A PROJECT OF THE
PEORIA PARK DISTRICT

BIKE TRAIL BRIDGE AND APPROACHES
PEORIA PARK DISTRICT ROCK ISLAND GREENWAY

AT KNOXVILLE AVE. (SR 40)
PEORIA, ILLINOIS

PEORIA PARK DISTRICT
PEORIA, ILLINOIS

PROJECT # 11-051

JUNE 18, 2013

PROJECT MANUAL

PACKAGE #_____

PROJECT MANUAL INCLUDING SPECIFICATIONS FOR:

BIKE TRAIL BRIDGE AND APPROACHES
PEORIA PARK DISTRICT ROCK ISLAND GREENWAY
AT KNOXVILLE AVE. (SR 40)
PEORIA, ILLINOIS

ARCHITECT: MAURER-STUTZ, INC.
ATTN: RICK ANDERSON, P.E.
3116 N. DRIES LANE, SUITE 100
PEORIA, ILLINOIS 61604
TELEPHONE: (309) 693-7615

OWNER: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS

TRUSTEES:
TIMOTHY J. CASSIDY, PRESIDENT
ROBERT L. JOHNSON, SR.
JACQUELINE J. PETTY
JAMES T. HANCOCK
KELLY A. CUMMINGS
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PROJECT MANAGER:
MIKE FRIBERG
PLANNING, DESIGN & CONSTRUCTION DIVISION
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PEORIA, ILLINOIS 61604
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ADMINISTRATIVE STAFF:
BONNIE W. NOBLE, EXECUTIVE DIRECTOR
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BILL ROEDER, SUPERINTENDENT OF RIVERFRONT DIVISION
BRENT WHEELER, SUPERINTENDENT, RIVERPLEX RECREATION AND WELLNESS CENTER
DAVID WHEELER, ADMINISTRATIVE ASSISTANT
BILL WOOLARD, SUPERINTENDENT OF GOLF

****

Address all communications regarding this work to the Project Manager listed above.

ADVERTISEMENT FOR BIDS

Sealed bids will be received by the Peoria Park District, Peoria, Illinois, hereinafter known as the Owner, for the following project:

Bike Trail Bridge and Approaches
Peoria Park District Rock Island Greenway
At Knoxville Avenue (SR 40)
Peoria, Illinois

It is the intent of the Owner to receive Base Bids & Alternates for the project listed above.

Sealed bids will be received until Tuesday, July 2, 2013 @ 1:30 p.m. prevailing time, by the Owner, at the Peoria Park District Administrative Office, Glen Oak Pavilion, 2218 North Prospect Road, Peoria, Illinois, 61603. (The Board Room clock in Glen Oak Pavilion shall be the official time keeping device in respect to the bid submission deadline.)

An electronic file including Bid Documents is available at www.peoriaparks-planning.org at no charge. Bid Documents, including Plans, Specifications and Interpretations for this project may be obtained at the Planning, Design & Construction Department, Bradley Park Equipment Service, 1314 N. Park Road, Peoria, IL 61604. Telephone (309) 686-3386. A non-refundable plan deposit of $75.00 will be charged for each printed set of Bid Documents.

Please note: This is a Lump Sum contract. Pay items and quantities listed are for information only.

A list of planholders can be obtained upon request. This information will be available up to twenty-four (24) hours prior to the scheduled bid opening time. **After that deadline, no information pertaining to the project will be given.**

A 10% Bid Bond is required, and is to be included with the Bid Proposal. The successful Bidder will be required to furnish a 100% Performance Bond and a 100% Labor and Materials Payment Bond within ten (10) days of formal Award of Contract.

The general prevailing rate of wage for the Peoria area shall be paid for each craft or type of worker needed to execute this contract or perform this work as required by the State of Illinois Department of Labor. Additionally, it is required that provisions of the Illinois Preference Act, the Illinois Drug Free Workplace Act, and the Substance Abuse Prevention on Public Works Act must be adhered to. Bidders are also advised that contract documents for this project include the non-discrimination, equal opportunity and affirmative action provisions in the Human Rights Act and rules and regulations of the Department of Human Rights. The Peoria Park District is an AA/EEO organization and encourages participation by minority and female-owned firms.

The Peoria Park District reserves the right to reject any or all bids, waive technical deficiencies, informalities or irregularities or rebid any project.

PLEASURE DRIVEWAY AND PARK DISTRICT
OF PEORIA, ILLINOIS

BY: TIMOTHY J. CASSIDY, President

BY: V. JOYCE MCLEMORE, Secretary

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SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

1. INSTRUCTIONS TO BIDDERS

A. "Instructions to Bidders", AIA Document A701, 1997 Editions, published by the American Institute of Architects, including revisions adopted before date of this Project Manual, is hereby made part of these specifications with same force and effect as though set forth in full.

B. The following modifies, changes, deletes from or adds to the **Instructions to Bidders** (AIA Document A701, 1997 Edition). Where any Article of the Instructions to Bidders is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

C. Parenthesis ( ) indicates the appropriate section and Subparagraph of the Instructions to Bidders which each paragraph of the Supplementary Instructions to Bidders modifies or refers to.

2. PROJECT DESCRIPTION

A. The Project description generally is as follows:

1. BASE BID:

Supply and erection of pedestrian truss superstructure, drilled concrete shafts, pre-cast concrete MSE walls, fencing, traffic control, precast concrete piers, aggregate base, bituminous concrete, bicycle railing, pavement markings, and other mixed use trail appurteances.

2. ALTERNATES:

Alternate #1:

Provide a Zinc-rich urethane primer/fluoropolymer/fluropolymer topcoat paint system in lieu of the urethane paint system specified for the steel pedestrian truss superstructure.

Alternate #2:

Provide black vinyl-coated wire mesh panels in lieu of galvanized.

Alternate #3:

Provide “vertical rib restriction” in lieu of “cut stone” formed MSE concrete wall panels.

B. PRE-BID MEETING:

1. A pre-bid meeting will be held at the project location on Monday, June 24, 2013 at 1 :30 p.m..

3. CODES AND PERMITS

A. COSTS ASSOCIATED WITH REGULATORY COMPLIANCE. All Work performed in connection with this Project shall be in compliance with the requirements of all applicable local, state, and federal laws, regulations, and rules, as well as the requirements of the Construction Documents. The Bid Price shall reflect all costs of compliance to those requirements, whether or not specifically stated in the Construction Documents or specific sections of the Project Manual.

B. PERMITS/FEES. Work shall not commence until all required building (and/or other) permits have been secured by the Contractor and copies of these permits submitted to the Owner's Representative. Cost of permits is to be included in the Bid Price.

C. ILLINOIS DEPARTMENT OF TRANSPORTATION PERMITS.

1. Due to the nature and proximity of the work to Illinois SR 40, the Engineer has submitted, on behalf of the Owner, plans and/or project specifications to the Illinois Department of Transportation for permit purposes.

2. If a permit has not been received by the time of the award of the Bid, the award may be delayed until the project's permitting status has been clarified. In such case, the construction time frames given in Section #12, below may be adjusted, prior to award of the Bid, to the mutual satisfaction of the Bidder and the Owner.

3. If redesign of the project/project items or elements is required in order to receive the necessary permits from the Illinois Department of Transportation prior to opening of the bids, the required changes will be issued as an ADDENDUM to the bid package, to all bidders.

Should it become apparent that changes in the plans/specifications of the project will be required in order to receive the necessary IDOT permits after the bid opening but prior to bid award, the Owner reserves the right to:

a) reject all bids, redesign and rebid the project,

or

b) negotiate a price for the required changes with the low bidder and incorporate the changes into the Agreement by means of change order.

4. BID GUARANTY

The bid must be accompanied by a Bid Guaranty which shall not be less than 10% of the amount of the Bid. At the option of the Bidder, the 10% Guaranty may be a Certified Check, Cashier's Check, or a Bid Bond. The Bid Bond shall be secured by a Guaranty or a Surety Company acceptable to the Owner. No bid will be considered unless it is accompanied by the required Guaranty. Funds must be made payable to the order of the Owner. Cash deposits will not be accepted. The Bid Guaranty shall ensure the execution of the Agreement and the furnishing of the Surety Bond or Bonds by the successful Bidder, all as required by the Contract Documents.

5. AWARD OF CONTRACT/REJECTION OF BIDS:

The Contracts will be awarded on the basis of Paragraph 5.3 of the Instructions to Bidders. The Bidders to whom the awards are made will be notified at the earliest possible date. The Owner, however, reserves the right to reject any and all Bids, to accept any combination of base bids and alternates and to waive any technical deficiencies, informalities, or irregularities in Bids received whenever such rejection or waiver is in its interest.

No bid shall be withdrawn for a period of sixty (60) days after the opening of bids without the consent of the Owner. The failure of the Bidder to submit a Bid Bond, Certified Check or Cashier's Check in the full amount to cover all proposals bid upon shall be sufficient cause for rejection of his bid. The award will be made contingent upon submittal and evaluation of Contractor's Qualification Statement, Bonds, Certificate of Insurance, Contractor Certification(s), including Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors, etc.

6. EXECUTION OF AGREEMENT:

Subsequent to the award and within ten (10) days after the prescribed forms are prepared and presented for signature by the Owner's Representative, the successful Bidder shall execute and return to the Owner's Representative an Agreement in the form included in the Contract Documents in such number of copies as the Owner may require. The President of the Board of Trustees will complete execution of Agreement after all bonds and any other required documents have been received by the Park District. One fully executed copy of Agreement will then be returned to Contractor.

7. PERFORMANCE BOND/LABOR AND MATERIAL PAYMENT BOND & INSURANCE

A. **BONDS REQUIRED**. Having satisfied all conditions of award as set forth elsewhere in these Documents, the successful Bidder shall, within ten (10) calendar days after award of contract, furnish Surety Bonds in penal sums, each not less than the amount of the Contract as awarded as security for the faithful performance of the Contract (Performance Bond), and for the payment (Labor and Materials Payment Bond) of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment or services employed or used by him in performing the work.

B. **FORM OF BONDS**. **Such bonds shall be in the same form as the samples included in the Project Manual** and shall bear the same date as or a date subsequent to that of the Agreement. The current Power of Attorney for the person who signs for any Surety Company shall be attached to such Bonds. Bonds shall be signed by a Guaranty or Surety Company acceptable to the Owner.

C. **COST OF PERFORMANCE BOND/LABOR AND MATERIAL PAYMENT BOND**. All costs for the Performance Bond/Labor and Material Payment Bond shall be included in the submitted Bid Price.

D. **INSURANCE.** Insurance requirements for this project are addressed both in the Supplementary General Conditions and in "Attachment A.5", in the "Exhibits" section of this Project Manual.

a) In respect to the property ("builders risk") insurance coverages referenced in the Supplementary General Conditions: the successful Bidder will be required to provide such coverages as the work of the Project will be accomplished by one general/prime contractor(s).

b) The Peoria Park District, Maurer-Stutz, Inc., and the State of Illinois shall all be listed as "Additional Insured" on the Contractors CGL policy.

E. **TIME FRAMES.** The successful Bidder shall, within ten (10) days after award of contract by the Board of Trustees, submit Proof of Insurance coverages/Bonds in the form and amounts required to the Owner's Representative. Should the Bidder be unable to provide the required Proof of Insurance(s)/Bonds within the specified ten day period the Owner reserves the right, at its sole discretion, to withdraw its award of contract from that Bidder.

8. DEFAULT

A. The failure of the successful Bidders to execute the Agreement, supply the required Bonds or proof of required insurance coverage(s) within (ten) 10 days after award of contract, or within such extended period as the Owner may grant based upon reasons determined sufficient by the Owner, may constitute a default. In such case, award of contract will be transferred to the second lowest bidder.

9. CONTRACTOR'S QUALIFICATION STATEMENT

A. Contractor's Qualification Statement (AIA Document 305) shall be submitted by low bidder for evaluation prior to award of contract if so requested by the Owner or his representatives.

10. LIST OF SUBCONTRACTORS/PRODUCT & EQUIPMENT SUBSTITUTIONS

A. Each Bidder shall submit a "MAJOR SUBCONTRACTORS LIST" proposed to be used in the execution of the Work. If there will be no subcontractors, the Bidder shall state "No Subcontractors" on this form. The completed form is due with the Bid Proposal.

1) Identify the trade name, address, telephone number, and category of work of each subcontractor.

2) Failure to submit the "Major Subcontractors List" with the Bid Proposal may result in the rejection of the Bid.

3) Delete Subparagraphs (6.3.1.1) and (6.3.1.2) from AIA A701.

B. The Bidder, by submission of a signed bid form, agrees to install all products and equipment by brand name or names specified in the Technical Specifications sections of this Project Manual. "Or equal" substitutions will be allowed only if approved in writing prior to the bid opening and listed in the "Substitutions" section of the Bid Form.

11. CONTRACT ADMINISTRATION FORMS/COSTS OF FORMS

A. REQUIRED FORMS. The following AIA forms will be used (AIA forms will be supplied by the Owner if requested, and charged to the Contractor at cost) in the administration of the project:

1) **AIA Document A310**: "Bid Bond", February 1970 edition

2) **AIA Document A305**: "Contractor's Qualification Statement", 1986 edition

3) **AIA Document G702**: "Application and Certificate of Payment", May 1992 edition

4) **AIA Document G703**: "Continuation Sheet", May 1992 edition

B. OTHER FORMS. Other contract administration forms (to be provided by the Owner unless otherwise noted) required for use in the Project are:

1) **Major Subcontractors List**

2) **Contractor's Affidavit**

3) **Individual Contractor Form**

4) **Corporate or Partnership Form**

5) **Performance Bond**

6) **Labor and Material Payment Bond**

7) **Lien Waiver Forms**

8) **Weekly Workforce Report**

9) **Certified Payroll Form** (Contractor may use own form)

10) **Insurance Forms: As required in Attachment A (at end of Project Manual)** (will not be provided by Owner)

11) **Agreement Between Owner and Contractor**

Examples of these forms are included in the Project Manual.

12. CONSTRUCTION TIME AND LIQUIDATED DAMAGES CLAUSE:

2.5.1 **PROJECT COMPLETION**. The Agreement will include the following paragraph(s) or language substantially the same, regarding construction time and liquidated damages:

1) LIQUIDATED DAMAGES: Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not Substantially Complete within the time specified below, plus any extensions thereof allowed in accordance with Article 8 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time.

2) Accordingly, instead of requiring any such proof, Owner and Contractor agree that as Liquidated Damages for delay (but not as a penalty) Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS ($250.00) for each calendar day that expires after one hundred fifty-three (153) calendar days from Notice of Award until Substantial Completion is attained. The work is tentatively scheduled to begin on July 11, 2013 and be at Substantial Completion by December 10, 2013.

3) After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work necessary to achieve Final Completion within fourteen (14) calendar days or any proper extension thereof granted by Owner,

Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS ($250.00) dollars for each day that expires after the time specified.

4) Owner and Contractor agree that the per day liquidated damage amounts set forth in subparagraphs "2" and "3" of this section constitute a reasonable forecast of the financial losses, actual costs and increased expenses the Owner may incur as a result of delayed Substantial or Final Completion of the Project.

13. PROJECT MANUAL/PLANS & SITE VISITATION

A. A set of Bid Documents may be examined, at no charge, at the office of the Owner's Representative.

B. **PLAN DEPOSIT**. An electronic file including Bid Documents is available at www.peoriaparks-planning.org at no charge. A printed set of Bid Documents, including Plans, Specifications and Interpretations for this project may be obtained at the Planning, Design & Construction Department, Bradley Park Equipment Service, 1314 N. Park Road, Peoria, IL 61604. Telephone (309)686-3386. A non-refundable plan deposit of $75.00 will be charged for each printed set of Bid Documents.

C. **FAMILIARITY WITH BID DOCUMENTS & SITE VISITATION**. Bidders, by submission of their Bids, represent that they have visited the site to acquaint themselves with the local conditions in which the Work is to occur, and that they are familiar with all the requirements of the Project, as defined in the Project Manual and the Plan(s).

14. OTHER MODIFICATIONS TO AIA-701/OTHER CONDITIONS

A. Add the following sentence to **(4.1.7**): "Bidder shall submit two (2) completed copies of Bid Form and retain one (1) copy for his files."

B. Delete Section **(6.2)** - "Owner's Financial Capability"; and last sentence of Paragraph **(4.2.1.)**

C. In reference to (**7.2.1**), the Peoria Park District reserves the right of final approval of bonding companies.

D. Delete paragraph **(7.1.3).**

15. EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION/SEXUAL HARASSMENT

A. The "Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors Form" and "Workforce Profile" and "Sexual Harassment Policy" shall be filled out and returned with the Bid. Failure to submit a completed "Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors Form" and "Workforce Profile" and "Sexual Harassment Policy" may result in rejection of the bid.

B. Effective July 1, 1993, every party to a public contract and every party bidding on public contracts is required to have a written **"Sexual Harassment Policy"** that contains:

1) A definition of sexual harassment under state law;

2) A description of sexual harassment utilizing examples;

3) A formalized complaint procedure;

4) A statement of victim's rights;

5) Directions on how to contact the Illinois Department of Human Rights - **Illinois companies**. Out-of-State companies must include directions on how to contact the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency.

6) A recitation that there cannot be any retaliation against employees who elect to file charges.

Recommendation: Your **"Sexual Harassment Policy"** should be drafted in language easy to understand and any revisions should be reviewed by legal counsel. A copy of your policy should be posted in a prominent and accessible location to assure all employees will be notified of the company's position.

In order to conduct business with the Peoria Park District, you must have a written "Sexual Harassment Policy" that conforms to the new Act.

FAILURE TO DO SO WILL DISQUALIFY YOU AS AN ELIGIBLE VENDOR.

C. Lowest responsible bidder not meeting the Park District's goal of 12% for minority/women participation, must provide proof of efforts made in contacting an adequate number of minority and women owned firms and/or labor.

1. After bid opening, the apparent low bid prime contractor may request a waiver of the specified MBE/WBE goal for the contract if the prime contractor found that its efforts to secure responsible MBE/WBE firms to meet the specified goal were

not successful. In requesting such a waiver, the prime contractor must provide:

a. Information indicating why the specified goal cannot be met.

b. A list of all MBE/WBE firms contacted and the dates they were contacted.

c. Copies of all bid solicitation letters to MBE/WBE firms.

d. All other evidence of good faith efforts made by the bidder to secure responsible MBE/WBE firms as subcontractors or suppliers.

The above documentation shall provide evidence that shows:

a. A reasonable number of MBE/WBE firms were contacted.

b. The work selected by the bidder for allocation to MBE/WBE firms was selected in order to increase the likelihood of achieving the specified goal.

c. The bidder negotiated in good faith with the potential MBE/WBE firms who responded to the contract/ solicitation by not imposing any conditions which are not similarly imposed on all other subcontractors and suppliers, or by denying benefits ordinarily conferred on subcontractors or suppliers for the type of work for which bids were solicited.

The Park District may reject one or all bids where the information submitted by the bidder (s) fails to objectively Demonstrate compliance with the M/WBE's utilization clause requirements. Upon finding that a contractor has not Complied with the provisions of this clause, the Park District may declare the bidder non-responsive and therefore Ineligible for contract award.

16. BID SUBMISSION

A. **DATE, TIME & PLACE OF RECEIVING BIDS**. Bids will be received until the date and time listed in the "Advertisement for Bids", at which time they will be publicly opened, read aloud and recorded. The Bid Opening will be held at the place listed in the "Advertisement for Bids".

B. **REQUIRED ITEMS**. The following items must be included as part of the "BID":

1) Two (2) signed copies of the **BID FORM**. (Retain the third copy for your files.)

2) The **PEORIA PARK DISTRICT CERTIFICATE OF EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE FOR CONTRACTORS AND VENDORS FORM** and **SEXUAL HARASSMENT POLICY.**

3) The **WORKFORCE PROFILE.**

4) The **ILLINOIS DRUG FREE WORKPLACE CERTIFICATION**.

5) The **CONTRACTOR CERTIFICATION** (individual or corporate/partnership).

6) The **LIST OF SUBCONTRACTORS**. (Submit form and state "No Subcontractors" on the form, if none will be used.)

7) The **BID GUARANTY.**

8) The **CERTIFICATION OF SAFETY COMPLIANCE.**

9) **SUBSTANCE ABUSE PREVENTION PROGRAM CERTIFICATION**

C. **BID SUBMISSION**. The "BID" shall be enclosed in envelopes (outer and inner), both of which shall be sealed and clearly labeled with the following information, in order to prevent premature opening of the bid:

- "PROPOSAL"
- NAME OF PROJECT
- NAME OF BIDDER
- DATE/TIME OF BID OPENING

END OF SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Bid From: _____

PROJECT NO. 11-051
BID FOR: BIKE TRAIL BRIDGE AND APPROACHES
LOCATION: PEORIA PARK DISTRICT ROCK ISLAND GREENWAY

BID FORM

BID TO: PEORIA PARK DISTRICT

NOTE: THIS IS A LUMP SUM CONTRACT

UNDERSIGNED:

1. Acknowledges receipt of:

   A. Project Manual and Drawings for:

      Bike Trail Bridge and Approaches – Peoria Park District Rock Island Greenway at Knoxville Ave. (SR 40), Peoria, Illinois

   B. Addenda: No. _____ through No. _____

2. Has examined facility and the bid documents and shall be responsible for performing work specifically required of him by all parts of bidding documents including specifications for entire project, even though such work may be included as related requirements specified in other divisions or sections.

3. And agrees to enter into and execute Contract with Owner, if awarded on basis of this bid, and to:

   A. Furnish Bonds and Insurance required by the Bidding & Contract Documents.

   B. Accomplish work in accord with Contract.

   C. Complete work within specified Contract time.

4. **CONTRACT TIME**: Contractor agrees to Substantially Complete ALL WORK as required by the Contract Documents per the Supplementary General Conditions and Supplementary Instructions to Bidders.

5. **BASE BIDS**:
   A. Base Bid:
      Bidder agrees to perform all building and site work, as set forth in the Project Manual and Drawings for the sum of:

      _____ Dollars ($_____._____)

6. **ALTERNATES:**

Bidder agrees to perform all building and/or site work items as set forth below. The prices submitted may be accepted either at the time of Base Bid approval or up to no later than ninety (90) days after award of the Bid; however, if not approved at the time of the award of the Base Bid, the contract times as set forth in the Project Manual and Drawings will be adjusted to compensate for the additional time taken in award of the Alternate:

A. Alternate #1:

Provide a Zinc-rich urethane primer/fluoropolymer/fluropolymer topcoat paint system in lieu of the urethane paint system specified for the steel pedestrian truss superstructure.

Add / Deduct (circle one)

_____ Dollars ($_____._____)

B. Alternate #2:

Provide black vinyl-coated wire mesh panels in lieu of galvanized.

Add / Deduct (circle one)

_____ Dollars ($_____._____)

C. Alternate #3:

Provide "vertical rib rustication" in lieu of "cut stone" formed MSE concrete wall panels.

Add / Deduct (circle one)

_____ Dollars ($_____._____)

7. **UNIT PRICES**:

A. Bidders submitting prices for the Base Bid and Alternates shall submit Unit Prices for adding or deleting work. Unit Prices shall include all costs, including but not limited to preparation, labor, equipment, and materials necessary for a complete installation.

ITEM	UNIT	UNIT PRICE
MSE wall, complete	SFF	$_____
Aggregate base course, 6" depth CA-6	SF	$_____
HMA Surface Course, 3", rolled	SF	$_____
Bicycle Railing, galvanized, complete	LF	$_____
South-east pedestrian truss superstructure, and pier "F", complete	LUMP	$_____

8. **PROPOSED SUBSTITUTION LIST:**

Base Bid(s) and Alternates are understood to include only those product brands, items, and elements which are specified in the Bid Documents. The following is a list of substitute products, equipment or methods of construction which the Bidder proposes to furnish on this project, with difference in price being added or deducted from Base Bid(s).

Bidder understands that acceptance of any proposed substitution which has not been approved as an "equal" to the product brand, item, or element specified prior to bid opening is at Owner's option. Approval or rejection of any substitutions listed below will be indicated before executing Contract.

ITEM	ADD	DEDUCT
_____	$_____	$_____
_____	$_____	$_____
_____	$_____	$_____

9. **BIDDERS CHECKLIST:**

Did you visit the site?	Yes	No
Is Bid Security enclosed? (If applicable)	Yes	No
Is Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors and Sexual Harassment Policy enclosed?	Yes	No
Is Workforce Profile enclosed?	Yes	No
Is List of Subcontractors enclosed?	Yes	No
Is Contractor Certification enclosed?	Yes	No
Is Ill. Drug Free Workplace Certification enclosed?	Yes	No
Is Certificate of Safety Compliance enclosed?	Yes	No
Is Substance Abuse Prevention Program Certification enclosed?	Yes	No

10. **BIDDER INFORMATION**:

NAME OF BIDDER:_____

ADDRESS: _____

Bid From: _____

PROJECT NO. 11-051
BID FOR: BIKE TRAIL BRIDGE AND APPROACHES
LOCATION: PEORIA PARK DISTRICT ROCK ISLAND GREENWAY

CITY, STATE, ZIP: _____

TELEPHONE NO.: _____

BY: _____
(Signature of Authorized Official)

TITLE: _____

BIDDER'S SEAL

WITNESS: _____

END OF BID FORM

Office Use Only:
Approved: _____
Date: _____

Peoria Park District

Certificate of Equal Employment Opportunity Compliance
for
Contractors and Vendors

Disclosure of the information requested in this form is required by the Peoria Park District. Failure to properly complete and sign this form will result in it being returned unprocessed thereby resulting in a delay or denial of eligibility to bid.

As part of the Company's commitment to equal employment opportunity practices, this company does the following:

- Recruits, trains, upgrades, promotes and disciplines persons without regard to race, color, sex, religion, national origin, veteran status, age, mental or physical ability.
- Notifies all recruitment sources that all qualified applicants will be considered for employment without regard to race, color, sex, religion, national origin, veteran status, age, mental or physical ability.
- When advertising is used, specifies that all qualified applicants will be considered for employment without regard to race, color, sex, religion, national origin, veteran status, age, mental or physical ability.
- Notifies all labor organizations which furnish this company with any skilled or non-skilled labor of the Company's responsibility to comply with the equal employment opportunity requirements required in all contracts by the
  Peoria Park District.
- Notifies all of its sub-contractors of their obligation to comply with the equal employment opportunity requirements required in all contracts by the Peoria Park District.
- Has an affirmative action program that assures the company's fair employment practices are understood and carried out by all of its managerial, administrative and supervisory personnel.

Is the Company a minority/woman owned business (MBE/WBE)? ____YES ____ NO

The Company does not discriminate against any employees or applicants for employment because of race, color, religion, sex, national origin, veteran status, age, mental or physical ability.

The Company does not maintain segregated facilities for any of its employees on the basis of race, religion, color, national origin, because of habit, local custom, or otherwise.

By signing this form, the Company attests that it complies with all statements listed above as part of the Company's commitment to equal employment opportunity practices. The Company further agrees that it has completed the attached Workforce Profile Sheet truthfully, to the best of its knowledge.

_____	_____
Company Name	Company Address
_____	_____
Signature of Company Official	Name / Title
_____	_____
Telephone Number & Fax Number	Email Address

WORKFORCE PROFILE - FULL TIME ONLY

Job Classifications	Total Employees		Black		Hispanic		Native American		Asian		Veteran		Disabled	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Officials, Managers, Supervisors														
2. Professionals														
3. Technicians														
4. Sales														
5. Office/Clerical														
6. White Collar Trainees:														
7. Skilled Crafts:														
8. Apprentices:														
9. On-the-job Trainees:														
10. Semi-skilled														
11. Service Workers														
12. Unskilled														
TOTALS														

WORKFORCE PROFILE INSTRUCTIONS

RACE/ETHNIC IDENTIFICATION

WHITE (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

BLACK (not of Hispanic origin): All persons having origins in any of the Black racial groups of Africa.

HISPANIC: All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

ASIAN or PACIFIC ISLANDER: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

NATIVE AMERICAN or ALASKAN NATIVE: All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

DESCRIPTION OF JOB CLASSIFICATIONS

OFFICIALS, MANAGERS, AND SUPERVISORS - Occupations requiring administrative personnel who set broad policies, and exercise over-all responsibility for the execution of these policies, and direct individual departments or special phases of a firm's operations. Includes: officials, executives, middle management, plant managers, department managers/superintendents, salaried foremen who are members of management, purchasing agents and buyers, and kindred workers.

PROFESSIONALS - Occupations requiring either college graduation or experience of such kind and amount as to provide a comparable background. Includes: accountants/auditors, airplane pilots and navigators, architects, artists, chemists, designers, dietitians, editors, engineers, lawyers, librarians, mathematicians, natural scientists, personnel and labor relations workers, physical scientists, physicians, social scientists, teachers, and kindred workers.

TECHNICIANS - Occupations requiring combination of basic scientific knowledge and manual skill which can be obtained through about 2 years of post high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training. Includes: drafters, engineering aids, junior engineers, scientific assistants, surveyors, technical illustrators, technicians (medical, dental, electronic physical sciences), and kindred workers.

SALES WORKERS - Occupations engaging wholly or primarily in direct selling. Includes: advertising agents/salespersons, insurance agents/brokers, real estate agents/brokers, stock and bond salespersons, demonstrators, salespersons and sales clerks, and kindred workers.

OFFICE AND CLERICAL WORKERS - Includes all clerical type work regardless of level of difficulty, where the activities are predominantly non-manual though some manual work not directly involved with altering or transporting the products is included. Includes: bookkeepers, cashiers, collectors (bills and accounts), messengers and office couriers, office machine operators, shipping and receiving clerks, stenographers, typist and secretaries, telegraph and telephone operators, and kindred workers.

WHITE COLLAR TRAINEES - Persons engaged in formal training for official, managerial, professional, technical, sales, office and clerical occupations.

SKILLED CRAFTS - Manual worker of relatively high skill level having a thorough and comprehensive knowledge of the processes involved in their work. Exercise considerable independent judgment and usually receive an extensive period of training. Includes: the building trades hourly paid foremen and leadmen who are not members of management, mechanics and repairmen, skilled machining occupations, compositors and typesetters, electricians, engravers, job setters (metal), motion picture projectionists, pattern and model makers, stationary engineers, tailors and tailoresses, and kindred workers.

APPRENTICES - Persons employed in a program including work training and related instruction to learn a trade or craft which is traditionally considered an apprenticeship, regardless of whether the program is registered with a Federal or State agency.

ON-THE-JOB TRAINEES - Persons engaged in formal training for craftsmen when not trained under apprentice programs; semi-skilled, unskilled and service occupations.

SEMI-SKILLED WORKERS - Workers who operate machine or processing equipment or perform other factory-type duties of intermediate skill level which can be mastered in a few weeks and require only limited training.

SERVICE WORKERS - Workers in both protective and non-protective service occupations. Includes: attendants (hospital and other institution, professional and personal service), barbers, charwomen and cleaners, cooks (except household), counter and fountain workers, elevator operators, fire fighters, guards, watchmen and doorkeepers, stewards, janitors, police officers and detectives, porters, waiters and waitresses, and kindred workers.

UNSKILLED WORKERS - Workers in manual occupations which generally require no special training. Perform elementary duties that may be learned in a few days and require the application of little or no independent judgement. Includes: garage laborers, car washers and greasers, gardeners (except farm) and groundskeepers, longshoremen and stevedores, lumbermen, craftsmen and wood choppers, laborers performing lifting, digging, mixing loading and pulling operations, and kindred workers.

P L E A S E B E A D V I S E D !

Every party to a public contract and every party bidding on public contracts are required to have a written sexual harassment policy that contains:

(1) a definition of sexual harassment under state law:

(2) a description of sexual harassment utilizing examples;

(3) a formalized complaint procedure;

(4) a statement of victims rights;

(5) directions on how to contact the Illinois Department of Human Rights – **Illinois companies. Out-of-State** companies must include directions on how to contact the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency.

(6) a recitation that there cannot be any retaliation against employees who elect to file charges.

Recommendation: Your sexual harassment policy should be drafted in language easy to understand and any revisions should be reviewed by legal counsel. A copy of your policy should be posted in a prominent and accessible location to assure all employees will be notified of the company's position.

In order to conduct business with the PEORIA PARK DISTRICT, you must have a written sexual harassment policy that conforms to the new ACT.

FAILURE TO DO SO
WILL DISQUALIFY YOU AS AN ELIGIBLE VENDOR!!!

Please be advised, effective July 1, 1993, Governor Jim Edgar established under Executive Order Number 7 (Public Act 87-1257) that every party to a public contract and every party bidding on a public contract within the State of Illinois must have a written policy statement prohibiting sexual harassment. The following model policy statement is a draft copy provided for use in formulating your company's policy statement

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SEXUAL HARASSMENT POLICY STATEMENT

It is the responsibility of each individual employee to refrain from sexual harassment and it is the right of each individual employee to work in an environment free from sexual harassment.

DEFINITION OF SEXUAL HARASSMENT
According to the Illinois Human Rights Act, sexual harassment is defined as:

Any unwelcome sexual advances or requests for sexual favors or any conduct of a sexual nature when

1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
2. submission to or rejection of such conduct by an individual is used as the basis for employment decision(s) affecting such individual; or
3. such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

The courts have determined that sexual harassment is a form of discrimination under Title VII of the U.S. Civil Rights act of 1964, as amended in 1991. One such example is a case where a qualified individual is denied employment opportunities and benefits that are, instead, awarded to an individual who submits (voluntarily or under coercion) to sexual advances or sexual favors. Another example is where an individual must submit to unwelcome sexual conduct in order to receive an employment opportunity.

DRAFT

Other conduct commonly considered to be sexual harassment includes:

⇒ Verbal: Sexual innuendoes, suggestive comments, insults, humor and jokes about sex, anatomy or gender-specific traits, sexual propositions, threats, repeated requests for dates, or statement about other employees, even outside of their presence, of a sexual nature.

⇒ Non-Verbal: Suggestive or insulting sounds (whistling), leering, obscene gestures, sexually suggestive bodily gestures, "catcalls", "smacking" or "kissing" noises.

⇒ Visual: Posters, signs, pin-ups, slogans of a sexual nature.

⇒ Physical: Touching, unwelcome hugging or kissing, pinching, brushing the body, coerced sexual intercourse or actual assault.

Sexual harassment most frequently involves a man harassing a woman. However, it can also involve a woman harassing a man or harassment between members of the same gender.

The most severe and overt forms of sexual harassment are easier to determine; however, some sexual harassment is more subtle and depends to some extent on individual perception and interpretation. The trend in the courts is to assess sexual harassment by a standard of what would offend a "reasonable woman" or a "reasonable man", depending upon the gender of the alleged victim.

An example of the most subtle form of sexual harassment is the use of endearments. The use of terms such as "honey", "darling", and "sweetheart" is objectionable to many women who believe that these terms undermine their authority and their ability to deal with men on an equal and professional level.

Another example is the use of a compliment that could potentially be interpreted as sexual in nature. Below are three statements that might be made about the appearance of a woman in the workplace:

- ⇒ "That's an attractive dress you have on."
- ⇒ "That's an attractive dress. It really looks good on you."
- ⇒ "That's an attractive dress. You really fill it out well."

The first statement appears to be simply a compliment. The last is most likely to be perceived as sexual harassment depending on individual perceptions and values. To avoid the possibility of offending an employee, it is best to follow a course of conduct above reproach, or to err on the side of caution.

RESPONSIBILITY OF INDIVIDUAL EMPLOYEES
Each individual employee has the responsibility to refrain from sexual harassment in the workplace. An individual employee who harasses a fellow worker is, of course, liable for his or her individual conduct. The harassing employee will be subject to disciplinary action up to and including discharge in accordance with company/organization policy or a collective bargaining agreement, as appropriate.

RESPONSIBILITY OF SUPERVISORY PERSONNEL
Each supervisor is responsible for maintaining a workplace free of sexual harassment. This is accomplished by promoting a professional environment and by dealing with sexual harassment as with all other forms of employee misconduct.

The courts have found companies/organizations as well as supervisors can be held liable for damages related to sexual harassment by a manager, supervisor, employee, or third party (an individual who is not an employee but does business with a company/organization, such as a contractor, customer, sales representative, or repair person).

Liability is based either on a company/organization's responsibility to maintain a certain level of order and discipline, or on the supervisor acting as an agent of the company/organization. As such, supervisors must act quickly and responsibly, not only to minimize their own liability, but also that of the company/organization.

DRAFT

RESOLUTION OUTSIDE THE COMPANY/ORGANIZATION
It is hoped that most sexual harassment complaints and incidents can be resolved within a company/organization. However, an employee has the right to contact the Illinois Department of Human Rights (IDHR) or the U.S. Equal Employment Opportunity Commission (EEOC) about filing a formal complaint. An IDHR complaint must be filed within 180 days of the alleged incident(s) unless it is a continuing offense. A complaint with EEOC must be filed within 300 days.

Illinois Department of Human Rights
(217) 785-5100 – Springfield
(217) 785-5125 – TDD Springfield
(312) 814-6200 – Chicago
(312) 263-1579 – TDD Chicago

Illinois Human Rights Commission
(217) 785-4350 – Springfield
(217) 785-5125 – TDD Springfield
(312) 814-6269 – Chicago
(312) 814-4760 – TDD Chicago

U.S. Equal Employment Opportunity Commission
(312) 353-2613 – Chicago District Office
(800) 669-4000 – Toll Free Within State of Illinois
(800) 669-6820 – TDD Chicago

An employee who is suddenly transferred to a lower paying job or passed for promotion, after filing a complaint with IDHR or EEOC, may file a retaliation charge, also due 180 days (IDHR) or 300 days (EEOC) from the alleged retaliation.

An employee who has been physically harassed or threatened while on the job may also have grounds for criminal charges of assault and battery.

FALSE AND FRIVOLOUS COMPLAINTS

False and frivolous charges refer to cases where the accuser is using a sexual complaint to accomplish some end other than stopping sexual harassment. It does not refer to charges made in good faith which cannot be proven. Given the seriousness of the consequences for the accused, a false and frivolous charge is a severe offense that can itself result in disciplinary action.



ILLINOIS DRUG FREE WORKPLACE CERTIFICATION

The undersigned Contractor/Vendor hereby certifies that it will comply with all provisions of the Illinois Drug Free Workplace Act of 1991.

Dated this _____ day of _____, 20 _____

Contractor/Vendor

_____

By: _____



SUBSTANCE ABUSE PREVENTION PROGRAM CERTIFICATION

Project Name:_____

Location:_____

The Substance Abuse Prevention on Public Works Act Public Act 95-0635, prohibits the use of drugs and alcohol, as defined in the Act, by employees of the Contractor and by employees of all approved Subcontractors while performing work on a public works project. The Contractor/Subcontractor herewith certifies that it has a superseding collective bargaining agreement or makes the public filing of its written substance abuse prevention program for the prevention of substance abuse among its employees who are not covered by a collective bargaining agreement dealing with the subject as mandated by the Act.

A.The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and that deal with the subject matter of Public Act 95-0635.

_____
Contractor/Subcontractor

_____
Name of Authorized Representative (type or print)

_____
Title of Authorized Representative (type or print)

_____
Signature of Authorized RepresentativeDate

B.The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has in place, for all of its employees not covered by a collective bargaining agreement that deals with the subject of the Act, the attached substance abuse prevention program that meets or exceeds the requirements of Public Act 95-0635.

_____
Contractor/Subcontractor

_____
Name of Authorized Representative (type or print)

_____
Title of Authorized Representative (type or print)

_____
Signature of Authorized RepresentativeDate



CERTIFICATION OF SAFETY COMPLIANCE

The undersigned Contractor/Vendor hereby certify that they and their sub-contractors will comply with any and all prevailing occupational safety and health standards including, but not limited to the following: hazard communication, hearing conservation, respirator use, permit required confined space entry, scaffolding, personal protective equipment, ladder usage, ventilation, flammable and combustible liquids handling and storage and lockout/tagout. Such compliance may include a training component or require a written program of compliance.

Dated this day of _____, 20 _____.

CONTRACTOR/VENDOR: _____

By: _____

PLEASURE DRIVEWAY AND PARK DISTRICT

OF PEORIA, ILLINOIS

Individual Contractor Form

CONTRACTOR CERTIFICATION

I, _____, do hereby certify that I am a contractor who has not been barred from bidding on a public contract as a result of a violation of either Section 33E-3 (bid-rigging) or Section 33E-4(bid rotating) of the Illinois Criminal Code, Illinois Compiled Statutes 720 ILCS 5/33E-3 and 5/33E-4.

_____
Contractor

By: _____

Subscribed and Sworn before me this _____ day of _____, 20____

_____
Notary Public

My Commission Expires _____, 20_____

PLEASURE DRIVEWAY AND PARK DISTRICT

OF PEORIA, ILLINOIS

Corporate or Partnership Contractor Form

CONTRACTOR CERTIFICATION

I, _____, a duly authorized agent of
(Agent)

_____, do hereby certify that neither
(Contractor)

_____, nor any individual presently
(Contractor)

affiliated with _____, has been barred from
(Contractor)

bidding on a public contract as a result of a violation of either Section 33E-3 (bid-rigging) or Section 33E-4 (bid rotating) of the Illinois Criminal Code, Illinois Compiled Statutes, 720 ILCS 5/33E-3 and 5/33E-4.

_____
Contractor

By: _____

Subscribed and Sworn before me this _____ day of _____, 20____

_____
Notary Public

My Commission Expires _____, 20_____

MAJOR SUBCONTRACTORS LIST

The following tabulation of Major Subcontractors shall be attached and made a condition of the Bid. The Bidder expressly understands and agrees to the following provisions:

A. If awarded a Contract as a result of this Bid, the major subcontractors used in the prosecution of the work will be those listed below.
B. The following list includes all subcontractors who will perform work representing 5% (five percent) or more of the total Base Bid.
C. The subcontractors listed below are financially responsible and are qualified to perform the work required.
D. The subcontractors listed below comply with the requirements of the Contract Documents.
E. Any substitutions in the subcontractors listed below shall be requested in writing by the Contractor and must be approved in writing by the Owner. No sub-subcontractors will be allowed unless specifically stated on the form. All pertinent financial, performance, insurance and other applicable information shall be submitted with the request for substitution(s). Owner shall respond to such requests within 14 calendar days following the submission of all necessary information to the full satisfaction of the Owner.
F. Failure to submit the list of Major Subcontractors as stated herein shall constitute a material variation from the Invitation to Bid; and any such Bid may be rejected by the Owner.

Subcontractor Name	Address	Telephone	Area of Work	Minority/Women Owned Business (Yes/No)

(Attach additional sheets if required)

END OF MAJOR SUBCONTRACTORS FORM

Directory of Minority & Women Owned Business Enterprises
Compiled with Information from
City of Peoria Equal Opportunity Office
Peoria Housing Authority
Peoria Park District

Revised 9/12

Adams Septic & Sewer Services, Inc. Michelle Adams	Septic and Sewer Contractor WBE 1641 N. Tiber Ridge Ct., East Peoria, IL 61611	(309) 691-6113
AFE Construction, Inc. Monica Arbuckle	General Contractor WBE P.O. Box 199, Mackinaw, IL 61755	(309) 303-7065 (866) 491-2209 (Fax)
A & L Salvage, Inc. Archie Brown	Clean Up, Tree Cutting & Removal, Truck Salvaging MBE 824 W. Brons Peoria, IL 61604	(309) 682-4412
Alexander Brothers Construction Co. Allester Alexander	Concrete, Demolition, Excavation, Landscaping MBE P.O. Box 1508, Peoria, IL 61605	(309) 673-6768
Ambri Inc. Robert J. Hunt. Jr.	Drywall, Flooring, Painting, Cabinetry MBE 9101 S. Nashville Ave., Oak Lawn, IL 60453	(708) 233-0217 (Phone and Fax)
Atherton, P.A. Patricia Atherton	Asphalt, Concrete, Demolition, Excavation WBE 57 Eichorn Road, Spring Bay, IL 61611	(309) 822-8575 (309) 822-8782 (Fax)
BJB Enterprises, Inc. Jim Bryant	Concrete, Demolition, Excavation, General, Landscaping, Trucking/Hauling MBE 1220 SW Washington St., Peoria, IL 61602	(309) 671-4415 (309) 673-4308 (Fax)
Braun Excavating, Inc. Teresa Braun	Demolition, Digging of Footings, Excavation, Pipe Laying WBE 24 Gulf Stream Bartonville, IL 61607	(309) 697-5454 (309) 697-6567 (Fax)
Brown, Leo Trucking, Inc. Leo Brown	Trucking/Hauling MBE P. O. Box 9057, Peoria, IL 61612	(309) 685-6710 (309) 685-0759 (Fax)
Buddy's Landscaping Dexter Davis	Landscaping MBE P. O. Box 1836, Bloomington, IL 61702	(309) 824-9211 (309) 454-3342 (Fax)
Central Landscaping	Landscaping WBE 12512 Mendell Rd., Princeville, IL 61559	(309) 385-4832 (309) 385-2644 (Fax)
CJL Landscaping, Inc. Rebecca J. Kelch	Landscaping WBE 10902 W. U. S. Highway 150, Brimfield, IL 61517	(309) 691-9200 (309) 691-5131 (Fax)
Clean Sweep Lead Abatement Ricky Walker	Lead-Based Paint Removal MBE 4014 Brighton Peoria, IL 61615	(309) 689-1146
Cordova Construction Tina Christopher	Concrete Removal, Curb & Gutter Removal, Sidewalk Removal WBE 2424 N. Ellory Road, Peoria, IL 61615	(309) 674-8810
Cornerstone Builders & Developers Ron Touilly	WBE 6129 W. Southport Rd., Peoria, IL 61615	(309) 674-9000 (309) 673-7783 (Fax)
CSS (Construction Specialties & Services) Dave Suzuki	Building Specialties, Design, Engineering, Estimating MBE P. O. Box 120703 Peoria, IL 61614	(309) 685-8453
Davis Brothers Construction Company Russell Davis	Trucking/Hauling MBE 1522 W. Kettelle St. Peoria, IL 61605	(309) 683-6931
DECA Realty Eddie J. Washington	Real Estate Broker, Appraiser MBE 417 W. Main, Peoria, IL 61606	(309) 637-3322 (309) 682-3922 (Fax)
Dunbar Transfer	Trucking WBE P.O. Box 315, Chillicothe, IL 61523-0315	(309) 303-5122 brendunbar@frontier.com

E & D Trucking and Hauling, Inc. Eddie Proctor	Trucking/Hauling MBE 1913 N. Idaho, Peoria, IL 61604	(309) 682-4336 (309) 251-6736 (Cell)
Elegant Installations James Barrett	Installation/sales custom drapery, blinds, shade, shutters MBE 125 E. Elaine, Peoria, IL 61614	(309) 648-8118 (309)693-0007 (Fax)
Fashion Floors, Inc. Yvonne Hand	Floorcoverings WBE 930 S. 2nd Street, Suite B, Pekin, IL 61554	(309) 353-8272 (309) 347-1109 (Fax)
Fuhrmann Engineering Inc. Kathy Shelter	Civil Engineers / Land Surveyors WBE 456 Fulton St., Suite 146	(309) 713-3498 Ext. 5
Flessner Electric	Electrical 3600 S. Cameron Ln., Mapleton, IL 61547	(309) 697-2484
G&L Trucking & Construction	WBE 1113 W. Groveland Ave., Peoria, IL 61604	(309) 686-9334
Garza Heating & Cooling	1304 S. Western Ave., Peoria, IL 61605	(309) 645-6294
Ronald A. Givens & Associates Ronald A. Givens	Insurance & Investments MBE 2616 N. Lehman, Peoria, IL 61602	(309) 685-4588 (309) 676-3152 (Fax)
Gutters & More	WBE 157 Thunderbird Ln., East Peoria, IL 61611	(309) 694-4000 (309) 694-3356 (Fax)
Hancock Trucking, Inc. Nancy Hancock	Trucking/Hauling WBE 30570 Hancock Road Mackinaw, IL 61755	(309) 447-6733
Hanley Steel, Inc. Jill Hanley	Fabricated structural and miscellaneous steel WBE 8811 N. Industrial Rd., Peoria, IL 61615	(309) 692-5250 (309) 692-5251 (Fax)
Heart Technologies Jim Bainter Brad Armstrong	Data and Telephone, Communication and Construction WBE 3105 N. Main Street, Peoria, IL 61611	(309) 427-7000 (309) 427-7007 (Fax)
Hermann & Associates Alisha Hermann	WBE 5835 N. Galena Rd., Peoria, IL 61614	(309) 687-5566 (309) 687-0571 (Fax)
Horan Construction, Inc. Susan Arnholt	Carpentry, Concrete, Demolition, General, Wrecking WBE 1720 W. Chanute Road Peoria, IL 61615	(309) 691-3133 (309) 691-1841 (Fax)
Intech Innovations John McCrary	Audio/Video Design and Integration WBE Washington, IL 61571	(309) 370-6676 (309) 745-9691 (Fax)
J Construction Frank Coates	General MBE 1810 Stever, Peoria, IL 61605	(309) 303-3919 (Cell)
J. D. Masonry Services Hurdestine Dabbs	Concrete M/WBE 907 E. Arcadia, Peoria, IL 61603	(309) 453-6533 (Cell)
J&J Manufacturing	110 W. Walnut, Chillicothe, IL 61523	(209) 274-3141
J & J Construction Herman Johnson	Demolition, Excavation MBE 1710 W. Garden Street, Peoria, IL 61605	(309) 673-8616 (309) 676-8292 (Fax)
J & K Construction James Tilman	General MBE 4003 N. Rochelle, Peoria, IL 61615	(309) 685-8554 (309) 685-8554 (Fax)
JM Industrial Supply Ron Given	Maintenance Items, Tools, Soaps MBE 2323 Lakeshore, Pekin, IL 61554	(309) 346-5796 (309) 347-5100
Kahbeah Contracting & Trucking Larry Kahbeah	Trucking/Hauling MBE 510 N. Yates, P. O. Box 56, Tallula, IL 62688	(217) 634-4157 (217) 634-4157 (Fax)
LNR Construction & Trucking Demonte Davis	Concrete, Trucking MBE 2200 Linsley St., Peoria, IL 61604	(309) 682-6331
LV Enterprise John L. Palmer	Trucking/Hauling MBE 303 E. Archer Avenue, Peoria, IL 61603	(309) 657-2420 (309) 682-8872 (Fax)

M & A Plumbing Michael Abner	Plumbing MBE 6216 N. Devonshire Avenue, Peoria, IL 61615	(309) 689-0133 (309) 689-0133 (Fax)
M&K Heating & Cooling Reggie Williams	HVAC MBE 2406 W. Newman Parkway, Peoria, IL 61604	(309) 256-6129
M & L Plumbing Manzell Lawson	Plumbing MBE 1309 W. Lincoln, Peoria, IL 61605	(309) 674-8466
Midwest Construction Services Sheila Shover	Traffic Control Products, Trucking/Hauling M/WBE P. O. Box 4185, Bartonville, IL 61607	(309) 697-1000 (309) 697-1004 (Fax)
Ordaz Construction Co. Inc. Elizabeth Ordaz Mercer	Concrete 8010 N. Sommer St., Peoria, IL 61615	(309) 693-3338 (309) 693-5505 (Fax)
Pendleton Excavating Darold Pendleton	Excavation, Sand & Gravel MBE 1207 W. MacQueen Peoria, IL 61605	(309) 685-9133 (309) 685-9133 (Fax)
Porter, V. L. Vincent Porter	Concrete, General MBE 500 W. North, Suite 10, Springfield, IL 62704	(217) 744-8050
RTM Concrete Construction Morris Stokes	Concrete MBE 2207 W. Wiswall, Peoria, IL 61605	(309) 637-4237
N. E. Rudd Trucking Nanette Jenkins-Rudd	Trucking/Hauling WBE P.O. Box 14, 107 Washington St., Kingston Mines, IL 61539	(309) 389-4150 (309) 389-2849 (Fax)
Rufus Construction Company Rufus Nelson	Painting, Roofing, Remodeling MBE 1819 S. Idaho Street, Peoria, IL 61605	(309) 673-6776 (309) 497-9453 (Cell)
Searle Trucking, Inc. Debbie Searle	Trucking/Hauling WBE P. O. Box 1084, Peoria, IL 61653	(309) 686-0708 (309) 688-5365 (Fax)
Sherwin Baker & Associates, Inc. Sherwin Baker	Construction Management, Consulting, Engineering, Technical Services MBE 103 E. Archer, Peoria, IL 61603	(309) 688-4203 (309) 688-4203 (Fax)
Smeltz, V.	Excavation MBE P. O. Box 64, Washington, IL 61571	
Tabitha Ventures, Inc. Edward O. Taiwo	Asphalt, Concrete, Demolition, Earthwork, Electrical, Excavation, General, HVAC, Landscaping, Painting, Plumbing, Resurfacing, Roofing, Trucking/Hauling MBE, 2000 W. Pioneer Parkway, Suite 7B, Peoria, IL 61615	(309) 692-1473 (309) 692-1564 (Fax)
The Communication Connection Jennifer Stone	Communication, Wire and Cable, Electrical and Telephone Products WBE 604 Filmore Street Harrisburg, PA 17104	(717) 561-7267
Three Cross Development J. T. Donelson	Concrete, General, Sidewalk MBE 1519 W. Millman Peoria, IL 61605	(309) 637-1238
Tilman Electric James Tilman	Electrical MBE 4003 N. Rochelle, Peoria, IL 61615	(309) 685-8554 (309) 264-3903 (Cell)
Whitaker Construction Lionel Whitaker	Concrete, General, Curb & Gutter, Sidewalk MBE 4010 N. Marbleway Dr., Peoria, IL 61615	(309) 682-9305 (309) 208-0476 (Cell)
Wiegand & Storrer Leslie Savant	Excavation, Sewer WBE 3210 E. Washington Road, East Peoria, IL 61611	(309) 699-6457 (309) 699-9660 (Fax)

Peoria County Prevailing Wage for June 2013

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn
ASBESTOS ABT-GEN		BLD		26.470	27.970	1.5	1.5	2.0	7.700	13.75
ASBESTOS ABT-GEN		HWY		28.750	30.000	1.5	1.5	2.0	7.700	13.95
ASBESTOS ABT-MEC		BLD		31.840	34.340	1.5	1.5	2.0	10.82	10.66
BOILERMAKER		BLD		35.010	38.010	2.0	2.0	2.0	7.070	13.83
BRICK MASON		BLD		32.060	33.560	1.5	1.5	2.0	7.700	9.130
CARPENTER		BLD		29.330	31.580	1.5	1.5	2.0	7.700	14.66
CARPENTER		HWY		30.820	33.070	1.5	1.5	2.0	7.700	15.14
CEMENT MASON		BLD		27.090	28.840	1.5	1.5	2.0	8.140	13.55
CEMENT MASON		HWY		28.280	29.780	1.5	1.5	2.0	8.140	13.93
CERAMIC TILE FNSHER		BLD		29.750	0.000	1.5	1.5	2.0	7.700	9.130
ELECTRIC PWR EQMT OP		ALL		35.440	0.000	1.5	1.5	2.0	5.000	10.98
ELECTRIC PWR GRNDMAN		ALL		24.320	0.000	1.5	1.5	2.0	5.000	7.540
ELECTRIC PWR LINEMAN		ALL		39.370	41.910	1.5	1.5	2.0	5.000	12.20
ELECTRIC PWR TRK DRV		ALL		25.510	0.000	1.5	1.5	2.0	5.000	7.920
ELECTRICIAN		BLD		34.820	37.320	1.5	1.5	2.0	5.350	10.08
ELECTRONIC SYS TECH		BLD		27.430	29.180	1.5	1.5	2.0	5.350	9.320
ELEVATOR CONSTRUCTOR		BLD		40.520	45.585	2.0	2.0	2.0	11.88	12.71
GLAZIER		BLD		31.670	33.670	1.5	1.5	2.0	9.950	7.700
HT/FROST INSULATOR		BLD		42.450	44.950	1.5	1.5	2.0	10.82	11.86
IRON WORKER		BLD		31.010	32.910	1.5	1.5	2.0	9.390	12.26
IRON WORKER		HWY		34.020	36.020	1.5	1.5	2.0	9.390	11.56
LABORER		BLD		25.470	26.970	1.5	1.5	2.0	7.700	13.75
LABORER		HWY		28.000	29.250	1.5	1.5	2.0	7.700	13.95
LABORER, SKILLED		BLD		25.870	27.370	1.5	1.5	2.0	7.700	13.75
LABORER, SKILLED		HWY		28.300	29.550	1.5	1.5	2.0	7.700	13.95
LATHER		BLD		29.330	31.580	1.5	1.5	2.0	7.700	14.66
MACHINERY MOVER		HWY		34.020	36.020	1.5	1.5	2.0	9.390	11.56
MACHINIST		BLD		43.550	46.050	1.5	1.5	2.0	6.130	8.950
MARBLE FINISHERS		BLD		29.750	0.000	1.5	1.5	2.0	7.700	9.130
MARBLE MASON		BLD		31.510	32.760	1.5	1.5	2.0	7.700	9.130
MILLWRIGHT		BLD		30.240	32.490	1.5	1.5	2.0	7.700	14.09
MILLWRIGHT		HWY		31.820	34.070	1.5	1.5	2.0	7.700	14.64
OPERATING ENGINEER		BLD	1	36.000	39.000	1.5	1.5	2.0	9.750	13.60
OPERATING ENGINEER		BLD	2	33.490	39.000	1.5	1.5	2.0	9.750	13.60
OPERATING ENGINEER		BLD	3	29.340	39.000	1.5	1.5	2.0	9.750	13.60
OPERATING ENGINEER		HWY	1	36.000	39.500	1.5	1.5	2.0	9.750	13.60
OPERATING ENGINEER		HWY	2	33.490	39.500	1.5	1.5	2.0	9.750	13.60
OPERATING ENGINEER		HWY	3	29.340	39.500	1.5	1.5	2.0	9.750	13.60
PAINTER		ALL		32.900	34.900	1.5	1.5	1.5	9.650	8.200
PAINTER SIGNS		BLD		33.920	38.090	1.5	1.5	1.5	2.600	2.710
PILEDRIVER		BLD		29.830	32.080	1.5	1.5	2.0	7.700	14.66
PILEDRIVER		HWY		31.820	34.070	1.5	1.5	2.0	7.700	15.14

PIPEFITTER	BLD		37.400	41.510	1.5	1.5	2.0	7.000	11.63
PLASTERER	BLD		27.770	28.770	1.5	1.5	2.0	8.140	12.76
PLUMBER	BLD		34.520	37.630	1.5	1.5	2.0	7.000	13.31
ROOFER	BLD		28.580	30.010	1.5	1.5	2.0	8.450	7.220
SHEETMETAL WORKER	BLD		32.150	33.760	1.5	1.5	2.0	8.270	14.18
SIGN HANGER	HWY		34.020	36.020	1.5	1.5	2.0	9.390	11.56
SPRINKLER FITTER	BLD		36.390	39.140	1.5	1.5	2.0	8.420	8.500
STEEL ERECTOR	HWY		34.020	36.020	1.5	1.5	2.0	9.390	11.56
STONE MASON	BLD		32.060	33.560	1.5	1.5	2.0	7.700	9.130
TERRAZZO FINISHER	BLD		29.750	0.000	1.5	1.5	2.0	7.700	9.130
TERRAZZO MASON	BLD		31.510	32.760	1.5	1.5	2.0	7.700	9.130
TILE MASON	BLD		31.510	32.760	1.5	1.5	2.0	7.700	9.130
TRUCK DRIVER	ALL	1	31.230	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	ALL	2	31.680	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	ALL	3	31.890	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	ALL	4	32.180	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	ALL	5	33.020	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	O&C	1	24.980	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	O&C	2	25.340	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	O&C	3	25.510	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	O&C	4	25.740	0.000	1.5	1.5	2.0	10.30	4.840
TRUCK DRIVER	O&C	5	26.420	0.000	1.5	1.5	2.0	10.30	4.840
TUCKPOINTER	BLD		32.060	33.560	1.5	1.5	2.0	7.700	9.130

Legend:

RG (Region)
TYP (Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers)
C (Class)
Base (Base Wage Rate)
FRMAN (Foreman Rate)
M-F>8 (OT required for any hour greater than 8 worked each day, Mon through
OSA (Overtime (OT) is required for every hour worked on Saturday)
OSH (Overtime is required for every hour worked on Sunday and Holidays)
H/W (Health & Welfare Insurance)
Pensn (Pension)
Vac (Vacation)
Trng (Training)

Explanations

PEORIA COUNTY

The following list is considered as those days for which holiday rate of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the

appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignment required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classificatio only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burgla alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

LABORER, SKILLED - BUILDING

The skilled laborer building (BLD) classification shall encompass the following types of work, irrespective of the site of the work: cuttin & acetylene torch, gunnite nozzlemen, gunnite pump men & pots, kettlemen & carriers of men handling hot stuff, sandblaster nozzle men, sandblasting pump men & pots, setting up and using concrete burning bars, wood block setters, underpinning & shoring of existing buildings, and the unload-ing and handling of all material coated wit creosote.

LABORER, SKILLED - HIGHWAY

The skilled laborer heavy & highway (HWY) classification shall encompass the following types of work,irrespective of the site of the work: jackhammer & drill operator, gunite pump & pot man, puddlers, vibrator men, wire fabric placer, sandblast pump & pot man, strike of concrete, unloading, handling & carrying of all creosoted piles, ties or timber, concrete burning bars, power wheelbarrows or buggies, asphalt raker, brickset-ters, cutting torchman (electric & acetylene) men setting lines to level forms, form setters, gunite nozzle man & sandblasting nozzle man, power man, and rip-rapping by hand.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION
Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but haulin less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and workin forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump,

service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregat supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

OPERATING ENGINEERS - BUILDING

Class 1. Cranes; Overhead Cranes; Gradall; All Cherry Pickers; Mechanics; Central Concrete Mixing Plant Operator; Road Pavers (27E - Dual Drum - Tri Batchers); Blacktop Plant Operators and Plant Engineers; 3 Drum Hoist; Derricks; Hydro Cranes; Shovels; Skimmer Scoops; Koehring Scooper; Drag Lines; Backhoe; Derrick Boats; Pile Drivers and Skid Rigs; Clamshells; Locomotive Cranes; Dredge (all types) Motor Patrol; Power Blades - Dumore - Elevating and similar types; Tower Cranes (Crawler-Mobile) and Stationary; Crane-type Backfiller; Drott Yumbo and similar types considered as Cranes; Caisson Rigs; Dozer; Tournadozer; Work Boats; Ross Carrier; Helicopter; Tournapulls - all and similar types; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip For Paver; Rock Crusher; Heavy Equipment Greaser; CMI, CMI Belt Placer, Auto Grade & 3 Track and similar types; Side Booms; Multiple Unit Earth Movers; Creter Crane; Trench Machine; Pump-crete-Belt Crete-Squeeze Cretes-Screw-type Pumps and Gypsum; Bulker & Pump - Operator will clean; Formless Finishing Machine; Flaherty Spreader o similar types; Screed Man on Laydown Machine; Wheel Tractors (industrial or Farm-type w/Dozer-Hoe-Endloader or other attachments); F.W.D. & Similar Types; Vermeer Concrete Saw.

Class 2. Dinkeys; Power Launches; PH One-pass Soil Cement Machine (and similar types); Pugmill with Pump; Backfillers; Euclid Loader; Forklifts; Jeeps w/Ditching Machine or other attachments; Tuneluger; Automatic Cement and Gravel Batching Plants; Mobile Drills (Soil Testing) and similar types; Gurries and Similar Types; (1) and (2) Drum Hoists (Buck Hoist and Similar Types); Chicago Boom; Boring Machine & Pipe Jacking Machine; Hydro Boom; Dewatering System; Straw Blower; Hydro Seeder; Assistant Heavy Equipment Greaser on Spread; Tractors (Track type) without Power Unit pulling Rollers; Rollers on Asphalt -- Brick Macadem; Concrete Breakers; Concrete Spreaders; Mul Pulling Rollers; Center Stripper; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Cement Finishing Machine; Barber Green or similar loaders; Vibro Tamper (All similar types) Self-propelled; Winch or Boom Truck; Mechanical Bull Floats; Mixers over 3 Bag to 27E; Tractor pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Truck Type Hoptoe Oilers; Fireman; Spray Machine on Paving; Curb Machines; Truck Crane Oilers; Oil Distributor; Truck-Mounted Saws.

Class 3. Air Compressor; Power Subgrader; Straight Tractor; Trac Air without attachments; Herman Nelson Heater, Dravo, Warner, Silent Glo, and similar types; Roller: Five (5) Ton and under on Earth or Gravel; Form Grader; Crawler Crane & Skid Rig Oilers; Freight Elevators - permanently installed; Pump; Light Plant; Generator; Conveyor (1) or (2) - Operator will clean; Welding Machine; Mixer (3) Bag and Under (Standard Capacity with skip); Bulk Cement Plant; Oiler on Central Concrete Mixing Plant.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

CLASS 1. Cranes; Hydro Cranes; Shovels; Crane Type Backfiller; Tower Mobile, Crawler, & Stationary Cranes; Derricks; Hoists (3 Drum); Draglines; Drott Yumbo & Similar Types considered as Cranes; 360 Degree Swing Excavator (Shears, Grapples, Movacs, etc.); Back Hoe; Derrick Boats; Pile Driver and Skid Rigs; Clam Shell; Locomotive - Cranes; Road Pavers - Single Drum - Dual Drum - Tri Batcher; Motor Patrols & Power Blades - Dumore - Elevating & Similar Types; Mechanics; Central Concrete Mixing Plant Operator; Asphalt Batch Plan Operators and Plant Engineers; Gradall; Caisson Rigs; Skimmer Scoop - Koering Scooper; Dredges (all types); Hoptoe; All Cherry Pickers; Work Boat; Ross Carrier; Helicopter; Dozer; Tournadozer; Tournapulls all and similar types; Operation of Concrete and all Recycle Machines; Multiple Unit Earth Movers; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Operation of Material Crusher, Screening Plants, and Tunnel Boring Machine; Heavy Equipment Greaser (top greaser on spread); CMI, Auto Grade, CMI Belt Placer & 3 Track and Similar Types Side Booms; Asphalt Heater & Planer Combination (used to plane streets); Wheel Tractors (with Dozer, Hoe or Endloader Attachments); CAT Earthwork Compactors and Similar Types; Blaw Knox Spreader and Similar Types; Trench Machines; Pump Crete - Belt Crete - Squeeze Crete - Screw Type Pumps and Gypsum (operator will clean); Creter Crane; Operation of Concrete Pump Truck; Formless Finishing Machines; Flaherty Spreader or Similar Types; Screed Man on Laydown Machine; Vermeer Concrete Saw; Operation of Laser Screed; Span Saw; Dredge Leverman; Dredge Engineer; Lull or Similar Type; Hydro-Boom Truck; Operation of Guard Rail Machine; and Starting Engineer on Pipeline or Construction (11 or more pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc, and Ground Heater (Trailer Mounted).

CLASS 2. Bulker & Pump; Power Launches; Boring Machine & Pipe Jackin Machine; Dinkeys; Operation of Carts, Powered Haul Unit for a Boring

Machine; P & H One Pass Soil Cement Machines and Similar Types; Wheel Tractors (Industry or Farm Type - Other); Back Fillers; Euclid Loader Fork Lifts; Jeep w/Ditching Machine or Other Attachments; Tunneluger; Automatic Cement & Gravel Batching Plants; Mobile Drills - Soil Testing and Similar Types; Pugmill with Pump; All (1) and (2) Drum Hoists; Dewatering System; Straw Blower; Hydro-Seeder; Bump Grinders (self-propelled); Assistant Heavy Equipment Greaser; Apsco Spreader; Tractors (Track-Type) without Power Units Pulling Rollers; Rollers on Asphalt - Brick or Macadam; Concrete Breakers; Concrete Spreaders; Cement Strippers; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Vibro-Tampers (All Similar Types Self-Propelled); Mechanical Bull Floats; Self-Propelled Concrete Saws; Truck Mounted Power Saws; Operation of Curb Cutters; Mixers - Over Three (3) Bags; Winch and Boom Trucks; Tractor Pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Mule Pulling Rollers; Pugmill without Pump; Barber Greene or Similar Loaders; Track Type Tractor w/Power Unit attached (minimum); Fireman; Spray Machine on Paving; Curb Machines; Paved Ditch Machine; Power Broom; Self-Propelled Sweepers; Self-Propelled Conveyors; Power Subgrader; Oil Distributor; Straight Tractor; Truck Crane Oiler; Truck Type Oilers; Directional Boring Machine; Horizontal Directional Drill; Articulating End Dump Vehicles; Starting Engineer on Pipeline or Construction (6 -10 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Powe Pac, etc., and Ground Heater (Trailer Mounted).

CLASS 3. Straight Framed Truck Mounted Vac Unit (separately powered) Trac Air Machine (without attachments); Rollers - Five Ton and Under on Earth and Gravel; Form Graders; Bulk Cement Plant; Oilers; and Starting Engineer on Pipeline or Construction (3 - 5 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mod of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification an provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task,

the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification no listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

SAMPLE ADDENDUM

Peoria Park District
Planning, Design and Construction Department
1314 N. Park Road
Peoria, IL 61604
Telephone: (309) 686-3386

ADDENDUM NO.

PROJECT TITLE:

ISSUANCE DATE:

LOCATION:

The proposed Contract Documents for this Work are modified as follows:

I. **DRAWINGS**: (Delete/Change/Modify/Etc.)

II. **PROJECT MANUAL/SPECIFICATIONS/GENERAL CONDITIONS/ETC**.: (Delete/Change/Modify/Etc.)

III. **INVITATION TO BID**: (Delete/Change/Modify/Etc.)

END OF ADDENDUM NO. _____

(Addendum may be bound into Project Manual, attached to front cover, faxed, mailed or delivered to bidders.)

Addendum No. _____
Page 1 of 1

Pleasure Driveway and Park District of Peoria, Illinois

Sample Agreement Between Owner and Contractor

This **AGREEMENT** for

BIKE TRAIL BRIDGE AND APPROACHES
PEORIA PARK DISTRICT ROCK ISLAND GREENWAY
AT KNOXVILLE AVENUE (SR 40)

is made as of the _____ day of _____ in the year of Two Thousand Thirteen (2013)

Between the Owner:

PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, ILLINOIS
2218 N. PROSPECT ROAD
PEORIA, IL 61603

And the Contractor:

The Owner's Representative is:

PLANNING, DESIGN AND CONSTRUCTION DEPARTMENT
1314 N. PARK ROAD
PEORIA, IL 61604

The Architect or Engineer is:

MAURER-STUTZ, INC.
3116 N. DRIES LANE, SUITE 100
PEORIA, IL 61604

The Owner and Contractor agree as follows:

I. THE CONTRACT DOCUMENTS. The Contract Documents consist of this AGREEMENT, the Plans/Drawings for the Project dated June 7, 2013, all sections of the Project Manual dated June 18, 2013, including but not limited to the Instructions and Supplementary Instructions to Bidders, the Bid Form, the General Conditions (1997 AIA Document A201) and Supplementary General Conditions, the General Requirements, the Specifications, and other documents as enumerated in Section 10 and Attachment #1 of this AGREEMENT**,** and including addenda issued prior to the execution of this AGREEMENT. The Contract Documents form the CONTRACT between the Owner and the Contractor. The CONTRACT represents the entire and integrated contract for the construction of the Work of the Project between the parties hereto and supersedes prior proposals, contracts, negotiations, or representations, either written or oral.

II. THE WORK OF THE CONTRACT. The Contractor shall execute the entire Work described in the Contract Documents, unless modified in Section XI of this AGREEMENT**.**

III. BASIS OF PAYMENT. The Work of the CONTRACT shall be performed on a lump sum basis.

IV. CONTRACT SUM. The Owner shall pay the Contractor the sum of

(and incorporates the acceptance of bid alternates as defined in sub-paragraph "A", below) for the Contractor's performance of the Work required by the Contract Documents, subject to modifications made by Owner approved Change Orders. If this CONTRACT calls for a unit price basis of payment, the contract sum stated above shall be adjusted by Change Order based upon multiplying the unit prices submitted by the Contractor on the Bid Form (and included herein as an Attachment to this CONTRACT) times (x) the actual quantities installed.

A. ACCEPTANCE OF ALTERNATES. The contract sum stated above is based on the acceptance of the following alternates, which are described in the Project Manual:

ITEM	ADD	DEDUCT

V. DATES OF COMMENCEMENT AND COMPLETION OF THE WORK. The Owner's Representative will issue a written Notice to Proceed with the Work of the Project after receiving the required Performance Bond, Labor and Material Payment Bond, and Certificate of Insurance (in proper form and providing the required coverages and amounts from a company [or companies] acceptable to the Owner, and naming the Owner as an Additional Insured), and any other pre-construction submittals required by the Contract Documents. The Contractor hereby acknowledges and agrees that failure to provide such submittals in a timely manner shall not be cause to adjust the date(s) for completion of the Work.

A. LIQUIDATED DAMAGES. Owner and Contractor recognize that time is of the essence of this CONTRACT and that Owner will suffer financial loss if the Contractor has not achieved Substantial Completion and Final Completion of the Work within the time specified below, plus any extensions thereof allowed in accordance with Article 8 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time.

B. SUBSTANTIAL COMPLETION. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as Liquidated Damages for delay (but not as a penalty), Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS ($250.00) for each calendar day that expires after one hundred fifty-three (153) calendar days from Notice of Award until Substantial Completion is attained. The work is tentatively scheduled to begin on July 11, 2013 and be at Substantial Completion by December 10, 2013.

C. FINAL COMPLETION. After Substantial Completion if Contractor shall neglect, refuse, or fail to complete the remaining Work necessary to achieve Final Completion within fourteen (14) calendar days or any proper extension thereof granted by Owner, Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS ($250.00) for each day that expires after the time specified.

VI. PROGRESS PAYMENTS, REDUCTION OF RETAINAGE AND FINAL PAYMENT.

A. Unless otherwise specified elsewhere in the Contract Documents, the Contractor may submit monthly applications for progress payments ("Application for Payment") to the Owner's Representative. Each Application for Payment must be certified by the Architect or Engineer (if applicable), or the Owner's Representative if an Architect or Engineer has not been engaged for construction phase services. An Application for Payment shall be for a period of no less than one calendar month ending on the last day of the month, unless otherwise approved in writing by the Owner's Representative. Application forms shall be subject to Owner's approval. Each Application for Payment shall be based upon the Schedule of Values submitted by the Contractor, in accordance with the Contract Documents. The Schedule of Values shall be approved by the Owner's Representative and the Architect or Engineer (if applicable) in advance of the Contractor's first Application for Payment and the approved schedule shall be used by the Contractor as the basis for submitting payment requests. The Owner's Representative and/or

Architect/Engineer's (if applicable) approval of the Schedule of Values shall not constitute a complete check for accuracy, and shall not relieve the Contractor from responsibility for errors of any sort.

B. An Application for Payment (certified by the Architect or Engineer, if applicable) shall be submitted to the Owner's Representative no later than the fifth (5th) day of the month following the period for which the application is being submitted. In such case, the Owner shall make the progress payment to the Contractor not later than the twentieth day of the next month. A progress payment request on an Application for Payment (certified by the Architect or Engineer, if applicable) received by the Owner's Representative after the fifth (5th) day of a month shall be made by the Owner not later than forty-five days after receipt by the Owner's Representative.

C. Based upon its review of the certified (by the Architect or Engineer, if applicable) Application for Payment, the Owner shall make a progress payment to the Contractor in such amount as the Owner reasonably determines is properly due, subject to a retainage of ten percent (10%) of the value of the Work completed and covered by the Application for Payment, less the aggregate of previous payments in each case. In determining the amount properly due, the Owner shall consider the value of labor, materials and equipment incorporated in the Work, or properly allocable to materials and equipment suitably stored at the site or at some other location previously agreed upon in writing by the parties. The Owner's Representative shall have the sole right to determine that materials or equipment stored off-site have been properly delivered, protected, and/or secured. The Owner's Representative (or the Architect or Engineer, if applicable) may nullify or withhold a Certificate of Payment, in whole or in part, for the reasons set forth in Section 9.5 of the General Conditions. Upon Substantial Completion of the Work, the Owner shall pay the Contractor a sum sufficient to increase the total payments to ninety-five percent (95%) of the Contract Sum, less such amounts as the Owner's Representative shall determine for incomplete work and unsettled claims.

VII. Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner when **1)** the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as provided in Subparagraph 12.2.2 of the General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; and **2)** a final Certificate of Payment has been issued by the Architect/Engineer or Owner's Representative; such final payment shall be made by the Owner not more than forty-five (45) days after the receipt of the final Certificate of Payment by the Owner.

VIII. CHANGE ORDERS. The Owner and Contractor agree that changes in the Work are sometimes required and necessary, and that timely: **a)** submission of proposed changes in the Work or the scope of Work by the Owner, **b)** pricing by the Contractor, **c)** review by the Owner's Representative and/or Architect/Engineer, and **d)** final approval by the Owner are necessary in order to assure that the Work of the Project is completed on schedule. The Contractor hereby acknowledges and agrees that an increase in the scope of the Work does not grant or imply an increase in the Contract Time, unless specifically so stated on the final approved Change Order. The Contractor also agrees that any and all Work which deviates from the plans and specifications and/or results in additional Work performed by Contractor's forces, including those of his sub-contractor's, will not result in additional expense to the Owner, unless **finally approved both by the Owner and the Architect/Engineer (if applicable) prior to the additional Work being performed.** No claim for an addition to the Contract Sum shall be valid unless approved by a written Change Order signed by the Owner and the architect/engineer (if applicable) **prior to the additional Work being performed.**

IX. TERMINATION OR SUSPENSION. The CONTRACT may be terminated by the Owner or the Contractor as provided by Article 14 of the General Conditions. The Work may be suspended by the Owner as provided in Article 14 of the General Conditions.

X. ENUMERATION OF CONTRACT DOCUMENTS. The Contract Documents, except for modifications issued after the execution of this Agreement, consist of:

- **A.** this Standard Form of Agreement Between Owner and Contractor, of the Pleasure Driveway and Park District of Peoria, Illinois.
- **B.** the Plans or Drawings titled Plans for Proposed Local Improvement – Knoxville Crossing, dated June 7, 2013, and enumerated in ATTACHMENT #1 - "LIST OF DRAWINGS".
- **C.** Supplementary and other Conditions of the CONTRACT, and the Specifications, are those found in the Project Manual titled "Bike Trail Bridge and Approaches ", and dated June 18, 2013, enumerated as follows:
  - **1)** Supplementary Instructions to Bidders
  - **2)** Contractor's Proposal, as accepted by the Owner
  - **3)** General Conditions of the Contract for Construction, AIA Document A201, 1997 Edition
  - **4)** Supplementary General Conditions
  - **5)** Major Subcontractor List
  - **6)** Directory of Minority & Women Owned Business Enterprises
  - **7)** Illinois Drug Free Workplace Certification
  - **8)** Contractor Certification (Individual or Corporate/Partnership)
  - **9)** Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors
  - **10)** Workforce Profile
  - **11)** Performance Bond
  - **12)** Labor and Material Payment Bond
  - **13)** Proof of Insurance
  - **14)** Specifications: Division 010000, "General Requirements"; Divisions 020000-350000 as applicable
  - **15)** Attachment A.5 - Insurance Requirements
  - **16)** Certificate of Safety Compliance
  - **17)** Peoria Park District Weekly Workforce Report
  - **18)** Certified Payroll Form
  - **19)** Substance Abuse Prevention Program Certification

XI. MISCELLANEOUS PROVISIONS. Other Provisions of this Agreement are as follows:

This AGREEMENT is entered into as of the day and year first written above and is executed in at least three original copies of which one is to be delivered to the Contractor, one to the Architect/Engineer (if any) for use in the administration of the CONTRACT, and one to the Owner.

OWNER:

(Signature)

TIMOTHY J. CASSIDY, Park Board President

ATTEST:

CONTRACTOR :

(Signature)

(Printed Name and Title)

ATTEST:

ATTACHMENT #1 - LIST OF DRAWINGS

Number	Title	Date
1	**Cover Sheet**	**June 7, 2013**
2	**General Notes**	**June 7, 2013**
3	**Summary of Quantities**	**June 7, 2013**
4-5	**Schedule of Quantities**	**June 7, 2013**
6-9	**Typical Sections**	**June 7, 2013**
10-11	**Alignment, Ties and Benchmarks**	**June 7, 2013**
12	**Removal Plan**	**June 7, 2013**
13-18	**Plan and Profile**	**June 7, 2013**
19-34	**Structure Plans**	**June 7, 2013**
35	**Curb Outlet Details**	**June 7, 2013**
36	**Detour**	**June 7, 2013**
37-53	**Cross Sections**	**June 7, 2013**
000001	**Standard Symbols, Abbreviations, and Paterns**	
001001	**Areas of Reinforcement Bars**	
001006	**Decimal of an Inch and of a Foot**	
280001	**Temporary Erosion Control Systems**	
515001	**Name Plate for Bridges**	
602301	**Inlet – Type A**	
604036	**Grate Type 8**	
701421	**Lane Closure, Multilane, Day Operations Only, for Speeds >/= 45 MPH to 55 MPH**	
701602	**Urban Lane Closure, Multilane, 2W with Bidirectional Left Turn Lane**	
701901	**Traffic Control Devices**	
720001	**Sign Panel Mounting Details**	
720006	**Sign Panel Erection Details**	
720011	**Metal Posts for Signs, Markers and Delineators**	
729001	**Application of Types A & B Metal Posts (For Signs and Markers)**	
780001	**Typical Pavement Markings**	

PERFORMANCE BOND

TO: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA
PEORIA, ILLINOIS

KNOW ALL MEN BY THEIR PRESENTS;

That_____
_____
as Principal, and_____
_____as
corporation of the State of _____, as Surety, are held and firmly bound unto the PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS, as Obligee, in the amount of _____
_____
($_____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20 _____ entered into a contract with Obligee for _____
_____
in accordance with contract documents prepared by the Architect-Engineer, which Contract is by reference made a part hereof and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly and faithfully perform the Contract and all changes thereof, and during the life of any guaranty or warranty required under the Contract, and, if Principal shall fully secure and protect the Obligee from all liability and from all loss or expense of any kind, including all court costs, engineering fees and attorneys' fees made necessary or arising from the failure, refusal or neglect of Principal to comply with all obligations assumed by Principal in connection with the performance of the Contract and all changes thereof, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof. Whenever Principal shall be and is declared to be in default under the Contract, Obligee having performed Obligee's obligations thereunder, Surety shall, after notice of such default, reserve all rights against all parties, take over and complete the Contract and become entitled to payment of the balance of any monies due or to become due to such defined Principal in accordance with the progress of the work.

A condition of this Bond is that the Principal shall faithfully perform in accordance with the prevailing wage clause provided in the bid specification or Contract pursuant to Illinois Compiled Statutes 820 ILCS 130/1 *et. seq.*

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Obligee named herein.

Signed and Sealed this _____ day of _____, 20 _____.

CONTRACTOR

_____
Contractor Firm Name

By: _____
Signature

_____
Title

SURETY

_____
Surety Name

By:_____
Attorney-in-Fact

_____
Resident Agent

ATTEST:

_____
Corporate Secretary (Corporations only)

LABOR & MATERIAL PAYMENT BOND

TO: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA
PEORIA, ILLINOIS

KNOW ALL MEN BY THESE PRESENTS:

That: _____
_____
as Principal, and _____
_____
a corporation of the State of _____ as Surety, are held and firmly bound unto the PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of _____Dollars ($_____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20 _____, entered into a Contract with Obligee for _____
_____
in accordance with contract documents prepared by the Architect-Engineer which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 820 ILCS 130/1 et. seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is defined as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.

2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, materialman or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the Contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between the Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.

4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.

5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this _____ day of _____, 20 _____.

CONTRACTOR	**SURETY**
Contractor Firm Name:	
_____	_____
By: _____ Signature	By:_____ Attorney-in-Fact
_____ Title	_____ Resident Agent

ATTEST:

_____
Corporate Secretary (Corporations only)

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

THE undersigned, being duly sworn, deposes and says that he is _____
_____ of the _____
who is the contractor for the _____
building located at _____
owned by _____.

That the total amount of the contract including extras is $_____ on which he has received payment of $_____ prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub-contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES	WHAT FOR	CONTRACT PRICE	AMOUNT PAID	THIS PMT.	BALANCE DUE

TOTAL ALL LABOR AND MATERIAL TO COMPLETE

There are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

Signed this _____ day of _____, 20 _____.

Signature: _____

Subscribed and sworn to before me this _____ day of _____, 20 ___.

_____
Notary Public

FINAL WAIVER OF LIEN

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____ha_____ been employed by THE PEORIA PARK DISTRICT to furnish material and labor for the _____

at the premises commonly known as _____

located in the City of _____, County of Peoria, State of Illinois.

The undersigned, for and in consideration of _____ ($_____) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do_____ hereby waive and release any and all lien or claim or right of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises and improvements thereon and on the money, funds or other considerations due or become due from the owner on account of labor or services, material, fixtures, apparatus or machinery heretofore furnished or which may be furnished at any time hereafter by the undersigned for the above described premises.

Dated this _____ day of _____ 20 _____.

[Affix corporate seal here.]

_____
(Name of sole owner, corporation or partnership)

ATTEST:

_____ _____(SEAL)
(Signature of secretary of corporation) (Signature of sole owner or authorized representative of corporation or partnership)

WAIVER OF LIEN

GENERAL CONTRACTOR'S PARTIAL
TO COVER ONLY CERTAIN PAYMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____ has been employed by THE PEORIA PARK DISTRICT to furnish material and labor for the _____at the premises commonly known as _____

_____

located in the City of Peoria, County of Peoria, and State of Illinois.

NOW, THEREFORE, the undersigned, for and in consideration of the sum of _____ _____ Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged by the undersigned, does hereby waive and release to the extent only of the aforesaid amount of _____ Dollars, paid simultaneously herewith, any and all lien or right or claim of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon and on the money, funds, or other consideration due or to become due from the owner on account of labor, services, material, fixtures, apparatus or machinery, furnished by the undersigned, to or on account of the said owner, for the above-described premises, but only to the extent of the payment aforesaid.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here]

_____
(Name of sole owner, corporation or partnership)

ATTEST:

_____ _____(SEAL)
(Signature of secretary of corporation) (Signature of sole owner or authorized representative of corporation or partnership)

SUB-CONTRACTOR'S FINAL WAIVER OF LIEN

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____
(sub-contractor)
ha____ been employed by _____
(general contractor)
to furnish material and labor for the _____ at the

premises commonly known as _____, in the City of _____,

County of Peoria, State of Illinois.

The undersigned, for and in consideration of _____

_____ ($_____) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do _____ hereby waive and release any and all lien or claim or right of lien under the statutes of the State of Illinois relating to Mechanics Liens, on the above described premises and improvements thereon and on the money, funds or other considerations due or become due from the owner on account of labor or services, material, fixtures, apparatus or machinery heretofore furnished or which may be furnished at any time hereafter by the undersigned for the above described premises.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here.]

ATTEST:_____

_____
(Name of sole owner, corporation or partnership)

_____ _____(SEAL)
(Signature of sole owner or authorized representative of corporation of partnership)
(Signature of secretary of corporation)

WAIVER OF LIEN

SUB-CONTRACTOR'S PARTIAL
TO COVER ONLY CERTAIN PAYMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

THE undersigned, _____
(sub-contractor)
has been employed by _____
(general contractor)
to furnish material and labor for the _____

_____

at the premises commonly known as _____

_____
located in the City of Peoria, County of Peoria, and State of Illinois.

NOW, THEREFORE, the undersigned, for and in consideration of the sum of _____ _____ Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged by the undersigned, does hereby waive and release to the extent only of the aforesaid amount of _____ Dollars, paid simultaneously herewith, any and all lien or right or claim of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon and on the money, funds, or other consideration due or to become due from the owner on account of labor, services, material, fixtures, apparatus or machinery, furnished by the undersigned, but only to the extent of the payment aforesaid.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here.]

_____
(Name of sole owner, corporation or partnership)

ATTEST:

_____
(Signature of secretary of corporation)

_____(SEAL)
(Signature of sole owner or authorized representative of corporation or partnership)

PEORIA PARK DISTRICT
Weekly Workforce Report
Instructions

This weekly workforce report must be completed and returned to the Peoria Park District project manager for each week that you are working on Peoria Park District property. You are to report only those employees that are actually working on the Peoria Park District project identified on this report. Do not report employees that are not working on the project identified on this report.

If you have further questions regarding this report, please contact the Owner's Project Manager.

I. Trade and Hour Breakdown Table
- List the different trades (carpenter, laborer, plumber, etc.) and report the number of hours by race/gender for each trade;
- Total the hours for each trade on the right.

II. New Hires by Race and Gender
- If additional employees are hired for the job, please record the number of employees hired by race/gender.

III. Total Project Employee Breakdown
- Please track total hours by race/gender for the project if project lasts longer than a week.

Weekly Workforce Report (Peoria Park District Form) Date:_____ Week Ending: _____

Contractor/Subcontractor:_____ Project: _____

Trade & Hour Breakdown:

TRADE	FEMALE HOURS	CAUCASIAN HOURS	AFRICAN-AMERICAN HOURS	HISPANIC HOURS	NATIVE AMERICAN HOURS	ASIAN, PAC. ISLANDER HOURS	TOTAL HOURS

New Hires by Race & Gender

TRADE	CAUCASIAN	AFRICAN-AMERICAN	HISPANIC	NATIVE AMERICAN	ASIAN, PACIFIC ISLANDER	MALE	FEMALE

Total Project Employee Breakdown

	CAUCASIAN	AFRICAN-AMERICAN	HISPANIC	NATIVE AMERICAN	ASIAN, PACIFIC ISLANDER	MALE	FEMALE

CERTIFIED PAYROLL FORM

(Contractor May Use Own Form)

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☐ ADDRESS

PAYROLL NO. FOR WEEK ENDING PROJECT AND LOCATION PROJECT OR CONTRACT NO.

NAME, ADDRESS, TELEPHONE NUMBER AND SOCIAL SECURITY NUMBER OF EMPLOYEE	WORK CLASSIFICATION	DAY DATE	HOURS WORKED EACH DAY							TOTAL HOURS	RATE OF PAY	GROSS AMOUNT EARNED	DEDUCTIONS			TOTAL DEDUCTIONS	NET WAGES PAID PER WEEK
													FICA	WITHHOLDING TAX	OTHER		
		O.T.															
		ST.															
		O.T.															
		ST.															
		O.T.															
		ST.															
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		ST.															
		O.T.															
		ST.															
		O.T.															
		ST.															
		O.T.															
		ST.															

DATE_____

I, _____ _____

(Name of Signatory Party) (Title)]

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

_____ on the

(Contractor of Subcontractor)

_____; that during the payroll period commencing on the

_____ day of _____, _____, and ending the _____ day of _____, _____,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

_____ from the full

(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions authorized by law.

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates mandated by the Illinois Prevailing Wage Act and that the classifications set forth therein for each laborer or mechanic conform with the work performed.

REMARKS:	
NAME AND TITLE	SIGNATURE
THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 5 (820 ILCS 130/5) OF THE PREVAILING WAGE ACT OF THE STATE OF ILLINOIS.	

Form **W-9**
(Rev. December 2011)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type See **Specific Instructions** on page 2.

Name (as shown on your income tax return)

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:
☐ Individual/sole proprietor ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

☐ Exempt payee

☐ Other (see instructions) ▶

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

			–		–				

Employer identification number

		–							

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here **Signature of U.S. person ▶** **Date ▶**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

Disregarded entity. Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

Note. Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/ disregarded entity name" line.

Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/ disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),

2. The United States or any of its agencies or instrumentalities,

3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,

4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or

5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,

7. A foreign central bank of issue,

8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,

9. A futures commission merchant registered with the Commodity Futures Trading Commission,

10. A real estate investment trust,

11. An entity registered at all times during the tax year under the Investment Company Act of 1940,

12. A common trust fund operated by a bank under section 584(a),

13. A financial institution,

14. A middleman known in the investment community as a nominee or custodian, or

15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over $600 required to be reported and direct sales over $5,000 [1]	Generally, exempt payees 1 through 7 [2]

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at *www.ssa.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: *A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.*

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

Signature requirements. Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account [1]
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor [2]
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee [1]
b. So-called trust account that is not a legal or valid trust under state law	The actual owner [1]
5. Sole proprietorship or disregarded entity owned by an individual	The owner [3]
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	**Give name and EIN of:**
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity [4]
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

***Note.** Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov.* You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.ftc.gov/idtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

A complete copy of AIA Document A201, 1997 Edition, with Supplementary General Conditions incorporated, is available for review in the Peoria Park District's Planning, Design and Construction Office.

SUPPLEMENTARY GENERAL CONDITIONS

1. A. "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AIA Document A201, 1997 Edition, published by the American Institute of Architects, including revisions adopted before the date of the Project Manual, is hereby made part of these Specifications with same force and effect as though set forth in full.

B. The following modifies, changes, deletes from or adds to the General Conditions of the Contract for Construction (AIA Document A201, Fourteenth Edition, 1997). Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

C. Parenthesis ( ) indicates the appropriate section and Subparagraph of the General Conditions which each paragraph of the Supplementary General Conditions modifies or refers to.

2. INSERT THE FOLLOWING PHRASE TO PARAGRAPH (1.1.1) AFTER THE WORDS "The Contract Documents consist of the Agreement Between Owner and Contractor (hereinafter the Agreement)":

"the Contractor's Bid, the Advertisement for Bids, the Instructions to Bidders, sample forms and addenda relating to these,"

DELETE THE LAST SENTENCE OF PARAGRAPH (1.1.1).

3. ADD THE FOLLOWING SENTENCES TO END OF PARAGRAPH (1.2.1):

The Contractor shall notify the Owner's Representative immediately if discrepancies are discovered. Full-size or large-scale details or drawings shall govern small-scale drawings that the former are intended to amplify. Dimensions from drawings shall not be determined by scale or rule. Where the Drawings and Specifications conflict with each other or with themselves, the Owner's Representative (in consultation with the Architect, if any) will decide which conflicting requirement governs. Should discrepancies or doubt occur, Contractor shall not proceed with the Work without clarification from the Owner. Contractor shall request clarification in a reasonable time to avoid delays and increases in the Contract Sum.

ADD THE FOLLOWING PARAGRAPHS TO SECTION (1.2):

1.2.4 If any item or material shown on the Drawings is omitted from the Specifications, or vice-versa (except when the Drawings and Specifications clearly exclude such omitted item), and when such item or material is clearly required to complete the detail shown or specified, the Contractor shall furnish and install such item or material of the type and quality established by the balance of the detail shown and specified at no increase to the Contract Sum.

1.2.5 Where a typical or representative detail is shown on the Drawings, this detail shall constitute the standard for workmanship and materials throughout those parts of the Work.

1.2.6 Any Summary of Work as outlined in the Specifications shall not be deemed to limit the work required by the Contract Documents. The Contractor and each Subcontractor shall be responsible for carefully examining all Drawings, including all details, plans, elevations, sections, schedules and diagrams for each particular type of work, and for coordinating the Work described in the Drawings, with the related Specifications. The Contractor shall also be responsible for determining the exact scope of work for each type of work per the Contract Documents and Contractor shall endeavor to check cross-references of work excluded from any division. The Contract Sum is deemed to be based on a complete installation. When additional details or instructions are clearly required to complete the work, the Contractor is deemed to have made an allowance in the Contract Sum for completion of such Work consistent with the local standard of care.

1.2.7 The Drawings are intended to show the arrangement, design and extent of the Work and are schematic in nature. They are not to be scaled for roughing-in measurements or used as shop drawings.

4. ADD THE FOLLOWING PARAGRAPH TO SECTION (1.5):

1.5.3 Neither any oral representation by or oral agreement with any officer, agent, or employee of Owner or Architect before execution of this Contract shall affect or modify any of the Contractor's rights or obligations hereunder. Contractor is not aware of any facts that make misleading or inaccurate in any material respect any information Owner or Architect has furnished to Contractor which would have a material adverse affect on the Contract Time or Contract Sum which Contractor has not advised Owner or Architect of, and if, during the course of the performance of the Work, Contractor learns of any such facts it will so advise Owner. Contractor shall not be entitled to any adjustments in the Contract Time or the Contract Sum as a consequence of Contractor's breach of the terms of this Subparagraph.

5. IN PARAGRAPH (1.6.1) DELETE THE WORD "Architect" **IN THE FOURTH SENTENCE AND REPLACE IT WITH THE WORD "**Owner**".**

DELETE SENTENCES #7, #8, #9 STARTING WITH "The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are …."

6. DELETE PARAGRAPH (2.2.3) IN ITS ENTIRETY.

7. ADD THE FOLLOWING SENTENCE AT THE END OF PARAGRAPH (2.3.1):

"The Owner shall not be liable for any extra cost incurred by the Contractor by such an order."

8. IN PARAGRAPH (2.4.1) DELETE THE SECOND TO LAST SENTENCE.

9. IN PARAGRAPH (3.2.1, 3.2.2 AND 3.2.3) AFTER THE WORD "Architect**" ADD THE WORDS "**and Owner**".**

10. ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.2):

3.2.4 Before starting any work, the Contractor shall examine work performed by others to which his work adjoins or is applied to and report to the Owner's Representative any conditions that will prevent the

satisfactory accomplishment of his work. Failure to notify the Owner's Representative of deficiencies or faults in preceding work prior to commencing work shall constitute acceptance thereof and waiver of any claim of its unsuitability.

11. ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.4):

3.4.4 Before ordering any material or doing any Work, the Contractor shall verify all measurements at the Project site and he shall be responsible for the correctness of same. No extra charge or compensation will be allowed to the Contractor on account of any difference between actual dimensions and the measurements shown on the Project Drawings.

3.4.5 The Contractor shall carefully inspect all materials delivered on and to the Project site and reject defective materials without waiting for the Owner's Representative or other representative of Owner to observe the materials.

12. ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.5):

3.5.2 The Contractor agrees to assign to the Owner any and all manufacturer's warranties relating to materials and equipment furnished as part of the Work and further agrees to perform the Work in such manner so as to preserve any and all such manufacturer's warranties subject to installation directives and other terms of the Contract Documents. The Contractor agrees to deliver to the Owner, upon final payment, such assignments along with or as part of a reference manual, in form and detail reasonably acceptable to Owner, showing all such warranties and guarantees provided by the Contractor and Subcontractors. Such warranties and guarantees shall commence no sooner than the date of purchase from the supplier.

3.5.3 The warranty of Contractor provided in Paragraph 3.5 shall in no way limit or abridge the warranties of the suppliers of equipment and systems which are to comprise a portion of the Work, if they are broader, and all of such warranties shall be in form and substance as required by the Contract Documents. Contractor shall take no action or fail to act in any way which results in the termination or expiration of such third party warranties or which otherwise results in prejudice to the rights of the Owner under such warranties subject to installation directives and other terms of the Contract Documents. Contractor agrees to provide all notices required for the effectiveness of such warranties and shall include provisions in the contracts with the providers and manufacturers of such systems and equipment whereby Owner shall have a direct right of enforcement of such warranty obligations.

13. IN PARAGRAPH (3.6.1), DELETE THE WORD "Sales".

ADD THE FOLLOWING AT THE END OF PARAGRAPH (3.6.1):

The Peoria Park District is exempt from Federal, State and Local taxes. A certificate of exemption will be furnished upon request.

14. IN PARAGRAPH (3.10.2) BEFORE THE WORD "Architect's" **ADD THE WORDS** "Owner's and".

IN PARAGRAPH (3.10.2) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.10):

3.10.4 The construction schedule shall provide for the most expeditious and practicable execution of the Work. The Contractor shall also work closely with the Owner to confirm that the construction schedule accurately reflects the status of the Project. The Contractor's construction schedule shall be updated every month by the Contractor and submitted to the Owner.

.1 Whenever it becomes apparent from the updated construction schedule that any substantial completion previously established by the construction schedule cannot be met, the Contractor shall, at the Owner's request, take any or all of the following actions with no increase to the Contract Sum or Contract Time (unless the delay is caused by an event set forth in paragraph 8.3 of these General Conditions thereby permitting adjustment of the Contract Sum and/or Contract Time under Paragraph 4.3.5 of these General Conditions):

.1.1 Increase construction manpower to substantially return the Project to schedule;

.1.2 Increase the number of working hours per shift, shifts per day or the amount of construction equipment or any combination of the foregoing which will substantially return the Project to schedule;

.1.3 Reschedule activities to concurrently accomplish activities, to the maximum degree practicable, in the time required by the Contract Documents.

If the Contractor fails to take any of these actions Owner shall have the notice and other rights set forth in Paragraph 2.4.

15. IN PARAGRAPH (4.1.1) DELETE THE FIRST SENTENCE AND SUBSTITUTE THE FOLLOWING:

"The Architect, Owner's Representative, and Owner's Project Manager are defined in Paragraph C of "Section 01000 - General" of "Division 01000 - General Requirements".

16. IN PARAGRAPH (4.2.1) DELETE THE WORDS "and will be an Owner's Representative**".**

17. IN PARAGRAPH (4.2.2) DELETE THE WORDS "as a representative of the Owner".

18. IN PARAGRAPH (4.2.4) IN THE FIRST SENTENCE SUBSTITUTE THE WORD "Architect" **FOR THE WORD** "Owner" **AND SUBSTITUTE THE WORD** "Owner" **FOR THE WORD** "Architect"**.**

19. IN PARAGRAPH (4.2.5) DELETE THE WORD "Architect's" **AND** "Architect"**AND SUBSTITUTE THE WORDS** "Owner Representative's" **AND** "Owner Representative"**.**

20. IN PARAGRAPH (4.2.6) IN THE SECOND SENTENCE AFTER THE WORDS "will have authority" **INSERT THE WORDS** "upon written authorization from the Owner".

21. IN PARAGRAPH (4.2.8) DELETE THE WORD "prepare" **AND SUBSTITUTE THE WORDS** "assist the Owner's Representative in preparing".

22. IN PARAGRAPH (4.2.9) DELETE THE WORD "Architect" **AND SUBSTITUTE WORDS** "Owner's Representative, assisted by the Architect".

23. IN PARAGRAPH (4.2.11) IN THE FIRST SENTENCE DELETE THE WORDS "and decide".

24. IN PARAGRAPH (4.2.12) IN THE FIRST SENTENCE DELETE THE WORD "and decisions".

IN PARAGRAPH (4.2.12) IN THE SECOND SENTENCE DELETE THE WORDS "and initial decisions" **AND** "or decisions".

25. ADD PARAGRAPH TO SECTION (4.2):

4.2.14 Notwithstanding any other provision of this Agreement to the contrary, the Architect shall have no authority to order or approve any material deviation from the Contract Documents, whether or not such deviation affects the Contract Sum or other Substantial Completion Date (as defined herein). In the event any such deviation is sought, prior written approval from the Owner's Representative and the Owner must be obtained. The Architect may decide quality issues and may approve non-material deviations from the Contract Documents.

26. IN PARAGRAPH (4.3.4) IN THE FOURTH SENTENCE DELETE THE WORD "decision" **AND SUBSTITUTE THE WORD** "recommendation".

IN PARAGRAPH (4.3.4) IN THE LAST SENTENCE DELETE THE WORD "determination" **AND SUBSTITUTE THE WORD** "recommendation".

27. DELETE PARAGRAPH (4.3.10) IN ITS ENTIRETY.

28. DELETE PARAGRAPH (4.4.1) AND SUBSTITUTE THE FOLLOWING:

"Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution or progress of the Work or the interpretation of the Contract Documents shall be initially referred in writing to the Architect for a recommendation."

29. IN PARAGRAPH (4.4.2) AFTER "(2)" ADD THE WORD "recommend" **AND CHANGE THE WORD** "reject" **TO** "rejecting".

IN PARAGRAPH (4.4.2) AFTER "(3)" ADD THE WORD "recommend" **AND CHANGE THE WORD** "approve" **TO** "approving".

IN PARAGRAPH (4.4.2) AT THE END OF THE SENTENCE DELETE THE WORD "resolve" **AND ADD THE WORDS** "make recommendation on".

30. IN PARAGRAPH (4.4.3) DELETE THE WORD "decision" **AND SUBSTITUTE THE WORD** "recommendation".

31. IN PARAGRAPH (4.4.4) IN THE LAST SENTENCE DELETE THE WORDS "either reject or approve the Claim" **AND SUBSTITUTE THE WORDS** "provide a recommendation regarding the Claim in accordance with Paragraph 4.2.2".

IN PARAGRAPH (4.4.4) AT THE END OF THE LAST SENTENCE DELETE THE WORDS "in whole or in part."

32. DELETE PARAGRAPHS (4.4.5) AND (4.4.6) IN THEIR ENTIRETY.

33. IN PARAGRAPH (4.4.8) DELETE THE WORD "resolution" **AND SUBSTITUTE THE WORDS** "final recommendation".

IN PARAGRAPH (4.4.8) AFTER THE WORD "Architect," **ADD THE WORD** "or".

IN PARAGRAPH (4.4.8) AT THE END OF THE SENTENCE DELETE THE WORDS "or by arbitration".

34. IN PARAGRAPH (4.5.1) DELETE THE WORD "decision" **AND SUBSTITUTE THE WORD** "recommendation".

IN PARAGRAPH (4.5.1) DELETE THE WORDS "arbitration or".

35. IN PARAGRAPH (4.5.2) IN THE SECOND SENTENCE DELETE THE WORDS "a demand for arbitration" **AND SUBSTITUTE THE WORDS** "legal or equitable proceedings".

IN PARAGRAPH (4.5.2) AFTER THE WORDS "proceed in advance of " **DELETE THE WORDS** "arbitration or".

36. IN PARAGRAPH (4.5.3) DELETE THE FIRST SENTENCE.

37. DELETE SECTION (4.6) IN ITS ENTIRETY.

38. IN PARAGRAPH (5.2.1) DELETE THE FIRST SENTENCE AND SUBSTITUTE:

> "The subcontractors/suppliers listed by the Contractor on the Major Subcontractor/Supplier List (submitted with the Bid) shall not be changed without the written consent of the Owner."

IN PARAGRAPH (5.2.1) IN THE SECOND SENTENCE DELETE THE WORDS "Architect will" **AND SUBSTITUTE THE WORDS** "Owner's Representative will".

IN PARAGRAPH (5.2.1) IN THE SECOND SENTENCE AFTER THE WORDS "promptly reply to" **ADD THE WORDS** "any request made by".

IN PARAGRAPH (5.2.1) IN THE SECOND SENTENCE AFTER THE WORDS "any such proposed" **ADD THE WORDS** "change in".

IN PARAGRAPH (5.2.1) IN THE LAST SENTENCE DELETE THE WORDS "Owner or Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

IN PARAGRAPH (5.2.1) IN THE LAST SENTENCE DELETE THE WORD "promptly" **AND ADD THE WORDS** "within 10 calendar days (of receipt of written request for such change from the Contractor)".

39. IN PARAGRAPH (6.2.2) BEFORE THE WORD "Architect" **ADD THE WORDS** "Owner and".

40. IN PARAGRAPH (6.3.1) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORD** "Owner".

41. IN PARAGRAPH (7.2.1) DELETE THE WORDS "the Architect" **AND SUBSTITUTE THE WORDS** "the Owner's Representative".

ADD THE FOLLOWING PARAGRAPHS TO SECTION (7.2):

7.2.3 A Change Order shall include all of the Contractor's costs associated therewith.

7.2.4 The Contractor shall not accept any request for a Change Order from any person other than the Owner and may not perform any work asserted to constitute a change in the Work until the Owner

has approved the Change Order in writing, unless the Owner authorizes the Contractor, in writing, to proceed with a change prior to the Owner's final approval. Notwithstanding anything to the contrary herein, the Contractor shall not charge for overtime services in the performance of any Change Order Work, unless the Owner has specifically authorized overtime in writing. Owner may competitively bid changes in the Work and Contractor, Subcontractor and suppliers shall provide Owner with all documents Owner requests to facilitate such competitive bidding of changes in the Work.

7.2.5 There shall be no change in the Work, whether an alteration or addition to the Contract Sum or to any amounts due under the Contract Documents or to a change in the Contract Time, unless and until such alteration or addition has been authorized by a written Change Order executed and issued in accordance and compliance with the requirements with this Article 7 or by written authorization to proceed with such change in the Work signed by the Owner or as otherwise provided pursuant to the Contract Documents. The requirements set forth in this Paragraph 7.2.5 are of the essence. No claim that the Owner has been unjustly enriched by any alteration or addition to the Work, whether or not any such unjust enrichment to the Work or to the Owner in fact exists, shall form the basis of any claim for an increase in any amount due under the Contract Documents or a change in the Contract Time, and the terms of a fully-executed Change Order shall be conclusive.

42. IN PARAGRAPH (7.3.1) DELETE THE WORDS "the Architect" **AND SUBSTITUTE THE WORDS** "the Owner's Representative".

43. IN PARAGRAPH (7.3.4) DELETE THE WORDS "the Architect" **AND SUBSTITUTE THE WORDS** "the Owner's Representative".

44. IN PARAGRAPH (7.3.6) IN THE FIRST SENTENCE DELETE THE WORD "determined" **AND SUBSTITUTE THE WORD** "recommended".

45. IN PARAGRAPH (7.3.7) IN THE FIRST SENTENCE AFTER THE WORD "Architect" **ADD THE WORDS** "and the Owner's Representative".

46. IN PARAGRAPH (7.3.8) DELETE THE WORDS "the Architect" **AND SUBSTITUTE THE WORDS** "the Owner's Representative".

47. IN PARAGRAPH (7.3.9) DELETE THE WORD "determination" **AND SUBSTITUTE THE WORD** "recommendation".

48. IN PARAGRAPH (8.1.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

49. ADD THE FOLLOWING PARAGRAPHS TO SECTION (8.2) .

8.2.4 All work shall be "Substantially Complete" as required by the **Instructions to Bidders** and the **Agreement Between Owner and Contractor.**

8.2.5 It is further agreed that said completion schedule is reasonable, and the Contractor shall prosecute said work regularly, diligently and continuously at such rate of progress as will insure full completion thereof within the time specified.

8.2.6 Provided, however, the following exceptions:

.1 Any preference, priority or allocation order duly issued by the United States Government.

.2 Any unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including acts of God, or of a public enemy, acts of the Owner, acts of another Contractor in performance of a separate contract with the Owner, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather. The criteria on which the unusually severe weather shall be based is the average precipitation/temperatures received in the project area, as recorded over a period of the last five (5) years at the local area United States Weather Station. Any extension of time due to unusually severe weather must be requested by the Contractor on the basis of documented records of the actual precipitation/temperatures during the contract time period, compared with the normal/average for the area. Also, the criteria shall include the number of excessive precipitation or extreme cold days (i.e., days in which the temperature would adversely affect the type of work being constructed) over the same period and whether or not the Contractor's force worked on said days or stage of construction was affected.

.3 Any delays of subcontractors occasioned by any of the causes specified in this paragraph.

8.2.7 Provided further that the Contractor shall, within seven (7) days from the beginning of any such delay during the performance of the Contract, notify the Owner's Representative in writing of the alleged cause of such delay.

50. IN PARAGRAPH (8.3.1) DELETE THE WORDS "and arbitration".

IN PARAGRAPH (8.3.1) DELETE THE WORD "determine" **AND SUBSTITUTE THE WORD** "recommend".

51. DELETE PARAGRAPH (9.2.1) AND SUBSTITUTE THE FOLLOWING:

"Before the first Application for Payment, the Contractor shall submit to the Owner's Representative a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect and Owner's Representative may require. This schedule, unless objected to by the Architect and Owner's Representative, shall be used as a basis for reviewing the Contractor's Applications for Payment."

52. IN THE FIRST SENTENCE OF (9.3.1), CHANGE "ten" **TO** "forty five".

IN PARAGRAPH (9.3.1) IN THE FIRST SENTENCE DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

ADD THE FOLLOWING TO THE END OF PARAGRAPH (9.3.1):

Payment requests shall consist of AIA Documents #702 "Application and Certificate for Payment"; AIA #703 "Continuation Sheet"; Contractors Affidavit of Payment to Subcontractors and Suppliers; Weekly

Workforce Reports; Certified Payroll Form; and Waivers of Lien. (Waivers of Lien are required from the general contractor in the full amount of the current payment application, and from all subcontractors, suppliers, or workers who provide more than $10,000 of project material/labor of the Work. The waiver shall be in the amount(s) listed in the Contractor's Affidavit.) For final payment, the general contractor shall also provide a Waiver of Lien in the full amount of the contract price.

The Waiver of Lien and Contractor Affidavit forms used shall be the Peoria Park District's standard form(s): 1) "Final Waiver of Lien" (for general contractors), 2) "Waiver of Lien - General Contractor's Partial To Cover Only Certain Payments", 3) "Sub-Contractor's Final Waiver of Lien", 4)

"Waiver of Lien - Sub-Contractor's Partial To Cover Only Certain Payments, and 5) "Contractor's Affidavit". (These forms are included in the Project Manual, and are the required Waiver of Lien forms for the project.)

(If the Contractor is unable to provide the required sub-contractor waiver at the time the application for payment is submitted (preferred method) alternatively, it may be provided at the time that payment is delivered by the District. If the sub-contractor waiver(s) still cannot be provided at that time, the District will provide "two-party" checks in which the Contractor and the sub-contractor are named jointly as payees.)

Format of AIA #703 shall follow that of "Schedule of Values". (See Division 01000 Article IV.) All payment requests shall reflect retainage in the amount of 10% of completed work.

53. IN PARAGRAPH (9.3.1.1) DELETE THE WORDS "or by interim determination of the Architect, but not yet included in Change Orders".

54. ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (9.3.1):

9.3.1.3 Upon Substantial Completion, the Owner will pay 95% percent of the amount due to the Contractor on account.

9.3.1.4 Monthly progress payments will be made by the Owner on projects lasting more than sixty days (from award of the bid to the Substantial Completion date given in the Supplementary Instructions to Bidders).

55. ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (9.3.2):

9.3.2.1 Material stored on site will be considered for payment only when a Schedule of Stored Materials with appropriate values accompany the payment request as an attachment.

9.3.2.2 All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of material and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the contract.

56. IN PARAGRAPH (9.4.1) DELETE THE WORDS "Architect" **AND** "Architect's" **AND SUBSTITUTE THE WORDS "**Owner's Representative" **AND** "Owner's Representative's".

IN PARAGRAPH (9.4.1) DELETE THE PHRASE "with a copy to the Contractor".

57. IN THE FIRST SENTENCE OF PARAGRAPH (9.4.2) DELETE THE WORD "Architect".

IN THE FIRST SENTENCE OF PARAGRAPH (9.4.2) AFTER THE WORDS "Architect's" **ADD THE WORDS** "and Owner's Representative's".

IN THE FOURTH SENTENCE OF PARAGRAPH (9.4.2) DELETE THE WORDS "Architect has" **AND SUBSTITUTE THE WORDS** "Owner's Representative and Architect have".

58. IN PARAGRAPH (9.5.1) DELETE THE WORDS "Architect" **AND** "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative **AND** "Owner's Representative's".

59. IN PARAGRAPHS (9.6.1, 9.6.3, AND 9.6.4) DELETE THE WORDS "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

60. IN PARAGRAPH (9.7.1) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

IN PARAGRAPH (9.7.1) DELETE THE WORDS "or awarded by arbitration".

61. IN PARAGRAPH (9.8.2) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS "**Owner's Representative".

62. IN THE FIRST SENTENCE OF PARAGRAPH (9.8.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative assisted by the Architect".

IN THE SECOND AND THIRD SENTENCES OF PARAGRAPH (9.8.3) DELETE THE WORDS "Architect's" and "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative's" and "Owner's Representative".

63. IN PARAGRAPH (9.8.4) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

64. IN PARAGRAPH (9.9.1) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

65. IN PARAGRAPH (9.10.1) IN THE FIRST SENTENCE AFTER THE FIRST TWO APPEARANCES OF THE WORD 'Architect" **ADD THE WORDS** "and Owner's Representative".

IN PARAGRAPH (9.10.1) DELETE THE THIRD AND FOURTH APPEARANCES OF THE WORD "Architect" and "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative" and "Owner's Representative's".

IN PARAGRAPH (9.10.1) AFTER THE FIFTH APPEARANCE OF THE WORD "Architect's" **ADD THE WORDS** "and Owner's Representative's".

IN THE LAST SENTENCE OF PARAGRAPH (9.10.1) DELETE THE WORD "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative's".

66. IN PARAGRAPH (9.10.2) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORD** "Owner's Representative".

67. ADD THE FOLLOWING SUB-PARAGRAPH TO PARAGRAPH (9.10.2):

9.10.2.1 When all items including items noted within Division 1000 General Requirements are found to be complete and in conformance with the Contract Documents, a final payment will be issued.

68. IN PARAGRAPH (9.10.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

69. IN PARAGRAPH (11.1.1) IN THE FIRST SENTENCE AFTER THE PHRASE "as will protect the Contractor" **ADD THE WORDS** "Architect and Owner".

70. IN PARAGRAPH (11.1.2), IN THE FIRST SENTENCE DELETE THE WORDS "limits of liability specified in the Contract Documents" **AND SUBSTITUTE THE WORDS** "limits required in 'Attachment A – Project Specific Insurance Requirements' (which is included as the last section of the Project Manual and the requirements therein shall be made part of the Contract Documents),".

IN PARAGRAPH (11.1.2) AFTER THE FIRST SENTENCE ADD:

"In addition, if any of the work occurs within fifty feet of an active railroad line and the Contractor's general liability coverages provide for exclusions of coverage when working on or near a railroad, the Contractor shall provide a separate Railroad Protective Liability Insurance Policy naming the railroad as the insured party, with the coverage limits required by that railroad."

71. IN PARAGRAPH (11.1.3), AFTER THE WORDS "Certificates of insurance" **ADD THE WORDS** "and endorsements to the insurance policy(s) which are".

IN PARAGRAPH (11.1.3) AFTER THE WORDS "acceptable to the Owner" **ADD THE WORDS** "and naming the Owner, their agents and consultants as additional insured".

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (11.1)

11.1.4 The Contractor may, at his option, furnish Owner's Protective Liability Insurance in lieu of naming the Owner Additional Insured on the Contractor's policy, as required above. This insurance shall protect the Owner from claims as set forth in Paragraph 11.1.1 of the General Conditions, and to the limits required herein, as shown in "Attachment A".

11.1.5 The Contractor shall furnish two copies of each of the required Certificates or Endorsements for each copy of the Agreement which shall specifically set forth evidence of all coverage required by the Contract Documents. The form of the Certificate(s) or Endorsement(s) shall be those as required in "Attachment A". The Contractor shall also furnish to the Owner copies of any endorsements which limit coverage, or are subsequently issued amending coverage or limits of coverage.

72. DELETE PARAGRAPHS (11.3.1, 11.3.2, AND 11.3.3) IN THEIR ENTIRETY.

73. DELETE PARAGRAPH (11.4.1) AND SUBSTITUTE:

"If the work of the project is being completed by one general or prime contractor rather than multiple prime contractors, the Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full replacement value thereof. Such insurance shall be in a company or companies against which the Owner has no reasonable objection. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.

74. AT THE END OF PARAGRAPH (11.4.1.1) ADD THE FOLLOWING SENTENCE: "The form of policy for this coverage shall be "Completed Value".

75. DELETE PARAGRAPH (11.4.1.2) IN ITS ENTIRETY.

76. DELETE PARAGRAPH (11.4.1.3) IN ITS ENTIRETY AND SUBSTITUTE:

"If by the terms of this insurance any mandatory deductibles are required, or if the Contractor should elect, with the concurrence of the Owner, to increase the mandatory deductible amounts or purchase this insurance with voluntary deductible amounts, the Contractor shall be responsible for payment of the

amount of all deductibles in the event of a paid claim. If separate contractors are added as insureds to be covered by this policy, the separate contractors shall be responsible for payment of appropriate part of any deductibles in the event claims are paid on their part of the Project."

77. DELETE PARAGRAPHS (11.4.3, 11.4.4, AND 11.4.5) IN THEIR ENTIRETY.

78. DELETE PARAGRAPH (11.4.6) AND SUBSTITUTE:

"The Contractor shall file two certified copies of all policies with the Owner before exposure to loss can occur. If the Owner is damaged by the failure of the Contractor to maintain such insurance and to so notify the Owner, then the Contractor shall bear all reasonable costs properly attributable thereto.

79. DELETE PARAGRAPHS (11.4.7, 11.4.8, 11.4.9, AND 11.4.10) IN THEIR ENTIRETY.

80. DELETE PARAGRAPH (11.5.1) AND SUBSTITUTE:

"The Contractor shall furnish a Performance Bond and a separate Labor and Material Payment Bond, each for one hundred percent (100%) of the Contract Sum. Form of these bonds shall be as provided by the Owner in the Project Manual and no other form will be accepted. The Surety shall be authorized to do business in the State of Illinois and be acceptable to the Owner.

81. IN PARAGRAPH (12.1.1) DELETE THE WORD "Architect's" **AND SUBSTITUTE WORDS** "Owner's Representative's and Architect's". **DELETE THE WORD** "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

82. IN PARAGRAPH (12.1.2) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

83. IN PARAGRAPH (12.2.1.1) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

84. IN PARAGRAPH (13.5.4) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

85. IN PARAGRAPH (14.1.1.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

86. IN PARAGRAPH (14.2.2) DELETE THE PHRASE ", upon certification by the Architect that sufficient cause exists to justify such action,".

87. IN PARAGRAPH (14.2.4) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

88. DELETE PARAGRAPH (14.4.3) IN ITS ENTIRETY AND SUBSTITUTE:

In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination. In no event, however, will such amounts exceed the Contract Sum reduced by the amount of prior payments except for increases pursuant to the claims procedure in the Contract Documents. Subcontracts, subsubcontracts, and purchase orders will contain appropriate provisions for termination for convenience under this Paragraph 14.4.

89. ADD THE FOLLOWING ARTICLE 15: LABOR, SAFETY AND WAGE STANDARDS TO THE GENERAL CONDITIONS OF THE CONTRACT:

ARTICLE 15
LABOR, WAGE, SAFETY, AND OTHER STANDARDS

15.1 LABOR STANDARDS. All employers shall comply with the Employment of Illinois Workers on Public Works Act [30 ILCS 570/1 to 570/7].

15.2 WAGE STANDARDS.

15.2.1 PREVAILING WAGE ACT: Wages and benefits to employees shall comply with all Federal and State of Illinois statutes pertaining to public works projects and specifically: Wages of Employees on Public Works [820 ILCS 130/1 - 12].

15.2.2 Not less than the prevailing rate of wages as determined by the Park District or the Department of Labor shall be paid to all laborers, workers and mechanics performing work under this contract. All contractor's bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause as provided by this bid specification or contract.

15.2.3 The terms “general prevailing rate of hourly wages”, “general prevailing rate of wages” or “prevailing rate of wages” when used in this Act mean the hourly cash wages plus fringe benefits for training and apprenticeship programs approved by the U.S. Department of Labor, Bureau of Apprenticeship and Training, health and welfare, insurance, vacations and pensions paid generally, in the locality in which the work is being performed, to employees engaged in work of a similar character on public works.

15.2.4 PREVAILING WAGE ACT/FOIA
Contractors and subcontractors shall submit certified payroll on a monthly basis to the Park District in compliance with requirements of 820 ILCS 130/5. These records will be kept by the Park District for three years and may be reviewed by others through the Freedom of Information Act (FOIA). The Park District will exclude employee’s address, telephone number, and social security number from public inspection.

15.3 SAFETY STANDARDS.

15.3.1 PROTECTION OF PERSONS AND PROPERTY: The Contractor and his subcontractors shall, at all times, comply with applicable provisions of Federal, State and Local laws.

15.3.1.1 The Contractor and his sub-contractors shall have written programs complying with Occupational Safety and Health Administration standards and/or Illinois Department of Labor requirements including, but not limited to the following: hazardous communications, hearing conservation, respirator use, confined space entry, scaffolding, ladders, ventilation, flammable and combustible liquids, and lockout/tagout. The Contractor shall submit documentation of their programs at the request of the Owner's Representative, or Occupational Safety and Health Administration and/or Illinois Department of Labor officials.

15.4 EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION/SEXUAL HARASSMENT

15.4.1 During the performance of the contract, the contractor agrees to the following:

15.4.1.1 That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are under-utilized and will take appropriate affirmative action to rectify any such under-utilization.

15.4.1.2 That, if it hires additional employees in order to perform his contract or any portion thereof, it will determine the availability (in accordance with the Rules and Regulations of the Illinois Department of Human Rights) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not under-utilized.

15.4.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability or an unfavorable discharge from military service.

15.4.1.4 That it will have a written sexual harassment policy to include at the minimum, the following:

15.4.1.4.1 a definition of sexual harassment under the law;

15.4.1.4.2 a description of sexual harassment utilizing examples;

15.4.1.4.3 a formalized complaint procedure;

15.4.1.4.4 a statement of victim's rights;

15.4.1.4.5 directions on how to contact the Illinois Department of Human Rights. Out-of-state companies must provide directions for filing with the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency; and

15.4.1.4.6 A recitation that there cannot be any retaliation against employees who elect to file charges.

15.4.1.4.7 In addition, it is recommended that the employer post a copy of the sexual harassment policy in a prominent and accessible location and distribute it in a manner to assure notice to all employees on an annual basis.

15.4.1.4.8 The Illinois Human Rights Act specifically provides that all documents may meet, but cannot exceed, the sixth grade literacy level. Therefore, the employers sexual harassment policy must be stated in plain language and in "laymen's terms".

15.4.1.5 That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice

advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

15.4.1.6. That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.

15.4.1.7. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.

15.4.1.8. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

15.4.2 In the event of the contractor's non-compliance with the provisions of the Illinois Human Rights Act, the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporation, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulations.

END OF SUPPLEMENTARY GENERAL CONDITIONS

SECTION 010000 - GENERAL

A. SUMMARY OF THE WORK

1. The Work covered under this Contract consists of that work described by the Invitation to Bid, the Instructions/Supplemental Instructions to Bidders, the Bid/Proposal Form, the General/Supplemental Conditions of the Contract, these General Requirements, the Plans, and the Technical Specifications.
2. The Contractor shall be responsible for all items incidental to the scope of the Work intended by the bidding documents as per A.1 above, including but not limited to, expenses incurred by the requirements of various Sections of Division 010000, unless specifically stated otherwise herein.
3. Changes to the Work as required by approved Change Orders shall be at the expense of the Owner, however, requests for additional payments made after the fact will not be considered.

B. OCCUPANCY BY OWNER.

1. The Owner reserves the right to occupy any portion of the project before it has been entirely completed, with the understanding that such occupancy shall in no way constitute acceptance of the work, in whole or in part, or of any work performed under the Contract, provided that such occupancy does not substantially interfere with completion of the work by the Contractor.

SECTION 012300 – ALTERNATES

A. Alternates to the Bid are set forth in the Supplementary Instructions to Bidders and are listed in the Bid Form.

1. Accepted Alternates have been incorporated into the Agreement.

B. Bid Alternate pricing, as set forth in the Supplementary Instructions to Bidders and the Bid Form, shall be good for a minimum of 90 calendar days after the date of the Bid opening, and the Owner reserves the right to accept Alternates up to that time.

SECTION 012600 - CHANGE ORDERS

A. OWNER'S REPRESENTATIVE'S FIELD ORDERS

1. From time to time during progress of the Work the Owner's Representative may issue an "Owner's Representative's Field Order" which interprets the Contract Documents or orders minor changes in the Work without change in Contract Sum or Contract Time.
2. Should the Contractor consider that a change in Contract Sum or Contract Time is required he shall submit an itemized proposal to the Owner's Representative **immediately and before proceeding with the Work**. If the proposal is found to be satisfactory and in proper order, the Field Order will be superseded by a Change Order.

B. PROPOSAL REQUESTS

1. From time to time during the progress of work the Owner's Representative may issue a "Proposal Request" for an itemized quotation for changes to the Work which may result in a change to the Contract Sum or Contract Time. This document **is not a Change Order** and is not a direction to proceed with the changes described therein.

C. CHANGE ORDERS

1. Change Orders are written documents describing changes in the Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof. Change Orders must be signed by both the Owner and the Architect/Owner's Representative prior to proceeding with the Work subject to the Change Order. **REQUESTS FOR "EXTRA'S" OR OTHER ADDITIONAL PAYMENTS OVER AND ABOVE THE CURRENT CONTRACT SUM WILL NOT BE CONSIDERED WITHOUT THE PRIOR, WRITTEN APPROVAL OF BOTH THE OWNER AND THE OWNER'S REPRESENTATIVE.**
    a) INITIATION. Change Orders may be initiated by a "Field Order" or "Proposal Request" per paragraphs "A" and "B" above. In addition, either the Contractor or Owner (or Owner's Representative) may initiate a Change Order through:
        1) Discovery of a discrepancy in the Contract Documents,
        2) Discovery of concealed conditions or,
        3) Discovery, during the course of the Work, of methods of accomplishing the Work in a better or more economical manner.
    b) PROCESSING CHANGE ORDERS.
        1) Change Orders will be dated and will be numbered in sequence.
        2) The Change Order will describe the change or changes, or will refer to the Proposal Requests or Field Orders involved.
        3) The Owner's Representative will issue three copies of each Change Order to the Contractor.
        4) The Contractor promptly shall sign all three copies and return them to the Owner's Representative.
        5) The Owner and Owner's Representative will retain two signed copies in their files, and will forward one signed copy to the Contractor.
        6) Should the Contractor disagree with the stipulated change in Contract Sum or change in Contract Time of Completion, or both:
            i) The Contractor promptly shall return all three of the Change Orders, unsigned by him, to the Owner's Representative with a letter signed by the Contractor stating the reason or reasons for the Contractor's disagreement.
            ii) The Contractor's disagreement with the Change Order shall not in any way relieve the Contractor of his responsibility to proceed with the change as ordered and to seek settlement of the dispute under pertinent provisions of the Contract Documents.

SECTION 012900 – PAYMENT PROCEDURES

A. SCHEDULE OF VALUES

1. Prior to the start of construction, submit a proposed Schedule of Values to the Owner's Representative which shows a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.
   a) The Schedule of Values is required to be compatible (in the same format) with the Application for Payment "Continuation Sheet", AIA G703.
2. If not requested to submit additional data or to modify the submitted Schedule of Values within ten (10) days of submittal, the initially submitted Schedule shall be deemed approved.

B. APPLICATIONS FOR PAYMENT

1. Progress payments will be made only if specifically called for in the Agreement. In all other cases, the Contractor may submit an Application for Payment (3 copies) upon Substantial Completion (95% of the Contract Sum), with the balance of the Contract Sum to be paid at Final Completion.
   a) **Paragraph #52 of the Supplementary General Conditions defines the documentation required for each payment request.**
   b) Applications for payment shall be delivered to the Owner's Project Manager at:

Department of Planning, Design, and Construction
Peoria Park District
Bradley Park Equipment Service
1314 N. Park Road
Peoria, Illinois 61604

SECTION 013100 - PROJECT MEETINGS

A. PRECONSTRUCTION CONFERENCE

1. Conduct a preconstruction conference prior to the start of the Work, at the location of the Work. Provide attendance by the designated personnel of the Contractor, including Sub-contractor's and/or suppliers of major components of the Work, if requested by the Owner's Representative.
   a) AGENDA. Discuss items of significance that could affect progress including such topics as:
      1) Tentative construction schedule.
      2) Critical Work sequencing.
      3) Designation of responsible personnel.
      4) Procedures for processing field decisions and Change Orders.
      5) Procedures for processing Applications for Payment.
      6) Distribution of Contract Documents.
      7) Submittal of Shop Drawings, Product Data and Samples.
      8) Preparation of record documents.
      9) Use of the premises.
      10) Office, Work and storage areas.
      11) Equipment deliveries and priorities.
      12) Safety procedures.
      13) First aid.
      14) Security.
      15) Housekeeping.
      16) Working hours.
      17) Permits and Permitting Agency Requirements

B. PROJECT MEETINGS

1. Project Meetings will be held per the schedule determined at the Preconstruction Conference, or as needed for proper coordination and administration of the project.
   a) AGENDA
      1) Review and correct or approve minutes of the previous progress meeting.
      2) Review progress of the Work since last meeting, including status of submittals for approval.
      3) Identify problems which impede planned progress.
      4) Develop corrective measures and procedures to regain planned schedule.
      5) Complete other current business.

C. REPORTING

1. Distribute copies of the minutes of each meeting to each party present, and to other parties who should have been present, no later than three business days after each meeting.

SECTION 013300 - SUBMITTALS

A. Requirements for shop drawings, samples, mock-ups, product data, etc., relative to specific elements or components of the work are called out in the various sections of the Technical Specifications.

1. Submit items to allow for Owner's Representative's review and approval, potential re-submission if full approval is not given, ordering, delivery, fabrication time, etc., so as to allow the Work to proceed in a timely manner and in conformance with the project schedule.

B. OTHER CONTRACTOR SUBMITTALS

1. Unless otherwise modified the Contractor shall also submit:

a) A "bar chart" type proposed construction schedule, within ten days after award of the Bid.
b) Other submittals as required by other section of Division 010000.

C. Submission of the required Bonds and Certificate of Insurance are to be made prior to the Owner's issuance of a Notice to Proceed.

SECTION 014000 – QUALITY/REGULATORY REQUIREMENTS

A. GENERAL: Contractors shall comply with all laws, rules and regulations governing the work.
1. When Contractor observes that contract documents are at variance with specified codes, notify Owner's Representative in writing immediately. Owner's Representative will issue all changes in accord with General Conditions.
2. When Contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Owner's Representative, Contractor shall pay all costs arising therefrom. However, it will not be the Contractor's primary responsibility to make certain that the contract documents are in accord with such laws, rules and regulations.

B. SAFETY:
1. Comply with all federal, state, and local laws, rules and regulations governing the installation/construction of the work.
2. Develop and utilize safety program and training for workmen and sub-contractor employees.

C. TESTING
1. TESTS AND INSPECTIONS REQUIRED
a) Provide all tests and inspections required by governmental agencies having jurisdiction, as required by provisions of the Contract Documents and/or as specifically required by sections of the Technical Specifications.
2. PAYMENT FOR TESTING
a) Include within the Contract Sum an amount sufficient to cover all testing, re-testing, and inspections required by the Contract documents and/or the Technical Specifications. Additionally pay for all testing and inspections required by all governmental agencies having jurisdiction.
1) The Owner will pay for any testing and inspecting specifically requested by the Owner's Representative which are over and above those described in Paragraph 1.a) above.
2) When initial tests (over and above those defined by 1.a) above) requested by the Owner's Representative indicate non-compliance with the Contract Documents, costs of initial tests associated with that non-compliance will be deducted by the Owner from the Contract Sum, and subsequent retesting occasioned by the non-compliance shall be performed by the same testing laboratory and the costs thereof shall be paid by the Contractor.
3. WAIVER OF INSPECTION AND/OR TESTS
a) Specified inspections and/or tests may be waived only by the specific written approval of the Owner's Representative, and **such waivers will be expected to result in credit to the Owner equal to normal cost of such inspection and/or test.**

SECTION 014200 - REFERENCE STANDARDS AND DEFINITIONS

A. Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed for performance of a required construction activity the Contractor shall obtain copies directly from the publication source.
2. Although copies of standards needed for enforcement of requirements may be included as part of required submittals the Architect reserves the right to require the Contractor to submit additional copies as necessary for enforcement of requirements.

B. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents they mean the recognized name of the trade association standards generating organization authority having jurisdiction or other entity applicable to the context of the text provision. Refer to the Encyclopedia of Associations, published by Gale Research Co. available in most libraries.

C. Definitions: Architect, Owner's Representative, and Owner's Project Manager
1. ARCHITECT: The Architect shall be the person or entity designated by the Owner as the Owner's Representative and shall be identified as such in the Agreement Between Owner and Contractor, and is referred to throughout the Contract Documents as if singular in number and masculine in gender.
2. OWNER'S REPRESENTATIVE: The duties of the Owner's Representative as listed in the Project Manual, include but are not limited to, construction phase observation and technical administration services.
a) LIMITS OF AUTHORITY: The Owner's Representative shall be authorized to provide approvals and interpretations concerning the plans, specifications and progress of the Work as bid, but is not authorized to change the scope of the Work on behalf of the Owner.
3. OWNER'S PROJECT MANAGER: The Owner's Project Manager will represent, act on behalf of, and provide interface between the Owner and the Contractor in respect to contract administration and/or other matters which affect the scope of the Work.
a) Unless defined otherwise in the Project Manual, the Owner's Project Manager shall be a designated member of the Planning, Design, and Construction Division of the Peoria Park District.
b) The Owner's Project Manager will also be the Owner's Representative and will provide construction phase observation and technical administration services, if a consultant Architect has not been engaged to do so, by the Owner.

SECTION 015000 – TEMPORARY FACILITIES & CONTROLS

A. MOBILIZATION
1. Furnish all labor, tools, materials, equipment, and incidentals necessary for preparatory work.

2. Provide and establish personnel, equipment, supplies, materials, offices or buildings, and other facilities necessary to work on the project.
3. Demobilize all of the above and remove temporary facilities at the completion of the project.

B. BARRIERS, PROTECTION OF SITE AND PROPERTY

1. GENERAL
   a) Owner's improvements to remain, existing utilities, as well as adjacent site improvements shall be protected from damage by barriers, guards and coverings. Damaged work shall be replaced or repaired to condition prevailing at time of signing of contract, at no additional cost to Owner.
   b) Provide 6' high, continuous chain link or orange plastic (used materials acceptable) construction fence to prohibit unauthorized personnel or public entry from the site of the Work. (Substitutions may be considered; submit request in writing to the Owner's Representative.)
   c) Contractor shall provide, erect and maintain additional planking, fences, protective canopies, railings, shoring, lights, warning signs, etc., as needed for the protection of adjacent property and the public.
2. LANDSCAPE PROTECTION
   a) All live, healthy trees, shrubs, etc. on the site or on the street fronts of the site, not specified to be removed and not interfering with installation of new work required hereunder, shall be protected against injury from construction operations.
   b) All shade trees which are to remain and which are liable to damage during the building operations, shall be properly boxed and protected from damage during the course of construction work as directed by the Park District. **No site-related work shall occur until the required tree protection (fencing, boxing, etc.) has been installed and approved by the Owner or his representative.**
      1) LIQUIDATED DAMAGES: The Owner reserves the right to charge the Contractor for damage to existing trees, and to deduct the charges from the amounts due the Contractor, based on the following schedule:

aa)	Broken limbs 1" or over in diameter:	$50 per caliper inch of limb
bb)	Trenching or grading within the tree dripline or 20' from the trunk, whichever is less, of trees 4" or over in caliper diameter:	$100 per tree/per foot within dripline, or within 20' minimum if applicable
cc)	Damage to tree trunks, including "barking", nicking, gouging, etc.	$150 per caliper inch of tree, per each injury

3. BARRIERS/CONSTRUCTION FENCE MATERIALS
   a) 2" open mesh chain link fence, 72" high minimum, galvanized, with appropriately sized posts; gates where indicated.
   b) Alternate barrier fencing materials may be acceptable, however, no additional payments will be made on account of approval of alternate barrier/safety fencing materials.
   c) Materials may be new or used, if in serviceable condition.
4. WATCHMAN SERVICE
   a) The Owner will not be responsible for loss due to theft or other damage which is not covered under Property Insurance. The Contractor shall make such arrangements for watchman service as he considers necessary and he shall be responsible for all loss or damage of his property, equipment, material, etc., at the site, and he shall make good such damage or loss without any additional cost to the Owner.
5. EXISTING IMPROVEMENTS - PROTECTION
   a) The Contractor shall be entirely responsible for all injuries to water pipes, electric conduits or cables, drains, sewers, gas mains, poles, telephones and telegraph lines, streets, pavements, sidewalks, curbs, culverts, retaining walls, building walls, foundation walls, or other structures of any kind met with during the progress of the Work, and shall be liable for damages to public or private property resulting therefrom.

C. CONSTRUCTION ACCESS, ROADS, AND PARKING AREAS

1. CONTRACTOR'S USE OF PREMISES
   a) The Contractor shall require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with the requirements of this Section.
2. CONSTRUCTION ACCESS
   a) To avoid traffic conflict with vehicles of the Owner's employees and customers, and to avoid over-loading of streets and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the route shown (IF SHOWN) on the Drawings as "Access Route". If access route is not shown on the Drawings, coordinate construction access and routes with the Owner's Project Manager.
   b) Do not permit such vehicles to park on any street or other area of the Owner's property except in the area shown on the Drawings as "Contractor's Parking Area". If not shown on the drawings, the Contractor's Parking Area shall be as designated by the Owner's Project Manager.
   c) Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
3. SECURITY
   a) Restrict the access of all persons entering upon the Owner's property in connection with the Work to the Access Route and to the actual site of the Work.

D. TEMPORARY ENVIRONMENTAL CONTROLS

1. GENERAL
   a) Provide temporary environmental controls at the site of the Work to ensure that construction operations have no harmful effects on adjacent properties and on members of the public who may come in proximity to the Work, and/or the employees of the Owner who are engaged in regular daily tasks and operations and are unable to be relocated to another work site during construction operations.
   b) Owner reserves the right to stop the Work, at the Contractor's expense, until the Contractor provides necessary control measures for the conditions listed below; additionally, the Owner reserves the right to perform or have performed necessary control measures, should the Contractor refuse to do so at the time requested and to deduct the cost of those expenses from the amount due the Contractor.
2. DUST CONTROL
   a) Provide dust control materials to minimize dust from construction operations. Prevent air-borne dust from dispersing into the atmosphere.

3. WATER CONTROL
   a). Control surface water to prevent damage to the project, the site and adjoining properties.
      1) Control fill, grading, and ditching to direct surface drainage away from excavations, pits, tunnels, and other construction areas; direct drainage to proper runoff channels or storm drainage utilities.

b) Provide, operate and maintain hydraulic equipment of adequate capacity to control surface water.
c) Dispose of drainage water in a manner to prevent flooding, erosion silting, or runoff of silt or sediment or other damage to all portions of the site or to adjoining properties.

4. RODENT CONTROL
a) Provide rodent control to prevent infestation of construction or storage areas.
1) Use methods and materials which will not adversely affect conditions at the site or on adjoining properties.

5. DEBRIS CONTROL
a) Maintain all areas free of extraneous debris, waste, and rubbish.

6. POLLUTION CONTROL
a) Prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
b) Provide equipment and personnel, perform emergency measures to contain all spillages, and to remove contaminated soils or liquids.
1) Excavate and dispose of all contaminated earth off-site. Replace with suitable compacted fill and topsoil.
c) Take special measures, as necessary, to prevent harmful substances from entering public waters, including lakes, streams, intermittent drainage channels, and storm or sanitary sewers.

7. EROSION CONTROL
a) Plan and execute construction and earthwork in a manner to control surface drainage from cuts and fills, and from borrow and waste disposal areas, to prevent erosion and sedimentation.
1) Schedule the Work to minimize the areas of bare soil exposed at one time, if possible.
2) Provide temporary control measures such as berms, dikes, and drains to prevent runoff of silt or sediment from the site.
3) Comply with Section 015713.

E. PROJECT IDENTIFICATION AND SIGNAGE

1. GENERAL
a) Provide and install project identification sign, if located and/or called out on the Drawings.

2. SUBMITTALS
a) Provide shop drawing(s) of proposed sign/sign installation to Owner's Representative for approval, prior to installation

3. INSTALLATION
a) Provide project sign as detailed on Drawings
b) If not detailed on Drawings provide project identification sign per the following minimum requirement:
1) Content
aa) Name of project
bb) Name of Owner
cc) Name of Architect(s) and major consultants
dd) Names of Contractor and major subcontractors
ee) Allow additional 200 characters of text explaining the project
2) Construction
aa) Size: 4' x 8'
bb) Materials: Min. 5/8" AC DFPA Exterior Plywood, with (2) 4" x 4" x 12' long pressure treated post supports
cc) Paint: paint front and back, seal edges, provide content as approved by Owner's Representative. Conform to recognized sign painting standards in selection of paint materials. Use only professional sign painter with three years minimum experience to apply sign graphics and lettering.
3) Install sign in a manner consistent with length of time of construction operations. Remove sign and fill post holes at project completion.

F. FIELD OFFICES

1. TEMPORARY FACILITIES
Provide and pay for temporary (new, or used if in serviceable condition) facilities and controls needed for the Work, if called out on the Drawings, which may include, but are not necessarily limited to:
a) Temporary utilities such as heat, water, electricity, and telephone;
b) Field office for the Contractor's personnel (required if shown on the Drawings; otherwise at the Contractor's option and expense).
1) Conform with requirements for Engineer's Field Office Type B, as defined in Article 646.04 of the Standard Specifications for Road and Bridge Construction - Illinois Department of Transportation.
c) Sanitary facilities;
d) Enclosures such as tarpaulins, barricades, and canopies;
e) Temporary fencing of the construction site;
f) Project sign.

2. Comply with Federal, State, and local codes and regulations.
a) Maintain temporary facilities and controls in proper and safe condition throughout the progress of the work. The Contractor is responsible for conformance with all safety codes and regulations for all Work under his jurisdiction, including that of Sub-Contractors.

3. Locate temporary facilities as shown on the Drawings, or as approved by the Owner's Representative if not shown on the Drawings.

SECTION 015713 – EROSION & SEDIMENT CONTROL

A. RELATED DOCUMENTS

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. SUMMARY

1. This Section includes the following:
   a) Site erosion and sediment control
   b) Silt fencing
   c) Ditch checks
   d) Erosion control blankets
   e) Culvert and inlet protection
   f) Stabilized entrance
2. Related Sections include the following:
   a) Division 31 – Earthwork.
   b) Division 32 – Exterior Improvements.

3. Erosion and Sediment Control Statement: The Peoria Park District takes the issue of construction related erosion and sediment control extremely seriously. The Peoria Park District is a community leader in the conservation and protection of our area's natural resources. This project will be watched closely by both staff and citizens for compliance with erosion and sediment control regulations and specifications.

C. QUALITY ASSURANCE
1. Materials and methods of construction shall comply with the following standards:
   a) Illinois Department of Transportation
   b) City of Peoria

D. PRODUCTS
1. Silt Fencing
   a) Fabric for silt fencing shall consist of woven or nonwoven filaments of polypropylene, polyester, or polyethylene. Fabric shall be resistant to degradation by ultraviolet light and heat exposure. Fabric shall be rot, insect, and mildew proof, and have a high resistance to tearing.
      1) Fabric shall comply with the following physical properties:

aa)	Grab tensile strength (lb) – ASTM D4632	200 (min)
bb)	Grab elongation @ break (%) – ASTM D4632	12
cc)	Burst strength (psi) – ASTM D751	250 (min)
dd)	Trapezoidal tear strength (lb) – ASTM D4533	75
ee)	Width (ft)	3.5 (min)
ff)	Weight (oz/sq. yd) – ASTM D3776	4.0
gg)	Equivalent opening size	30 (nonwoven)
hh)	(EOS) sieve no. – Corps of Engrs. CS-02215	50 (woven)

2. Ditch Checks
   a) Ditch checks will consist of silt fencing with the addition of wire reinforcement.
   b) Wire shall be 9 gauge.
   c) Alternate: Straw bales may be used in lieu of silt fencing
3. Posts
   a) Posts shall be standard "T" or "U" steel posts or wood with a minimum cross section of 3 square inches. Posts shall be a minimum of 60" in length. Posts shall be driven a minimum of 24" into the ground.
4. Erosion Control Blankets
   a) Excelsior Blanket: Excelsior blanket shall consist of a machine produced mat of wood excelsior of 80% 6" or longer fiber length. The wood from which the excelsior blanket is cut shall be properly cured to achieve adequately curled and barbed fibers.
      1) The blanket shall be of consistent thickness, with the fiber evenly distributed over the entire area of the blanket. The excelsior blanket shall be covered on the top side with a 90 day biodegradable extruded plastic mesh netting having an approximate minimum opening of 16 x 16 mm (5/8 x 5/8 in.) to an approximate maximum opening of 50 x 25 mm (2 x 1 in.). The netting shall be substantially adhered to the excelsior blanket by a knitting process using biodegradable thread or by an applied degradable adhesive. The netting shall be substantially adhered to the excelsior by a knitting process using biodegradable thread. The netting shall be entwined with the excelsior blanket for maximum strength and ease of handling.
      2) The excelsior blanket shall comply with the following:

aa)	Minimum width, $\pm$ 25 mm (1 in.)	600 mm (24 in.)
bb)	Minimum mass $\pm$ 10%	0.34 kg/sm (0.63 lb/sq yd)
cc)	Minimum length of roll, approximately	45 m (150 ft)

      3) The excelsior blanket shall be smolder resistant.
5. Culvert And Inlet Protection
   a) Culvert protection shall consist of a ditch check immediately upstream of every culvert entrance. Ditch check shall be installed to protect culvert interior from sedimentation.
   b) Inlet protection shall consist of purpose made devices by:

      Dandy Products, Inc.
      P. O. Box 1980
      Westerville, Ohio 43086-1980
      Phone: 1-800-591-2284
      Fax: 740-881-2791
      www.dandyproducts.com
      dlc@dandyproducts.com

      or

      NILEX, Inc.
      15171 E. Fremont Drive
      Centennial, CO 80112
      Phone: 1-800-537-4241
      Fax: 303-766-1110
      www.nilex.com

denver@nilex.com

c) "Or Equal" substitutions may be made with prior approval of Owner's Representative.

6. Stabilized Entrance
   a) Stabilized entrance shall consist of coarse aggregate laid over geotextile fabric.
   b) Dimensions: 70' long by 14' wide.
   c) Geotextile Fabric: as per requirements of "silt fencing".
   d) Aggregate: IDOT Class CA-1, CA-2, cA-3, or CA-4.

E. EXECUTION
1. Site Erosion And Sediment Control
   a) Contractor is responsible for fulfilling terms of City of Peoria Erosion Control Permit and all applicable portions of the "Erosion, Sediment, and Stormwater Control Ordinance of the City of Peoria".
   b) Install control devices as shown on erosion control plan.
   c) Install additional measures as needed to control erosion and sedimentation on the site.
2. Silt Fencing Installation
   a) Install silt fencing according to details in plans. The silt fence shall be entrenched to a minimum depth of 8".
   b) The silt fence shall be installed on the contour, with the ends extending up-slope.
   c) Install silt fencing before commencing site clearing work.
3. Ditch Check Installation
   a) Install ditch checks according to details in plans.
   b) Install ditch checks at locations shown on plans.
   c) Install additional ditch checks as needed to control erosion within drainage swales as site conditions and weather dictate.
   d) Install ditch checks immediately after swales are graded.
4. Erosion Control Blankets Installation
   a) Install erosion control blankets as needed to control erosion in drainage swales and at the direction of the Owner's Representative.
   b) Anchor stakes shall be driven at a spacing of 2 feet on center.
5. Culvert And Inlet Protection Installation
   a) Install culvert protection at upstream entrances to all culverts.
   b) Install culvert protection to intercept waterborne silt and sediment and prevent it from entering culvert pipes.
   c) Install immediately after culvert installation.
   d) Install inlet protection according to manufacturer's written instructions at each inlet immediately after inlet construction.
6. Stabilized Construction Entrance Installation
   a) Install stabilized construction entrance and other approved measures as necessary to limit tracking of soil on to all paved surfaces.
   b) Comply with all City of Peoria codes limiting tracking of soil on to City streets.
7. Maintenance
   a) Inspect silt fences after each rainfall. Repair fencing, failures, end runs, and erosion cuts immediately.
   b) Remove soil from silt fencing after each rainfall.
   c) Erosion control maintenance and repair shall be considered incidental to the contract.
   d) Tracked soil and sediment shall be removed from all paved surfaces on a daily basis.
   e) Replace or provide new erosion and sediment control measures as needed during construction to provide protection to site and surrounding property for the entire time of construction, or until project is complete.
8. Close-Out
   a) Remove silt fencing and other erosion and sediment control devices after lawn or seeding has been established.
   b) Soil deposits remaining in place after silt fence is no longer required shall be dressed to conform to existing grade, and seeded with appropriate seed material.

SECTION 016000 – PRODUCT REQUIREMENTS

A. MATERIALS AND EQUIPMENT
1. STANDARD SPECIFICATIONS
   a) Reference herein to known standard specifications of governmental agencies or technical societies shall refer to the latest edition of such specifications, adopted and published at date of these Specifications.
2. MANUFACTURED ARTICLES
   a) All manufactured articles, materials and equipment to be incorporated in the work shall be new (unless otherwise specified) and of the quality specified and shall be used, erected, installed, connected, cleaned and conditioned as directed by and in conformity with job conditions to produce the best results obtainable.
      1) Field measurements for all special products and materials which requires close tolerances or fitting into other items or components of the Work shall be taken on the job by the party furnishing the materials.
3. QUALITY ASSURANCE
   a) Per the Supplementary Instructions to Bidders, the Bidder by submission of a signed bid form, agrees to install products and equipment by brand and model name or names specified in the Technical Specifications, Divisions 02-35. Substitutions are allowed only in conformance to the following:

      1) Proprietary Specification Requirement: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.
      2) Semiproprietary Specification Requirement: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted
         aa) Where either of the two cases above prevail, and the named product is accompanied by "or approved equal" substitutions will be allowed only upon written approval of the Owner's Representative prior to submission of bids.

3) Non-Proprietary Specification Requirement: When the Specifications lists products or manufacturers that are available and are accompanied by "or equal", the Contractor may propose any available product that complies with the Specifications' requirements; however, the Owner's Representative shall determine if the produced item complies with those requirements.

4) Descriptive Specification Requirement: Where Specifications describe a product or assembly listing exact characteristics required, with or without use of a brand, trade, or model name, provide a product or assembly that provides the characteristics and otherwise complies with the Contract Documents.

5) Performance Specification Requirement: Where Specifications require compliance with performance requirements, provide products or assembly that comply with these requirements and are recommended by the manufacturer for the application indicated.

6) Compliance with Standards, Codes, and Regulations: Where the Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standard, code, or regulation specified.

b) VISUAL MATCHING AND SELECTION. Where the Specifications require matching an established sample or call for "as selected", the Owner's Representative's decision will be final on whether a proposed product matches satisfactorily.

B. STORAGE AND PROTECTION

1. GENERAL

a) Contractor shall provide and maintain:

1) Storage for materials and equipment to be installed in Project.

2) Protection and security for stored materials and equipment, on and off site.

3) Protection of existing on-site elements to remain.

4) Protection of adjacent properties improvements

2. METHODS

a) Store off grade and cover with impervious material all moisture or water vulnerable materials.

b) Store finished products and equipment in an enclosed building, on or off site.

c) Maintain integrity of shipping cartons until ready for installation.

d) Provide separate storage for combustible and non-combustible products.

e) Follow storage recommendations of product and equipment manufacturers.

f) Other methods shall be subject to Owner's prior written approval.

3. The Contractor shall maintain an emergency phone number where a contact person can be notified at any time, Sundays and holidays included, of an emergency condition due to the work which requires immediate repair or protection.

C. SUBSTITUTIONS

1. See "SECTION 016000 – A. MATERIALS AND EQUIPMENT" for requirements pertaining to substitution of specified materials, products, equipment, etc.

2. Contractor may propose substitute materials, products, equipment, etc., after award of the Bid; however, such proposals are expected to result in a cost savings to the Owner and/or higher quality Work at no additional cost to the Owner.

D. WARRANTIES AND BONDS

1. GENERAL

a) This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.

b) Warranties for the Work and products and installations of each Contractor shall be one (1) year unless specified otherwise in the individual Sections of Divisions 02 through 35.

c) Disclaimers and Limitations:

1) Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and Contractors required to countersign special warranties with the Contractor.

2) The responsibility of the Contractor in respect to the required warranties shall not be relieved or limited in any way by the failure of installed components, equipment, materials, etc., due to naturally occurring and/or re-occurring conditions at the site or area of the Work including, but not limited to:

aa) ground and soil conditions, especially as related to frost heave;

bb) high wind velocities (except those exceeding velocities normally used for calculating wind loading at the site of the Work);

cc) rain and water damage (unless caused by winds exceeding normal design limits);

dd) ice/snow loading on structures

ee) and other naturally occurring or re-occurring site conditions

3) The Contractor shall notify the Owner's Representative, prior to the award of the contract, of any part or component of the Work that is, in his opinion, not designed to accommodate the existing, naturally occurring, or re-occurring conditions of the site, and whether or not a change in the proposed methods of construction, types of equipment, etc., will affect the bid price.

aa) Should the proposed change in construction methods, equipment type, etc., result in additional expense, the Owner reserves the right to request proposals from the other bidders and to make award the contract based on the bid amount which includes the proposed change.

2. WARRANTY REQUIREMENTS

a) Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.

b) Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

c) Replacement cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

d) Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights or remedies.

aa) Rejection of Warranties: The Owner reserves the rights to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

e) The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

f) For specific warranty requirements related to landscape materials, refer to the applicable Section.

3. SUBMITTALS

a) Submit written warranties to the Owner's Representative prior to the date certified for Substantial Completion. If the Owner's Representative's Certificate of Substantial Completion designates a commencement date for warranties other that the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Owner's Representative.

1) When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner's Representative within fifteen days of completion of that designated portion of the Work.

b) Form of Submittal: At Final Completion, compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, Subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.

c) Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.

d) Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.

e) Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the project title or name, and the name of the Contractor.

f) When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

SECTION 017300 – EXECUTION

A. GEOTECHNICAL DATA

1. If the Owner has caused borings or other subsurface investigations to be made, the data or report pursuant to these investigations will be included on the project plans.
2. The Owner and Owner's Representative do not guarantee the accuracy or validity of the data, nor do they assume any responsibility for the Contractor's interpretation of the data.
3. The Contractor's may, at his option, perform additional subsurface investigation, however, it shall be at the Contractor's sole expense.

B. FIELD ENGINEERING

Provide such field engineering services as are required for proper completion of the Work including, but not limited to:

1. Establishing and maintaining lines and levels
2. Structural design of shores, forms, and similar items provided by the Contractor as part of his means and methods of construction.
3. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks and control points. Preserve permanent reference points during construction.

C. COORDINATION OF TRADES AND SUB-CONTRACTORS

1. The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operation of all trades, sub-contractors, or materials and men engaged upon the work. He shall be prepared to guarantee to each of his subcontractors the dimensions which may be required for fitting of their work to all surrounding work and shall do, or cause his agents to do, all cutting, fitting, adjusting and patching necessary to make the several parts of the work come together properly and fit the work to receive, or be received by that of other contractors.
2. When two or more prime contracts are being executed at one time in such manner that the work on one contract may interfere with the work of another, the Owner's Representative shall decide which contractor shall cease work and which shall continue, or whether the work on both contracts may progress at the same time and in what manner.

a) The Contractor shall not cause any unnecessary hindrance or delay to any other contractors on the premises, and shall be responsible for all damages done to the work of other contractors caused by him or by his employees.

D. REFERENCE AND CONTROL POINTS PROVIDED BY OWNER

In addition to layout procedures provided by the Contractor for proper performance of the Contractor's responsibilities:

1. Locate and protect existing control points before starting work on the site.
2. Preserve permanent reference points during progress of the Work.
3. Do not change or relocate reference points or items of the Work without specific approval from the Owner's Representative.
4. Promptly advise the Owner's Representative when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
5. Upon direction of the Owner's Representative, require the field engineer to replace reference stakes or markers.
6. Locate such replacement according to the original survey control.

E. REFERENCE AND CONTROL POINTS PROVIDED BY THE CONTRACTOR
1. If not provided by the Owner (and defined as the responsibility of the Owner in the Contract Documents) establish sufficient general reference points in the form of permanent bench marks, grade stakes or other markers as will enable the Contractor to proceed with the Work.
2. The Contractor may lay out his own work, or cause the Work to be laid out by a qualified party such as a Registered Land Surveyor or a Professional Engineer, as necessary.
3. The Contractor shall establish and be responsible for all lines, elevations and measurements of the structure utilities, installations, and other Work executed by him under the contract.
   a) Exercise proper precautions to verify the figures and dimensions shown on the drawings before laying out the work; be responsible for any error resulting from failure to exercise such precaution.

SECTION 017329 - CUTTING AND PATCHING

A. CHASES AND OPENINGS
1. The Contractor is responsible for the provision and/or coordination of all chases, openings and recesses required by work of his own forces, subcontractors or separate contractors.
   a) Each subcontractor or separate contractor shall be responsible for furnishing advance information to the General Contractor as to exact dimensions and locations of such chases and openings, and shall provide and set in place all necessary sleeves, inserts and forms.
   b) Openings shall be accurately located, neatly cut, and no larger than necessary. Provide all rebuilding, patching, refinishing and painting required to restore the construction to original condition.
2. Provide shoring, bracing, and support as required to maintain structural integrity of the project.
3. Provide protection from cutting and patching operations as required for other portions of the project; protect the Work and existing improvements in proximity to the cutting and patching operations from the elements.

SECTION 017419 – CONSTRUCTION WASTE MANAGEMENT & DISPOSAL

A. PERIODIC CLEANING
1. Each Contractor shall clean up after his own work as needed and/or ensure that sub-contractors clean up after their work and remove accumulations of waste, debris, and rubbish caused by construction operations.
   a) Remove all waste, rubbish and debris on a daily basis (if needed), as they accumulate, and after completion of the Work.

B. PROJECT COMPLETION
1. On completion of the project, the entire job shall be cleaned up and left in perfect condition, including adjacent areas.
   a) Marred surfaces shall be patched or repaired and touched up to match adjoining surfaces.
   b) All rubbish shall be removed from the site before acceptance.
   c) New surfaces and/or exposed elements of the Work shall be protected from stain and marring. These surfaces shall be cleaned to the satisfaction of the Owner's Representative or replaced if said stains or mars are unable to be completely removed

C. GOVERNMENTAL REGULATIONS
1. Conduct cleaning and disposal operations in compliance with Federal, State and local ordinances and anti-pollution laws and regulations.

SECTION 017700 - PROJECT CLOSEOUT

A. GENERAL

Work includes:
1. Substantial Completion.
2. Final Completion
3. Closeout submittals.
4. Instruction

B. SUBSTANTIAL COMPLETION
1. Prepare and submit the list ("punch-list") required by the first sentence of Paragraph 9.8.2 of the General Conditions.
   a) Within a reasonable time after receipt of the list the Owner's Representative will inspect to determine status of completion. Should the Owner's Representative determine that the Work is not Substantially Complete:
      1) The Owner's Representative will so notify the Contractor, in writing, giving the reasons therefore.
      2) Remedy the deficiencies and notify the Owner's Representative when ready for reinspection.
      3) The Owner's Representative will reinspect the Work.
   b) When the Owner's Representative concurs that the Work is Substantially Complete:
      1) The Owner's Representative will prepare a "Certificate of Substantial Completion" on AIA form G704, accompanied by the Contractor's list of items to be completed or corrected, as verified and approved by the Owner's Representative.
      2) The Owner's Representative will submit the Certificate to the Owner and to the Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.

C. FINAL COMPLETION
1. Prepare and submit the notice required by the first sentence of Paragraph 9.10.1 of the General Conditions.
   a) Verify that the Work is complete including, but not necessarily limited to, the items mentioned in Paragraph 9.8.2 of the General Conditions. Certify that:
      1) the Contract Documents have been reviewed;
      2) the Work has been inspected for compliance with the Contract Documents;
      3) the Work has been completed in accordance with the Contract Documents;
      4) equipment and systems have been tested as required, and are operational;

5) the Work is completed and ready for final inspection.

b) The Owner's Representative will make a final inspection to verify status of completion and if all "punch-list" items have been completed, and upon receipt of the Contractor's Final Application for Payment, issue a Certificate of Final Completion. Should the Owner's Representative determine that the Work is incomplete or defective:
   1) The Owner's Representative will so notify the Contractor, in writing, listing the incomplete or defective work.
   2) Remedy the deficiencies promptly, and notify the Owner's Representative when ready for reinspection.

c) FINAL APPLICATION FOR PAYMENT
   1) Submit a final Application for Payment to the Owner's Representative, showing all adjustments to the Contract Sum.
   2) If needed, the Owner's Representative will prepare a final Change Order showing adjustments to the Contract Sum which were not made previously by Change Orders.
   3) Include final waivers of lien from the Contractor, sub-contractors, and major suppliers.
   4) Final payment will not be released until all close-out submittals have been made, final cleaning has been performed, and required instruction(s) to Owner's personnel have been accomplished.

D. CLOSEOUT SUBMITTALS

1. When the Owner's Representative determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make closeout submittals. Closeout submittals include, but are not necessarily limited to:
   a) Project record documents described in "Section 017839".
   b) Operation and maintenance manuals/data as described in "Section 017823".
   c) Warranties and bonds as described in "Section 016000".
   e) Spare parts and materials extra stock;
   f) Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to:
      1) Certificates of Inspection, as required
      2) Certificate(s) of Occupancy
   g) Certificates of Insurance for products and completed operations;
   h) Evidence of payment and release of liens.
      1) Consent of Surety to Final Payment
      2) Contractor's Final Waiver of Lien
      3) Separate releases or Waivers of Lien for sub-contractors, suppliers and others with lien rights against the Owner, together with a list of those parties.
   i) List of subcontractors, service organizations, and principal vendors, including names, addresses, and telephone numbers where they can be reached for emergency service at all times including nights, weekends, and holidays.

SECTION 017823 - OPERATING/MAINTENANCE MANUALS & INSTRUCTION

A. GENERAL

1. Compile operating/product data and related information appropriate for Owner's maintenance and operation of products and equipment provided under the Contract.
2. Instruct Owner's personnel in operation and maintenance of products, equipment and systems.

B. OPERATIONS/MAINTENANCE MANUALS - FORM OF SUBMITTAL

1. Prepare operating and maintenance manuals in the form of an instructional manual, utilizing heavy-duty, durable 3-ring vinyl covered loose-leaf binders, for use by the Owner's operating personnel. Organize into suitable sets of manageable size. Where possible, assemble instructions for similar equipment into a single binder. Provide when drawings or diagrams are required as part of the manual.
2. Provide sturdy manila or kraft envelope, accordion type file folder, or cardboard file boxes, properly labeled, of sufficient size to contain all submittals.
3. Submit one copy of data in final form at least fifteen days before final inspection. This copy will be returned within fifteen days after final inspection, with comments. After final inspection make corrections or modifications to comply with the Owner's Representative's comments and submit three copies of each approved manual to the Owner's Representative
4. WARRANTIES, BONDS AND SERVICE CONTRACTS
   a) Provide a copy of each warranty, bond or service contract in the appropriate manual for the information of the Owner's operating personnel. Provide written data outlining procedures to be followed in the event of product failure. List circumstances and conditions that would affect validity of the warranty or bond. Provide list for each product containing name, address, and phone number of:
      1) Contractor.
      2) Subcontractor.
      3) Maintenance contractor, as appropriate.
      4) Local supply source for parts and replacement.
   b) Identify area of responsibility of each contractor.

C. MANUAL FOR MATERIALS AND FINISHES

1. Submit two (2) copies of complete manual in final form.
2. Refer to individual Specification Sections for additional requirements on care and maintenance of materials and finishes.
3. Content for products, applied materials and finishes:
   a) Manufacturer's data, giving full information on products.
      1) Catalog number, size, composition.
      2) Color and texture designations.
      3) Information for re-ordering special-manufactured products.
4. Instructions for care and maintenance.

a) Manufacturer's recommendations for types of cleaning agents and methods.
b) Cautions against cleaning agents and methods detrimental to product.
c) Recommended cleaning and maintenance schedule.

5. Moisture-Protection and Weather-Exposed Products: Provide complete manufacturer's data with instructions on inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.
6. Manufacturer's Data: Provide manufacturer's data giving detailed information, including the following, as applicable:
   a) Applicable standards.
   b) Chemical composition.
   c) Installation details.
   d) Inspection procedures.
   e) Maintenance information.
   f) Repair procedures.

SECTION 017839 - PROJECT RECORD DOCUMENTS (AS-BUILTS)

A. DOCUMENTS REQUIRED AT SITE
   1. The Contractor shall maintain at the job site one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other Contract modifications.
      a) Each of these project record documents shall be clearly marked "**Project Record Copy**"
      b) Shall be maintained in good condition
      c) shall be available at all times for inspection by the Park District, and shall not be used for construction purposes.

B. Project-record drawings shall be marked up to show significant changes made during construction progress, referenced to visible and accessible features of the structures. Project-record drawings shall be kept current and no work shall be concealed until required information has been recorded.

C. Record-documents shall be submitted in satisfactory condition to the Park District at the completion of the project. **FINAL COMPLETION OF THE PROJECT WILL NOT BE ATTAINED, AND FINAL PAYMENT WILL BE WITHHELD, UNTIL PROJECT "AS-BUILTS" ARE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.**

END OF GENERAL REQUIREMENTS

CHECK SHEET
FOR
RECURRING SPECIAL PROVISIONS

Adopted January 1, 2013

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

RECURRING SPECIAL PROVISIONS

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CHECK SHEET
FOR
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Adopted January 1, 2013

The following LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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Project Specific Special Provisions

Peoria Park District
Rock Island Greenway
(Knoxville Avenue Crossing)
Peoria County

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SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2012", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of the Peoria Park District Rock Island Greenway over Knoxville Avenue in Peoria County and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

PROJECT BIDDING INFORMATION

The project plan set and specifications were originally developed using individual pay items. The project will be bid lump sum. Any references to specific pay items or cost inclusions are for information only.

LOCATION OF PROJECT

This project is located along the former Peoria & Peoria Heights railroad service from Northmoor Road to just east of Knoxville Avenue in the City of Peoria.

DESCRIPTION OF PROJECT

The scope of work consists of the construction of 0.47 miles of bicycling trail. Improvements consist of earthwork, HMA pavement, pedestrian truss, MSE retaining walls, and all other items as shown in the contract documents.

WORKING RESTRICTIONS

Due to the high traffic volumes on Knoxville Avenue, a minimum of two lanes in each direction must be maintained at all times with the exception of the hours between 8:30 AM to 3:30 PM Mondays through Fridays or closure for assembly and erection of the truss(es) as outlined below.

No lane restrictions or short term closures will be permitted from 6:30 AM-8:30 AM or 3:30 PM-5:30 PM Mondays through Fridays or at any time during the holiday period for legal holidays as specified in Article 107.09 of the Standard Specifications.

A minimum lane width of 11' shall be maintained on Knoxville Avenue lanes open to traffic.

Truss Placement over IL 40:

The Contractor shall be allowed to stop traffic for twenty (20) minutes at a time for the placement of the truss over IL 40. After twenty (20) minutes, another closure cannot take place until after traffic has cleared. The following traffic control requirements shall be included for this process:

Changeable Message Boards (CMB) shall be placed five days in advance of the closure and shall remain in place during the closure. One CMB shall be placed north of Northmoor Road

and another, south of Glen Avenue with the following message (See Traffic Control Detail Sheet for locations):

ADVANCE MESSAGE:		CLOSURE MESSAGE:	
PAGE 1	PAGE 2	PAGE 1	PAGE 2
TRUSS	EXPECT	ROAD	EXPECT
SETTING	20 MIN.	CLOSED	20 MIN.
*	DELAYS	AHEAD	DELAYS

Additional CMBs shall be placed on the day of the closure. One, north of Pioneer Parkway and another, south of Lake Street with the following message (See Traffic Control Detail Sheet for locations):

ADVANCE MESSAGE:		CLOSURE MESSAGE:	
PAGE 1	PAGE 2	PAGE 1	PAGE 2
TRUSS	EXPECT	ROAD	EXPECT
SETTING	20 MIN.	CLOSED	20 MIN.
*	DELAYS	AHEAD	DELAYS

*actual day and time to be entered once known (ex. THUR 7P)

Time Restrictions for Truss Setting:

The contractor shall not close the road prior to 7:00 pm Monday through Thursday. Friday night or Saturday night closures shall not be allowed.

If, after consulting with the resident engineer, the contractor anticipates longer than 20 minutes to accomplish setting of the truss, the contractor shall begin after 10:00 pm and be allowed 45 minute closures.

Night lighting for flaggers & workers shall be provided per IDOT specifications for work completed or anticipated after daylight hours.

Any proposed traffic control changes must be submitted to the Engineer in writing. All changes must be approved by the Engineer prior to implementation.

TRAFFIC CONTROL PLAN

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction," the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," these Special

Provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Section 701 and Articles 107.09 and 107.14 of the "Standard Specifications for Road and Bridge Construction" and the following Highway Standards relating to traffic control:

701421 701602 701901

The governing factor in the execution of work for this project is to provide the motoring public with the safest possible traffic conditions through the construction zone. The Contractor shall arrange his/her operations to keep the closing of lanes or the closure time to a minimum.

Traffic Control & Protection Standard 701602 shall be used to reduce traffic to one lane in each direction for the preparatory work and installation of the truss. The Contractor shall be allowed to have the lanes reduced from 8:30am to 6:00am the following day on the day of the truss setting.

One flagger shall also be included for each direction prior to closing the road.

IDOT will have two Illinois State Police troopers available prior to and during the closures. The Contractor shall notify Don Hoffman at IDOT 309-671-4488 forty eight (48) hours in advance of the closures to arrange the troopers.

The Contractor shall be responsible for the proper location, installation and arrangement of all traffic control devices. Special attention shall be given to existing warning and guide signs during construction. The Contractor shall immediately remove or completely cover all signs that are inconsistent with lane assignment patterns or closures.

Notifications:

The Contractor shall notify the Engineer in writing ten calendar days prior to any activities that will disrupt normal traffic flow including road closure or lane restrictions.

The contractor shall notify police, fire, ambulance, and the business at Junction City a minimum of 48 hours in advance of closures.

The Contractor will also be responsible for providing to IDOT a press release for the local newspapers, television and radio stations of the proposed closure date and time.

Business and Private Access:

The Contractor shall maintain access to all driveways, entrances and roadways at all times or as directed by the Engineer. Closures are possible if prior to the closure, the Contractor secures the property owners or tenants approval in writing and provides a copy to the Engineer.

~~This work will be paid for at the contract unit price per Lump Sum for TRAFFIC CONTROL AND PROTECTION, (SPECIAL). Changeable Message Signs will not be paid for separately but will be included in the cost for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).~~

STATUS OF UTILITIES/UTILITIES TO BE ADJUSTED

Effective: January 21, 2005

The following utilities are located within the project limits. For relocations, the utility companies have provided the estimated dates.

Name, Contact, Address and Phone Number of Utility	Type	Location	Relocation Needed?	Estimated Date Relocation Completed
AT&T SHARON TILJAK 708-709-2523	FIBER OPTIC	UNDERGROUND	NO	N/A
ITV-3, INC. BRANDON HENRICKS 309-670-0641	FIBER OPTIC	UNDERGROUND	NO	N/A
PAETEC(Mcleod) MARK MILLS 217-876-7194 X240	FIBER OPTIC	UNDERGROUND	NO	N/A
WINDSTREAM DOUG CLARK 812-253-2168	FIBER OPTIC	UNDERGROUND	NO	N/A
AMEREN CILCO GAS KENT KOWALSKE 309-693-4839	16” HIGH PRESSURE GAS MAIN	UNDERGROUND	NO (USE CAUTION)	N/A
AMEREN ELECTRIC WAHEED SHAHZAD	ELECTRICAL CONCRETE CASE	UNDERGROUND	NO (USE CAUTION)	N/A
COMCAST KIRK KROMPHARDT 309-686-2616		UNDERGROUND	NO	N/A
GPSD MARIA ZAVALA 309-272-4844X4844	SANITARY LINE	UNDERGROUND	NO	N/A
IL AMER WATER MATT WHITE 309-208-8366 (cell)	WATERLINE (24” FORCE MAIN)	UNDERGROUND	NO (USE CAUTION)	N/A
ACCESS 2GO JOHN PETRAKIS	FIBER OPTIC	UNDERGROUND	NO	N/A

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Recurring Special Provisions LRS1, LRS6 and Articles 105.07, 107.20, 107.31 and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor. If any utility adjustments or relocations have not been completed by the above dates specified and when required by the Contractor's operations after these dates, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's critical path schedule is affected.

LOCATION OF UNDERGROUND STATE MAINTAINED FACILITIES

Effective August 3, 2007 Revised July 31, 2009

The Contractor shall be responsible for locating existing and proposed IDOT electrical facilities (traffic signal, overhead lighting, Intelligent Transportation System, etc.) prior to performing any work at his/her own expense if required. The Contractor shall also be liable for any damage to DOT facilities resulting from inaccurate locating.

The Contractor may obtain, on request, plans for existing electrical facilities from the Department.

The Contractor shall also be responsible for locating and providing protection for IDOT facilities during all phases of construction. If at any time the facilities are damaged, the Contractor shall immediately notify the Department and make all necessary arrangements for repair to the satisfaction of the Engineer. This work will not be paid for separately, but shall be included in the contract bid price.

PEDESTRIAN TRUSS SUPERSTRUCTURE

Effective: January 13, 1998
Revised: August 17, 2012

Description: This work shall consist of the design, fabrication, storage, delivery and erection of a welded steel, pedestrian truss superstructure. Also included in this work shall be the furnishing and installation of a deck, all bearings, anchors and/or retainers, railings, fencing and miscellaneous items as indicated on the plans.

Materials:
Truss. Structural steel shall conform to the requirements of Section 1006 of the Standard Specifications, ASTM A847 for cold formed welded square and rectangular tubing, AASHTO M270 Grade 50W (M270M 345W) for atmospheric corrosion resistant structural steel, as applicable, unless otherwise shown on the plans or approved by the Engineer. All structural steel field connections shall be bolted with high strength bolts. High strength bolts for unpainted weathering steel shall conform to ASTM A325 (A325M) (Type 3). For painted structures, the high strength bolts shall be mechanically galvanized according to the requirements of Article 1006.08(a) of the Standard Specifications.

Deck. The deck type shall be as specified on the plans. The materials shall comply with the applicable portions of the materials section of the Standard Specifications.

When specified for use, the concrete deck and stay-in-place forms shall be non composite. Metal Forms shall have a minimum thickness of 0.0359 in. (912 microns) or 20 Gage and shall be galvanized per ASTM A653 (A653M) with a G165 (Z350) mm. coating designation.

Railing. The railing shall consist of a smooth rub rail, a toe plate and misc. elements, all located on the inside face of the truss.

Bearings. The bearing shall be designed and furnished as detailed in the plans, in the absence of details, the bearings details shall be as specified by the bridge manufacturer.
When specified for use, elastomeric bearings shall be according to Article 1083 of the Standard Specifications. Teflon surfaces shall be per Article 1083.02(b) of the Standard Specification and shall be bonded to the bearing plate.

Suppliers. The manufacturer shall be a company specializing in the design and manufacture of pedestrian bridges. The manufacturer shall be certified by AISC according to Article 106.08(b) of the Standard Specifications. The manufacturer shall provide information, to the satisfaction of the Engineer, demonstrating it has successfully provided bridges of similar scope for a minimum of 10 projects. The submittals demonstrating experience shall include names, addresses and telephone numbers of the owners of the structures. This submittal shall be made at the time of the preconstruction conference.

Potential bridge suppliers include but are not limited to:

Continental Custom Bridge Company
8301 State Hwy 29 North
Alexandria, Minnesota 56308
800-328-2047, FAX 320-852-7067
Steadfast Bridges
4021 Gault Ave South
Fort Payne, Alabama 35967
800-749-7515, FAX 256-845-9750

Excel Bridge Manufacturing Company
12001 Shoemaker Avenue
Santa Fe Springs, California 90670
800-548-0054, FAX 562-944-4025

Wheeler Consolidated
9330 James Avenue South
Bloomington, MN 55431
800-328-3986, FAX 952-929-2909

Echo Bridge/Decker, Incorporated
123 Bob Masia Dr
Pine City, New York 14871
607-734-9456, FAX 607-733-4148

Anderson Bridges
111 Willow Street
Colfax, WI 54730
715-962-2800, FAX 715-962-2801

The Ohio Bridge Corporation/ US Bridge
P0 Box 757
Cambridge, OH 43725
740-432-6334, FAX 740-439-7349

Design: The superstructure shall conform to the clear span, clear width, and railing configuration shown on the contract plans. The design shall be according to the LRFD Guide Specifications for the Design of Pedestrian Bridges. The design loads shall be as specified by the Guide Specification except as follows:

Design Wind Loads (Pa) for Pedestrian Trusses in Illinois		
Application	**psf (kPa)**	**Applied to:**
Circular Members	35 (1.68)	Projected vertical area of member
Flat Members	55 (2.63)	Projected vertical area of member
Signs	35 (1.68)	Projected vertical area of sign
Chain Link Fencing	10 (0.48)	Full projected area of fencing as if solid

The railings shall be designed per the appropriate Bridge Design Specifications for bicycle railings as shown on the plans. Smooth rub rails shall be attached to the bicycle railing and located at a bicycle handlebar height of 3.5 ft. (1.1 m) above the top of the deck.

Prior to beginning construction or fabrication, the Contractor shall submit design calculations and six sets of shop drawings for each pedestrian bridge to the Engineer for review and approval. In addition, for bridges with any span over 150 ft. (46 m), or over a State or Federal Route, or within the States Right-of-Way, a copy of the shop drawings will be reviewed and approved for structural adequacy, by the Bureau of Bridges and Structures prior to final approval of shop drawings. The shop drawings shall include all support reactions for each load type. The following certification shall be placed on the first sheet of the bridge shop plans adjacent to the seal and signature of the Structural Engineer:

> "I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans and complies with the requirements of the Contract and the current 'Guide Specifications for Design of Pedestrian Bridges'."

The substructure is designed per the appropriate Bridge Design Specifications and based on the assumed truss loads, as shown on the plans. If the manufacturer's design exceeds those loads and/or the substructure needs to be adjusted to accommodate the truss superstructure chosen, then the Contractor shall submit the redesign to the Engineer for approval prior to ordering any material or starting construction. All design calculations, shop drawings and

redesigned substructure drawings shall be sealed by a Structural Engineer licensed in the State of Illinois.

Construction: Truss erection procedures shall be according to the manufacturer's instructions. The deck shall be placed according to the applicable Sections of the Standard Specifications.

When weathering steel is used, all structural steel shall be prepared according to Article 506.07.

When painting is specified, all structural steel shall be cleaned and painted according to Section 506. The paint system and color of the finish coat shall be as specified in the plans.

~~**Method of Measurement:** The pedestrian truss superstructure will be measured in square feet (square meters) of completed and accepted bridge deck within the limits of the truss superstructure.~~

~~**Basis of Payment:** The pedestrian superstructure will be paid for at the contract unit price per square foot (square meter) for "PEDESTRIAN TRUSS SUPERSTRUCTURE."~~

CONCRETE WEARING SURFACE

Description.
This work shall consist of placing a concrete wearing surface, to the specified thickness, on the steel deck forms on the Pedestrian Truss Superstructure. Included in this work is cleaning and preparing the steel form surface prior to placement of the concrete wearing surface. This work shall be according to the applicable articles of Section 503 and the following.

Materials.
The concrete wearing surface shall be class BS concrete.

Surface Preparation.
Prior to placement of the concrete wearing surface, the top surface of the steel stay-in-place forms shall be clean and free of all foreign material and laitance.

All debris of every type, including dirty water, resulting from the cleaning operation shall be reasonably confined during the performance of the cleaning work and shall be immediately and thoroughly removed from the cleaned surfaces and all other areas where debris may have accumulated.

Prior to placement of the concrete wearing surface, the Engineer will inspect the cleaned surface, and all areas still contaminated shall be cleaned again at the Contractor's expense.

Wearing Surface Placement.
The concrete wearing surface placement shall be according to Article 503.16 of the Standard Specifications. The surface shall be pre-wetted and any accumulations of water shall be dispersed or removed prior to placement of the concrete wearing surface.

A fine, broom finish shall be applied to the surface of the concrete wearing surface in accordance with Article 424.06 of the Standard Specifications.

Curing and Protection.
The concrete shall be continuously wet cured for at least 14 days according to Article 1020.13(a)(5). However, if the minimum specified compressive strength or flexural strength is obtained prior to 14 days, the cure time may be reduced, but at no time shall the wet cure be less than 7 days. The concrete shall be protected from low air temperatures according to ArticleIO2O.13(d)(1)(2), except the protection method shall remain in place for the entire curing period.

~~Method of Measurement.~~
~~Concrete wearing surface will be measured for payment in place and the area computed in square yards (square meters).~~

~~Basis of Payment.~~
~~This work including cleaning and surface preparation will be paid for at the contract unit price per square yard (square meter) for CONCRETE WEARING SURFACE, of the thickness specified.~~

MECHANICALLY STABILIZED EARTH RETAINING WALLS

Effective: February 3, 1999
Revised: February 6, 2013

Description. This work shall consist of preparing the design, furnishing the materials, and constructing the mechanically stabilized earth (MSE) retaining wall to the lines, grades and dimensions shown in the contract plans and as directed by the Engineer.

General. The MSE wall consists of a concrete leveling pad, precast concrete face panels, a soil reinforcing system, select fill and concrete coping (when specified). The soil reinforcement shall have sufficient strength, quantity, and pullout resistance, beyond the failure surface within the select fill, as required by design. The material, fabrication, and construction shall comply with this Special Provision and the requirements specified by the supplier of the wall system selected by the Contractor for use on the project.

The MSE retaining wall shall be one of the following pre-approved wall systems:

Company Name: Wall System
Earth Tec International, LLC: EarthTrac HA
Sanders Pre-Cast Concrete Systems Company: Sanders MSE Wall
Shaw Technologies: Strengthened Soil
Sine Wall, LLC: Sine Wall
SSL Construction Products: MSE Plus
T&B Structural Systems: Stabilized Earth
Tensar Earth Technologies: ARES Wall
The Reinforced Earth Company: GeoMega System
The Reinforced Earth Company: Reinforced Earth
The Reinforced Earth Company: Retained Earth
Tricon Precast: Tricon Retained Soil
Tricon Precast: Tn-Web Retained Soil

Pre-approval of the wall system does not include material acceptance at the jobsite.

Submittals. The wall system supplier shall submit complete design calculations and shop drawings to the Engineer according to Article 1042.03(b) of the Standard Specifications no later than 90 days prior to beginning construction of the wall. No work or ordering of materials for the structure shall be done by the Contractor until the submittal has been approved in writing by the Engineer. All submittals shall be sealed by an Illinois Licensed Structural Engineer and shall include all details, dimensions, quantities and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

(a) Plan, elevation and cross section sheet(s) for each wall showing the following:

(1) A plan view of the wall indicating the offsets from the construction centerline to the face of the wall at all changes in horizontal alignment. The plan view shall show the limits of soil reinforcement and stations where changes in length and/or size of reinforcement occur. The centerline shall be shown for all drainage structures or pipes behind or passing through and/or under the wall.

(2) An elevation view of the wall indicating the elevations of the top of the panels. These elevations shall be at or above the top of exposed panel line shown on the contract plans. This view shall show the elevations of the top of the leveling pads, all steps in the leveling pads and the finished grade line. Each panel type, the number, size and length of soil reinforcement connected to the panel shall be designated. The equivalent uniform applied service (unfactored) nominal bearing pressure shall be shown for each designed wall section.

(3) A listing of the summary of quantities shall be provided on the elevation sheet of each wall.

(4) Typical cross section(s) showing the limits of the reinforced select fill volume included within the wall system, soil reinforcement, embankment material placed behind the select fill, precast face panels, and their relationship to the right-of-way limits, excavation cut slopes, existing ground conditions and the finished grade line.

(5) All general notes required for constructing the wall.

(b) All details for the concrete leveling pads, including the steps, shall be shown. The top of the leveling pad shall be located at or below the theoretical top of the leveling pad line shown on the contract plans. The theoretical top of leveling pad line shall be 3.5 ft. (1.1m) below finished grade line at the front face of the wall, unless otherwise shown on the plans.

(c) Where concrete coping or barrier is specified, the panels shall extend up into the coping or barrier as shown in the plans. The top of the panels may be level or sloped to satisfy the top of exposed panel line shown on the contract plans. Cast-in-place concrete will not be an acceptable replacement for panel areas below the top of exposed panel line. As an alternative to cast in place coping, the Contractor may substitute a precast coping,

the details of which must be included in the shop drawings and approved by the Engineer.

(d) All panel types shall be detailed. The details shall show all dimensions necessary to cast and construct each type of panel, all reinforcing steel in the panel, and the location of soil reinforcement connection devices embedded in the panels. These panel embed devices shall not be in contact with the panel reinforcement steel.

(e) All details of the wall panels and soil reinforcement placement around all appurtenances located behind, on top of, or passing through the soil reinforced wall volume such as parapets with anchorage slabs, coping, foundations, and utilities etc. shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular system shall also be submitted.

(f) When specified on the contract plans, all details of architectural panel treatment, including color, texture and form liners shall be shown.

(g) The details for the connection between concrete panels, embed devices, and soil reinforcement shall be shown.

(h) When pile sleeves are specified, the pile sleeve material, shape, and wall thickness shall be submitted to the Engineer for approval. It shall have adequate strength to withstand the select fill pressures without collapse until after completion of the wall settlement. The annulus between the pile and the sleeve shall be as small as possible while still allowing it to be filled with loose dry sand after wall erection.

The initial submittal shall include three sets of shop drawings and one set of calculations. One set of drawings will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with ~~ten (10)~~ sets of corrected plan prints for distribution ~~by the Department~~. No work or ordering of materials for the structure shall be done until the submittal has been approved by the Engineer.

Materials. The MSE walls shall conform to the supplier's standards as previously approved by the Department, and the following:

(a) The soil reinforcing system, which includes the soil reinforcement, and all connection devices, shall be according to the following:

(1) Inextensible Soil Reinforcement. Steel reinforcement shall be according ASTM A 572 Grade 65 (450), ASTM A 1011 or ASTM A 463 Grade 50 (345). The steel strips shall be either epoxy coated, aluminized Type 2, or galvanized. Epoxy coatings shall be according to Article 1006.10(a)(2), except the minimum thickness of epoxy coating shall be 18 mils (457 microns). No bend test will be required. Aluminized Type 2-100 shall be according to ASTM A 463. Galvanizing shall be according to AASHTO M 111 or ASTM A 653 with touch up of damage according to ASTM A 780.

(2) Extensible Soil Reinforcement. Geosynthetic reinforcement shall be monolithically fabricated from virgin high density polyethylene (HDPE) or high tenacity polyester (HTPET) resins having the following properties verified by mill certifications:

Property for Geosynthetic Reinforcement	Value	Test
Minimum Tensile Strength	**	ASTM D 6637

** As specified in the approved design calculations and shown on the shop drawings.

Property for HDPE	Value	Test
Melt Flow Rate (g/cm)	0.060 — 0.150	ASTM D 1238, Procedure B
Density (g/cu m)	0.94 1 — 0.965	ASTM D 792
Carbon Black	2% (mm)	ASTM D 4218

Property for HTPET	Value	Test
Carboxyl End Group (max) (mmol/kg)	<30	GRI-GG7
Molecular Weight (Mn)	>25,000	GRI-GG8

(3) Panel Embed/Connection Devices. Panel embeds and connection devices shall be according to the following:

a. Metallic panel embed/connection devices and connection hardware shall be galvanized according to AASHTO M 232 and shall be according to the following.

Mesh and Loop Embeds	ASTM A 706 (A 706M)
Tie Strip Embeds	AASHTO M 270/M 270M Grade 50 (345) or ASTM A 1011 HSLAS Grade 50 (345) Class 2

b. Non metallic panel embed/connection devices typically used with geosynthetic soil reinforcement shall be manufactured from virgin or recycled polyvinyl chloride having the following properties:

Property for Polyvinyl Chloride	Value	Test
Heat Deflection Temperature (°F)	155 —164	ASTM D 1896
Notched IZOD 1/8 inch @ 73°F (ft-lb/in)	4 — 12	ASTM D 256
Coefficient of Linear Exp. (in/in/°F)	3.5 — 4.5	ASTM D 696
Hardness, Shore D	79	ASTM D 2240

Property for Polypropylene	Value	Test
Melt Flow Rate (g/cm)	0.060 — 0.150	ASTM D 1238, Procedure B
Density (g/cu m)	0.88 — 0.92	ASTM D 792

(b) The select fill, defined as the material placed in the reinforced volume behind the wall, shall be according to Sections 1003 and 1004 of the Standard Specifications and the following:

(1) Select Fill Gradation. Either a coarse aggregate or a fine aggregate may be used. For coarse aggregate, gradations CA 6 thru CA 16 may be used. If an epoxy coated reinforcing is used, the coarse aggregate gradations shall be limited to CA 12 thru CA 16. For fine aggregate, gradations FA 1, FA 2, or FA 20 may be used.

(2) Select Fill Quality. The coarse or fine aggregate shall have a maximum sodium sulfate (S24)NOa loss of 15 percent according to Illinois Modified AASHTO T 104.

(3) Select Fill Internal Friction Angle. The effective internal friction angle for the coarse or fine aggregate shall be a minimum 34 degrees according to AASHTO T 236 on samples compacted to 95 percent density according to Illinois Modified AASHTO T 99. The AASHTO T 296 test with pore pressure measurement may be used in lieu of AASHTO T 236. If the vendor's design uses a friction angle higher than 34 degrees, as indicated on the approved shop drawings, this higher value shall be taken as the minimum required.

(4) Select Fill and Steel Reinforcing. When steel reinforcing is used, the select fill shall meet the following requirements.

a. The pH shall be 5.0 to 10.0 according to Illinois Modified AASHTO T 289.
b. The resistivity according to Illinois Modified AASHTO T 288 shall be greater than 3000 ohm centimeters for epoxy coated and galvanized reinforcement, and 1500 ohm centimeters for Aluminized Type 2. However, the resistivity requirement is not applicable to CA7, CA8, CAll, CA 12, CA 13, CA 14, CA 15, and CA 16.
c. The chlorides shall be less than 100 parts per million according to Illinois Modified AASHTO T 291 or ASTM D 4327. For either test, the sample shall be prepared according to Illinois Modified AASHTO T 291.
d. The sulfates shall be less than 200 parts per million according to Illinois Modified AASHTO T 290 or ASTM D 4327. For either test, the sample shall be prepared according to Illinois Modified AASHTO T 290.
e. The organic content shall be a maximum 1.0 percent according to Illinois Modified AASHTO T 267.

(5) Select Fill and Geosynthetic Reinforcing. When geosynthetic reinforcing is used, the select fill pH shall be 4.5 to 9.0 according to Illinois Modified AASHTO T 289.

(6) Test Frequency. Prior to start of construction, the Contractor shall provide internal friction angle and pH test results, to show the select fill material meets the specification requirements. In addition, resistivity, chlorides, sulfates, and organic content test results will be required if steel reinforcing is used. The laboratory performing the Illinois Modified AASHTO T 288 test shall be approved by the Department according to the current Bureau of Materials and Physical Research Policy Memorandum "Minimum Laboratory Requirements for Resistivity Testing". All test results shall not be older than 12 months. In addition, a sample of select fill material will be obtained for testing and approval by the Department. Thereafter, the minimum frequency of sampling and testing by the department at the jobsite will be one per 40,000 tons (36,300 metric tons) of select fill material. Testing to verify the internal friction angle will be required when the wall design utilizes a minimum effective internal friction angle greater than 34 degrees, or when crushed coarse aggregate is not used.

(c) The embankment material behind the select fill shall be according to Section 202 and/or Section 204. An embankment unit weight of 120 lbs/cubic foot (1921 kg/cubic meter) and an effective friction angle of 30 degrees shall be used in the wall system design, unless otherwise indicated on the plans.

(d) The geosynthetic filter material used across the panel joints shall be either a non-woven needle punch polyester or polypropylene or a woven monofilament polypropylene with a minimum width of 12 in. (300 mm) and a minimum non-sewn lap of 6 in. (150 mm) where necessary.

(e) The bearing pads shall be rubber, neoprene, polyvinyl chloride, or polyethylene of the type and grade as recommended by the wall supplier.

(f) All precast panels shall be manufactured with Class PC concrete according to Section 504, Article 1042.02, Article 1042.03, and the following requirements:

(1) The minimum panel thickness shall be 5 1/2 in. (140 mm).

(2) The minimum reinforcement bar cover shall be 1 1/2 in. (38 mm).

(3) The panels shall have a ship lap or tongue and groove system of overlapping joints between panels designed to conceal joints and bearing pads.

(4) The panel reinforcement shall be according to Article 1006.10 (a)(2).

(5) All dimensions shall be within 3/16 in. (5 mm).

(6) Angular distortion with regard to the height of the panel shall not exceed 0.2 inches in 5ft(5 mm in 1.5 m).

(7) Surface defects on formed surfaces measured on a length of 5 ft. (1.5 m) shall not be more than 0.1 in. (2.5 mm).

(8) The panel embed/connection devices shall be cast into the facing panels with a tolerance not to exceed 1 in. (25 mm) from the locations specified on the approved shop drawings.

Unless specified otherwise, concrete surfaces exposed to view in the completed wall shall be finished according to Article 503.15(a). The back face of the panel shall be roughly screeded to eliminate open pockets of aggregate and surface distortions in excess of 1/4 in. (6 mm).

Design Criteria. The design shall be according to the appropriate AASHTO Design Specifications noted on the plans for Mechanically Stabilized Earth Walls except as modified herein. The wall supplier shall be responsible for all internal stability aspects of the wall design and shall supply the Department with computations for each designed wall section. The analyses of settlement, bearing capacity and overall slope stability will be the responsibility of the Department.

External loads, such as those applied through structure foundations, from traffic or railroads, slope surcharge etc., shall be accounted for in the internal stability design. The presence of all appurtenances behind, in front of, mounted upon, or passing through the wall volume such as drainage structures, utilities, structure foundation elements or other items shall be accounted for in the internal stability design of the wall.

The design of the soil reinforcing system shall be according to the applicable AASHTO or AASHTO LRFD Design Specifications for “Inextensible” steel or “Extensible” geosynthetic reinforcement criteria. The reduced section of the soil reinforcing system shall be sized to allowable stress levels at the end of a 75 year design life.

Steel soil reinforcing systems shall be protected by one of the following; epoxy coating, galvanizing or aluminizing. The design life for epoxy shall be 16 years. The corrosion protection for the balance of the 75 year total design life shall be provided using a sacrificial steel thickness computed for all exposed surfaces according to the applicable AASHTO or AASHTO LRFD Design Specifications.

Geosynthetic soil reinforcing systems shall be designed to account for the strength reduction due to long-term creep, chemical and biological degradation, as well as installation damage.

To prevent out of plane panel rotations, the soil reinforcement shall be connected to the standard panels in at least two different elevations, vertically spaced no more than 30 in. (760mm) apart.

The panel embed/soil reinforcement connection capacity shall be determined according to the applicable AASHTO or AASHTO LRFD Design Specifications.

The factor of safety for pullout resistance in the select fill shall not be less than 1.5, based on the pullout resistance at 1/2 in. (13 mm) deformation. Typical design procedures and details, once accepted by the Department, shall be followed. All wall system changes shall be submitted in advance to the Department for approval.

For aesthetic considerations and differential settlement concerns, the panels shall be erected in such a pattern that the horizontal panel joint line is discontinuous at every other panel. This shall be accomplished by alternating standard height and half height panel placement along the leveling pad. Panels above the lowest level shall be standard size except as required to satisfy the top of exposed panel line shown on the contract plans.

At locations where the plans specify a change of panel alignment creating an included angle of 150 degrees or less, precast corner joint elements will be required. This element shall separate the adjacent panels by creating a vertical joint secured by means of separate soil reinforcement.

Isolation or slip joints, which are similar to corner joints in design and function, may be required to assist in differential settlements at locations indicated on the plans or as recommended by the wall supplier. Wall panels with areas greater than 30 sq. ft. (2.8 sq. m) may require additional slip joints to account for differential settlements. The maximum standard panel area shall not exceed 60 sq. ft. (5.6 sq. m).

Construction. The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include any costs related to this technical assistance in the unit price bid for this item.

The foundation soils supporting the structure shall be graded for a width equal to or exceeding the length of the soil reinforcement. Prior to wall construction, the foundation shall be compacted with a smooth wheel vibratory roller. Any foundation soils found to be unsuitable shall be removed and replaced, as directed by the Engineer, and shall be paid for separately according to Section 202.

When structure excavation is necessary, it shall be made ~~and paid for~~ according to Section 502 except that the horizontal limits for structure excavation shall be from the rear limits of the soil reinforcement to a vertical plane 2 ft. (600 mm) from the finished face of the wall. The depth shall be from the top of the original ground surface to the top of the leveling pad. The additional excavation necessary to place the concrete leveling pad ~~will not be measured for payment but~~ shall be included in this work.

The concrete leveling pads shall have a minimum thickness of 6 in. (150 mm) and shall be placed according to Section 503.

As select fill material is placed behind a panel, the panel shall be maintained in its proper inclined position according to the supplier specifications and as approved by the Engineer. Vertical tolerances and horizontal alignment tolerances shall not exceed 3/4 in. (19 mm) when measured along a 10 ft. (3 m) straight edge. The maximum allowable offset in any panel joint shall be 3/4 in. (19 mm). The overall vertical tolerance of the wall, (plumbness from top to bottom) shall not exceed 1/2 in. per 10 ft. (13 mm per 3 m) of wall height. The precast face panels shall be erected to insure that they are located within 1 in. (25 mm) from the contract plan offset at any location to insure proper wall location at the top of the wall. Failure to meet this tolerance may cause the Engineer to require the Contractor to disassemble and re-erect the affected portions of the wall. A 3/4 in. (19 mm) joint separation shall be provided between all adjacent face panels to prevent direct concrete to concrete contact. This gap shall be maintained by the use of bearing pads and/or alignment pins.

The back of all panel joints shall be covered by a geotextile filter material attached to the panels with a suitable adhesive. No adhesive will be allowed directly over the joints.

The select fill and embankment placement shall closely follow the erection of each lift of panels. At each soil reinforcement level, the fill material should be roughly leveled and compacted before placing and attaching the soil reinforcing system. The soil reinforcement and the maximum lift thickness shall be placed according to the supplier's recommended procedures except, the lifts for select fill shall not exceed 10 in. (255 mm) loose measurement or as approved by the Engineer. Embankment shall be constructed according to Section 205.

At the end of each day's operations, the Contractor shall shape the last level of select fill to permit runoff of rainwater away from the wall face. Select fill shall be compacted according to the project specifications for embankment except the minimum required compaction shall be 95 percent of maximum density as determined by AASHTO T 99. Select fill compaction shall be accomplished without disturbance or distortion of soil reinforcing system and panels. Compaction in a strip 3 ft. (1 m) wide adjacent to the backside of the panels shall be achieved using a minimum of 3 passes of a light weight mechanical tamper, roller or vibratory system. The Engineer will perform one density test per 5000 cu yd (3800 cu m) and not less than one test per 2ft (0.6 m) of lift.

~~**Method of Measurement**. Mechanically Stabilized Earth Retaining Wall will be measured for payment in square feet (square meters). The MSE retaining wall will be measured from the top of exposed panel line to the theoretical top of leveling pad line for the length of the wall as shown on the contract plans.~~

~~**Basis of Payment**. This work, including furnish and placement of the select fill within the soil reinforced wall volume shown on the approved shop drawings, precast face panels, soil reinforcing system, concrete leveling pad and accessories will be paid for at the contract unit price per square foot (square meter) for MECHANICALLY STABILIZED EARTH RETAINING WALL.~~

~~Concrete coping when specified on the contract plans will be included for payment in this work. Other concrete appurtenances such as anchorage slabs, parapets, abutment caps, etc. will not be included in this work, but will be paid for as specified elsewhere in this contract, unless otherwise noted on the plans.~~

~~Excavation necessary to place the select fill for the MSE wall shall be paid for as STRUCTURE EXCAVATION and/or ROCK EXCAVATION FOR STRUCTURES as applicable, according to Section 502.~~

~~Embankment placed outside of the select fill volume will be measured and paid for according to Sections 202 and/or 204 as applicable.~~

PRECAST CONCRETE SUBSTRUCTURE

Description. This work shall consist of preparing the design, furnishing the materials, and constructing the precast modules of the substructure units to the lines, grades, and dimensions shown in the contract plans.

General. The precast concrete substructure shall consist of precast concrete modules, assembled to form the exterior surfaces of the vertical towers of each substructure unit. The precast modules shall be sized and reinforced to support the hydraulic pressure of the wet concrete cast into the cores of the precast modules. The material, fabrication, and construction shall comply with this Special Provision and the requirements specified in the contract plans.

Submittals. The precast manufacturer shall submit complete shop drawings to the Engineer according to Article 1042.03(b) of the Standard Specifications no later than 60 days prior to beginning construction of the substructure units. No work or ordering of materials for the structure shall be done by the Contractor until the submittal has been approved in writing by the Engineer. All submittals shall include all details, dimensions, and quantities necessary to fabricate and erect the precast modules, and shall include, but not be limited to, the following items:

(a) Plan, elevation, and detail sheet(s) for each tower showing the following:

(1) A plan view of each level of the tower indicating the size of the precast modules and relative location within the substructure.

(2) A front and side elevation view of the tower indicating the module heights, elevations, sizes.

(3) All general notes required for constructing the substructure unit(s) as well as the locations of lifting devices and/or support points in the precast modules shall be indicated.

(b) All module types shall be detailed. The details shall show all dimensions necessary to cast and construct each type of module, all the reinforcing steel in the module, and all details of architectural treatment for each exposed surface of the module, including color, texture, and form liners. As a minimum, the different module details shall include:

(1) A plan view of the module indicating the dimensions of the different surfaces on all four exterior sides of the module and the dimensions of the voided core.

(2) An elevation of each exterior face of the module detailing the formed surface including recesses, reveals, and form liners.

(3) The number of each module type to be fabricated and the substructure unit(s) associated with the module.

(c) The details of the horizontal top and bottom surfaces of each module indicating the means by which alignment between the modules will be maintained using pins, grooves, or other alignment mechanisms.

The initial submittal shall include three sets of shop drawings. One set of drawings will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with eight sets of corrected prints and one mylar set for distribution by the Owner. No work or ordering of materials for the structure shall be done until the submittal has been approved by the Engineer.

Materials. The materials shall meet the following requirements:

(a) All precast modules shall be manufactured with Class PC concrete according to Section 504, Article 1042.02, Article 1042.03, and the following requirements:

(1) The minimum face thickness of each module shall be 4 1/2 in., or as required to resist the maximum hydrostatic pressure of the wet concrete cast into the core of the erected precast modules.

(2) The minimum reinforcement bar cover shall be 1 1/2 in.

(3) All dimensions shall be within 1/8 in.

(4) Difference between the heights of any of the four corners of the module or any point between shall not exceed 0.1 in.

(5) The modules shall not be more than 1/2 in. from square measured as the difference between the two diagonals.

(6) Panel reinforcement and lifting devices shall be set in place to the dimension and tolerances shown on the plans and these special provisions prior to casting.

Concrete surfaces exposed to view in the completed modules shall be finished according to Article 503.15(a) of the Standard Specifications and as detailed in the contract plans. Form liner surfaces shall be according to Article 503.06(a).

(b) Reinforcing steel shall be according to Article 1006.10(a). Welded steel wire fabric for concrete reinforcement shall be according to Article 1006.10(b)(1).

(c) Lifting inserts cast into the panels shall be hot dipped galvanized.

The date of manufacture, the production lot number, and the piece-mark shall be clearly noted on each panel on a surface not exposed in the final erected product.

Construction Requirements. The modules may not be loaded or shipped to the project site until they have obtained a minimum compressive strength of 3500 psi and no sooner than seven days after casting. Precast modules shall be lifted and supported at the points indicated on the shop plans. They shall be stored off the ground. Modules shall be shipped, handled, and stored in such a manner as to minimize the danger of staining, chipping, spalling, development of cracks, fractures, and excessive bending stresses. Any touch up and repair is at the Contractor's expense and shall be carried out as directed by the Engineer.

The first course of modules must be erected with particular care and adjustment as required to correct the vertical, horizontal, and transverse alignment. Poor alignment of the base course will magnify tolerance problems in upper modules and require dismantling and re-erection of the tower.

Adjustments to the bearing surface of each course may include grinding of the surface or the use of shims no thicker than 1/8 inch and recessed so not to be visible from the exterior face.
The overall vertical tolerance of the tower (plumbness from top to bottom) shall not exceed ¼ in. per 10 ft. of height. The horizontal tolerance of the tower at the truss bearing elevation shall not exceed ½ in. in any direction.

Horizontal joints between precast modules shall be sealed with a compressible mastic strip to prevent leakage of concrete or bleed water during the placement of the concrete core. Any drippings of concrete shall be immediately washed from the exposed faces of the precast modules.

~~Basis of Payment. This work, including providing the form liners, furnishing, and placement of the precast modules, and other collateral work, will be paid for at the contract lump sum price for PRECAST CONCRETE SUBSTRUCTURE.~~

FORM LINER, TEXTURED SURFACE

Description. This work shall consist of designing, developing, furnishing, and installing form liners and forming concrete using reusable, high-strength urethane form liners to achieve the various concrete treatments as shown in the drawings and specifications. Form lined surfaces shall include areas of the precast pier and abutment modules as shown on the plans and the MSE Precast Wall Panels. Work shall be performed in accordance with applicable portions of Section 503 and 504 of the Standard Specifications and as specified herein.

Form liners shall be installed to a minimum of 1'-0" below finished grade on the MSE walls.

Fabricator Requirements. The following form liner patterns and associated suppliers have been reviewed and approved for use as indicated in the drawings. Equivalent patterns and textures by other competent suppliers may be provided pending review and approval by the Owner and Engineer. The manufacturer shall have five years of experience making stone masonry molds to create formed concrete surfaces to match natural stone shapes and surface textures.

MSE Wall Panels:
The pattern shall represent cut stone with a maximum relief of 2½ inch to 3½ inch and an average relief of 1½ inch to 2¼ inch. The stone shall appear in 14¾ inch to 15 inch horizontal courses and have a maximum individual stone length of 48 inches.

1. Pattern #1104, Random Cut Stone
Custom Rock International, St. Paul, MN (651-699-1345)
2. Pattern #897B, 14 3/4" Rustic Quarried 3"
Architectural Polymers, Palmerton, PA (610-824-3322)

Precast Concrete Substructure:
The pattern of the form liner surface shall be as indicated on the drawings for the substructure units. Texture of the form liner surface shall simulate a weathered cut stone with a maximum relief of % inch to 1¼ inch and an average relief of 1/2 inch to % inch similar to the texture of the following pattern:

1. Pattern #11002, Weathered Limestone
Custom Rock International, St. Paul, MN (651-699-1345)

Submittals. The Contractor shall submit shop drawings for each of the two form liner patterns. Shop drawing submittals shall include:

1. Form liner pattern descriptions, dimensions, and details showing typical cross sections, joints, corners, stone relief and stone sizes.
2. Elevation views of each form liner panel which would be provided for the project showing the full length and height of the panel, dimensions between the stone mortar joints, and details of joints between adjacent panels.
3. Specification including bonding and releasing agents.

For a proposed equivalent to the pre-approved form liner patterns and textures, the Contractor shall submit to the Engineer the catalog cut sheet and a 36 inch by 36 inch liner sample for the texture of architectural form liner proposed for use on the MSE wall panels and/or the Precast Concrete Substructures. The submittal shall be made no later than 14 calendar days from the date of notification to proceed with the contract. Upon receipt of the information, the Engineer, in consultation with the Owner, will have 14 calendar days to approve and notify the Contractor of which style of form liner is to be used on the project.

Upon approval of the form liner plans and details, the Contractor shall submit two 4 foot by 4 foot (minimum) mock-up concrete panels of the simulated stone masonry finish for the MSE wall textured surface. The Contractor shall also submit two 4 foot by 3 foot concrete panels simulating one face of the substructure modules.

Materials. Form liners shall be of high-quality, reusable material capable of withstanding anticipated concrete pour pressures without causing leakage or causing physical defects. Form liners shall attach easily to form the precast form assemblies and be removable without causing concrete surface damage or weakness in the substrate. Form release agents shall be non-staining, non-residual, non-reactive and shall not contribute to the degradation of the form liner material. Liners used for the texture shall be made from high-strength elastomeric urethane material which shall not compress more than ¼ inch when poured at a rate of 10 vertical feet per hour.

If the contractor elects to use form ties for the concrete forming, only fiberglass for ties will be permitted. Use of removable metallic form ties will not be allowed.

Concrete used for the concrete designated to receive form liner textured surfaces shall contain a high range water-reducing admixture according to Article 1021.03(c) of the Standard Specifications to obtain a 5 inch to 7 inch slump. Concrete used for Form Liner Textured Surface shall not contain CA7 aggregate.

General. The work shall be performed according to Article 503.06 of the Standard Specifications and the following:

The form liners shall be installed according to the manufacturer's recommendations to achieve the highest quality concrete appearance possible. The form liners shall withstand the concrete placement pressures without leakage, physical or visual defects.

The Contractor shall clean the form liners, removing any buildup prior to each use. The Contractor shall inspect each form for blemishes or tears and make repairs as needed following manufacturer's recommendations.

The Contractor shall apply the form release agent to all surfaces of the form liner which will come in contact with concrete, according to the manufacturer's recommendations.

Wall ties shall be coordinated with the liner and form to achieve the least visible result. Place form ties at thinnest points of molds (high points of finished wall). Neatly patch the remaining hole after disengaging the protruding portion of the tie so that it will not be visible after coloring the concrete surface.

The Contractor shall employ proper consolidation methods to ensure the highest quality finish. Internal vibration shall be achieved with a vibrator of appropriate size, the highest frequency and low to moderate amplitude. Concrete placement shall be in lifts not to exceed 1.5 feet. Internal vibrator operation shall be at appropriate intervals and depths and withdrawn slowly enough to assure a minimal amount of surface air voids and the best possible finish without causing segregation. An external form vibrator may be required to assure the proper results. The use of an external form vibrator must be approved by the form liner manufacturer.

The form liners shall be stripped between 12 and 24 hours as recommended by the manufacturer. When stripping the forms, the Contractor shall avoid creating defects in finished surface. Form liners shall release without leaving particles or pieces of form liner material on concrete and without pulling or breaking concrete from the textured surface. The concrete and textured surfaces exposed by removing form liners shall be protected from damage.

Curing methods shall be according to Article 1020.13 of the Standard Specifications and compatible with the desired aesthetic result. The use of curing compounds will not be allowed. No rubbing of flat areas or other repairs should be required after form removal. The finished exposed formed concrete surfaces shall be free of visible vertical seams, horizontal seams, and butt joint marks. Grinding and chipping of finished formed surfaces shall be avoided.

~~Basis of Payment. This work will not be measured for payment separately, but shall be included in the contract unit price of PRECAST CONCRETE SUBSTRUCTURE or MECHANICALLY STABILIZED EARTH RETAINING WALL, as appropriate.~~

STAINING CONCRETE STRUCTURES

Description. This work shall consist of staining the Form Liner Textured Surfaces as shown on the plans to replicate the look of actual stone masonry and mortar joints. The staining shall match the color variations present in natural limestone, accurately simulating the appearance of real stone including the multiple colors, shades, flecking, and veining that is apparent in real stone. It shall also simulate the colors that may be present from aging, such as staining from oxidations, rusting, and/or organic staining from soil and vegetation. The joints shall be colored to simulate real mortar.

Materials. The stain shall create a surface finish that is breathable (allowing water vapor transmission), and that resists deterioration from water, acid, alkali, fungi, sunlight, and/or weathering. The stain shall be odor free and V.O.C. compliant. The stain shall meet the requirements for weathering resistance of 2000 hours accelerated exposure.

Submittals. Contractor shall submit to the Engineer for approval evidence of the selected subcontractor's five years experience making color stains to match natural stone and mortar colors on concrete surfaces.

Upon receipt of notification of the style of form liner to be used, the Contractor shall submit a proposed procedure for obtaining the simulated finish using the approved architectural form liner style and stain (see the special provision for FORM LINER TEXTURED SURFACE).

The Contractor shall present the Owner with a panel of color choices, from which one or two selections may be made. The color samples shall consist of stain applied to concrete tiles. Upon approval of the form liner plans and details, the Contractor shall provide mockup panels per the special provision for FORM LINER TEXTURED SURFACE. One half of these sample panels shall be stained with the selected color following the requirements of this special provision.

The stained panels shall be reviewed by the Engineer and Owner. If not found to be satisfactory, the Contractor shall stain the remaining panels until the product is found to be satisfactory to the Owner. The approved, stained mockup panel(s) shall be delivered and positioned at the site where the final staining of the panels will occur. These panels shall be the standard for concrete staining throughout the project.

General. The surfaces to be stained shall be structurally sound, clean, dry, and fully cured. The concrete shall be at least 30 days old prior to applying the stain. Curing agents must be removed a minimum of 14 days prior to staining to allow the concrete to dry out.

Temperature and relative humidity conditions shall meet the manufacturer's application instructions. Do not apply the stain under rainy conditions or within three (3) days after surfaces became wet from rainfall or other moisture. Do not apply in foggy or overcast conditions.

The concrete surface shall be cleaned prior to the applying the stain materials. The methods and materials used for cleaning the substrate shall be as recommended by the manufacturer of the water-repellent stain. The Contractor shall insure that the surface is free of latency, dirt, dust, grease, efflorescence, paint, or other foreign material. The Contractor shall not use sandblasting as a cleaning method. The preferred method to remove latency is pressure washing with water, at a minimum 3000 psi (3-4 gal/mm), using fan nozzle. The nozzle should be positioned perpendicular to and at a distance of 1-2 feet from the concrete surface. The cleaned surface shall be free of blemishes, discoloration, surface voids, and unnatural form marks.

The stain shall be thoroughly mixed according to the manufacturer's directions using an air-driven or other explosion-proof power mixer. Mix all containers thoroughly prior to application.
Do not thin the material. Materials shall be applied at the rate as recommended by the manufacturer. Absorption rates may be increased or decreased depending upon the surface texture and porosity of the substrate so as to achieve even staining.

A test area of 10 square feet shall be prepared in an inconspicuous portion of the project chosen by the Engineer, and the stain shall be applied to the surface to verify the surface preparation, adhesion, and color. Photographs shall be provided to the Engineer of the test results. Once the Engineer has approved the results from the test area, the application of the stain to the rest of the exposed surfaces may be completed.

Take precautions to ensure that workman and work areas are adequately protected from fire and health hazards resulting from handling, mixing, and application of materials. Furnish all the necessary equipment to complete the work. Provide drop cloths and other forms of protection necessary to protect all adjoining work and surfaces to render them completely free of

overspray and splash from the concrete stain work. Any surfaces, which have been damaged or splattered, shall be cleaned, restored, or replaced to the satisfaction of the Engineer.

Avoid staining the "mortar joints" by providing suitable protection over the joints during the staining process.

Where staining is to be completed in the field, schedule the color stain application with earthwork and backfilling of any wall areas making sure that all simulated stone texture that might fall below grade is colored prior to backfilling. Delay adjacent plantings until color application is completed. Coordinate work to permit coloring applications without interference from other trades. Where exposed soil or pavement is adjacent which may splatter dirt or soil from rainfall, or where surface may be subject to over-spray from other processes, provide temporary cover of completed work.

UV protection shall be applied to the final exposed surface. UV coating shall be B97-150 Series, Protective and Marine Coating as manufactured by Sherwin Williams (http://www.sherwin-williams.com) or approved equal.

~~Basis of Payment. This work will not be measured for payment separately, but shall be included in the contract unit price of PRECAST CONCRETE SUBSTRUCTURE or MECHANICALLY STABILIZED EARTH RETAINING WALL, as appropriate.~~

CURB REMOVAL AND REPLACEMENT

Description
This work shall consist of all materials, equipment, and labor to remove and replace the existing curb at the locations shown on the plans. The removal of the existing curb shall be in accordance with Section 440 of the Standard Specifications. The construction of the proposed curb after the storm sewer is constructed shall be in accordance with Section 606 of the Standard Specifications.

~~Measurement and Payment~~
~~This work will be paid for at the contract unit price per foot for CURB REMOVAL AND REPLACEMENT.~~

BORROW AND FURNISHED EXCAVATION

Effective March 7, 2000 Revised April 27, 2007

Add the following to the requirements of Article 204:

"Soils which demonstrate the following properties shall be restricted to the interior of the embankment and shall be covered on both sides and top with a minimum of 3 feet (900mm) of non-restricted soil not considered detrimental in terms of erosion potential or excess volume change. A restricted soil is defined as having any one of the following properties:"

A grain size distribution with less than 35% passing the number 75um (#200) sieve.
A plasticity index of less than 12.
A liquid limit in excess of 50.

"All restricted and non-restricted embankment materials strengths for the indicated moistures:" shall have the following minimum

Immediate Bearing Value	Shear Strength At 95% Density*	Moisture
3.0	1000 PSF (50 Kpa)	120%
4.0	1300 PSF (62 Kpa)	110%

*Granular Soils p=35°

EMBANKMENT (RESTRICTIONS)

Effective January 21, 2005 Revised August 3, 2007

Add the following to the requirements of Article 205.04:

Gravel, crushed stone or soils having less than 35% passing the number 200 sieve and other materials as allowed by Article 202.03 of the standard specifications are further restricted. These further restricted materials are also limited to the interior of the embankment and shall have a minimum cover of 3' (1 m) of non-restricted soil (see "Borrow and Furnished Excavation" Special Provision). Alternating layers of further restricted material and cohesive soil will not be permitted. The further restricted materials may only be incorporated into the embankment by using one of the following procedures:

a. The further restricted materials shall be placed in 4" lifts and disked with the underlying lift material until a uniform and homogenous material is formed having more than 35% passing the number 200 sieve.

b. Sand, gravel or crushed stone embankment when placed on the existing ground surface will be drained using a 10' (3 m) by 10' (3 m) french drain consisting of nonwoven geotechnical fabric with 12" (0.3 m) of B-3 riprap. This shall be constructed on both sides of the embankment at the toe of the foreslope spaced 150' (46 m) apart. At locations requiring a French drain the 3' (1 m) cohesive cap shall not be installed within the 10' by 10' riprap area. If the Engineer determines that the existing ground is a granular free draining soil, the french drain may be deleted.

c. Sand, gravel or crushed stone embankment when placed on top of a cohesive embankment will be drained with a permanent 4" (100 mm) underdrain system. The underdrain system shall consist of a longitudinal underdrain on both sides of the embankment and transverse underdrains spaced at 250' (75 m) centers. The underdrain shall consist of a 2' (0.6 m) deep by 1' (0.3 m) wide trench, backfilled with FA4 sand and a 4"

(100 mm) diameter underdrain. In addition, both sides of the embankment will have a 6" (150 mm) diameter pipe drain which will drain the underdrain system and outletted into a permanent drainage structure or outletted by a headwall at the toe of the embankment.

~~The above work will not be paid for separately but shall be included in the cost of Earth Excavation, Furnished Excavation, or Borrow Excavation.~~

EMBANKMENT

Effective: July 1, 1990 Revised: November 1, 2007

Revise the third paragraph of Article 205.06 of the Standard Specifications to read:

All embankment shall be constructed with not more than 110% of optimum moisture content, determined according to AASHTO T 99 (Method C). The 110% of optimum moisture limit may be waived in free draining granular material when approved by the Engineer.

The Contractor may, at his option, add a drying agent to lower the moisture content as specified above. The drying agent must be approved by the Engineer prior to use. Extra compensation will not be allowed for the use of a drying agent but will be considered included in the cost of the various items of excavation.

SUBBASE GRANULAR MATERIAL

Effective: November 5, 2004

This work shall be in accordance with Section 311 of the Standard Specifications and as specified herein.

All Subbase Granular Material shall have a minimum IBR of 40.

PROOF ROLLING

Effective April 23, 2004 Revised January 1, 2007

This work shall consist of proof rolling the subgrade with a fully loaded tandem axle dump truck and driver at the direction of the Engineer. The truck shall travel the subgrade in all of the proposed lanes of traffic in the presence of the Engineer.

~~This work will not be paid for separately, but considered included in the various earthwork pay items.~~

STORM SEWER, (WATER MAIN QUALITY PIPE)

Effective January 1, 2011
Revised January 1, 2012

This work consists of constructing storm sewer to meet water main standards, as required by the IEPA or when otherwise specified. The work shall be performed in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations (Title 35 of the Illinois Administrative Code, Subtitle F, Chapter II, Section 653.119), the applicable sections of the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and as herein specified.

This provision shall govern the installation of all storm sewers which do not meet IEPA criteria for separation distance between storm sewers and water mains. Separation criteria for storm sewers placed adjacent to water mains and water service lines are as follows:

(1) Water mains and water service lines shall be located at least 10 feet (3.05 meters) horizontally from any existing or proposed drain, storm sewer, sanitary sewer, or sewer service connections.

(2) Water mains and water service lines may be located closer than 10 feet (3.05 meters) to a sewer line when:

(a) Local conditions prevent a lateral separation of 10 feet (3.05 meters); and

(b) The water main or water service invert is 18 inches (460 mm) above the crown of the sewer; and

(c) The water main or water service is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.

(3) A water main or water service shall be separated from a sewer so that its invert is a minimum of 18 inches (460 mm) above the crown of the drain or sewer whenever water mains or services cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main or water services located within 10 feet (3.05 meters) horizontally of any sewer or drain crossed.

When it is impossible to meet (1), (2) or (3) above, the storm sewer shall be constructed of concrete pressure pipe, slip-on or mechanical joints ductile iron pipe, or PVC pipe equivalent to water main standards of construction. Construction shall extend on each side of the crossing until the perpendicular distance from the water main or water service to the sewer or drain line is at least 10 feet (3.05 meters). Storm sewer meeting water main requirements shall be constructed of the following pipe materials:

<u>Concrete Pressure Pipe</u>
Concrete pressure pipe shall conform to the latest ANSI/AWWA C300, C301, C302, or C303.

Joints shall conform to Article 41-2.07B of the “Standard Specifications for Water and Sewer Main Construction in Illinois.”

Ductile Iron Pipe

Ductile Iron pipe shall conform to ANSI A 21.51 (AWWA C151), class or thickness designed per ANSI A 21, 50 (AWWA C150), tar (seal) coated and/or cement lined per ANSI A 21.4 (AWWA C104), with a mechanical or rubber ring (slip seal or push on) joints.

Joints for ductile iron pipe shall be in accordance with the following applicable specifications.

1. Mechanical Joints - AWWA C111 and C600

2. Push-On Joints - AWWA C111 and C600

Plastic Pipe

Plastic pipe shall be marked with the manufacturer’s name (or trademark); ASTM or AWWA specification; Schedule Number, Dimension Ratio (DR) Number or Standard Dimension Ratio (SDR) Number; and Cell Class. The pipe and fittings shall also meet NSF Standard 14, and bear the NSF seal of approval. Fittings shall be compatible with the type of pipe used. The plastic pipe options shall be in accordance with the following:

1. Polyvinyl Chloride (PVC) conforming to ASTM Standard D 1785. Schedule 80 is the minimum required for all pipe sizes, except when the pipe is to be threaded, and then it shall be Schedule 120. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

2. Polyvinyl Chloride (PVC) conforming to ASTM D 2241. A minimum wall thickness of SDR 26 is required for all pipe sizes (Note: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

3. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM f 441. A minimum of Schedule 80 is required for all pipe sizes. Threaded joints are not allowed. It shall be made from CPVC compound meeting ASTM D 1784, Class 23447.

4. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 442. A minimum wall thickness of SDR 26 is required for all pipe sizes (Note: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from CPVC compound meeting ASTM D 1784.

5. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C900. A minimum of wall thickness of DR 25 is required for all pipe sizes (Note: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

6. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C905. A minimum of wall thickness of DR 26 is required for all pipe sizes (Note: The lower the DR number, the

higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

Joining of plastic pipe shall be by push-on joint, solvent welded joint, heat welded joint flanged joint, or threaded joint, in accordance with the pipe manufacturer's instruction and industry standards. Special precautions shall be taken to insure clean, dry contact surfaces when making solvent or heat welded joints. Adequate setting time shall b allowed for maximum strength.

Elastotmeric seals (gaskets) used for push-on joints shall comply with ASTM F477.

Solvent cement shall be specific for the plastic pipe material and shall comply with ASTM D 2564 (PVC) or ASTM F 493 (CPVC) and be approved by NSF.

For water-sewer line crossings only, storm sewer meeting water main requirements may also be constructed of reinforced concrete sewer pipe. The pipe shall conform to ASTM C 76 with a joint and rubber gasket meeting ASTM C 443. The joint shall meet the leakage performance test in ASTM C 443. The pipe manufacturer must demonstrate to Illinois Department of Transportation personnel that the joints pass the leakage performance test prior to installation of the pipe. The pipe class shall meet the requirements of Section 550 of the *Standard Specifications for Road and Bridge Construction.*

~~This work will be measured and paid for at the contract unit price per foot (meter) for STORM SEWER (WATER MAIN QUALITY PIPE) of the diameter and type specified.~~

HOT-MIX ASPHALT - MIXTURE DESIGN VERIFICATION AND PRODUCTION

Effective: August 3, 2012 Revised: April 26, 2013

Description. This special provision states the requirements for Hamburg Wheel and Tensile Strength testing for High ESAL, IL-4.75, and SMA hot mix asphalt (HMA) mixes during mix design verification and production. This special provision also states the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

When the options of Warm Mix Asphalt, Reclaimed Asphalt Shingles, or Reclaimed Asphalt Pavement are used by the Contractor, the Hamburg Wheel and tensile strength requirements in this special provision will be superseded by the special provisions for Warm Mix Asphalt or Reclaimed Asphalt Pavement and Reclaimed Asphalt Shingles as applicable.

In addition to the requirements in the December 1, 2011 HMA Special Provisions for Pay for Performance Using Percent Within Limits, a Hamburg Wheel test and tensile strength test will be conducted during mix design on mixtures used for Pay For Performance projects.

Mix Design Testing. Add the following to Article 1030.04 of the Standard Specifications:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for

the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make necessary changes to the mix and provide passing Hamburg Wheel and Tensile Strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(1) Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the plans for the mix design.

PG Grade	Number of Passes
PG 64-xx (or lower)	10,000
PG 70-xx	15,000
PG 76-xx (or higher)	20,000

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 415 kPa (60 psi) for non-polymer modified performance graded (PG) asphalt binder and 550 kPa (80 psi) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 1380 kPa (200 psi)."

Production Testing. Add the following to Article 1030.06 of the Standard Specifications:

'(c) Hamburg Wheel Test. A Hamburg Wheel test will be conducted on each High ESAL, IL-4.75, and SMA mix produced that has been verified by the Hamburg Wheel process.

The Contractor shall obtain a sample during the startup for each mix and compact gyratory specimens to the air void percentage as specified in IL-modified AASHTO T 324 to be provided to the Department for testing. The Department may conduct additional Hamburg Wheel Tests on production material as determined by the Engineer."

System for Hydrated Lime Addition. Revise the last sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

"The method of application shall be according to Article 11 02.01(a)(1 0)."

Revise the first three sentences of the second paragraph of Article 1102.01 (a)(1 0) of the Standard Specifications to read:

"When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is

added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a drum plant, the lime will be added in such a manner that the lime will not become entrained into the air stream of the dryer and that thorough dry mixing will occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer."

~~Basis of Payment. Revise the seventh paragraph of Article 406.14 of the Standard Specifications to read:~~

~~"For mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.~~

~~If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.~~

~~No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."~~

SUBGRADE TREATMENT

Effective July 1, 1990 Revised April 25, 2008

Revise first sentence of first paragraph of Article 301.04 as follows:

"When compacted, the subgrade shall have a minimum dry density of 95 percent of the standard laboratory dry density and a minimum immediate bearing value (IBV) of 4.0."

Delete the second paragraph (including subparagraphs a, b, and c) of Article 301.04 of the Standard Specifications and replace it with the following:

"In cut sections the contractor responsible for the rough grading shall obtain not less than 95% of the standard laboratory density and not more than 110% of the optimum moisture for the top 1' (300mm) of the subgrade.

The Contractor may, at his/her option, add a drying agent to lower the moisture content as specified. The drying agent must be approved by the Engineer prior to use. Additional compensation will not be allowed for the use of a drying agent, but will be considered as included in the cost of the various earthwork items."

In the first sentence of the third paragraph delete "above steps have" and replace with "work has."

PCC AUTOMATIC BATCHING EQUIPMENT

Effective April 23, 2010

Portland cement concrete provided shall be produced from batch plants that conform to the requirements of Article 1103.03 (a) and (b) of the Standard Specifications for Road and Bridge Construction. Semi-automatic batching will not be allowed.

In addition, the batching plant shall be a computerized plant interfaced with a printer and shall print actual batch weights, added water, tempering water, mixing time, and amount of each additive per batch. At the discretion of the Engineer, archived electronic versions of batch proportions will be acceptable. Truck delivery tickets will still be required as per Article 1020.11 (a)(7).

Illinois Department of Transportation

Storm Water Pollution Prevention Plan

Route	FAP 646	Marked Rte.	N/A
Section		Project No.	
County	Peoria	Contract No.	

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Friberg
Print Name

Signature

Planner III
Title

May 13, 2013
Date

Peoria Park District
Agency

I. Site Description:

A. Provide a description of the project location (include latitude and longitude):

The project is located in the City of Peoria. Project limits include approximately 0.5 mile of proposed bicycle trail along the former Peoria and Peoria Heights railroad service from Northmoor Rd. to east of Knoxville Ave.

Latitude:40.8°
Longitude:-89.6° (Approx.)

B. Provide a description of the construction activity which is the subject of this plan:

Construction of a new portion of bicycle path along an abandoned railroad alignment. Construction activity includes pavement removal to tie into the previously built path, cut new ditches, install inlets and storm sewers, remove pipe culverts, add curb, install concrete outlets, build mechanically stabilized earth retaining wall and a pedestrian truss bridge to span Knoxville Ave.

C. Provide the estimated duration of this project:

One construction season

D. The total area of the construction site is estimated to be *2.6* acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is *2.6* acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.423

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
17A-Keomah silt loam, 0 to 2 percent slopes	90	298	C/D	.49	5	4.0	77.0	19.0
68A – Sable silty clay loam, 0 to 2 percent slopes	90	200	B/D	.24	5	2.0	67.0	31.0
224D2 – Strawn silt loam, 10 to 18 percent slopes, eroded	95	98	C	.32	5	24.0	53.0	23.0
279B – Rozetta silt loam, 2 to 5 percent slopes	91	226	B	.37	5	4.0	77.0	19.0
Urban land	90	295	---	---	---	---	---	---

G. Provide an aerial extent of wetland acreage at the site:

There are no wetlands within the project area. (See attached map)

H. Provide a description of potentially erosive areas associated with this project:

Areas along new ditches

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

Soil disturbing activities will include earthwork (earth excavation and furnished excavation) to construct the MSE walls, bridge, sideslopes and new ditches along the proposed path. Foreslopes and backslopes are typically 1:3 with a 2' wide ditch bottom.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Pleasure Driveway and Park District of Peoria, Illinois

L. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

Unknown tributaries with the Illinois River as the ultimate receiving water..

M. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

None

N. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- ☐ Floodplain
- ☐ Wetland Riparian
- ☐ Threatened and Endangered Species
- ☐ Historic Preservation
- ☐ 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- ☐ Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
- ☐ Applicable Federal, Tribal, State or Local Programs
- ☐ Other

1. 303(d) Listed receiving waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

a. The name(s) of the listed water body:

b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

O. The following pollutants of concern will be associated with this construction project:

☒	Soil Sediment	☐	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
☒	Concrete	☐	Antifreeze / Coolants
☒	Concrete Truck Waste	☐	Waste water from cleaning construction equipment
☒	Concrete Curing Compounds	☐	Other (specify)
☐	Solid Waste Debris	☐	Other (specify)
☒	Paints	☐	Other (specify)
☐	Solvents	☐	Other (specify)
☒	Fertilizers / Pesticides	☐	Other (specify)

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls

1. **Stabilized Practices:** Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven (7) days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

Where the initiation of stabilization measures by the seventh day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following stabilization practices will be used for this project:

- ☐ Preservation of Mature Vegetation
- ☐ Vegetated Buffer Strips
- ☐ Protection of Trees
- ☒ Temporary Erosion Control Seeding
- ☐ Temporary Turf (Seeding, Class 7)
- ☐ Temporary Mulching
- ☒ Permanent Seeding
- ☒ Erosion Control Blanket / Mulching
- ☐ Sodding
- ☐ Geotextiles
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)

Describe how the stabilization practices listed above will be utilized during construction:

Temporary Erosion Control Seeding will be applied throughout the project. Permanent Seeding and Erosion Control Blanket/Mulching will be applied as soon as practical.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Permanent and Temporary Seeding, Erosion Control Blanket and Mulching shall be applied as specified in the Standard Specifications at the end of major construction activities.

2. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project:

- ☒ Perimeter Erosion Barrier
- ☒ Temporary Ditch Check
- ☒ Storm Drain Inlet Protection
- ☐ Sediment Trap
- ☐ Temporary Pipe Slope Drain
- ☐ Temporary Sediment Basin
- ☐ Temporary Stream Crossing
- ☐ Stabilized Construction Exits
- ☐ Turf Reinforcement Mats
- ☐ Permanent Check Dams
- ☐ Permanent Sediment Basin
- ☐ Aggregate Ditch
- ☐ Paved Ditch
- ☐ Rock Outlet Protection
- ☒ Riprap
- ☐ Gabions
- ☐ Slope Mattress
- ☒ Retaining Walls
- ☐ Slope Walls
- ☐ Concrete Revetment Mats
- ☐ Level Spreaders
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)

Describe how the structural practices listed above will be utilized during construction:

Perimeter Erosion Barrier shall be placed at locations where the potential for disturbed soil to erode away from the construction site exists as shown on the plans. Temporary Ditch Checks shall be placed at locations as specified in the plans. Inlet and pipe protection shall be placed at the upstream ends of the pipe culverts as specified in the plans. Riprap will be placed as shown on the plans at the downstream ends of the storm sewers. MSE retaining walls will be constructed as the embankment leading up to the bridge increases.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

Perimeter Erosion Barrier, Temporary Ditch Checks and Storm Drain Inlet Protection will be removed while Riprap and MSE Walls will remain in place.

3. **Storm Water Management:** Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

   a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

      The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

   b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

   Description of storm water management controls:

   Riprap will be placed at pipe outfall locations.

4. **Approved State or Local Laws:** The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

   Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

   None

5. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.

   a. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

      - Approximate duration of the project, including each stage of the project
      - Rainy season, dry season, and winter shutdown dates
      - Temporary stabilization measures to be employed by contract phases
      - Mobilization timeframe
      - Mass clearing and grubbing/roadside clearing dates
      - Deployment of Erosion Control Practices
      - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
      - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
      - Paving, saw-cutting, and any other pavement related operations
      - Major planned stockpiling operations
      - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
      - Permanent stabilization activities for each area of the project

   b. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management – Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal – Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

Maintenance of temporary erosion control systems shall include repair of the various systems used, removal of the trapped sediment and cleaning of any silt filter fabric as described in Article 280.05 of the Standard Specifications.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm that is 0.5 inch or greater or equivalent snowfall.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

Illinois Department of Transportation

Contractor Certification Statement

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.5 of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route	FAP 646	Marked Rte.	N/A
Section	N/A	Project No.	N/A
County	Peoria	Contract No.	N/A

This certification statement is a part of the SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in the SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

☐ Contractor

☐ Sub-Contractor

Print Name	Signature
Title	Date
Name of Firm	Telephone
Street Address	City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.5. of the SWPPP:

23712002
Rock Island Greenway
(Knoxville Crossing)
Peoria Park District

Weighted Runoff Coefficient

Surface Type	Area (sq ft)	Area (acre)	Coefficient	C*A
Pavement	17067.8	0.39	0.825	0.3
Bridge/Sidewalks (conc.)	15780.8	0.36	0.875	0.3
Aggregate Shoulder/Entrance	7404.59	0.17	0.475	0.1
Grassed	72646.79	1.67	0.225	0.4
TOTAL	112900	2.59		1.1

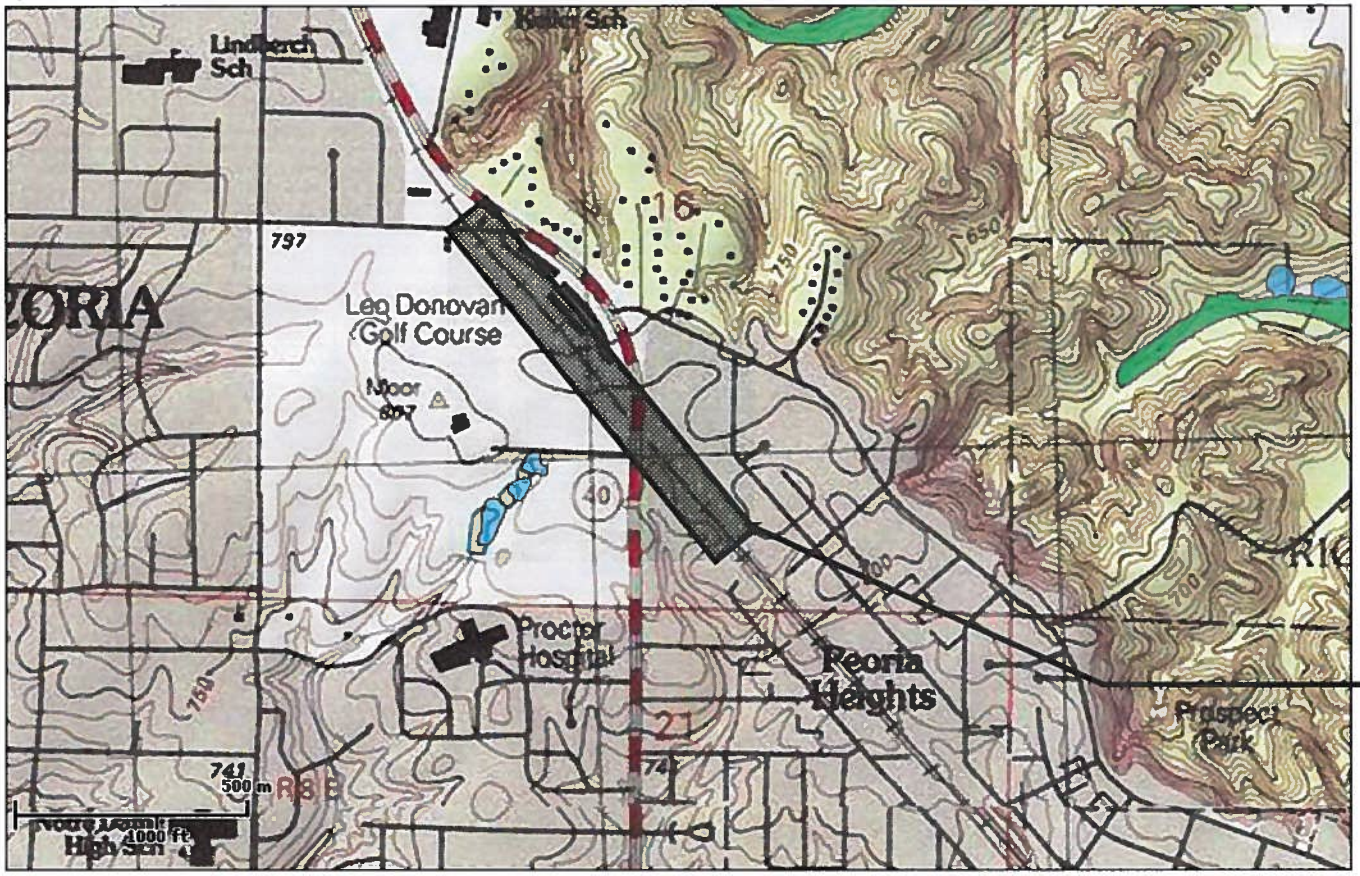
Weight Average of Runoff Coefficient = 0.423

U.S. Fish and Wildlife Service

National Wetlands Inventory

Topography Map

May 6, 2013



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

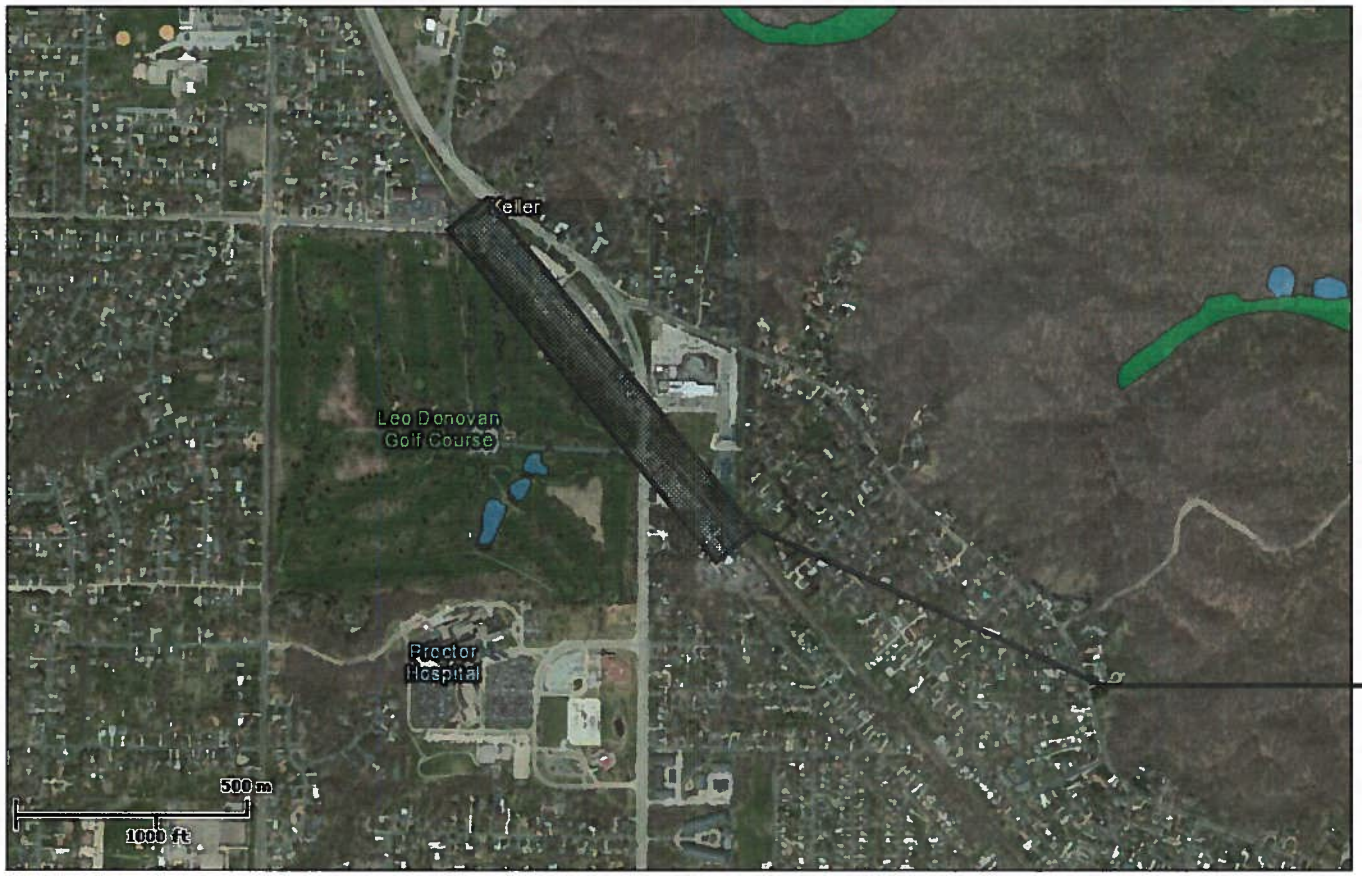
User Remarks:

Rock Island Greenway

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands Map

May 6, 2013



PROJECT LOCATION

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

Riparian

- Herbaceous
- Forested/Shrub

Riparian Status

- Digital Data

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

Rock Island Greenway

BDE SPECIAL PROVISIONS
For the April 26 and June 14, 2013 Lettings

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An * indicates a new or revised special provision for the letting.

	File Name	#		Special Provision Title	Effective	Revised
	80240	1		Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
	80099	2		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
	80274	3		Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
	80309	4		Anchor Bolts	Jan. 1, 2013	
	80192	5		Automated Flagger Assistance Device	Jan. 1, 2008	
	80173	6		Bituminous Materials Cost Adjustments	Nov. 2, 2006	Jan. 1, 2012
	80241	7		Bridge Demolition Debris	July 1, 2009	
	80276	8		Bridge Relief Joint Sealer	Jan. 1, 2012	Aug. 1, 2012
	5026I	9		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5048I	10		Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5049I	11		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5053I	12		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
*	80292	13		Coarse Aggregate in Bridge Approach Slabs/Footings	April 1, 2012	April 1, 2013
	80310	14		Coated Galvanized Steel Conduit	Jan. 1, 2013	
	80198	15		Completion Date (via calendar days)	April 1, 2008	
	80199	16		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293	17		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	
	80294	18		Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	
	80311	19		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
	80277	20		Concrete Mix Design – Department Provided	Jan. 1, 2012	
	80261	21		Construction Air Quality – Diesel Retrofit	June 1, 2010	
	80029	22		Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Aug. 2, 2011
	80312	23		Drain Pipe, Tile, Drainage Mat, and Wall Drain	Jan. 1, 2013	
	80313	24		Fabric Bearing Pads	Jan. 1, 2013	
	80265	25	✔	Friction Aggregate	Jan. 1, 2011	
	80229	26		Fuel Cost Adjustment	April 1, 2009	July 1, 2009
	80303	27	✔	Granular Materials	Nov. 1, 2012	
	80304	28		Grooving for Recessed Pavement Markings	Nov. 1, 2012	Jan. 1, 2013
	80169	29		High Tension Cable Median Barrier	Jan. 1, 2007	Jan. 1, 2013
	80246	30	✔	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
	80315	31		Insertion Lining of Culverts	Jan. 1, 2013	
*	80320	32		Liquidated Damages	April 1, 2013	
	80045	33		Material Transfer Device	June 15, 1999	Jan. 1, 2009
	80297	34		Modified Urethane Pavement Marking	April 1, 2012	
	80165	35		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80253	36		Movable Traffic Barrier	Jan. 1, 2010	Jan. 1, 2013
	80231	37		Pavement Marking Removal	April 1, 2009	
	80298	38		Pavement Marking Tape Type IV	April 1, 2012	
	80254	39		Pavement Patching	Jan. 1, 2010	
*	80321	40	✔	Pavement Removal	April 1, 2013	
	80022	41		Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
	80316	42	✔	Placing and Consolidating Concrete	Jan. 1, 2013	
	80278	43		Planting Woody Plants	Jan. 1, 2012	Aug. 1, 2012
	80305	44		Polyurea Pavement Markings	Nov. 1, 2012	Jan. 1, 2013
	80279	45	✔	Portland Cement Concrete	Jan. 1, 2012	Jan. 1, 2013

	File Name	#		Special Provision Title	Effective	Revised
	80300	46		Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
	80218	47		Preventive Maintenance – Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2012
	80219	48		Preventive Maintenance – Cape Seal	Jan. 1, 2009	April 1, 2012
	80220	49		Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	April 1, 2012
	80221	50		Preventive Maintenance – Slurry Seal	Jan. 1, 2009	April 1, 2012
	80281	51	✔	Quality Control/Quality Assurance of Concrete Mixtures	Jan. 1, 2012	Jan. 1, 2013
	3426I	52		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157	53		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
	80306	54		Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 1, 2013
*	80283	55	✔	Removal and Disposal of Regulated Substances	Jan. 1, 2012	Nov. 2, 2012
*	80319	56	✔	Removal and Disposal of Surplus Materials	Nov. 2, 2012	
	80224	57		Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	Jan. 1, 2012
	80271	58		Safety Edge	April 1, 2011	
	80307	59		Seeding	Nov. 1, 2012	
	80127	60		Steel Cost Adjustment	April 2, 2004	April 1, 2009
	80255	61		Stone Matrix Asphalt	Jan. 1, 2010	Jan. 1, 2012
	80143	62		Subcontractor Mobilization Payments	April 2, 2005	April 1, 2011
	80317	63		Surface Testing of Hot-Mix Asphalt Overlays (NOTE: This special provision was previously named "*Surface Testing of Pavements*".)	Jan. 1, 2013	
	80308	64	✔	Synthetic Fibers in Concrete Gutter, Curb, Median and Paved Ditch	Nov. 1, 2012	
	80286	65	✔	Temporary Erosion and Sediment Control	Jan. 1, 2012	
	80225	66		Temporary Raised Pavement Marker	Jan. 1, 2009	
	80256	67		Temporary Water Filled Barrier	Jan. 1, 2010	Jan. 1, 2013
	80301	68		Tracking the Use of Pesticides	Aug. 1, 2012	
	80273	69		Traffic Control Deficiency Deduction	Aug. 1, 2011	
	20338	70		Training Special Provisions	Oct. 15, 1975	
*	80318	71		Traversable Pipe Grate	Jan. 1, 2013	April 1, 2013
	80270	72	✔	Utility Coordination and Conflicts	April 1, 2011	Jan. 1, 2012
	80288	73		Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2012
	80302	74		Weekly DBE Trucking Reports	June 2, 2012	
	80289	75		Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
	80071	76	✔	Working Days	Jan. 1, 2002	

The following special provisions are either in the 2013 Standard Specifications, the 2013 Recurring Special Provisions, or the special provisions Portland Cement Concrete, QC/QA of Concrete Mixtures, or Placing and Consolidating Concrete:

File Name	Special Provision Title	New Location	Effective	Revised
80275	Agreement to Plan Quantity	Article 202.07	Jan. 1, 2012	
80291	Calcium Chloride Accelerator for Class PP-2 Concrete	Recurring CS #28	April 1, 2012	
80237	Construction Air Quality – Diesel Vehicle Emissions Control	Articles 105.03 and 107.41	April 1, 2009	Jan. 2, 2012
80239	Construction Air Quality – Idling Restrictions	Articles 105.03 and 107.41	April 1, 2009	
80177	Digital Terrain Modeling for Earthwork Calculations	Recurring CS #32	April 1, 2007	
80272	Drainage and Inlet Protection Under Traffic	Articles 603.02 and 603.07	April 1, 2011	Jan. 1, 2012
80228	Flagger at Side Roads and Entrances	Articles 701.13 and 701.20	April 1, 2009	
80109	Impact Attenuators	Section 643	Nov. 1, 2003	Jan. 1, 2012
80110	Impact Attenuators, Temporary	Section 706	Nov. 1, 2003	Jan. 1, 2012
80203	Metal Hardware Cast into Concrete	Articles 503.02, 504.02, and 1006.13	April 1, 2008	Jan. 1, 2012
80290	Payrolls and Payroll Records	Recurring CS #5	Jan. 2, 2012	
80299	Portland Cement Concrete Inlay or Overlay	Recurring CS #29	April 1, 2012	
80280	Portland Cement Concrete Sidewalk	Article 424.07	Jan. 1, 2012	

File Name	Special Provision Title	New Location	Effective	Revised
80152	Self-Consolidating Concrete for Cast-In-Place Construction	The following special provisions: Portland Cement Concrete, QC/QA of Concrete Mixtures and Placing and Consolidating Concrete	Nov. 1, 2005	April 1, 2012
80132	Self-Consolidating Concrete for Precast and Precast Prestressed Products	The following special provisions: Portland Cement Concrete, QC/QA of Concrete Mixtures and Placing and Consolidating Concrete	July 1, 2004	April 1, 2012
80284	Shoulder Rumble Strips	Article 642.05	Jan. 1, 2012	
80285	Sidewalk, Corner or Crosswalk Closure	Articles 701.03, 701.15, and 1106.02	Jan. 1, 2012	
80075	Surface Testing of Pavements (Section 406 overlay portion will remain a special provision and will now be called “Surface Testing of HMA Overlays”.)	Articles 407.09, 407.12, 420.10, 420.20, and 1101.10	April 1, 2002	Jan. 1, 2007
80287	Type G Inlet Box	Article 610.09	Jan. 1, 2012	

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

FRICTION AGGREGATE (BDE)

Effective: January 1, 2011

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

"(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.

a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).

b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

Revise Article 1004.03(a) of the Standard Specifications to read:

"**1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA).** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination:</u> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA All Other	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination:</u> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[1/] Crushed Concrete

<table>
<tr><th>Use</th><th>Mixture</th><th>Aggregates Allowed</th></tr>
<tr><td>HMA
High ESAL
Low ESAL</td><td>Binder
IL-25.0, IL-19.0,
or IL-19.0L

SMA Binder</td><td><u>Allowed Alone or in Combination:</u>
Crushed Gravel
Carbonate Crushed Stone[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Concrete[3/]</td></tr>
<tr><td>HMA
High ESAL
Low ESAL</td><td>C Surface and
Leveling Binder
IL-12.5,IL-9.5,
or IL-9.5L

SMA
Ndesign 50
Surface</td><td><u>Allowed Alone or in Combination:</u>
Crushed Gravel
Carbonate Crushed Stone[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag[4/]
Crushed Concrete[3/]</td></tr>
<tr><td rowspan="5">HMA
High ESAL</td><td rowspan="5">D Surface and
Leveling Binder
IL-12.5 or
IL-9.5

SMA
Ndesign 50
Surface</td><td><u>Allowed Alone or in Combination:</u>
Crushed Gravel
Carbonate Crushed Stone (other than Limestone)[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF) [5/]
Crushed Steel Slag[4/ 5/]
Crushed Concrete[3/]</td></tr>
<tr><td><u>Other Combinations Allowed:</u>
<table><tr><th>Up to...</th><th>With...</th></tr><tr><td>25% Limestone</td><td>Dolomite</td></tr><tr><td>50% Limestone</td><td>Any Mixture D aggregate other than Dolomite</td></tr><tr><td>75% Limestone</td><td>Crushed Slag (ACBF)[5/] or Crushed Sandstone</td></tr></table></td></tr>
</table>

<table>
<tr><th>Use</th><th>Mixture</th><th colspan="2">Aggregates Allowed</th></tr>
<tr><td rowspan="5">HMA
High ESAL</td><td rowspan="5">E Surface
IL-12.5 or
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2"><u>Allowed Alone or in Combination:</u>

Crushed Gravel
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)[5/]
Crushed Steel Slag[5/]
Crushed Concrete[3/]

No Limestone.</td></tr>
<tr><td colspan="2"><u>Other Combinations Allowed:</u></td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<tr><td>50% Dolomite[2/]</td><td>Any Mixture E aggregate</td></tr>
<tr><td>75% Dolomite[2/]</td><td>Crushed Sandstone, Crushed Slag (ACBF)[5/], Crushed Steel Slag[5/], or Crystalline Crushed Stone</td></tr>
<tr><td>75% Crushed Gravel or Crushed Concrete[3/]</td><td>Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF)[5/], or Crushed Steel Slag[5/]</td></tr>
<tr><td rowspan="4">HMA
High ESAL</td><td rowspan="4">F Surface
IL-12.5 or
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2"><u>Allowed Alone or in Combination:</u>

Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)[5/]
Crushed Steel Slag[5/]
No Limestone.</td></tr>
<tr><td colspan="2"><u>Other Combinations Allowed</u>:</td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
</table>

Use	Mixture	Aggregates Allowed	
		50% Crushed Gravel, Crushed Concrete[3/], or Dolomite[2/]	Crushed Sandstone, Crushed Slag (ACBF)[5/], Crushed Steel Slag[5/], or Crystalline Crushed Stone

1/ Crushed steel slag allowed in shoulder surface only.
2/ Carbonate crushed stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
3/ Crushed concrete will not be permitted in SMA mixes.
4/ Crushed steel slag shall not be used as leveling binder.
5/ When either slag is used, the blend percentages listed shall be by volume."

80265

GRANULAR MATERIALS (BDE)

Effective: November 1, 2012

Revise the title of Article 1003.04 of the Standard Specifications to read:

"**1003.04 Fine Aggregate for Bedding, Trench Backfill, Embankment, Porous Granular Backfill, Sand Backfill for Underdrains, and French Drains.**"

Revise Article 1003.04(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradations for granular embankment, granular backfill, bedding, and trench backfill for pipe culverts and storm sewers shall be FA 1, FA 2, or FA 6 through FA 21.

The fine aggregate gradation for porous granular embankment, porous granular backfill, french drains, and sand backfill for underdrains shall be FA 1, FA 2, or FA 20, except the percent passing the No. 200 (75 µm) sieve shall be 2±2."

Revise Article 1004.05(c) of the Standard Specifications to read:

"(c) Gradation. The coarse aggregate gradations shall be as follows.

Application	Gradation
Blotter	CA 15
Granular Embankment, Granular Backfill, Bedding, and Trench Backfill for Pipe Culverts and Storm Sewers	CA 6, CA 9, CA 10, CA 12, CA17, CA18, and CA 19
Porous Granular Embankment, Porous Granular Backfill, and French Drains	CA 7, CA 8, CA 11, CA 15, CA 16 and CA 18"

80303

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010
Revised: April 1, 2012

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.

b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4%	91.0%
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	90.0%

SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%”

80246

PAVEMENT REMOVAL (BDE)

Effective: April 1, 2013

Revise Article 440.07(c) of the Standard Specifications to read:

"(c) Adjustment of Quantities. The quantity of pavement removal will be adjusted if the thickness of the existing pavement varies more than 15 percent from that shown on the plans. The quantity will be either increased or decreased according to the following table.

% change of thickness	% change of quantity
0 to less than 15	0
15 to less than 20	10
20 to less than 30	15
30 to less than 50	20

If the thickness of the existing pavement varies by 50 percent or more from that shown on the plans, the character of the work will be considered significantly changed and an adjustment to the contract will be made according to Article 104.02.

When an adjustment is made for variations in pavement thickness a resulting adjustment will also be made in the earthwork quantities when applicable.

No adjustment will be made for variations in the amount of reinforcement."

80321

PLACING AND CONSOLIDATING CONCRETE (BDE)

Effective: January 1, 2013

Revise the first paragraph of Article 503.06 of the Standard Specifications to read:

"**503.06 Forms.** Forms shall be set and maintained to the lines and grades shown on the plans, and shall be tight to prevent concrete leakage."

Revise Article 503.07 of the Standard Specifications to read:

"**503.07 Placing and Consolidating.** No concrete shall be placed on ice, snow, or frozen foundation material.

The method and manner of placing concrete shall be such as to avoid segregation or separation of the aggregates or the displacement of the reinforcement. The external surface of all concrete shall be thoroughly worked during the operations of placing in such a manner as to work the mortar against the forms to produce a smooth finish free of honeycomb and with a minimum of water and air pockets.

Open troughs and chutes shall extend as nearly as practicable to the point of deposit. Dropping the concrete a distance of more than 5 ft (1.5 m) or depositing a large quantity at any point and running or working it along the forms will not be permitted. The concrete for walls with an average thickness of 12 in. (300 mm) or less shall be placed with tubes so that the drop is not greater than 5 ft (1.5 m).

For self-consolidating concrete, the maximum distance of horizontal flow from the point of deposit shall be 15 ft (4.6 m). The distance may be increased if the dynamic segregation index (DSI) at the maximum flow distance is 10.0 percent or less according to Illinois Test Procedure SCC-8 (Option C). The maximum distance using the DSI shall be 25 ft (7.6 m). In addition, this specified horizontal flow distance shall apply to precast products. In the case of precast prestressed concrete products, refer to the Department's "Manual of Fabrication for Precast Prestressed Concrete Products" for the specified horizontal flow distance requirements.

When the form height for placing the self-consolidating concrete is greater than 10 ft (3.0 m), direct monitoring of form pressure shall be performed by the Contractor according to Illinois Test Procedure SCC-10. The monitoring requirement is a minimum, and the Contractor shall remain responsible for adequate design of the falsework and forms. The Contractor shall record the formwork pressure during concrete placement. This information shall be used by the Contractor to prevent the placement rate from exceeding the maximum formwork pressure allowed, to monitor the thixotropic change in the concrete during the pour, and to make appropriate adjustments to the mix design. This information shall be provided to the Engineer during the pour.

When concrete is pumped, the equipment shall be suitable in kind and adequate in capacity for the work and arranged so that vibrations will not damage freshly placed concrete. Aluminum

pipe or conduit will not be permitted in pumping or placing concrete. Mixed concrete shall be supplied to maintain continuous operation of the pumping equipment.

When air entrained concrete is pumped, an accessory or accessories shall be incorporated in the discharge components to minimize air loss. The maximum allowable air loss caused by the pumping operation shall be 3.0 percent with the minimum air content at the point of discharge meeting the requirements of Article 1020.04.

Placing of concrete shall be regulated so that the pressures caused by the wet concrete will not exceed those used in the design of the forms. Special care shall be taken to fill each part of the forms by depositing the concrete as near its final position as possible, to work the coarser aggregates back from the face, and to force the concrete under and around the reinforcement bars without displacing them. Leakage through forms onto beams or girders shall not be allowed to harden and shall be removed while in a plastic state.

The concrete shall be consolidated by internal vibration unless self-consolidating concrete is used. Self-consolidating concrete may be used for inaccessible locations where consolidation by internal vibration is not practicable. The self consolidating concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator may only be permitted if it can be used in a manner that does not cause segregation as determined by the Engineer. Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

The Contractor shall provide and use a sufficient number of vibrators to ensure that consolidation can be started immediately after the concrete has been deposited in the forms.

The vibrators shall be inserted into the concrete immediately after it is deposited and shall be moved throughout the mass so as to thoroughly work the concrete around the reinforcement, embedded fixtures, and into the corners and angles of the forms. Vibrators shall not be attached to the forms, reinforcement bars, or the surface of the concrete.

Application of vibrators shall be at points uniformly spaced and not farther apart than twice the radius over which the vibration is visibly effective. The duration of the vibration at the points of insertion shall be sufficient to thoroughly consolidate the concrete into place but shall not be continued so as to cause segregation. When consolidating concrete in bridge decks, the vibrator shall be vertically inserted into the concrete for 3 - 5 seconds or for a period of time determined by the Engineer. Vibration shall be supplemented by spading when required by the Engineer. In addition to the internal vibration required herein, formed surfaces which will be exposed to view after completion of the work shall be spaded with a spading tool approved by the Engineer.

Concrete shall be placed in continuous horizontal layers. When it is necessary by reason of an emergency to place less than a complete horizontal layer in one operation, such layer shall terminate in a vertical bulkhead. Separate batches shall follow each other closely and in no case shall the interval of time between the placing of successive batches be greater than 20 minutes.

If mix foaming or detrimental material is observed during placement or at the completion of a pour, the material shall be removed while the concrete is still plastic

After the concrete has taken its initial set, care shall be exercised to avoid jarring the forms or placing any strain on the ends of projecting reinforcement."

Revise Article 516.12(a) of the Standard Specifications to read:

"(a) Free Fall Placement. The free fall placement shall only be permitted in shafts that can be dewatered to ensure less than 3 in. (75 mm) of standing water exist at the time of placement without causing side wall instability. The height of free fall placement shall be a maximum of 60 ft (18.3 m) as measured from the discharge end, but it shall be reduced to a maximum of 30 ft (9.1 m) when self-consolidating concrete is used. The Contractor shall obtain approval from the Engineer to place self-consolidating concrete by free fall.

Concrete placed by free fall shall fall directly to the base without contacting either the rebar cage or shaft sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

Drop chutes used to direct placement of free fall concrete shall consist of a smooth tube of either one continuous section or multiple pieces that can be added and removed. Concrete may be placed through either a hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. The drop chute shall be supported so that free fall does not exceed the specified maximum 60 ft (18.3 m) or 30 ft (9.1 m) at all times from the discharge end, and to ensure the concrete does not strike the rebar cage. If placement cannot be satisfactorily accomplished by free fall in the opinion of the Engineer, either a tremie or pump shall be used to accomplish the pour."

80316

PORTLAND CEMENT CONCRETE (BDE)

Effective: January 1, 2012
Revised: January 1, 2013

Revise Notes 1 and 2 of Article 312.24 of the Standard Specifications to read:

"Note 1. Coarse aggregate shall be gradation CA 6, CA 7, CA 9, CA 10, or CA 11, Class D quality or better. Article 1020.05(d) shall apply.

Note 2. Fine aggregate shall be FA 1 or FA 2. Article 1020.05(d) shall apply."

Revise the first paragraph of Article 312.26 of the Standard Specifications to read:

"**312.26 Proportioning and Mix Design.** At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials for proportioning and testing. The mixture shall contain a minimum of 200 lb (90 kg) of cement per cubic yard (cubic meter). Portland cement may be replaced with fly ash according to Article 1020.05(c)(1), however the minimum portland cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse aggregate. The Engineer will determine the proportions of materials for the mixture. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply and a Level III PCC Technician shall develop the mix design."

Revise the second paragraph of Article 503.22 of the Standard Specifications to read:

Other cast-in-place concrete for structures will be paid for at the contract unit price per cubic yard (cubic meter) for CONCRETE HANDRAIL, CONCRETE ENCASEMENT, and SEAL COAT CONCRETE."

Add the following to Article 1003.02 of the Standard Specifications:

(e) Alkali Reaction.

(1) ASTM C 1260. Each fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II portland cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.03 percent will be assigned to limestone or dolomite fine

aggregates (manufactured stone sand). However, the Department reserves the right to perform the ASTM C 1260 test.

(2) ASTM C 1293 by Department. In some instances, such as chert natural sand or other fine aggregates, testing according to ASTM C 1260 may not provide accurate test results. In this case, the Department may only test according to ASTM C 1293.

(3) ASTM C 1293 by Contractor. If an individual aggregate has an ASTM C 1260 expansion value that is unacceptable to the Contractor, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The laboratory performing the ASTM C 1293 test shall be approved by the Department according to the current Bureau of Materials and Physical Research Policy Memorandum "Minimum Laboratory Requirements for Alkali-Silica Reactivity (ASR) Testing".

The ASTM C 1293 test shall be performed with Type I or II portland cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container, wick of absorbent material, or amount of coverage inside the container with blotting paper, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly. If the aggregate is manufactured into multiple gradation numbers, and the other gradation numbers have the same or lower ASTM C 1260 value, the ASTM C 1293 test result may apply to multiple gradation numbers.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 test result. When the Contractor performs the test, a split sample shall be provided to the Engineer. The Engineer may also independently obtain a sample at any time. The aggregate will be considered reactive if the Contractor or Engineer obtains an expansion value of 0.040 percent or greater.

Revise the first paragraph of Article 1004.01(e)(5) of the Standard Specifications to read:

"Crushed concrete, crushed slag, or lightweight aggregate for portland cement concrete shall be stockpiled in a moist condition (saturated surface dry or greater) and the moisture content shall be maintained uniformly throughout the stockpile by periodic sprinkling."

Revise Article 1004.02(d) of the Standard Specifications to read:

"(d) Combining Sizes. Each size shall be stored separately and care shall be taken to prevent them from being mixed until they are ready to be proportioned. Separate compartments shall be provided to proportion each size.

(1) When Class BS concrete is to be pumped, the coarse aggregate gradation shall have a minimum of 45 percent passing the 1/2 in. (12.5 mm) sieve. The Contractor may combine two or more coarse aggregate sizes, consisting of CA 7, CA 11, CA 13, CA 14, and CA 16, provided a CA 7 or CA 11 is included in the blend.

(2) If the coarse aggregate is furnished in separate sizes, they shall be combined in proportions to provide a uniformly graded coarse aggregate grading within the following limits.

Class of Concrete 1/	Combined Sizes	Sieve Size and Percent Passing						
		2 1/2 in.	2 in.	1 3/4 in.	1 1/2 in.	1 in.	1/2 in.	No. 4
PV 2/								
	CA 5 & CA 7	---	---	100	98±2	72±22	22±12	3±3
	CA 5 & CA 11	---	---	100	98±2	72±22	22±12	3±3
SI and SC 2/								
	CA 3 & CA 7	100	95±5	---	---	55±25	20±10	3±3
	CA 3 & CA 11	100	95±5	---	---	55±25	20±10	3±3
	CA 5 & CA 7	---	---	100	98±2	72±22	22±12	3±3
	CA 5 & CA 11	---	---	100	98±2	72±22	22±12	3±3

Class of Concrete 1/	Combined Sizes	Sieve Size (metric) and Percent Passing						
		63 mm	50 mm	45 mm	37.5 mm	25 mm	12.5 mm	4.75 mm
PV 2/								
	CA 5 & CA 7	---	---	100	98±2	72±22	22±12	3±3
	CA 5 & CA 11	---	---	100	98±2	72±22	22±12	3±3
SI and SC 2/								
	CA 3 & CA 7	100	95±5	---	---	55±25	20±10	3±3
	CA 3 & CA 11	100	95±5	---	---	55±25	20±10	3±3
	CA 5 & CA 7	---	---	100	98±2	72±22	22±12	3±3
	CA 5 & CA 11	---	---	100	98±2	72±22	22±12	3±3

1/ See Table 1 of Article 1020.04.

2/ Any of the listed combination of sizes may be used."

Add the following to Article 1004.02 of the Standard Specifications:

(g) Alkali Reaction.

(1) ASTM C 1260. Each coarse aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II portland cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates. However, the Department reserves the right to perform the ASTM C 1260 test.

(2) ASTM C 1293 by Department. In some instances testing a coarse aggregate according to ASTM C 1260 may not provide accurate test results. In this case, the Department may only test according to ASTM C 1293.

(3) ASTM C 1293 by Contractor. If an individual aggregate has an ASTM C 1260 expansion value that is unacceptable to the Contractor, an ASTM C 1293 test may be performed by the Contractor according to Article 1003.02(e)(3).

Revise the first paragraph of Article 1019.06 of the Standard Specifications to read:

"**1019.06 Contractor Mix Design.** A Contractor may submit their own mix design and may propose alternate fine aggregate materials, fine aggregate gradations, or material proportions. Article 1020.05(a) shall apply and a Level III PCC Technician shall develop the mix design."

Revise Section 1020 of the Standard Specifications to read:

"SECTION 1020. PORTLAND CEMENT CONCRETE

1020.01 Description. This item shall consist of the materials, mix design, production, testing, curing, low air temperature protection, and temperature control of concrete.

1020.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003
(d) Coarse Aggregate	1004

(e) Concrete Admixtures 1021
(f) Finely Divided Minerals 1010
(g) Concrete Curing Materials 1022
(h) Straw ..... 1081.06(a)(1)
(i) Calcium Chloride 1013.01

1020.03 Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Concrete Mixers and Trucks	1103.01
(b) Batching and Weighing Equipment	1103.02
(c) Automatic and Semi-Automatic Batching Equipment	1103.03
(d) Water Supply Equipment	1103.11
(e) Membrane Curing Equipment	1101.09
(f) Mobile Portland Cement Concrete Plants	1103.04

1020.04 Concrete Classes and General Mix Design Criteria. The classes of concrete shown in Table 1 identify the various mixtures by the general uses and mix design criteria. If the class of concrete for a specific item of construction is not specified, Class SI concrete shall be used.

For the minimum cement factor in Table 1, it shall apply to portland cement, portland-pozzolan cement, and portland blast-furnace slag except when a particular cement is specified in the Table.

The Contractor shall not assume that the minimum cement factor indicated in Table 1 will produce a mixture that will meet the specified strength. In addition, the Contractor shall not assume that the maximum finely divided mineral allowed in a mix design according to Article 1020.05(c) will produce a mixture that will meet the specified strength. The Contractor shall select a cement factor within the allowable range that will obtain the specified strength. The Contractor shall take into consideration materials selected, seasonal temperatures, and other factors which may require the Contractor to submit multiple mix designs.

For a portland-pozzolan cement, portland blast-furnace slag cement, or when replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the portland cement content in the mixture shall be a minimum of 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). When calculating the portland cement portion in the portland-pozzolan or portland blast-furnace slag cement, the AASHTO M 240 tolerance may be ignored.

Special classifications may be made for the purpose of including the concrete for a particular use or location ~~as a separate pay item in the contract.~~ The concrete used in such cases shall conform to this section.

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA

Class of Conc.	Use	Specification Section Reference	Cement Factor cwt/cu yd (3)		Water / Cement Ratio lb/lb	Slump in. (4)	Mix Design Compressive Strength (Flexural Strength) psi, minimum			Air Content %	Coarse Aggregate Gradations (14)
							Days				
			Min.	Max			3	14	28		
PV	Pavement Base Course Base Course Widening Driveway Pavement Shoulders Shoulder Curb	420 or 421 353 354 423 483 662	5.65 (1) 6.05 (2)	7.05	0.32 - 0.42	2 - 4 (5)	Ty III 3500 (650)	3500 (650)		5.0 - 8.0 (5)	CA 5 & CA 7, CA 5 & CA 11, CA 7, CA 11, or CA 14
PP	Pavement Patching Bridge Deck Patching (10)	442					3200 (600) Article 701.17(e)(3)b.				CA 7, CA 11, CA 13, CA 14, or CA 16
	PP-1		6.50 6.20 (Ty III)	7.50 7.20 (Ty III)	0.32 - 0.44	2 - 4	at 48 hours			4.0 - 7.0	
	PP-2		7.35	8.20	0.32 - 0.38	2 - 6	at 24 hours			4.0 - 6.0	
	PP-3		7.35 (Ty III) (8)	7.35 (Ty III) (8)	0.32 - 0.35	2 - 4	at 16 hours			4.0 - 6.0	
	PP-4		6.00 (9)	6.25 (9)	0.32 - 0.50	2 - 6	at 8 hours			4.0 - 6.0	
	PP-5		6.75 (9)	6.75 (9)	0.32 - 0.40	2 - 8	at 4 hours			4.0 - 6.0	
RR	Railroad Crossing	422	6.50 6.20 (Ty III)	7.50 7.20 (Ty III)	0.32 - 0.44	2 - 4	3500 (650) at 48 hours			4.0 - 7.0	CA 7, CA 11, or CA 14
BS	Bridge Superstructure Bridge Approach Slab	503	6.05	7.05	0.32 - 0.44	2 - 4 (5)		4000 (675)		5.0 - 8.0 (5)	CA 7, CA 11, or CA 14 (7)
PC	Various Precast Concrete Items Wet Cast Dry Cast	1042	5.65 5.65 (TY III)	7.05 7.05 (TY III)	0.32 - 0.44 0.25 - 0.40	1 - 4 0 - 1	See Section 1042			5.0 - 8.0 N/A	CA7, CA11,CA 13, CA 14, CA 16, or CA 7 & CA 16
PS	Precast Prestressed Members	504	5.65 5.65 (TY III)	7.05 7.05 (TY III)	0.32 - 0.44	1 - 4			Plans	5.0 - 8.0	CA 11 (11), CA 13, CA 14 (11), or CA 16
	Precast Prestressed Piles and Extensions	512							5000		
	Precast Prestressed Sight Screen	639							3500		

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA												
Class of Conc.	Use	Specification Section Reference	Cement Factor cwt/cu yd (3)		Water / Cement Ratio lb/lb	Slump in. (4)	Mix Design Compressive Strength (Flexural Strength) psi, minimum			Air Content %	Coarse Aggregate Gradations (14)
							Days				
			Min.	Max			3	14	28		
DS	Drilled Shaft (12) Metal Shell Piles (12) Sign Structures Drilled Shaft (12) Light Tower Foundation (12)	516 512 734 837	6.65	7.05	0.32 - 0.44	6 - 8 (6)		4000 (675)		5.0 - 8.0	CA 13, CA 14, CA 16, or a blend of these gradations.
SC	Seal Coat	503	5.65 (1) 6.05 (2)	7.05	0.32 - 0.44	3 - 5		3500 (650)		Optional 6.0 max.	CA 3 & CA 7, CA 3 & CA 11, CA 5 & CA 7, CA 5 & CA 11, CA 7, or CA 11
SI	Structures (except Superstructure) Sidewalk Slope Wall Encasement Box Culverts End Section and Collar Curb, Gutter, Curb & Gutter, Median, and Paved Ditch Concrete Barrier Sign Structures Spread Footing Concrete Foundation Pole Foundation (12) Traffic Signal Foundation Drilled Shaft (12) Square or Rectangular	503 424 511 512 540 542 606 637 734 836 878	5.65 (1) 6.05 (2)	7.05	0.32 - 0.44	2 - 4 (5)		3500 (650)		5.0 - 8.0 (5)	CA 3 & CA 7, CA 3 & CA 11, CA 5 & CA 7, CA 5 & CA 11, CA 7, CA 11, CA 13, CA 14, or CA 16 (13)

Notes:

(1) Central-mixed.

(2) Truck-mixed or shrink-mixed.

(3) For Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, the cement factor shall be increased by ten percent.

(4) The maximum slump may be increased to 7 in. when a high range water-reducing admixture is used for all classes of concrete, except Class PV, SC, and PP. For Class SC, the maximum slump may be increased to 8 in. For Class PP-1, the maximum slump may be increased to 6 in. For Class PS, the 7 in. maximum slump may be increased to 8 1/2 in. if the high range water-reducing admixture is the polycarboxylate type.

(5) The slump range for slipform construction shall be 1/2 to 2 1/2 in. and the air content range shall be 5.5 to 8.0 percent.

(6) If concrete is placed to displace drilling fluid, or against temporary casing, the slump shall be 8 - 10 in. at the point of placement. If a water-reducing admixture is used in lieu of a high range water-reducing admixture according to Article 1020.05(b)(7), the slump shall be 2 - 4 in.

(7) For Class BS concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching.

(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 ºF, the Type III portland cement may be replaced with Type I or II portland cement.

(9) The cement shall be a rapid hardening cement from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs" for PP-4 and calcium aluminate cement for PP-5.

(10) For Class PP concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching. In addition, the mix design shall have 72 hours to obtain a 4,000 psi compressive or 675 psi flexural strength for all PP mix designs.

(11) The nominal maximum size permitted is 3/4 in. Nominal maximum size is defined as the largest sieve which retains any of the aggregate sample particles.

(12) The concrete mix shall be designed to remain fluid throughout the anticipated duration of the pour plus one hour. At the Engineer's discretion, the Contractor may be required to conduct a minimum 2 cu yd trial batch to verify the mix design.

(13) CA 3 or CA 5 may be used when the nominal maximum size does not exceed two-thirds the clear distance between parallel reinforcement bars, or between the reinforcement bar and the form. Nominal maximum size is defined in Note 11.

(14) Alternate combinations of gradation sizes may be used with the approval of the Engineer. Refer also to Article 1004.02(d) for additional information on combining sizes.

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA (metric)

Class of Conc.	Use	Specification Section Reference	Cement Factor kg/cu m (3)		Water / Cement Ratio kg/kg	Slump mm (4)	Mix Design Compressive Strength (Flexural Strength) kPa, minimum			Air Content %	Coarse Aggregate Gradations (14)
							Days				
			Min.	Max			3	14	28		
PV	Pavement Base Course Base Course Widening Driveway Pavement Shoulders Shoulder Curb	420 or 421 353 354 423 483 662	335 (1) 360 (2)	418	0.32 - 0.42	50 - 100 (5)	Ty III 24,000 (4500)	24,000 (4500)		5.0 - 8.0 (5)	CA 5 & CA 7, CA 5 & CA 11, CA 7, CA 11, or CA 14
PP	Pavement Patching Bridge Deck Patching (10)	442					22,100 (4150) Article 701.17(e)(3)b.				
	PP-1		385 365 (Ty III)	445 425 (Ty III)	0.32 - 0.44	50 - 100	at 48 hours			4.0 - 7.0	CA 7, CA 11, CA 13, CA 14, or CA 16
	PP-2		435	485	0.32 - 0.38	50 - 150	at 24 hours			4.0 - 6.0	
	PP-3		435 (Ty III) (8)	435 (Ty III) (8)	0.32 - 0.35	50 - 100	at 16 hours			4.0 - 6.0	
	PP-4		355 (9)	370 (9)	0.32 - 0.50	50 - 150	at 8 hours			4.0 - 6.0	
	PP-5		400 (9)	400 (9)	0.32 – 0.40	50 - 200	at 4 hours			4.0 – 6.0	
RR	Railroad Crossing	422	385 365 (Ty III)	445 425 (Ty III)	0.32 - 0.44	50 - 100	24,000 (4500) at 48 hours			4.0 - 7.0	CA 7, CA 11, or CA 14
BS	Bridge Superstructure Bridge Approach Slab	503	360	418	0.32 - 0.44	50 - 100 (5)		27,500 (4650)		5.0 - 8.0 (5)	CA 7, CA 11, or CA 14 (7)
PC	Various Precast Concrete Items Wet Cast Dry Cast	1042	335 335 (TY III)	418 418 (TY III)	0.32 - 0.44 0.25 - 0.40	25 - 100 0 - 25	See Section 1042			5.0 - 8.0 N/A	CA7, CA11, CA13, CA 14, CA 16, or CA 7 & CA 16
PS	Precast Prestressed Members	504	335 335 (TY III)	418 418 (TY III)	0.32 - 0.44	25 - 100			Plans	5.0 - 8.0	CA 11 (11), CA 13, CA 14 (11), or CA 16
	Precast Prestressed Piles and Extensions	512							34,500		
	Precast Prestressed Sight Screen	639							24,000		

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA (metric)

Class of Conc.	Use	Specification Section Reference	Cement Factor kg/cu m (3)		Water / Cement Ratio kg/kg	Slump mm (4)	Mix Design Compressive Strength (Flexural Strength) kPa, minimum Days			Air Content %	Coarse Aggregate Gradations (14)
			Min.	Max			3	14	28		
DS	Drilled Shaft (12) Metal Shell Piles (12) Sign Structures Drilled Shaft (12) Light Tower Foundation (12)	516 512 734 837	395	418	0.32 - 0.44	150 -200 (6)		27,500 (4650)		5.0 - 8.0	CA 13, CA 14, CA 16, or a blend of these gradations.
SC	Seal Coat	503	335 (1) 360 (2)	418	0.32 - 0.44	75 - 125		24,000 (4500)		Optional 6.0 max.	CA 3 & CA 7, CA 3 & CA 11, CA 5 & CA 7, CA 5 & CA 11, CA 7, or CA 11
SI	Structures (except Superstructure) Sidewalk Slope Wall Encasement Box Culverts End Section and Collar Curb, Gutter, Curb & Gutter, Median, and Paved Ditch Concrete Barrier Sign Structures Spread Footing Concrete Foundation Pole Foundation (12) Traffic Signal Foundation Drilled Shaft (12) Square or Rectangular	503 424 511 512 540 542 606 637 734 836 878	335 (1) 360 (2)	418	0.32 - 0.44	50 - 100 (5)		24,000 (4500)		5.0 - 8.0 (5)	CA 3 & CA 7, CA 3 & CA 11, CA 5 & CA 7, CA 5 & CA 11, CA 7, CA 11, CA 13, CA 14, or CA 16 (13)

Notes:

(1) Central-mixed.

(2) Truck-mixed or shrink-mixed.

(3) For Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, the cement factor shall be increased by ten percent.

(4) The maximum slump may be increased to 175 mm when a high range water-reducing admixture is used for all classes of concrete except Class PV, SC, and PP. For Class SC, the maximum slump may be increased to 200 mm. For Class PP-1, the maximum slump may be increased to 150 mm. For Class PS, the 175 mm maximum slump may be increased to 215 mm if the high range water-reducing admixture is the polycarboxylate type.

(5) The slump range for slipform construction shall be 13 to 64 mm and the air content range shall be 5.5 to 8.0 percent.

(6) If concrete is placed to displace drilling fluid, or against temporary casing, the slump shall be 200 - 250 mm at the point of placement. If a water-reducing admixture is used in lieu of a high range water-reducing admixture according to Article 1020.05(b)(7), the slump shall be 50 – 100 mm.

(7) For Class BS concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching.

(8) In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 ºC, the Type III portland cement may be replaced with Type I or II portland cement.

(9) The cement shall be a rapid hardening cement from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs" for PP-4 and calcium aluminate cement for PP-5.

(10) For Class PP concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching. In addition, the mix design shall have 72 hours to obtain a 27,500 kPa compressive or 4,650 kPa flexural.

(11) The nominal maximum size permitted is 19 mm. Nominal maximum size is defined as the largest sieve which retains any of the aggregate sample particles.

(12) The concrete mix shall be designed to remain fluid throughout the anticipated duration of the pour plus one hour. At the Engineer's discretion, the Contractor may be required to conduct a minimum 1.5 cu m trial batch to verify the mix design.

(13) CA 3 or CA 5 may be used when the nominal maximum size does not exceed two-thirds the clear distance between parallel reinforcement bars, or between the reinforcement bar and the form. Nominal maximum size is defined in Note 11.

(14) Alternate combinations of gradation sizes may be used with the approval of the Engineer. Refer also to Article 1004.02(d) for additional information on combining sizes.

Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation. Self-consolidating concrete mix designs may be developed for Class BS, PC, PS, DS, and SI concrete. Self-consolidating concrete mix designs may also be developed for precast concrete products that are not subjected to Class PC concrete requirements according to Section 1042. The mix design criteria for the concrete mixture shall be according to Article 1020.04 with the following exceptions.

(a) The slump requirements shall not apply.

(b) The concrete mixture should be uniformly graded, and information in the "Portland Cement Concrete Level III Technician Course – Manual of Instructions for Design of Concrete Mixtures" may be used to develop the uniformly graded mix design. The coarse aggregate gradations shall be CA 11, CA 13, CA 14, CA 16, or a blend of these gradations. However, the final gradation when using a single coarse aggregate or combination of coarse aggregates shall have 100 percent pass the 1 in. (25 mm) sieve, and minimum 95 percent pass the 3/4 in. (19 mm) sieve. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.

(c) The slump flow range shall be 22 in. (560 mm) minimum to 28 in. (710 mm) maximum and tested according to Illinois Test Procedure SCC-2.

(d) The visual stability index shall be a maximum of 1 and tested according to Illinois Test Procedure SCC-2.

(e) The J-Ring value shall be a maximum of 2 in. (50 mm) and tested according to Illinois Test Procedure SCC-3. The L-Box blocking ratio shall be a minimum of 80 percent and tested according to Illinois Test Procedure SCC-3. The Contractor has the option to select either test.

(f) The hardened visual stability index shall be a maximum of 1 and tested according to Illinois Test Procedure SCC-6.

(g) If Class PC concrete requirements do not apply to the precast concrete product according to Section 1042, the maximum cement factor shall be 7.05 cwt/cu yd (418 kg/cu m) and the maximum allowable water/cement ratio shall be 0.44.

(h) If the measured slump flow, visual stability index, J-Ring value, or L-Box blocking ratio fall outside the limits specified, a check test will be made. In the event of a second failure, the Engineer may refuse to permit the use of the batch of concrete represented.

The Contractor may use water or self-consolidating admixtures at the jobsite to obtain the specified slump flow, visual stability index, J-ring value, or L-box blocking ratio. The maximum design water/cement ratio shall not be exceeded.

1020.05 Other Concrete Criteria. The concrete shall be according to the following.

(a) Proportioning and Mix Design. For all Classes of concrete, it shall be the Contractor's responsibility to determine mix design material proportions and to proportion each batch of concrete. A Level III PCC Technician shall develop the mix design for all Classes of concrete, except Classes PC and PS. The mix design, submittal information, trial batch, and Engineer verification shall be according to the "Portland Cement Concrete Level III Technician" course material.

The Contractor shall provide the mix designs a minimum of 45 calendar days prior to production. More than one mix design may be submitted for each class of concrete.

The Engineer will verify the mix design submitted by the Contractor. Verification of a mix design shall in no manner be construed as acceptance of any mixture produced. Once a mix design has been verified, the Engineer shall be notified of any proposed changes.

Tests performed at the jobsite will determine if a mix design can meet specifications. If the tests indicate it cannot, the Contractor shall make adjustments to a mix design, or submit a new mix design if necessary, to comply with the specifications.

(b) Admixtures. The Contractor shall be responsible for using admixtures and determining dosages for all Classes of concrete, cement aggregate mixture II, and controlled low-strength material that will produce a mixture with suitable workability, consistency, and plasticity. In addition, admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Contractor shall obtain approval from the Engineer to use an accelerator when the concrete temperature is greater than 60 °F (16 °C). However, this accelerator approval by the Engineer will not be required for Class PP, RR, PC, and PS concrete. The accelerator shall be the non-chloride type unless otherwise specified in the contract plans.

The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(10). For information on approved controlled low-strength material air-entraining admixtures, refer to Article 1019.02. The Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted by the Contractor prior to the pour when determining an admixture dosage from this list or when making minor admixture dosage adjustments at the jobsite. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. The Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overlay pour, the initial set time shall be delayed until the deflections due

to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays.

The sequence, method, and equipment for adding the admixtures shall be approved by the Engineer. Admixtures shall be added to the concrete separately. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

Admixture use shall be according to the following.

(1) When the atmosphere or concrete temperature is 65 °F (18 °C) or higher, a retarding admixture shall be used in the Class BS concrete and concrete bridge deck overlays. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture, except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in bridge deck concrete. At the option of the Contractor, a water-reducing admixture may be used with the high range water-reducing admixture in Class BS concrete.

(2) At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 or RR concrete. When the air temperature is less than 55 °F (13 °C) and an accelerator is used, the non-chloride accelerator shall be calcium nitrite.

(3) When Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 or RR concrete, a water-reducing or high range water-reducing admixture shall be used.

(4) For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture with the high range water-reducing admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite. For Class PP-2 concrete, the non-chloride accelerator shall be calcium nitrite when the air temperature is less than 55 °F (13 °C).

(5) For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture with the high range water-reducing admixture. An accelerator shall not be used. For stationary or truck-mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use

a mobile portland cement concrete plant, but a retarding admixture shall not be used unless approved by the Engineer.

For PP-5 concrete, a non-chloride accelerator, high range water-reducing admixture, and air-entraining admixture shall be used. The accelerator, high range water-reducing admixture, and air-entraining admixture shall be per the Contractor's recommendation and dosage. The approved list of concrete admixtures shall not apply. A mobile portland cement concrete plant shall be used to produce the patching mixture.

(6) When a calcium chloride accelerator is specified in the contract, the maximum chloride dosage shall be 1.0 quart (1.0 L) of solution per 100 lb (45 kg) of cement. The dosage may be increased to a maximum 2.0 quarts (2.0 L) per 100 lb (45 kg) of cement if approved by the Engineer. When a calcium chloride accelerator for Class PP-2 concrete is specified in the contract, the maximum chloride dosage shall be 1.3 quarts (1.3 L) of solution per 100 lb (45 kg) of cement. The dosage may be increased to a maximum 2.6 quarts (2.6 L) per 100 lb (45 kg) of cement if approved by the Engineer.

(7) For Class DS concrete a retarding admixture and a high range water-reducing admixture shall be used. For dry excavations that are 10 ft (3 m) or less, the high range water-reducing admixture may be replaced with a water-reducing admixture if the concrete is vibrated. The use of admixtures shall take into consideration the slump loss limits specified in Article 516.12 and the fluidity requirement in Article 1020.04 (Note 12).

(8) At the Contractor's option, when a water-reducing admixture or a high range water-reducing admixture is used for Class PV, PP-1, RR, SC, and SI concrete, the cement factor may be reduced a maximum 0.30 hundredweight/cu yd (18 kg/cu m). However, a cement factor reduction will not be allowed for concrete placed underwater.

(9) When Type F or Type G high range water-reducing admixtures are used, the initial slump shall be a minimum of 1 1/2 in. (40 mm) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

(10) When specified, a corrosion inhibitor shall be added to the concrete mixture utilized in the manufacture of precast, prestressed concrete members and/or other applications. It shall be added, at the same rate, to all grout around post-tensioning steel when specified.

When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m), and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch.

When Rheocrete 222+ is used, it shall be added at the rate of 1.0 gal/cu yd (5.0 L/cu m), and the batching sequence shall be according to the manufacturer's instructions.

(c) Finely Divided Minerals. Use of finely divided minerals shall be according to the following.

(1) Fly Ash. At the Contractor's option, fly ash from approved sources may partially replace portland cement in cement aggregate mixture II, Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete.

The use of fly ash shall be according to the following.

a. Measurements of fly ash and portland cement shall be rounded up to the nearest 5 lb (2.5 kg).

b. When Class F fly ash is used in cement aggregate mixture II, Class PV, BS, PC, PS, DS, SC, and SI concrete, the amount of portland cement replaced shall not exceed 25 percent by weight (mass).

c. When Class C fly ash is used in cement aggregate mixture II, Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete, the amount of portland cement replaced shall not exceed 30 percent by weight (mass).

d. Fly ash may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

(2) Ground Granulated Blast-Furnace (GGBF) Slag. At the Contractor's option, GGBF slag may partially replace portland cement in Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete. For Class PP-3 concrete, GGBF slag shall be used according to Article 1020.04.

The use of GGBF slag shall be according to the following.

a. Measurements of GGBF slag and portland cement shall be rounded up to the nearest 5 lb (2.5 kg).

b. When GGBF slag is used in Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC and SI concrete, the amount of portland cement replaced shall not exceed 35 percent by weight (mass).

c. GGBF slag may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

(3) Microsilica. At the Contractor's option, microsilica may be added at a maximum of 5.0 percent by weight (mass) of the cement and finely divided minerals summed together.

Microsilica shall be used in Class PP-3 concrete according to Article 1020.04.

(4) High Reactivity Metakaolin (HRM). At the Contractor's option, HRM may be added at a maximum of 5.0 percent by weight (mass) of the cement and finely divided minerals summed together.

(5) Mixtures with Multiple Finely Divided Minerals. Except as specified for Class PP-3 concrete, the Contractor has the option to use more than one finely divided mineral in Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete as follows.

a. The mixture shall contain a maximum of two finely divided minerals. The finely divided mineral in portland-pozzolan cement or portland blast-furnace slag cement shall count toward the total number of finely divided minerals allowed. The finely divided minerals shall constitute a maximum of 35.0 percent of the total cement plus finely divided minerals. The fly ash portion shall not exceed 30.0 percent for Class C fly ash or 25.0 percent for Class F fly ash. The Class C and F fly ash combination shall not exceed 30.0 percent. The ground granulated blast-furnace slag portion shall not exceed 35.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed ten percent. The finely divided mineral in the portland-pozzolan cement or portland blast-furnace slag blended cement shall apply to the maximum 35.0 percent.

b. Central Mixed. For Class PV, SC, and SI concrete, the mixture shall contain a minimum of 565 lbs/cu yd (335 kg/cu m) of cement and finely divided minerals summed together. If a water-reducing or high-range water-reducing admixture is used, the Contractor has the option to use a minimum of 535 lbs/cu yd (320 kg/cu m).

c. Truck-Mixed or Shrink-Mixed. For Class PV, SC, and SI concrete, the mixture shall contain a minimum of 605 lbs/cu yd (360 kg/cu m) of cement and finely divided minerals summed together. If a water-reducing or high-range water-reducing admixture is used, the Contractor has the option to use a minimum of 575 lbs/cu yd (345 kg/cu m).

d. Central-Mixed, Truck-Mixed or Shrink-Mixed. For Class PP-1 and RR concrete, the mixture shall contain a minimum of 650 lbs/cu yd (385 kg/cu m) of cement and finely divided minerals summed together. For Class PP-1 and RR concrete using Type III portland cement, the mixture shall contain a minimum of 620 lbs/cu yd (365 kg/cu m).

For Class PP-2 concrete, the mixture shall contain a minimum of 735 lbs/cu yd (435 kg/cu m) of cement and finely divided minerals summed together. For Class BS concrete, the mixture shall contain a minimum of 605 lbs/cu yd (360 kg/cu m). For Class DS concrete, the mixture shall contain a minimum of 665 lbs/cu yd (395 kg/cu m).

If a water-reducing or high range water-reducing admixture is used in Class PP-1 and RR concrete, the Contractor has the option to use a minimum of 620 lbs/cu yd (365 kg/cu m) of cement and finely divided minerals summed together. If a water-reducing or high-range water-reducing admixture is used with Type III portland cement in Class PP-1 and RR concrete, the Contractor has the option to use a minimum of 590 lbs/cu yd (350 kg/cu m).

e. Central-Mixed or Truck-Mixed. For Class PC and PS concrete, the mixture shall contain a minimum of 565 lbs/cu yd (335 kg/cu m) of cement and finely divided minerals summed together.

f. The mixture shall contain a maximum of 705 lbs/cu yd (418 kg/cu m) of cement and finely divided mineral(s) summed together for Class PV, BS, PC, PS, DS, SC, and SI concrete. For Class PP-1 and RR concrete, the mixture shall contain a maximum of 750 lbs/cu yd (445 kg/cu m). For Class PP-1 and RR concrete using Type III portland cement, the mixture shall contain a maximum of 720 lbs/cu yd (425 kg/cu m). For Class PP-2 concrete, the mixture shall contain a maximum of 820 lbs/cu yd (485 kg/cu m).

g. For Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, the allowable cement and finely divided minerals summed together shall be increased by ten percent.

h. The combination of cement and finely divided minerals shall comply with Article 1020.05(d).

(d) Alkali-Silica Reaction. For cast-in-place (includes cement aggregate mixture II and latex mixtures), precast, and precast prestressed concrete, one of the mixture options provided in Article 1020.05(d)(2) shall be used to reduce the risk of a deleterious alkali-silica reaction in concrete exposed to humid or wet conditions. The mixture options are not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate, or sodium formate. The mixture options will not be required for the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy.

The mixture options shall not apply to concrete revetment mats, insertion lining of pipe culverts, portland cement mortar fairing course, controlled low-strength material, miscellaneous grouts that are not prepackaged, Class PP-3 concrete, Class PP-4 concrete, and Class PP-5 concrete.

(1) Aggregate Groups. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

Aggregate Groups			
Coarse Aggregate or Coarse Aggregate Blend ASTM C 1260 Expansion	Fine Aggregate Or Fine Aggregate Blend ASTM C 1260 Expansion		
	≤0.16%	>0.16% - 0.27%	>0.27%
≤0.16%	Group I	Group II	Group III
>0.16% - 0.27%	Group II	Group II	Group III
>0.27%	Group III	Group III	Group IV

(2) Mixture Options. Based upon the aggregate group, the following mixture options shall be used. However, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Reduction of Risk for Deleterious Alkali-Silica Reaction					
Aggregate Groups	Mixture Options				
	Option 1	Option 2	Option 3	Option 4	Option 5
Group I	Mixture options are not applicable. Use any cement or finely divided mineral.				
Group II	X	X	X	X	X
Group III	X	Combine Option 2 with Option 3	Combine Option 2 with Option 3	X	X
Group IV	X	Combine Option 2 with Option 4	Invalid Option	Combine Option 2 with Option 4	X

"X" denotes valid mixture option for aggregate group.

a. Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used. Coarse aggregate may only be blended with another coarse aggregate. Fine aggregate may only be blended with another fine aggregate. Blending of

coarse with fine aggregate to place the material in another group will not be permitted.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = (a/100 x A) + (b/100 x B) + (c/100 x C) + …

Where: a, b, c… = percentage of aggregate in the blend;
A, B, C… = expansion value for that aggregate.

b. Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. In addition, a blended cement with a finely divided mineral may be added to a separate finely divided mineral to meet the following requirements, provided the finely divided minerals are the same material. However, adding together two different finely divided minerals to obtain the specified minimum percentage of one material will not be permitted for 1), 2), 3), and 4). Refer to Mixture Option 5 to address this situation.

1. Class F Fly Ash. For cement aggregate mixture II, Class PV, BS, PC, PS, MS, DS, SC and SI concrete, the Class F fly ash shall be a minimum 25.0 percent by weight (mass) of the cement and finely divided minerals summed together.

   If the maximum total equivalent available alkali content ($Na_2O + 0.658K_2O$) exceeds 4.50 percent for the Class F fly ash, it may be used only if it complies with Mixture Option 5.

2. Class C Fly Ash. For cement aggregate mixture II, Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete, Class C fly ash shall be a minimum of 25.0 percent by weight (mass) of the cement and finely divided minerals summed together.

   If the maximum total equivalent available alkali content ($Na_2O + 0.658K_2O$) exceeds 4.50 percent or the calcium oxide exceeds 26.50 percent for the Class C fly ash, it may be used only per Mixture Option 5.

3. Ground Granulated Blast-Furnace Slag. For Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete, ground granulated blast-furnace slag shall be a minimum of 25.0 percent by weight (mass) of the cement and finely divided minerals summed together.

   If the maximum total equivalent available alkali content ($Na_2O + 0.658K_2O$) exceeds 1.00 percent for the ground granulated blast-furnace slag, it may be used only per Mixture Option 5.

4. Microsilica or High Reactivity Metakaolin, Microsilica solids or high reactivity metakaolin shall be a minimum 5.0 percent by weight (mass) of the cement and finely divided minerals summed together.

   If the maximum total equivalent available alkali content ($Na_2O + 0.658K_2O$) exceeds 1.00 percent for the Microsilica or High Reactivity Metakaolin, it may be used only if it complies with Mixture Option 5.

c. Mixture Option 3. The cement used shall have a maximum total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.60 percent. When aggregate in Group II is involved and the Contractor desires to use a finely divided mineral, any finely divided mineral may be used with the cement unless the maximum total equivalent available alkali content ($Na_2O + 0.658K_2O$) exceeds 4.50 percent for the fly ash; or 1.00 percent for the ground granulated blast-furnace slag, microsilica or high reactivity metakaolin. If the alkali content is exceeded, the finely divided mineral may be used only per Mixture Option 5.

d. Mixture Option 4. The cement used shall have a maximum total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.45 percent. When aggregate in Group II or III is involved and the Contractor desires to use a finely divided mineral, any finely divided mineral may be used with the cement unless the maximum total equivalent available alkali content ($Na_2O + 0.658K_2O$) exceeds 4.50 percent for the fly ash; or 1.00 percent for the ground granulated blast-furnace slag, microsilica, or high reactivity metakaolin. If the alkali content is exceeded, the finely divided mineral may be used only per Mixture Option 5.

e. Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The laboratory performing the ASTM C 1567 test shall be approved by the Department according to the current Bureau of Materials and Physical Research Policy Memorandum “Minimum Laboratory Requirements for Alkali-Silica Reactivity (ASR) Testing”. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly.

   For latex concrete, the ASTM C 1567 test shall be performed without the latex.

   The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

   If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content ($Na_2O + 0.658K_2O$), a new ASTM C 1567 test will not be required.

   The Engineer reserved the right to verify a Contractor’s ASTM C 1567 test result. When the Contractor performs the test, a split sample may be requested by the Engineer. The Engineer may also independently obtain a sample at any time.

The proposed cement or finely divided mineral will not be allowed for use if the Contractor or Engineer obtains an expansion value greater than 0.16 percent.

1020.06 Water/Cement Ratio. The water/cement ratio shall be determined on a weight (mass) basis. When a maximum water/cement ratio is specified, the water shall include mixing water, water in admixtures, free moisture on the aggregates, and water added at the jobsite. The quantity of water may be adjusted within the limit specified to meet slump requirements.

When fly ash, ground granulated blast-furnace slag, high-reactivity metakaolin, or microsilica (silica fume) are used in a concrete mix, the water/cement ratio will be based on the total cement and finely divided minerals contained in the mixture.

1020.07 Slump. The slump shall be determined according to Illinois Modified AASHTO T 119.

If the measured slump falls outside the limits specified, a check test will be made. In the event of a second failure, the Engineer may refuse to permit the use of the batch of concrete represented.

If the Contractor is unable to add water to prepare concrete of the specified slump without exceeding the maximum design water/cement ratio, a water-reducing admixture shall be added.

1020.08 Air Content. The air content shall be determined according to Illinois Modified AASHTO T 152 or Illinois Modified AASHTO T 196. The air-entrainment shall be obtained by the use of cement with an approved air-entraining admixture added during the mixing of the concrete or the use of air-entraining cement.

If the air-entraining cement furnished is found to produce concrete having air content outside the limits specified, its use shall be discontinued immediately and the Contractor shall provide other air-entraining cement which will produce air contents within the specified limits.

If the air content obtained is above the specified maximum limit at the jobsite, the Contractor may have the concrete further mixed, within the limits of time and revolutions specified, to reduce the air content. If the air content obtained is below the specified minimum limit, the Contractor may add to the concrete a sufficient quantity of an approved air-entraining admixture at the jobsite to bring the air content within the specified limits.

1020.09 Strength Tests. The specimens shall be molded and cured according to Illinois Modified AASHTO T 23. Specimens shall be field cured with the construction item as specified in Illinois Modified AASHTO T 23. The compressive strength shall be determined according to Illinois Modified AASHTO T 22. The flexural strength shall be determined according to Illinois Modified AASHTO T 177.

Except for Class PC and PS concrete, the Contractor shall transport the strength specimens from the site of the work to the field laboratory or other location as instructed by the Engineer. During transportation in a suitable light truck, the specimens shall be embedded in straw,

burlap, or other acceptable material in a manner meeting with the approval of the Engineer to protect them from damage; care shall be taken to avoid impacts during hauling and handling. For strength specimens, the Contractor shall provide a field curing box for initial curing and a water storage tank for final curing. The field curing box will be required when an air temperature below 60 °F (16 °C) is expected during the initial curing period. The device shall maintain the initial curing temperature range specified in Illinois Modified AASHTO T 23, and may be insulated or power operated as appropriate.

1020.10 Handling, Measuring, and Batching Materials. Aggregates shall be handled in a manner to prevent mixing with soil and other foreign material.

Aggregates shall be handled in a manner which produces a uniform gradation, before placement in the plant bins. Aggregates delivered to the plant in a nonuniform gradation condition shall be stockpiled. The stockpiled aggregate shall be mixed uniformly before placement in the plant bins.

Aggregates shall have a uniform moisture content before placement in the plant bins. This may require aggregates to be stockpiled for 12 hours or more to allow drainage, or water added to the stockpile, or other methods approved by the Engineer. Moisture content requirements for crushed concrete, crushed slag or lightweight aggregate shall be according to Article 1004.01(e)(5).

Aggregates, cement, and finely divided minerals shall be measured by weight (mass). Water and admixtures shall be measured by volume or weight (mass).

The Engineer may permit aggregates, cement, and finely divided minerals to be measured by volume for small isolated structures and for miscellaneous items. Aggregates, cement, and finely divided minerals shall be measured individually. The volume shall be based upon dry, loose materials.

1020.11 Mixing Portland Cement Concrete. The mixing of concrete shall be according to the following.

(a) Ready-Mixed Concrete. Ready-mixed concrete is central-mixed, truck-mixed, or shrink-mixed concrete transported and delivered in a plastic state ready for placement in the work and shall be according to the following.

(1) Central-Mixed Concrete. Central-mixed concrete is concrete which has been completely mixed in a stationary mixer and delivered in a truck agitator, a truck mixer operating at agitating speed, or a nonagitator truck.

The stationary mixer shall operate at the drum speed for which it was designed. The batch shall be charged into the drum so that some of the water shall enter in advance of the cement, finely divided minerals, and aggregates. The flow of the water shall be uniform and all water shall be in the drum by the end of the first 15 seconds of the mixing period. Water shall begin to enter the drum from zero to

two seconds in advance of solid material and shall stop flowing within two seconds of the beginning of mixing time.

Some coarse aggregate shall enter in advance of other solid materials. For the balance of the charging time for solid materials, the aggregates, finely divided minerals, and cement (to assure thorough blending) shall each flow at acceptably uniform rates, as determined by visual observation. Coarse aggregate shall enter two seconds in advance of other solid materials and a uniform rate of flow shall continue to within two seconds of the completion of charging time.

The entire contents of the drum, or of each single compartment of a multiple-drum mixer, shall be discharged before the succeeding batch is introduced.

The volume of concrete mixed per batch shall not exceed the mixer's rated capacity as shown on the standard rating plate on the mixer by more than ten percent.

The minimum mixing time shall be 75 seconds for a stationary mixer having a capacity greater than 2 cu yd (1.5 cu m). For a mixer with a capacity equal to or less than 2 cu yd (1.5 cu m) the mixing time shall be 60 seconds. Transfer time in multiple drum mixers is included in the mixing time. Mixing time shall begin when all materials are in the mixing compartment and shall end when the discharge of any part of the batch is started. The required mixing times will be established by the Engineer for all types of stationary mixers.

When central-mixed concrete is to be transported in a truck agitator or a truck mixer, the stationary-mixed batch shall be transferred to the agitating unit without delay and without loss of any portion of the batch. Agitating shall start immediately thereafter and shall continue without interruption until the batch is discharged from the agitator. The ingredients of the batch shall be completely discharged from the agitator before the succeeding batch is introduced. Drums and auxiliary parts of the equipment shall be kept free from accumulations of materials.

The vehicles used for transporting the mixed concrete shall be of such capacity, or the batches shall be so proportioned, that the entire contents of the mixer drum can be discharged into each vehicle load.

(2) Truck-Mixed Concrete. Truck-mixed concrete is completely mixed and delivered in a truck mixer. When the mixer is charged with fine and coarse aggregates simultaneously, not less than 60 nor more than 100 revolutions of the drum or blades at mixing speed shall be required, after all of the ingredients including water are in the drum. When fine and coarse aggregates are charged separately, not less than 70 revolutions will be required. For self-consolidating concrete, a minimum of 100 revolutions is required in all cases. Additional mixing beyond 100 revolutions shall be at agitating speed unless additions of water, admixtures, or other materials are made at the jobsite. The mixing operation shall begin immediately after the cement and water, or the cement and wet aggregates, come in contact. The

ingredients of the batch shall be completely discharged from the drum before the succeeding batch is introduced. The drum and auxiliary parts of the equipment shall be kept free from accumulations of materials. If additional water or an admixture is added at the jobsite, the concrete batch shall be mixed a minimum of 40 additional revolutions after each addition.

(3) Shrink-Mixed Concrete. Shrink-mixed concrete is mixed partially in a stationary mixer and completed in a truck mixer for delivery. The mixing time of the stationary mixer may be reduced to a minimum of 30 seconds to intermingle the ingredients, before transferring to the truck mixer. All ingredients for the batch shall be in the stationary mixer and partially mixed before any of the mixture is discharged into the truck mixer. The partially mixed batch shall be transferred to the truck mixer without delay and without loss of any portion of the batch, and mixing in the truck mixer shall start immediately. The mixing time in the truck mixer shall be not less than 50 nor more than 100 revolutions of the drum or blades at mixing speed. For self-consolidating concrete, a minimum of 100 revolutions is required in the truck mixer. Additional mixing beyond 100 revolutions shall be at agitating speed, unless additions of water, admixtures, or other materials are made at the jobsite. Units designed as agitators shall not be used for shrink mixing. The ingredients of the batch shall be completely discharged from the drum before the succeeding batch is introduced. The drum and auxiliary parts of the equipment shall be kept free from accumulations of materials. If additional water or an admixture is added at the jobsite, the concrete batch shall be mixed a minimum of 40 additional revolutions after each addition.

(4) Mixing Water. Wash water shall be completely discharged from the drum or container before a batch is introduced. All mixing water shall be added at the plant and any adjustment of water at the jobsite by the Contractor shall not exceed the specified maximum water/cement ratio or slump. If strength specimens have been made for a batch of concrete, and subsequently during discharge there is more water added, additional strength specimens shall be made for the batch of concrete. No additional water may be added at the jobsite to central-mixed concrete if the mix design has less than 565 lbs/cu yd (335 kg/cu m) of cement and finely divided minerals summed together.

(5) Mixing and Agitating Speeds. The mixing or agitating speeds used for truck mixers or truck agitators shall be per the manufacturer's rating plate.

(6) Capacities. The volume of plastic concrete in a given batch will be determined according to AASHTO T 121, based on the total weight (mass) of the batch, determined either from the weight (masses) of all materials, including water, entering the batch or directly from the net weight (mass) of the concrete in the batch as delivered.

The volume of mixed concrete in truck mixers or truck agitators shall in no case be greater than the rated capacity determined according to the Truck Mixer, Agitator,

and Front Discharge Concrete Carrier Standards of the Truck Mixer Manufacturer's Bureau, as shown by the rating plate attached to the truck. If the truck mixer does not have a rating plate, the volume of mixed concrete shall not exceed 63 percent of the gross volume of the drum or container, disregarding the blades. For truck agitators, the value is 80 percent.

(7) Time of Haul. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work.

The time elapsing from when water is added to the mix until it is deposited in place at the site of the work shall not exceed 30 minutes when the concrete is transported in nonagitating trucks.

The maximum haul time for concrete transported in truck mixers or truck agitators shall be according to the following.

Concrete Temperature at Point of Discharge °F (°C)	Haul Time	
	Hours	Minutes
50-64 (10-17.5)	1	30
>64 (>17.5) - without retarder	1	0
>64 (>17.5) - with retarder	1	30

To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer.

(8) Production and Delivery. The production of ready-mixed concrete shall be such that the operations of placing and finishing will be continuous insofar as the job operations require. The Contractor shall be responsible for producing concrete that will have the required workability, consistency, and plasticity when delivered to the work. Concrete which is unsuitable for placement as delivered will be rejected. The

Contractor shall minimize the need to adjust the mixture at the jobsite, such as adding water and admixtures prior to discharging.

(9) Use of Multiple Plants in the Same Construction Item. The Contractor may simultaneously use central-mixed, truck-mixed, and shrink-mixed concrete from more than one plant, for the same construction item, on the same day, and in the same pour. However, the following criteria shall be met.

a. Each plant shall use the same cement, finely divided minerals, aggregates, admixtures, and fibers.

b. Each plant shall use the same mix design. However, material proportions may be altered slightly in the field to meet slump and air content criteria. Field water adjustments shall not result in a difference that exceeds 0.02 between plants for water/cement ratio. The required cement factor for central-mixed concrete shall be increased to match truck-mixed or shrink-mixed concrete, if the latter two types of mixed concrete are used in the same pour.

c. The maximum slump difference between deliveries of concrete shall be 3/4 in. (19 mm) when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the slump difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for slump by the Contractor. Thereafter, when a specified test frequency for slump is to be performed, it shall be conducted for each plant at the same time.

d. The maximum air content difference between deliveries of concrete shall be 1.5 percent when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the air content difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for air content by the Contractor. Thereafter, when a specified test frequency for air content is to be performed, it shall be conducted for each plant at the same time.

e. Strength tests shall be performed and taken at the jobsite for each plant. When a specified strength test is to be performed, it shall be conducted for each plant at the same time. The difference between plants for strength shall not exceed 900 psi (6200 kPa) compressive and 90 psi (620 kPa) flexural. If the strength difference requirements are exceeded, the Contractor shall take corrective action.

f. The maximum haul time difference between deliveries of concrete shall be 15 minutes. If the difference is exceeded, but haul time is within specification

limits, the concrete may be used. The Contractor shall take immediate corrective action and check subsequent deliveries of concrete.

(b) Class PC Concrete. The concrete shall be central-mixed or truck-mixed. Variations in plastic concrete properties shall be minimized between batches.

(c) Class PV Concrete. The concrete shall be central-mixed, truck-mixed, or shrink-mixed.

The required mixing time for stationary mixers with a capacity greater than 2 cu yd (1.5 cu m) may be less than 75 seconds upon satisfactory completion of a mixer performance test. Mixer performance tests may be requested by the Contractor when the quantity of concrete to be placed exceeds 50,000 sq yd (42,000 sq m). The testing shall be conducted according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Field Test Procedures for Mixer Performance and Concrete Uniformity Tests".

The Contractor will be allowed to test two mixing times within a range of 50 to 75 seconds. If satisfactory results are not obtained from the required tests, the mixing time shall continue to be 75 seconds for the remainder of the contract. If satisfactory results are obtained, the mixing time may be reduced. In no event will mixing time be less than 50 seconds.

The Contractor shall furnish the labor, equipment, and material required to perform the testing according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Field Test Procedures for Mixer Performance and Concrete Uniformity Tests".

A contract which has 12 ft (3.6 m) wide pavement or base course, and a continuous length of 1/2 mile (0.8 km) or more, shall have the following additional requirements.

(1) The plant and truck delivery operation shall be able to provide a minimum of 50 cu yd (38 cu m) of concrete per hour.

(2) The plant shall have automatic or semi-automatic batching equipment.

(d) All Other Classes of Concrete. The concrete shall be central-mixed, truck-mixed, or shrink-mixed concrete.

1020.12 Mobile Portland Cement Concrete Plants. The use of a mobile portland cement concrete plant may be approved under the provisions of Article 1020.10 for volumetric proportioning in small isolated structures, thin overlays, and for miscellaneous and incidental concrete items.

The first 1 cu ft (0.03 cu m) of concrete produced may not contain sufficient mortar and shall not be incorporated in the work. The side plate on the cement feeder shall be removed

periodically (normally the first time the mixer is used each day) to see if cement is building up on the feed drum.

Sufficient mixing capacity of mixers shall be provided to enable continuous placing and finishing insofar as the job operations and the specifications require.

Slump and air tests made immediately after discharge of the mix may be misleading, since the aggregates may absorb a significant amount of water for four or five minutes after mixing.

1020.13 Curing and Protection. The method of curing, curing period, and method of protection for each type of concrete construction is included in the following Index Table.

INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION			
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete [11/]			
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) [3/ 5/]	3	1020.13(c)
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) [2/]	3	1020.13(c)
Driveway Median Barrier Curb Gutter Curb & Gutter Sidewalk Slope Wall Paved Ditch	1020.13(a)(1)(2)(3)(4)(5) [4/ 5/]	3	1020.13(c) [16/]
Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) [4/]	3	1020.13(c)
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) [2/]	3 [12/]	1020.13(c)
Bridge Deck Patching	1020.13(a)(3)(5)	3 or 7 [12/]	1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)
Piles and Drilled Shafts	1020.13(a)(3)(5)	7	1020.13(d)(1)(2)(3)
Foundations & Footings Seal Coat	1020.13(a)(1)(2)(3)(4)(5) [4/ 6/]	7	1020.13(d)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) [1/ 7/]	7	1020.13(d)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) [8/]	7	1020.13(d)(1)(2)
Deck Bridge Approach Slab	1020.13(a)(5)	7	1020.13(d)(1)(2) [17/]
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) [1/ 7/]	7	1020.13(d)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) [1/]	7	1020.13(d)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) [4/ 6/]	7	1020.13(d)(1)(2) [18/]
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
Precast Concrete [11/]			
Bridge Slabs Piles and Pile Caps Other Structural Members	1020.13(a)(3)(5) [9/ 10/]	As [13/] Required	9/
All Other Precast Items	1020.13(a)(3)(4)(5) [2/ 9/ 10/]	As [14/] Required	9/
Precast, Prestressed Concrete [11/]			
All Items	1020(a)(3)(5) [9/ 10/]	Until Strand Tensioning is Released [15/]	9/

Notes-General:

1/ Type I, membrane curing only

2/ Type II, membrane curing only

3/ Type III, membrane curing only

4/ Type I, II and III membrane curing

5/ Membrane Curing will not be permitted between November 1 and April 15.

6/ The use of water to inundate foundations and footings, seal coats or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 45 °F (7 °C) or higher.

7/ Asphalt emulsion for waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.

8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed oil emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09(b).

9/ Steam, supplemental heat, or insulated blankets (with or without steam/supplemental heat) are acceptable and shall be according to the Bureau of Materials and Physical Research's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products" and the "Manual for Fabrication of Precast, Prestressed Concrete Products".

10/ A moist room according to AASHTO M 201 is acceptable for curing.

11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.

12/ Curing maintained only until opening strength is attained for pavement patching, with a maximum curing period of three days. For bridge deck patching the curing period shall be three days if Class PP concrete is used and 7 days if Class BS concrete is used.

13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.

14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.

15/ The producer has the option to continue curing after strand release.

16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(d)(1).

17/ When Article 1020.13(d)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(d)(1).

18/ For culverts having a waterway opening of 10 sq ft (1 sq m) or less, the culverts may be protected according to Article 1020.13(d)(3).

(a) Methods of Curing. Except as provided for in the Index Table of Curing and Protection of Concrete Construction, curing shall be accomplished by one of the following described methods. When water is required to wet the surface, it shall be applied as a fine spray so that it will not mar or pond on the surface. Except where otherwise specified, the curing period shall be at least 72 hours.

(1) Waterproof Paper Method. The surface of the concrete shall be covered with waterproof paper as soon as the concrete has hardened sufficiently to prevent marring the surface. The surface of the concrete shall be wetted immediately before the paper is placed. The blankets shall be lapped at least 12 in. (300 mm) end to end, and these laps shall be securely weighted with a windrow of earth, or other approved method, to form a closed joint. The same requirements shall apply to the longitudinal laps where separate strips are used for curing edges, except the lap shall be at least 9 in. (225 mm). The edges of the blanket shall be weighted securely with a continuous windrow of earth or any other means satisfactory to the Engineer to provide an air-tight cover. Any torn places or holes in the paper shall be repaired immediately by patches cemented over the openings, using a bituminous cement having a melting point of not less than 180 °F (82 °C). The blankets may be reused, provided they are air-tight and kept serviceable by proper repairs.

A longitudinal pleat shall be provided in the blanket to permit shrinkage where the width of the blanket is sufficient to cover the entire surface. The pleat will not be required where separate strips are used for the edges. Joints in the blanket shall be sewn or cemented together in such a manner that they will not separate during use.

(2) Polyethylene Sheeting Method. The surface of the concrete shall be covered with white polyethylene sheeting as soon as the concrete has hardened sufficiently to prevent marring the surface. The surface of the concrete shall be wetted immediately before the sheeting is placed. The edges of the sheeting shall be weighted securely with a continuous windrow of earth or any other means satisfactory to the Engineer to provide an air-tight cover. Adjoining sheets shall overlap not less than 12 in. (300 mm) and the laps shall be securely weighted with earth, or any other means satisfactory to the Engineer, to provide an air tight cover.

For surface and base course concrete, the polyethylene sheets shall be not less than 100 ft (30 m) in length nor longer than can be conveniently handled, and shall be of such width that, when in place, they will cover the full width of the surface, including the edges, except that separate strips may be used to cover the edges. Any tears or holes in the sheeting shall be repaired. When sheets are no longer serviceable as a single unit, the Contractor may select from such sheets and reuse those which will serve for further applications, provided two sheets are used as a single unit; however, the double sheet units will be rejected when the Engineer deems that they no longer provide an air tight cover.

(3) Wetted Burlap Method. The surface of the concrete shall be covered with wetted burlap blankets as soon as the concrete has hardened sufficiently to prevent marring the surface. The blankets shall overlap 6 in. (150 mm). At least two layers of wetted burlap shall be placed on the finished surface. The burlap shall be kept saturated by means of a mechanically operated sprinkling system. In place of the sprinkling system, at the Contractor's option, two layers of burlap covered with impermeable covering shall be used. The burlap shall be kept saturated with water. Plastic coated burlap may be substituted for one layer of burlap and impermeable covering.

The blankets shall be placed so that they are in contact with the edges of the concrete, and that portion of the material in contact with the edges shall be kept saturated with water.

(4) Membrane Curing Method. Membrane curing will not be permitted where a protective coat, concrete sealer, or waterproofing is to be applied, or at areas where rubbing or a normal finish is required, or at construction joints other than those necessary in pavement or base course. Concrete at these locations shall be cured by another method specified in Article 1020.13(a).

After all finishing work to the concrete surface has been completed, it shall be sealed with membrane curing compound of the type specified within ten minutes. The seal shall be maintained for the specified curing period. The edges of the concrete shall, likewise, be sealed within ten minutes after the forms are removed. Two separate applications, applied at least one minute apart, each at the rate of not less than 1 gal/250 sq ft (0.16 L/sq m) will be required upon the surfaces and edges of the concrete. These applications shall be made with the mechanical equipment specified. Type III compound shall be agitated immediately before and during the application.

At locations where the coating is discontinuous or where pin holes show or where the coating is damaged due to any cause and on areas adjacent to sawed joints, immediately after sawing is completed, an additional coating of membrane curing compound shall be applied at the above specified rate. The equipment used may be of the same type as that used for coating variable widths of pavement. Before the additional coating is applied adjacent to sawed joints, the cut faces of the joint shall be protected by inserting a suitable flexible material in the joint, or placing an

adhesive width of impermeable material over the joint, or by placing the permanent sealing compound in the joint. Material, other than the permanent sealing compound, used to protect cut faces of the joint, shall remain in place for the duration of the curing period. In lieu of applying the additional coating, the area of the sawed joint may be cured according to any other method permitted.

When rain occurs before an application of membrane curing compound has dried, and the coating is damaged, the Engineer may require another application be made in the same manner and at the same rate as the original coat. The Engineer may order curing by another method specified, if unsatisfactory results are obtained with membrane curing compound.

(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry or damp cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 4 ft (1.2 m) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3).

(b) Removing and Replacing Curing Covering. When curing methods specified above in Article 1020.13(a), (1), (2), or (3) are used for concrete pavement, the curing covering for each day's paving shall be removed to permit testing of the pavement surface with a profilograph or straightedge, as directed by the Engineer.

Immediately after testing, the surface of the pavement shall be wetted thoroughly and the curing coverings replaced. The top surface and the edges of the concrete shall not be left unprotected for a period of more than 1/2 hour.

(c) Protection of Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 32 °F (0 °C), or lower, or if the actual temperature drops to 32 °F (0 °C), or lower, concrete less than 72 hours old shall be provided at least the following protection.

Minimum Temperature	Protection
25 – 32 °F (-4 – 0 °C)	Two layers of polyethylene sheeting, one layer of polyethylene and one layer of burlap, or two layers of waterproof paper.
Below 25 °F (-4 °C)	6 in. (150 mm) of straw covered with one layer of polyethylene sheeting or waterproof paper.

These protective covers shall remain in place until the concrete is at least 96 hours old. When straw is required on pavement cured with membrane curing compound, the compound shall be covered with a layer of burlap, polyethylene sheeting or waterproof paper before the straw is applied.

After September 15, there shall be available to the work within four hours, sufficient clean, dry straw to cover at least two days production. Additional straw shall be provided as needed to afford the protection required. Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced.

(d) Protection of Concrete Structures From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low below 45 °F (7 °C), or if the actual temperature drops below 45 °F (7 °C), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities, and equipment for protection are approved by the Engineer.

When directed by the Engineer, the Contractor may be required to place concrete during the winter period. When winter construction is specified, the Contractor shall proceed with the construction, including excavation, pile driving, concrete, steel erection, and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced.

(1) Protection Method I. The concrete shall be completely covered with insulating material such as fiberglass, rock wool, or other approved commercial insulating material having the minimum thermal resistance R, as defined in ASTM C 168, for

the corresponding minimum dimension of the concrete unit being protected as shown in the following table.

Minimum Pour Dimension		Thermal Resistance R
in.	(mm)	
6 or less	(150 or less)	R=16
> 6 to 12	(> 150 to 300)	R=10
> 12 to 18	(> 300 to 450)	R=6
> 18	(> 450)	R=4

The insulating material manufacturer shall clearly mark the insulating material with the thermal resistance R value.

The insulating material shall be completely enclosed on sides and edges with an approved waterproof liner and shall be maintained in a serviceable condition. Any tears in the liner shall be repaired in a manner approved by the Engineer. The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period.

On formed surfaces, the insulating material shall be attached to the outside of the forms with wood cleats or other suitable means to prevent any circulation of air under the insulation and shall be in place before the concrete is placed. The blanket insulation shall be applied tightly against the forms. The edges and ends shall be attached so as to exclude air and moisture. If the blankets are provided with nailing flanges, the flanges shall be attached to the studs with cleats. Where tie rods or reinforcement bars protrude, the areas adjacent to the rods or bars shall be adequately protected in a manner satisfactory to the Engineer. Where practicable, the insulation shall overlap any previously placed concrete by at least 1 ft (300 mm). Insulation on the underside of floors on steel members shall cover the top flanges of supporting members. On horizontal surfaces, the insulating material shall be placed as soon as the concrete has set, so that the surface will not be marred and shall be covered with canvas or other waterproof covering. The insulating material shall remain in place for a period of seven days after the concrete is placed.

The Contractor may remove the forms, providing the temperature is 35 °F (2 °C) and rising and the Contractor is able to wrap the particular section within two hours from the time of the start of the form removal. The insulation shall remain in place for the remainder of the seven days curing period.

(2) Protection Method II. The concrete shall be enclosed in adequate housing and the air surrounding the concrete kept at a temperature of not less than 50 °F (10 °C) nor more than 80 °F (27 °C) for a period of seven days after the concrete is placed. The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period. All exposed surfaces within the housing shall be cured according to the Index Table.

The Contractor shall provide adequate fire protection where heating is in progress and such protection shall be accessible at all times. The Contractor shall maintain labor to keep the heating equipment in continuous operation.

At the close of the heating period, the temperature shall be decreased to the approximate temperature of the outside air at a rate not to exceed 15 °F (8 °C) per 12 hour period, after which the housing maybe removed. The surface of the concrete shall be permitted to dry during the cooling period.

(3) Protection Method III. As soon as the surface is sufficiently set to prevent marring, the concrete shall be covered with 12 in. (300 mm) of loose, dry straw followed by a layer of impermeable covering. The edges of the covering shall be sealed to prevent circulation of air and prevent the cover from flapping or blowing. The protection shall remain in place until the concrete is seven days old. If construction operations require removal, the protection removed shall be replaced immediately after completion or suspension of such operations.

1020.14 Temperature Control for Placement. Temperature control for concrete placement shall be according to the following.

(a) Concrete other than Structures. Concrete may be placed when the air temperature is above 35 °F (2 °C) and rising, and concrete placement shall stop when the falling temperature reaches 40 °F (4 °C) or below, unless otherwise approved by the Engineer.

The temperature of concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C). If concrete is pumped, the temperature of the concrete at point of placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C). A maximum concrete temperature shall not apply to Class PP concrete.

(b) Concrete in Structures. Concrete may be placed when the air temperature is above 40 °F (4 °C) and rising, and concrete placement shall stop when the falling temperature reaches 45 °F (7 °C) or below, unless otherwise approved by the Engineer.

The temperature of the concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C). If concrete is pumped, the temperature of the concrete at point of placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C).

When insulated forms are used according to Article 1020.13(d)(1), the maximum temperature of the concrete mixture immediately before placement shall be 80 °F (25 °C).

When concrete is placed in contact with previously placed concrete, the temperature of the freshly mixed concrete may be increased to 80 °F (25 °C) by the Contractor to offset anticipated heat loss.

(c) All Classes of Concrete. Aggregates and water shall be heated or cooled uniformly and as necessary to produce concrete within the specified temperature limits. No frozen aggregates shall be used in the concrete.

(d) Temperature. The concrete temperature shall be determined according to Illinois Modified AASHTO T 309.

1020.15 Heat of Hydration Control for Concrete Structures. The Contractor shall control the heat of hydration for concrete structures when the least dimension for a drilled shaft, foundation, footing, substructure, or superstructure concrete pour exceeds 5.0 ft (1.5 m). The work shall be according to the following.

(a) Temperature Restrictions. The maximum temperature of the concrete after placement shall not exceed 150 °F (66 °C). The maximum temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface shall not exceed 35 °F (19 °C). The Contractor shall perform temperature monitoring to ensure compliance with the temperature restrictions.

(b) Thermal Control Plan. The Contractor shall provide a thermal control plan a minimum of 28 calendar days prior to concrete placement for review by the Engineer. Acceptance of the thermal control plan by the Engineer shall not preclude the Contractor from specification compliance, and from preventing cracks in the concrete. At a minimum, the thermal control plan shall provide detailed information on the following requested items and shall comply with the specific specifications indicated for each item.

(1) Concrete mix design(s) to be used. Grout mix design if post-cooling with embedded pipe.

The mix design requirements in Articles 1020.04 and 1020.05 shall be revised to include the following additional requirements to control the heat of hydration.

a. The concrete mixture should be uniformly graded and preference for larger size aggregate should be used in the mix design. Article 1004.02(d)(2) shall apply and information in the "Portland Cement Concrete Level III Technician Course – Manual of Instructions for Design of Concrete Mixtures" may be used to develop the uniformly graded mixture.

b. The following shall apply to all concrete except Class DS concrete or when self-consolidating concrete is desired. For central-mixed concrete, the Contractor shall have the option to develop a mixture with a minimum of 520 lbs/cu yd (309 kg/cu m) of cement and finely divided minerals summed together. For truck-mixed or shrink-mixed concrete, the Contractor shall have the option to develop a mixture with a minimum of 550 lbs/cu yd (326 kg/cu m) of cement and finely divided minerals summed together. A water-reducing or high range water-reducing admixture shall be used in the central mixed, truck-mixed or shrink-

mixed concrete mixture. For any mixture to be placed underwater, the minimum cement and finely divided minerals shall be 550 lbs/cu yd (326 kg/cu m) for central-mixed concrete, and 580 lbs/cu yd (344 kg/cu m) for truck-mixed or shrink-mixed concrete.

For Class DS concrete, CA 11 may be used. If CA 11 is used, the Contractor shall have the option to develop a mixture with a minimum cement and finely divided minerals of 605 lbs/cu yd (360 kg/cu m) summed together. If CA 11 is used and either Class DS concrete is placed underwater or a self-consolidating concrete mixture is desired, the Contractor shall have the option to develop a mixture with a minimum cement and finely divided minerals of 635 lbs/cu yd (378 kg/cu m) summed together.

c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161 Procedure A or B, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer.

d. The maximum cement replacement with fly ash shall be 40.0 percent. The maximum cement replacement with ground granulated blast-furnace slag shall be 65.0 percent. When cement replacement with ground granulated blast-furnace slag exceeds 35.0 percent, only Grade 100 shall be used.

e. The mixture may contain a maximum of two finely divided minerals. The finely divided mineral in portland-pozzolan cement or portland blast-furnace slag cement shall count toward the total number of finely divided minerals allowed. The finely divided minerals shall constitute a maximum of 65.0 percent of the total cement plus finely divided minerals. The fly ash portion shall not exceed 40.0 percent. The ground granulated blast-furnace slag portion shall not exceed 65.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed 5.0 percent.

f. The time to obtain the specified strength may be increased to a maximum 56 days, provided the curing period specified in Article 1020.13 is increased to a minimum of 14 days.

The minimum grout strength for filling embedded pipe shall be as specified for the concrete, and testing shall be according to AASHTO T 106.

(2) The selected mathematical method for evaluating heat of hydration thermal effects, which shall include the calculated adiabatic temperature rise, calculated maximum concrete temperature, and calculated maximum temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface. The time when the maximum concrete temperature and maximum temperature differential will occur is required.

Acceptable mathematical methods include ACI 207.2R "Report on Thermal and Volume Change Effects on Cracking of Mass Concrete" as well as other proprietary methods. The Contractor shall perform heat of hydration testing on the cement and finely divided minerals to be used in the concrete mixture. The test shall be according to ASTM C 186 or other applicable test methods, and the result for heat shall be used in the equation to calculate adiabatic temperature rise. Other required test parameters for the mathematical model may be assumed if appropriate.

The Contractor has the option to propose a higher maximum temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface, but the proposed value shall not exceed 50 °F (28 °C). In addition, based on strength gain of the concrete, multiple maximum temperature differentials at different times may be proposed. The proposed value shall be justified through a mathematical method.

(3) Proposed maximum concrete temperature or temperature range prior to placement.

Article 1020.14 shall apply except a minimum 40 °F (4 °C) concrete temperature will be permitted.

(4) Pre-cooling, post-cooling, and surface insulation methods that will be used to ensure the concrete will comply with the specified maximum temperature and specified or proposed temperature differential. For reinforcement that extends beyond the limits of the pour, the Contractor shall indicate if the reinforcement is required to be covered with insulation.

Refer to ACI 207.4R "Cooling and Insulating Systems for Mass Concrete" for acceptable methods that will be permitted. If embedded pipe is used for post-cooling, the material shall be polyvinyl chloride or polyethylene. The embedded pipe system shall be properly supported, and the Contractor shall subsequently inspect glued joints to ensure they are able to withstand free falling concrete. The embedded pipe system shall be leak tested after inspection of the glued joints, and prior to the concrete placement. The leak test shall be performed at maximum service pressure or higher for a minimum of 15 minutes. All leaks shall be repaired. The embedded pipe cooling water may be from natural sources such as streams and rivers, but shall be filtered to prevent system stoppages. When the embedded pipe is no longer needed, the surface connections to the pipe shall be removed to a depth of 4 in. (100 mm) below the surface of the concrete. The remaining pipe shall be

completely filled with grout. The 4 in. (100 mm) deep concrete hole shall be filled with nonshrink grout. Form and insulation removal shall be done in a manner to prevent cracking and ensure the maximum temperature differential is maintained. Insulation shall be in good condition as determined by the Engineer and properly attached.

(5) Dimensions of each concrete pour, location of construction joints, placement operations, pour pattern, lift heights, and time delays between lifts.

Refer to ACI 207.1R "Guide to Mass Concrete" for acceptable placement operations that will be permitted.

(6) Type of temperature monitoring system, the number of temperature sensors, and location of sensors.

A minimum of two independent temperature monitoring systems and corresponding sensors shall be used.

The temperature monitoring system shall have a minimum temperature range of 32 °F (0 °C) to 212 °F (100 °C), an accuracy of ± 2 °F (± 1 °C), and be able to automatically record temperatures without external power. Temperature monitoring shall begin once the sensor is encased in concrete, and with a maximum interval of one hour. Temperature monitoring may be discontinued after the maximum concrete temperature has been reached, post-cooling is no longer required, and the maximum temperature differential between the internal concrete core and the ambient air temperature does not exceed 35 °F (19 °C). The Contractor has the option to select a higher maximum temperature differential, but the proposed value shall not exceed 50 °F (28 °C). The proposed value shall be justified through a mathematical method.

At a minimum, a temperature sensor shall be located at the theoretical hottest portion of the concrete, normally the geometric center, and at the exterior face that will provide the maximum temperature differential. At the exterior face, the sensor shall be located 2 to 3 in. (50 to 75 mm) from the surface of the concrete. Sensors shall also be located a minimum of 1 in. (25 mm) away from reinforcement, and equidistant between cooling pipes if either applies. A sensor will also be required to measure ambient air temperature. The entrant/exit cooling water temperature for embedded pipe shall also be monitored.

Temperature monitoring results shall be provided to the Engineer a minimum of once each day and whenever requested by the Engineer. The report may be electronic or hard copy. The report shall indicate the location of each sensor, the temperature recorded, and the time recorded. The report shall be for all sensors and shall include ambient air temperature and entrant/exit cooling water temperatures. The temperature data in the report may be provided in tabular or graphical format, and the report shall indicate any corrective actions during the monitoring period. At the

completion of the monitoring period, the Contractor shall provide the Engineer a final report that includes all temperature data and corrective actions.

(7) Indicate contingency operations to be used if the maximum temperature or temperature differential of the concrete is reached after placement.

(c) Temperature Restriction Violations. If the maximum temperature of the concrete after placement exceeds 150 °F (66 °C), but is equal to or less than 158 °F (70 °C), the concrete will be accepted if no cracking or other unacceptable defects are identified. If cracking or unacceptable defects are identified, Article 105.03 shall apply. If the concrete temperature exceeds 158 °F (70 °C), Article 105.03 shall apply.

If a temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface exceeds the specified or proposed maximum value allowed, the concrete will be accepted if no cracking or other unacceptable defects are identified. If unacceptable defects are identified, Article 105.03 shall apply.

When the maximum 150 °F (66 °C) concrete temperature or the maximum allowed temperature differential is violated, the Contractor shall implement corrective action prior to the next pour. In addition, the Engineer reserves the right to request a new thermal control plan for acceptance before the Contractor is allowed to pour again.

(d) Inspection and Repair of Cracks. The Engineer will inspect the concrete for cracks after the temperature monitoring is discontinued, and the Contractor shall provide access for the Engineer to do the inspection. A crack may require repair by the Contractor as determined by the Engineer. The Contractor shall be responsible for the repair of all cracks. Protective coat or a concrete sealer shall be applied to a crack less than 0.007 in. (0.18 mm) in width. A crack that is 0.007 in. (0.18 mm) or greater shall be pressure injected with epoxy according to Section 590.

QUALITY CONTROL/QUALITY ASSURANCE OF CONCRETE MIXTURES (BDE)

Effective: January 1, 2012
Revised: January 1, 2013

Add the following to Section 1020 of the Standard Specifications:

"**1020.16 Quality Control/Quality Assurance of Concrete Mixtures**. This Article specifies the quality control responsibilities of the Contractor for concrete mixtures (except Class PC and PS concrete), cement aggregate mixture II, and controlled low-strength material incorporated in the project, and defines the quality assurance and acceptance responsibilities of the Engineer.

A list of quality control/quality assurance (QC/QA) documents is provided in Article 1020.16(g), Schedule D.

A Level I Portland Cement Concrete (PCC) Technician shall be defined as an individual who has successfully completed the Department's training for concrete testing.

A Level II Portland Cement Concrete (PCC) Technician shall be defined as an individual who has successfully completed the Department's training for concrete proportioning.

A Level III Portland Cement Concrete (PCC) Technician shall be defined as an individual who has successfully completed the Department's training for concrete mix design.

A Concrete Tester shall be defined as an individual who has successfully completed the Department's training to assist with concrete testing and is monitored on a daily basis.

Aggregate Technician shall be defined as an individual who has successfully completed the Department's training for gradation testing involving aggregate production and mixtures.

Mixture Aggregate Technician shall be defined as an individual who has successfully completed the Department's training for gradation testing involving mixtures.

Gradation Technician shall be defined as an individual who has successfully completed the Department's training to assist with gradation testing and is monitored on a daily basis.

(a) Equipment/Laboratory. The Contractor shall provide a laboratory and test equipment to perform their quality control testing.

The laboratory shall be of sufficient size and be furnished with the necessary equipment, supplies, and current published test methods for adequately and safely performing all required tests. The laboratory will be approved by the Engineer according to the current Bureau of Materials and Physical Research Policy Memorandum "Minimum Private Laboratory Requirements for Construction Materials Testing or Mix Design". Production of a mixture shall not begin until the Engineer provides written approval of the laboratory.

The Contractor shall refer to the Department's "Required Sampling and Testing Equipment for Concrete" for equipment requirements.

Test equipment shall be maintained and calibrated as required by the appropriate test method, and when required by the Engineer. This information shall be documented on the Department's "Calibration of Concrete Testing Equipment" form.

Test equipment used to determine compressive or flexural strength shall be calibrated each 12 month period by an independent agency, using calibration equipment traceable to the National Institute of Standards and Technology (NIST). The Contractor shall have the calibration documentation available at the test equipment location.

The Engineer will have unrestricted access to the plant and laboratory at any time to inspect measuring and testing equipment, and will notify the Contractor of any deficiencies. Defective equipment shall be immediately repaired or replaced by the Contractor.

(b) Quality Control Plan. The Contractor shall submit, in writing, a proposed Quality Control (QC) Plan to the Engineer. The QC Plan shall be submitted a minimum of 45 calendar days prior to the production of a mixture. The QC Plan shall address the quality control of the concrete, cement aggregate mixture II, and controlled low-strength material incorporated in the project. The Contractor shall refer to the Department's "Model Quality Control Plan for Concrete Production" to prepare a QC Plan. The Engineer will respond in writing to the Contractor’s proposed QC Plan within 15 calendar days of receipt.

Production of a mixture shall not begin until the Engineer provides written approval of the QC Plan. The approved QC Plan shall become a part of the contract between the Department and the Contractor, but shall not be construed as acceptance of any mixture produced.

The QC Plan may be amended during the progress of the work, by either party, subject to mutual agreement. The Engineer will respond in writing to a Contractor’s proposed QC Plan amendment within 15 calendar days of receipt. The response will indicate the approval or denial of the Contractor's proposed QC Plan amendment.

(c) Quality Control by Contractor. The Contractor shall perform quality control inspection, sampling, testing, and documentation to meet contract requirements. Quality control includes the recognition of obvious defects and their immediate correction. Quality control also includes appropriate action when passing test results are near specification limits, or to resolve test result differences with the Engineer. Quality control may require increased testing, communication of test results to the plant or the jobsite, modification of operations, suspension of mixture production, rejection of material, or other actions as appropriate. The Engineer shall be immediately notified of any failing tests and subsequent remedial action. Passing tests shall be reported no later than the start of the next work day.

When a mixture does not comply with specifications, the Contractor shall reject the material; unless the Engineer accepts the material for incorporation in the work, according to Article 105.03.

(1) Personnel Requirements. The Contractor shall provide a Quality Control (QC) Manager who will have overall responsibility and authority for quality control. The jobsite and plant personnel shall be able to contact the QC Manager by cellular phone, two-way radio or other methods approved by the Engineer.

The QC Manager shall visit the jobsite a minimum of once a week. A visit shall be performed the day of a bridge deck pour, the day a non-routine mixture is placed as determined by the Engineer, or the day a plant is anticipated to produce more than 1000 cu yd (765 cu m). Any of the three required visits may be used to meet the once per week minimum requirement.

The Contractor shall provide personnel to perform the required inspections, sampling, testing and documentation in a timely manner. The Contractor shall refer to the Department's "Qualifications and Duties of Concrete Quality Control Personnel" document.

A Level I PCC Technician shall be provided at the jobsite during mixture production and placement, and may supervise concurrent pours on the project. For concurrent pours, a minimum of one Concrete Tester shall be required at each pour location. If the Level I PCC Technician is at one of the pour locations, a Concrete Tester is still required at the same location. Each Concrete Tester shall be able to contact the Level I PCC Technician by cellular phone, two-way radio or other methods approved by the Engineer. A single Level I PCC Technician shall not supervise concurrent pours for multiple contracts.

A Level II PCC Technician shall be provided at the plant, or shall be available, during mixture production and placement. A Level II PCC Technician may supervise a maximum of three plants. Whenever the Level II PCC Technician is not at the plant during mixture production and placement, a Concrete Tester or Level I PCC Technician shall be present at the plant to perform any necessary concrete tests. The Concrete Tester, Level I PCC Technician, or other individual shall also be trained to perform any necessary aggregate moisture tests, if the Level II PCC Technician is not at the plant during mixture production and placement. The Concrete Tester, Level I PCC Technician, plant personnel, and jobsite personnel shall have the ability to contact the Level II PCC Technician by cellular phone, two-way radio, or other methods approved by the Engineer.

For a mixture which is produced and placed with a mobile portland cement concrete plant as defined in Article 1103.04, a Level II PCC Technician shall be provided. The Level II PCC Technician shall be present at all times during mixture production and placement. However, the Level II PCC Technician may request to be available if

operations are satisfactory. Approval shall be obtained from the Engineer, and jobsite personnel shall have the ability to contact the Level II PCC Technician by cellular phone, two-way radio, or other methods approved by the Engineer.

A Concrete Tester, Mixture Aggregate Technician, and Aggregate Technician may provide assistance with sampling and testing. A Gradation Technician may provide assistance with testing. A Concrete Tester shall be supervised by a Level I or Level II PCC Technician. A Gradation Technician shall be supervised by a Level II PCC Technician, Mixture Aggregate Technician, or Aggregate Technician.

(2) Required Plant Tests. Sampling and testing shall be performed at the plant, or at a location approved by the Engineer, to control the production of a mixture. The required minimum Contractor plant sampling and testing is indicated in Article 1020.16(g) Schedule A.

(3) Required Field Tests. Sampling and testing shall be performed at the jobsite to control the production of a mixture, and to comply with specifications for placement. For standard curing, after initial curing, and for strength testing; the location shall be approved by the Engineer. The required minimum Contractor jobsite sampling and testing is indicated in Article 1020.16(g), Schedule B.

(d) Quality Assurance by Engineer. The Engineer will perform quality assurance tests on independent samples and split samples. An independent sample is a field sample obtained and tested by only one party. A split sample is one of two equal portions of a field sample, where two parties each receive one portion for testing. The Engineer may request the Contractor to obtain a split sample. Aggregate split samples and any failing strength specimen shall be retained until permission is given by the Engineer for disposal. The results of all quality assurance tests by the Engineer will be made available to the Contractor. However, Contractor split sample test results shall be provided to the Engineer before Department test results are revealed. The Engineer's quality assurance independent sample and split sample testing is indicated in Article 1020.16(g), Schedule C.

(1) Strength Testing. For strength testing, Article 1020.09 shall apply, except the Contractor and Engineer strength specimens may be placed in the same field curing box for initial curing and may be cured in the same water storage tank for final curing.

(2) Comparing Test Results. Differences between the Engineer's and the Contractor's split sample test results will be considered reasonable if within the following limits:

Test Parameter	Acceptable Limits of Precision
Slump	0.75 in. (20 mm)
Air Content	0.9%
Compressive Strength	900 psi (6200 kPa)

Flexural Strength	90 psi (620 kPa)
Slump Flow (Self-Consolidating Concrete (SCC))	1.5 in. (40 mm)
Visual Stability Index (SCC)	Not Applicable
J-Ring (SCC)	1.5 in. (40 mm)
L-Box (SCC)	10 %
Hardened Visual Stability Index (SCC)	Not Applicable
Dynamic Segregation Index (SCC)	1.0 %
Flow (Controlled Low-Strength Material (CLSM))	1.5 in. (40 mm)
Strength (Controlled Low-Strength Material (CLSM))	40 psi (275 kPa)
Aggregate Gradation	See "Guideline for Sample Comparison" in Appendix "A" of the Manual of Test Procedures for Materials.

When acceptable limits of precision have been met, but only one party is within specification limits, the failing test shall be resolved before the material may be considered for acceptance.

(3)Test Results and Specification Limits.

a. Split Sample Testing. If either the Engineer's or the Contractor's split sample test result is not within specification limits, and the other party is within specification limits; immediate retests on a split sample shall be performed for slump, air content, slump flow, visual stability index, J-Ring, L-Box, dynamic segregation index, flow (CLSM), or aggregate gradation. A passing retest result by each party will require no further action. If either the Engineer's or Contractor's slump, air content, slump flow, visual stability index, J-Ring, L-Box, dynamic segregation index, flow (CLSM), or aggregate gradation split sample retest result is a failure; or if either the Engineer's or Contractor's strength or hardened visual stability index test result is a failure, and the other party is within specification limits; the following actions shall be initiated to investigate the test failure:

1. The Engineer and the Contractor shall investigate the sampling method, test procedure, equipment condition, equipment calibration, and other factors.

2. The Engineer or the Contractor shall replace test equipment, as determined by the Engineer.

3. The Engineer and the Contractor shall perform additional testing on split samples, as determined by the Engineer.

For aggregate gradation, jobsite slump, jobsite air content, jobsite slump flow, jobsite visual stability index, jobsite J-Ring, jobsite L-Box, jobsite dynamic segregation index, and jobsite flow (CLSM); if the failing split sample test result is not resolved according to 1., 2., or 3., and the mixture has not been placed, the Contractor shall reject the material; unless the Engineer accepts the material for

incorporation in the work according to Article 105.03. If the mixture has already been placed, or if a failing strength or hardened visual stability index test result is not resolved according to 1., 2., or 3., the material will be considered unacceptable.

If a continued trend of difference exists between the Engineer's and the Contractor's split sample test results, or if split sample test results exceed the acceptable limits of precision, the Engineer and the Contractor shall investigate according to items 1., 2., and 3.

b. Independent Sample Testing. For aggregate gradation, jobsite slump, jobsite air content jobsite slump flow, jobsite visual stability index, jobsite J-Ring, jobsite L-Box, jobsite dynamic segregation index, jobsite flow (CLSM); if the result of a quality assurance test on a sample independently obtained by the Engineer is not within specification limits, and the mixture has not been placed, the Contractor shall reject the material, unless the Engineer accepts the material for incorporation in the work according to Article 105.03. If the mixture has already been placed or the Engineer obtains a failing strength or hardened visual stability index test result, the material will be considered unacceptable.

(e) Acceptance by the Engineer. Final acceptance will be based on the Standard Specifications and the following:

(1) The Contractor's compliance with all contract documents for quality control.

(2) Validation of Contractor quality control test results by comparison with the Engineer's quality assurance test results using split samples. Any quality control or quality assurance test determined to be flawed may be declared invalid only when reviewed and approved by the Engineer. The Engineer will declare a test result invalid only if it is proven that improper sampling or testing occurred. The test result is to be recorded and the reason for declaring the test invalid will be provided by the Engineer.

(3) Comparison of the Engineer's quality assurance test results with specification limits using samples independently obtained by the Engineer.

The Engineer may suspend mixture production, reject materials, or take other appropriate action if the Contractor does not control the quality of concrete, cement aggregate mixture II, or controlled low-strength material for acceptance. The decision will be determined according to (1), (2), or (3).

(f) Documentation.

(1) Records. The Contractor shall be responsible for documenting all observations, inspections, adjustments to the mix design, test results, retest results, and corrective actions in a bound hardback field book, bound hardback diary, or appropriate

Department form, which shall become the property of the Department. The documentation shall include a method to compare the Engineer's test results with the Contractor's results. The Contractor shall be responsible for the maintenance of all permanent records whether obtained by the Contractor, the consultants, the subcontractors, or the producer of the mixture. The Contractor shall provide the Engineer full access to all documentation throughout the progress of the work.

The Department's form MI 504M, form BMPR MI654, and form BMPR MI655 shall be completed by the Contractor, and shall be submitted to the Engineer weekly or as required by the Engineer. A correctly completed form MI 504M, form BMPR MI654, and form BMPR MI655 are required to authorize payment by the Engineer, for applicable pay items.

(2) Delivery Truck Ticket. The following information shall be recorded on each delivery ticket or in a bound hardback field book: initial revolution counter reading (final reading optional) at the jobsite, if the mixture is truck-mixed; time discharged at the jobsite; total amount of each admixture added at the jobsite; and total amount of water added at the jobsite.

(g) ~~Basis of Payment and Schedules. Quality Control/Quality Assurance of portland cement concrete mixtures will not be paid for separately, but shall be considered as included in the cost of the various concrete contract items.~~

SCHEDULE A

CONTRACTOR PLANT SAMPLING AND TESTING			
Item	Test	Frequency	IL Modified AASHTO or Department Test Method [1/]
Aggregates (Arriving at Plant)	Gradation [2/]	As needed to check source for each gradation number	2, 11, 27, and 248
Aggregates (Stored at Plant in Stockpiles or Bins)	Gradation [2/]	2,500 cu yd (1,900 cu m) for each gradation number [3/]	2, 11, 27, and 248
Aggregates (Stored at Plant in Stockpiles or Bins)	Moisture [4/]: Fine Aggregate	Once per week for moisture sensor, otherwise daily for each gradation number	Flask, Dunagan, Pychnometer Jar, or 255
	Moisture [4/]: Coarse Aggregate	As needed to control production for each gradation number	Dunagan, Pychnometer Jar, or 255
Mixture [5/]	Slump Air Content Unit Weight / Yield Slump Flow (SCC) Visual Stability Index (SCC) J-Ring (SCC) [6/] L-Box (SCC) [6/] Temperature	As needed to control production	T 141 and T 119 T 141 and T 152 or T 196 T 141 and T 121 SCC-1 and SCC-2 SCC-1 and SCC-2 SCC-1 and SCC-3 SCC-1 and SCC-4 T 141 and T 309
Mixture (CLSM) [7/]	Flow Air Content Temperature	As needed to control production	Illinois Test Procedure 307

1/ Refer to the Department's "Manual of Test Procedures for Materials".

2/ All gradation tests shall be washed. Testing shall be completed no later than 24 hours after the aggregate has been sampled.

3/ One per week (Sunday through Saturday) minimum unless the stockpile has not received additional aggregate material since the previous test.

One per day minimum for a bridge deck pour unless the stockpile has not received additional aggregate material since the previous test. The sample shall be taken and testing completed prior to the pour. The bridge deck aggregate sample may be taken the day before the pour or as approved by the Engineer.

4/ If the moisture test and moisture sensor disagree by more than 0.5 percent, retest. If the difference remains, adjust the moisture sensor to an average of two or more moisture tests. The Department's "Water/Cement Ratio Worksheet" form shall be completed when applicable.

5/ The Contractor may also perform strength testing according to Illinois Modified AASHTO T 141, T 23, and T 22 or T 177; or water content testing according to Illinois Modified AASHTO T 318.

The Contractor may also perform other available self-consolidating concrete (SCC) tests at the plant to control mixture production.

6/ The Contractor shall select the J-Ring or L-Box test for plant sampling and testing.

7/ The Contractor may also perform strength testing according to Illinois Test Procedure 307.

SCHEDULE B

CONTRACTOR JOBSITE SAMPLING & TESTING [1/]			
Item	Measured Property	Random Sample Testing Frequency per Mix Design and per Plant [2/]	IL Modified AASHTO Test Method
Pavement, Shoulder, Base Course, Base Course Widening, Driveway Pavement, Railroad Crossing, Cement Aggregate Mixture II	Slump [3/ 4/]	1 per 500 cu yd (400 cu m) or minimum 1/day	T 141 and T 119
	Air Content [3/ 5/ 6/]	1 per 100 cu yd (80 cu m) or minimum 1/day	T 141 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 1250 cu yd (1000 cu m) or minimum 1/day	T 141, T 22 and T 23 or T 141, T 177 and T 23
Bridge Approach Slab [9/], Bridge Deck [9/], Bridge Deck Overlay [9/], Superstructure [9/], Substructure, Culvert, Miscellaneous Drainage Structures, Retaining Wall, Building Wall, Drilled Shaft Pile & Encasement Footing, Foundation, Pavement Patching, Structural Repairs	Slump [3/ 4/]	1 per 50 cu yd (40 cu m) or minimum 1/day	T 141 and T 119
	Air Content [3/ 5/ 6/]	1 per 50 cu yd (40 cu m) or minimum 1/day	T 141 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 250 cu yd (200 cu m) or minimum 1/day	T 141, T 22 and T 23 or T 141, T 177 and T 23
Seal Coat	Slump [3/]	1 per 250 cu yd (200 cu m) or minimum 1/day	T 141 and T 119
	Air Content [3/ 5/ 6/]	1 per 250 cu yd (200 cu m) or minimum 1/day when air is entrained	T 141 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 250 cu yd (200 cu m) or minimum 1/day	T 141, T 22 and T 23 or T 141, T 177 and T 23

CONTRACTOR JOBSITE SAMPLING & TESTING [1/]			
Curb, Gutter, Median, Barrier, Sidewalk, Slope Wall, Paved Ditch, Fabric Formed Concrete Revetment Mat [10/], Miscellaneous Items, Incidental Items	Slump [3/ 4/]	1 per 100 cu yd (80 cu m) or minimum 1/day	T 141 and T 119
	Air Content [3/ 5/ 6/]	1 per 50 cu yd (40 cu m) or minimum 1/day	T 141 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 400 cu yd (300 cu m) or minimum 1/day	T 141, T 22 and T 23 or T 141, T 177 and T 23
The Item will use a Self-Consolidating Concrete Mixture	Slump Flow [3/] VSI [3/] J-Ring [3/ 11/] L-Box [3/ 11/]	Perform at same frequency that is specified for the Item's slump	SCC-1 & SCC-2 SCC-1 & SCC-2 SCC-1 & SCC-3 SCC-1 & SCC-4
The Item will use a Self-Consolidating Concrete Mixture	HVSI [12/]	Minimum 1/day at start of production for that day	SCC-1 and SCC-6
The Item will use a Self-Consolidating Concrete Mixture	Dynamic Segregation Index (DSI)	Minimum 1/week at start of production for that week	SCC-1 and SCC-8 (Option C)
The Item will use a Self-Consolidating Concrete Mixture	Air Content [3/ 5/ 6/]	Perform at same frequency that is specified for the Item's air content	SCC-1 and T 152 or T 196
The Item will use a Self-Consolidating Concrete Mixture	Compressive Strength 7/ 8/ or Flexural Strength [7/ 8/]	Perform at same frequency that is specified for the Item's strength	SCC-1, T 22 and T 23 or SCC-1, T 177 and T 23
All	Temperature [3/]	As needed to control production	T 141 and T 309
Controlled Low-Strength Material (CLSM)	Flow, Air Content, Compressive Strength (28-day) [13/], and Temperature	First truck load delivered and as needed to control production thereafter	Illinois Test Procedure 307

1/ Sampling and testing of small quantities of curb, gutter, median, barrier, sidewalk, slope wall, paved ditch, miscellaneous items, and incidental items may be waived by the Engineer if requested by the Contractor. However, quality control personnel are still required according to Article 1020.16(c)(1) The Contractor shall also provide recent evidence that similar material has been found to be satisfactory under normal sampling and testing procedures. The total quantity that may be waived for testing shall not exceed 100 cu yd (76 cu m) per contract.

If the Contractor's or Engineer's test result for any jobsite mixture test is not within the specification limits, all subsequent truck loads delivered shall be tested by the Contractor until the problem is corrected.

2/ If one mix design is being used for several construction items during a day's production, one testing frequency may be selected to include all items. The construction items shall have the same slump, air content, and water/cement ratio specifications. For self-consolidating concrete, the construction items shall have the same slump flow, visual stability index, J-Ring, L-Box, air content, and water/cement ratio specifications. The frequency selected shall equal or exceed the testing required for the construction item.

One sufficiently sized sample shall be taken to perform the required test(s). Random numbers shall be determined according to the Department's "Method for Obtaining Random Samples for Concrete". The Engineer will provide random sample locations.

3/ The temperature, slump, and air content tests shall be performed on the first truck load delivered, for each pour. For self consolidating concrete, the temperature, slump flow, visual stability index, J-Ring or L-Box, and air content tests shall be performed on the first truck load delivered, for each pour. Unless a random sample is required for the first truck load, testing the first truck load does not satisfy random sampling requirements.

4/ The slump random sample testing frequency shall be a minimum 1/day for a construction item which is slipformed.

5/ If a pump or conveyor is used for placement, a correction factor shall be established to allow for a loss of air content during transport. The first three truck loads delivered shall be tested, before and after transport by the pump or conveyor, to establish the correction factor. Once the correction is determined, it shall be re-checked after an additional 50 cu yd (40 cu m) is pumped, or an additional 100 cu yd (80 cu m) is conveyored. This shall continue throughout the pour. If the re-check indicates the correction factor has changed, a minimum of two truckloads is required to re-establish the correction factor. The correction factor shall also be re-established when significant changes in temperature, distance, pump or conveyor arrangement, and other factors have occurred. If the correction factor is >3.0 percent, the Contractor shall take corrective action to reduce the loss of air content during transport by the pump or conveyor. The Contractor shall record all air content test results, correction factors and corrected air contents. The corrected air content shall be reported on form BMPR MI654.

6/ If the Contractor's or Engineer's air content test result is within the specification limits, and 0.2 percent or closer to either limit, the next truck load delivered shall be tested by the Contractor. For example, if the specified air content range is 5.0 to 8.0 percent and the test result is 5.0, 5.1, 5.2, 7.8, 7.9 or 8.0 percent, the next truck shall be tested by the Contractor.

7/ The test of record for strength shall be the day indicated in Article 1020.04. For cement aggregate mixture II, a strength requirement is not specified and testing is not required. Additional strength testing to determine early falsework and form removal, early pavement or bridge opening to traffic, or to monitor strengths is at the discretion of the Contractor. Strength shall be defined as the average of at least two cylinder or two beam breaks for field tests.

8/ In addition to the strength test, a slump test, air content test, and temperature test shall be performed on the same sample. For self-consolidating concrete, a slump flow test, visual stability index test, J-Ring or L-Box test, air content test, and temperature test shall be performed on the same sample as the strength test. For mixtures pumped or conveyored, the Contractor shall sample according to Illinois Modified AASHTO T 141.

9/ The air content test will be required for each delivered truck load.

10/ For fabric formed concrete revetment mat, the slump test is not required and the flexural strength test is not applicable.

11/ The Contractor shall select the J-Ring or L-Box test for jobsite sampling and testing.

12/ In addition to the hardened visual stability index (HVSI) test, a slump flow test, visual stability index (VSI) test, J-Ring or L-Box test, air content test, and temperature test shall be performed on the same sample. The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

13/ The test of record for strength shall be the day indicated in Article 1019.04. In addition to the strength test, a flow test, air content test, and temperature test shall be performed on the same sample. The strength test may be waived by the Engineer if future removal of the material is not a concern.

SCHEDULE C

ENGINEER QUALITY ASSURANCE INDEPENDENT SAMPLE TESTING		
Location	Measured Property	Testing Frequency [1/]
Plant	Gradation of aggregates stored in stockpiles or bins, Slump and Air Content	As determined by the Engineer.
Jobsite	Slump, Air Content, Slump Flow, Visual Stability Index, J-Ring, L-Box, Hardened Visual Stability Index, Dynamic Segregation Index and Strength	As determined by the Engineer.
	Flow, Air Content, Strength (28-day), and Dynamic Cone Penetration for Controlled Low-Strength Material (CLSM)	As determined by the Engineer

ENGINEER QUALITY ASSURANCE SPLIT SAMPLE TESTING		
Location	Measured Property	Testing Frequency [1/]
Plant	Gradation of aggregates stored in stockpiles or bins [2/]	At the beginning of the project, the first test performed by the Contractor. Thereafter, a minimum of 10% of total tests required of the Contractor will be performed per aggregate gradation number and per plant.
	Slump and Air Content	As determined by the Engineer.
Jobsite	Slump [2/], Air Content [2/ 3/], Slump Flow [2/], Visual Stability Index [2/], J-Ring [2/] and L-box [2/]	At the beginning of the project, the first three tests performed by the Contractor. Thereafter, a minimum of 20% of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design.
	Hardened Visual Stability Index [2/]	As determined by the Engineer.
	Dynamic Segregation Index [2/]	As determined by the Engineer.
	Strength [2/]	At the beginning of the project, the first test performed by the Contractor. Thereafter, a minimum of 20% of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design.
	Flow, Air Content, and Strength (28-day) for Controlled Low-Strength Material (CLSM)	As determined by the Engineer.

1/ The Engineer will perform the testing throughout the period of quality control testing by the Contractor.

2/ The Engineer will witness and take immediate possession of or otherwise secure the Department's split sample obtained by the Contractor.

3/ Before transport by pump or conveyor, a minimum of 20 percent of total tests required of the Contractor will be performed per mix design and per plant. After transport by pump or conveyor, a minimum of 20 percent of total tests required of the Contractor will be performed per mix design and per plant.

SCHEDULE D

CONCRETE QUALITY CONTROL AND QUALITY ASSURANCE DOCUMENTS

(a) Model Quality Control Plan for Concrete Production (*)

(b) Qualifications and Duties of Concrete Quality Control Personnel (*)

(c) Development of Gradation Bands on Incoming Aggregate at Mix Plants (*)

(d) Required Sampling and Testing Equipment for Concrete (*)

(e) Method for Obtaining Random Samples for Concrete (*)

(f) Calibration of Concrete Testing Equipment (BMPR PCCQ01 through BMPR PCCQ09) (*)

(g) Water/Cement Ratio Worksheet (BMPR PCCW01) (*)

(h) Field/Lab Gradations (MI 504M) (*)

(i) Concrete Air, Slump and Quantity (BMPR MI654) (*)

(j) P.C. Concrete Strengths (BMPR MI655) (*)

(k) Aggregate Technician Course or Mixture Aggregate Technician Course (*)

(l) Portland Cement Concrete Tester Course (*)

(m) Portland Cement Concrete Level I Technician Course - Manual of Instructions for Concrete Testing (*)

(n) Portland Cement Concrete Level II Technician Course - Manual of Instructions for Concrete Proportioning (*)

(o) Portland Cement Concrete Level III Technician Course - Manual of Instructions for Design of Concrete Mixtures (*)

(p) Manual of Test Procedures for Materials

* Refer to Appendix C of the Manual of Test Procedures for Materials for more information."

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2012
Revised: November 2, 2012

Revise Article 669.01 of the Standard Specifications to read:

"**669.01 Description.** This work shall consist of the transportation and proper disposal of contaminated soil and water. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their content and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities."

Revise Article 669.08 of the Standard Specifications to read:

"**669.08 Contaminated Soil and/or Groundwater Monitoring.** The Contractor shall hire a qualified environmental firm to monitor the area containing the regulated substances. The affected area shall be monitored with a photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID). Any field screen reading on the PID or FID in excess of background levels indicates the potential presence of contaminated material requiring handling as a non-special waste, special waste, or hazardous waste. No excavated soils can be taken to a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation with detectable PID or FID meter readings that are above background. The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily. All testing shall be done by a qualified engineer/technician. Such testing and monitoring shall be included in the work. The Contractor shall identify the exact limits of removal of non-special waste, special waste, or hazardous waste. All limits shall be approved by the Engineer prior to excavation. The Contractor shall take all necessary precautions.

Based upon the land use history of the subject property and/or PID or FID readings indicating contamination, a soil or groundwater sample shall be taken from the same location and submitted to an approved laboratory. Soil or groundwater samples shall be analyzed for the contaminants of concern, including pH, based on the property's land use history or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605. The analytical results shall serve to document the level of soil contamination. Soil and groundwater samples may be required at the discretion of the Engineer to verify the level of soil and groundwater contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with decontaminated or disposable instruments. The samples shall be placed in sealed containers and transported in an insulated container to the laboratory. The container shall maintain a temperature of 39 °F (4 °C). All samples shall be clearly labeled. The labels shall indicate the sample number, date sampled, location and elevation, and any other observations.

The laboratory shall use analytical methods which are able to meet the lowest appropriate practical quantitation limits (PQL) or estimated quantitation limit (EQL) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846 and "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039. For parameters where the specified cleanup objective is below the acceptable detection limit (ADL), the ADL shall serve as the cleanup objective. For other parameters the ADL shall be equal to or below the specified cleanup objective."

Replace the first two paragraphs of Article 669.09 of the Standard Specifications with the following:

"**669.09 Contaminated Soil and/or Groundwater Management and Disposal.** The management and disposal of contaminated soil and/or groundwater shall be according to the following:

(a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605, the soil shall be managed as follows:

(1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Engineer, the excavated soil can be utilized within the construction limits as fill, when suitable. Such soil excavated for storm sewers can be placed back into the excavated trench as backfill, when suitable, unless trench backfill is specified. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

(2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

(5) When the Engineer determines soil cannot be managed according to Articles 669.09(a)(1) through (a)(4) above, the soil shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

(b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC but the pH of the soil is less than 6.25 or greater than 9.0, the excavated soil can be utilized within the construction limits or managed and disposed of off-site as "uncontaminated soil" according to Article 202.03. However the excavated soil cannot be taken to a CCDD facility or an uncontaminated soil fill operation.

(c) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Illinois Administrative Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste.

All groundwater encountered within lateral trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench it must be removed as a special or hazardous waste. The Contractor is prohibited from managing groundwater within the trench by discharging it through any existing or new storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10^{-7} cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer."

Revise Article 669.14 of the Standard Specifications to read:

"**669.14 Final Environmental Construction Report.** At the end of the project, the Contractor will prepare and submit three copies of the Environmental Construction Report on the activities conducted during the life of the project, one copy shall be submitted to the Resident Engineer, one copy shall be submitted to the District's Environmental Studies Unit, and one copy shall be submitted with an electronic copy in Adode.pdf format to the Geologic

and Waste Assessment Unit, Bureau of Design and Environment, IDOT, 2300 South Dirksen Parkway, Springfield, Illinois 62764. The technical report shall include all pertinent information regarding the project including, but not limited to:

(a) Measures taken to identify, monitor, handle, and dispose of soil or groundwater containing regulated substances, to prevent further migration of regulated substances, and to protect workers,

(b) Cost of identifying, monitoring, handling, and disposing of soil or groundwater containing regulated substances, the cost of preventing further migration of regulated substances, and the cost for worker protection from the regulated substances. ~~All cost should be in the format of the contract pay items listed in the contract plans (identified by the preliminary environmental site investigation (PESA) site number),~~

(c) Plan sheets showing the areas containing the regulated substances,

(d) Field sampling and testing results used to identify the nature and extent of the regulated substances,

(e) Waste manifests (identified by the preliminary environmental site investigation (PESA) site number) for special or hazardous waste disposal, and

(f) Landfill tickets (identified by the preliminary environmental site investigation (PESA) site number) for non-special waste disposal."

~~Revise the second paragraph of Article 669.16 of the Standard Specifications to read~~:

~~"The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL."~~

80283

REMOVAL AND DISPOSAL OF SURPLUS MATERIALS (BDE)

Effective: November 2, 2012

Revise the first four paragraphs of Article 202.03 of the Standard Specifications to read:

"**202.03 Removal and Disposal of Surplus, Unstable, Unsuitable, and Organic Materials.** Suitable excavated materials shall not be wasted without permission of the Engineer. The Contractor shall dispose of all surplus, unstable, unsuitable, and organic materials, in such a manner that public or private property will not be damaged or endangered.

Suitable earth, stones and boulders naturally occurring within the right-of-way may be placed in fills or embankments in lifts and compacted according to Section 205. Broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities may be used in embankment or in fill. If used in fills or embankments, these materials shall be placed and compacted to the satisfaction of the Engineer; shall be buried under a minimum of 2 ft (600 mm) of earth cover (except when the materials include only uncontaminated dirt); and shall not create an unsightly appearance or detract from the natural topographic features of an area. Broken concrete without protruding metal bars, bricks, rock, or stone may be used as riprap as approved by the Engineer. If the materials are used for fill in locations within the right-of-way but outside project construction limits, the Contractor must specify to the Engineer, in writing, how the landscape restoration of the fill areas will be accomplished. Placement of fill in such areas shall not commence until the Contractor's landscape restoration plan is approved by the Engineer.

Aside from the materials listed above, all other construction and demolition debris or waste shall be disposed of in a licensed landfill, recycled, reused, or otherwise disposed of as allowed by State or Federal laws and regulations. When the Contractor chooses to dispose of uncontaminated soil at a clean construction and demolition debris (CCDD) facility or at an uncontaminated soil fill operation, it shall be the Contractor's responsibility to have the pH of the material tested to ensure the value is between 6.25 and 9.0, inclusive. A copy of the pH test results shall be provided to the Engineer.

A permit shall be obtained from IEPA and made available to the Engineer prior to open burning of organic materials (i.e., plant refuse resulting from pruning or removal of trees or shrubs) or other construction or demolition debris. Organic materials originating within the right-of-way limits may be chipped or shredded and placed as mulch around landscape plantings within the right-of-way when approved by the Engineer. Chipped or shredded material to be placed as mulch shall not exceed a depth of 6 in. (150 mm)."

80319

SYNTHETIC FIBERS IN CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)

Effective: November 1, 2012

Add the following to Article 606.02 of the Standard Specifications.

"(g) Grout 1024.01
(h) Synthetic Fibers (Note 1)

Note 1. Synthetic fibers may be used in the concrete mixture for slipform applications. Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall have a minimum length of 1/2 in. (13 mm) and a maximum length of 0.75 in. (19 mm).

The synthetic fibers shall be added to the concrete and mixed per the manufacturer's recommendation. The maximum dosage rate in the concrete mixture shall be 1.5 lb/cu yd (0.9 kg/cu m).

The Department will maintain an "Approved List of Synthetic Fibers"."

Revise the second paragraph of Article 606.11 of the Standard Specifications to read:

"Forms shall be removed within 24 hours after the concrete has been placed, and minor defects shall be filled with grout consisting of one part cement and two parts sand mixed with water."

80308

TEMPORARY EROSION AND SEDIMENT CONTROL (BDE)

Effective: January 1, 2012

Revise the first paragraph of Article 280.04(f) of the Standard Specifications to read:

"(f) Temporary Erosion Control Seeding. This system consists of seeding all erodible/bare areas to minimize the amount of exposed surface area. Seed bed preparation will not be required if the surface of the soil is uniformly smooth and in a loose condition. Light disking shall be done if the soil is hard packed or caked. Erosion rills greater than 1 in. (25 mm) in depth shall be filled and area blended with the surrounding soil. Fertilizer nutrients will not be required."

Delete the last sentence of Article 280.08(e) of the Standard Specifications.

80286

UTILITY COORDINATION AND CONFLICTS (BDE)

Effective: April 1, 2011
Revised: January 1, 2012

Revise Article 105.07 of the Standard Specifications to read:

"**105.07 Cooperation with Utilities.** The Department reserves the right at any time to allow work by utilities on or near the work covered by the contract. The Contractor shall conduct his/her work so as not to interfere with or hinder the progress or completion of the work being performed by utilities. The Contractor shall also arrange the work and shall place and dispose of the materials being used so as not to interfere with the operations of utility work in the area.

The Contractor shall cooperate with the owners of utilities in their removal and rearrangement operations so work may progress in a reasonable manner, duplication or rearrangement of work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer."

Revise the first sentence of the last paragraph of Article 107.19 of the Standard Specifications to read:

"When the Contractor encounters unexpected regulated substances due to the presence of utilities in unanticipated locations, the provisions of Article 107.40 shall apply; otherwise, if the Engineer does not direct a resumption of operations, the provisions of Article 108.07 shall apply."

Revise Article107.31 of the Standard Specification to read:

"**107.31 Reserved.**"

Add the following four Articles to Section 107 of the Standard Specifications:

"**107.37 Locations of Utilities within the Project Limits.** All known utilities existing within the limits of construction are either indicated on the plans or visible above ground. For the purpose of this Article, the limits of proposed construction are defined as follows:

(a) Limits of Proposed Construction for Utilities Paralleling the Roadway.

(1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 2 ft (600 mm) distant at right angles from the plan or revised slope limits.

In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 4 ft (1.2 m) outside the edges of structure footings or the structure where no footings are required.

(2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.

(3) The lower vertical limits shall be either the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.

(b) Limits of Proposed Construction for Utilities Crossing the Roadway in a Generally Transverse Direction.

(1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction, unless otherwise required by the regulations governing the specific utility involved.

(2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions as indicated in the contract. It is further understood the actual location of the utilities may be located anywhere within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c), and the proximity of some utilities to construction may require extraordinary measures by the Contractor to protect those utilities.

No additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of or any claimed interference from known utility facilities or any adjustment of them, except as specifically provided in the contract.

107.38 Adjustments of Utilities within the Project Limits. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation, or altering of an existing utility facility in any manner.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting known utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits as described in Article 107.37. When

utility adjustments must be performed in conjunction with construction, the utility adjustment work will be indicated in the contract.

The Contractor may make arrangements for adjustment of utilities indicated in the contract, but not scheduled by the Department for adjustment, provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any such adjustments shall be the responsibility of the Contractor.

107.39 Contractor's Responsibility for Locating and Protecting Utility Property and Services. At points where the Contractor's operations are adjacent to properties or facilities of utility companies, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

Within the State of Illinois, a State-Wide One Call Notice System has been established for notifying utilities. Outside the city limits of the City of Chicago, the system is known as the Joint Utility Locating Information for Excavators (JULIE) System. Within the city limits of the City of Chicago the system is known as DIGGER. All utility companies and municipalities which have buried utility facilities in the State of Illinois are a part of this system.

The Contractor shall call JULIE (800-892-0123) or DIGGER (312-744-7000), a minimum of 48 hours in advance of work being done in the area, and they will notify all member utility companies involved their respective utility should be located.

For utilities which are not members of JULIE or DIGGER, the Contractor shall contact the owners directly. The plan general notes will indicate which utilities are not members of JULIE or DIGGER.

The following table indicates the color of markings required of the State-Wide One Call Notification System.

Utility Service	Color
Electric Power, Distribution and Transmission	Safety Red
Municipal Electric Systems	Safety Red
Gas Distribution and Transmission	High Visibility Safety Yellow
Oil Distribution and Transmission	High Visibility Safety Yellow
Telephone and Telegraph System	Safety Alert Orange
Community Antenna Television Systems	Safety Alert Orange
Water Systems	Safety Precaution Blue
Sewer Systems	Safety Green
Non-Potable Water and Slurry Lines	Safety Purple
Temporary Survey	Safety Pink
Proposed Excavation	Safety White (Black when snow is on the ground)

The State-Wide One Call Notification System will provide for horizontal locations of utilities. When it is determined that the vertical location of the utility is necessary to facilitate construction, the Engineer may make the request for location from the utility after receipt of notice from the Contractor. If the utility owner does not field locate their facilities to the satisfaction of the Engineer, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

In the event of interruption of utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. If water service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

107.40 Conflicts with Utilities. Except as provided hereinafter, the discovery of a utility in an unanticipated location will be evaluated according to Article 104.03. It is understood and agreed that the Contractor has considered in the bid all facilities not meeting the definition of a utility in an unanticipated location and no additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of or any claimed interference from such facilities.

When the Contractor discovers a utility in an unanticipated location, the Contractor shall not interfere with said utility, shall take proper precautions to prevent damage or interruption of the utility, and shall promptly notify the Engineer of the nature and location of said utility.

(a) Definition. A utility in an unanticipated location is defined as an active or inactive utility, which is either:

(1) Located underground and (a) not shown in any way in any location on the contract documents; (b) not identified in writing by the Department to the Contractor prior to the letting; or (c) not located relative to the location shown in the contract within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c); or

(2) Located above ground or underground and not relocated as provided in the contract.

Service connections shall not be considered to be utilities in unanticipated locations.

(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work applicable to the utility or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows:

(1) Minor Delay. A minor delay occurs when the Contractor's operation is completely stopped by a utility in an unanticipated location for more than two hours, but not to exceed three weeks.

(2) Major Delay. A major delay occurs when the Contractor's operation is completely stopped by a utility in an unanticipated location for more than three weeks.

(3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the contractor's rate of production decreases by more than 25 percent and lasts longer than seven days.

(c) Payment. Payment for Minor, Major and Reduced Rate of Production Delays will be made as follows.

(1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

(2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to three weeks plus the cost of move-out to either the Contractor's yard or another job, whichever is less. Rental equipment may be paid for longer than three weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

(3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Whether covered by (1), (2) or (3) above, additional traffic control required as a result of the operation(s) delayed will be paid for according to Article 109.04 for the total length of the delay.

If the delay is clearly shown to have caused work, which would have otherwise been completed, to be done after material or labor costs have increased, such increases may be paid. Payment for materials will be limited to increased cost substantiated by documentation furnished by the Contractor. Payment for increased labor rates will include those items in Article 109.04(b)(1) and (2), except the 35 percent and ten percent additives will not be permitted. On a working day contract, a delay occurring between November 30 and May 1, when work has not started, will not be considered as eligible for payment of measured labor and material costs.

Project overhead (not including interest) will be allowed when all progress on the contract has been delayed, and will be calculated as 15 percent of the delay claim.

(d) Other Obligations of Contractor. Upon payment of a claim under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this Provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this Provision."

80270

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 55 working days.

80071

LR #	Title (Effective or Revision Date) Type of Funds: Usage
LR SD12	"Slab Movement Detection Device" (Rev. 1/1/07) MFT & FA: Special Note - Use with Check Sheet #12
LR SD13	"Required Cold Milled Surface Texture" (Rev. 1/1/07) MFT & FA: Special Note - Use with Check Sheet #13
LR SD406	"Safety Edge" (Eff. 4/1/2011) MFT & FA: Optional; Special Note – This special provision may be used with BDE 80271; however, designers should consider creating a project specific detail.
LR 105	"Cooperation with Utilities" (Rev. 1/1/07) MFT & FA: Optional; Special Note – This special provision should not be used with BDE 80270.
LR 107-2	"Railroad Protective Liability Insurance for Local Lettings" (Rev. 1/1/06) MFT & FA: State Let - DO NOT USE. BDE 80157 should be used for Class I Railroads and BDE 3426I should be used for all others. MFT & FA: Local Let - All Established Pay Items, Special Note - Submit to local agency for approval. The liability limits negotiated by the local agency with the railroad should be included on the railroad protective liability limit form. Pay Item Number(s) - Z0048665
LR 107-4 X	"Insurance" (Rev. 8/1/07) MFT & FA: State Let - All Proposals; Special Note - This special provision should only include the local agency supervising the construction. All other agencies and individuals listed will be removed. MFT & FA: Local Let - Optional; Special Note – This special provision may include any individual or agency for indemnification.
LR 107-7	"Wages of Employees on Public Works" (Rev. 1/2/13) FA: **DO NOT USE.** CS #1 should be used. MFT: State Let – **DO NOT USE.** CS #5 should be used. MFT: Local Let – Special Note – Include in all proposals where the contractor or material supplier has a contract with the Department to perform work at the job site. Do not include for material proposals f.o.b. supplier or delivered to the job site.
LR 108	"Combination Bids" (Rev. 3/1/05) MFT & FA: Optional.
LR 109	"Equipment Rental Rates" (Eff. 1/1/12) State Let: **DO NOT USE** Local Let: Optional
LR 212	"Shaping Roadway" (Rev. 1/1/02) MFT & FA: All Such Pay Items. Pay Item Number(s): LR212000, MLR21200.
LR 355-1	"Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix" (Rev. 1/1/07) MFT & FA: Optional.
LR 355-2	"Asphalt Stabilized Base Course, Plant Mix" (Rev. 1/1/07) MFT & FA: Optional
LR 400-1	"Bituminous Treated Earth Surface" (Rev. 4/1/12) MFT & FA: All Established Pay Items. Pay Item Number(s): LR400100, LR400200, LR400300. MLR40010, MLR40020, MLR40030
LR 400-2	"Bituminous Surface Plant Mix (Class B)" (Eff. 1/1/08) MFT: All Established Pay Items; Special Note – This special provision shall only be used for local agency general maintenance projects. FA: **DO NOT USE.** Pay Item Number(s): LR400400, MLR40040
LR 400-3	"Hot-in-Place Recycling (HIR) – Surface Recycling" (Eff. 1/1/2012) MFT & FA: All Established Pay Items Pay Item Number(s): LR400510, LR400520, MLR40051, MLR40052
LR400-4	"Full-Depth Reclamation (FDR) with Emulsified Asphalt" (Rev. 6/1/2012) MFT & FA: All Established Pay Items; Special Note – LR1000-1 must be used with this special provision. Pay Item Number(s): LR400840 to LR400899 with LR400005
LR400-5	"Cold In-Place Recycling (CIR) with Emulsified Asphalt" (Rev. 6/1/2012) MFT & FA: All Established Pay Items; Special Note – LR1000-1 must be used with this special provision. Pay Item Number(s): LR400725 to LR400760 with LR400005
LR400-6	"Cold In-Place Recycling (CIR) with Foamed Asphalt" (Eff. 6/1/2012) MFT & FA: All Established Pay Items; Special Note – LR1000-2 must be used with this special provision. Pay Item Number(s): LR400725 to LR400760 with LR400010

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Pleasure Driveway and Park District of Peoria, Illinois

City of Peoria

Maurer-Stutz, Inc.

State of Illinois

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

ATTACHMENT A.5
INSURANCE REQUIREMENTS
CONSTRUCTION PROJECTS - LARGE IN SCOPE AND USING GENERAL CONTRACTOR

Contractor shall obtain insurance of the types and in the amounts listed below.

A. COMMERCIAL GENERAL AND UMBRELLA LIABILITY INSURANCE

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than $5,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Owner shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance afforded to Owner.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage.

B. CONTINUING COMPLETED OPERATIONS LIABILITY INSURANCE

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella liability insurance with a limit of not less than $5,000,000 each occurrence for at least three years following substantial completion of the work.

Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 10 93, or substitute form providing equivalent coverage, and shall, at minimum, cover liability arising from products-completed operations and liability assumed under an insured contract.

Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit.

Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

C. BUSINESS AUTO AND UMBRELLA LIABILITY INSURANCE

Contractor shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than $2,000,000 each accident. Such insurance shall cover liability arising out of any auto including owned, hired and non-owned autos.

Business auto insurance shall be written on Insurance Services Office (ISO) form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.

D. WORKERS COMPENSATION INSURANCE

Contractor shall maintain workers compensation as required by statute and employers liability insurance. The commercial umbrella and/or employers liability limits shall not be less than $1,000,000 each accident for bodily injury by accident or $1,000,000 each employee for bodily injury by disease.

If Owner has not been included as an insured under the CGL using ISO additional insured endorsement CG 20 10 under the Commercial General and Umbrella Liability Insurance required in this Contract, the Contractor waives all rights against Owner and its officers, officials, employees, volunteers and agents for recovery of damages arising out of or incident to the Contractor's work.

E. GENERAL INSURANCE PROVISIONS

1. Evidence of Insurance. Prior to beginning work, Contractor shall furnish Owner with a certificate(s) of insurance and applicable policy endorsement(s), executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above.

All certificates shall provide for 30 days written notice to Owner prior to the cancellation or material change of any insurance referred to therein. Written notice to Owner shall be by certified mail, return receipt requested.

Failure of Owner to demand such certificate, endorsement or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Owner shall have the right, but not the obligation, of prohibiting Contractor or any subcontractor from entering the project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by Owner.

Failure to maintain the required insurance may result in termination of this Contract at Owner's option.

With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to Owner whenever requested.

Contractor shall provide certified copies of all insurance policies required above within 10 days of Owner's written request for said copies.

2. Acceptability of Insurers. For insurance companies which obtain a rating from A.M. Best, that rating should be no less than A VII using the most recent edition of the A.M. Best's Key Rating Guide. If the Best's rating is less than A VII or a Best's rating is not obtained, the Owner has the right to reject insurance written by an insurer it deems unacceptable.

3. Cross-Liability Coverage. If Contractor's liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

4. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to the Owner. At the option of the Owner, the Contractor may be asked to eliminate such deductibles or self-insured retentions as respects the Owner, its officers, officials, employees, volunteers and agents or required to procure a bond guaranteeing payment of losses and other related costs including but not limited to investigations, claim administration and defense expenses.

5. Subcontractors. Contractor shall cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified above. When requested by the Owner, Contractor shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

F. INDEMNIFICATION

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses, including but not limited to legal fees (attorney's and paralegal's fees and court costs), arising

out of or resulting from the performance of the Contractor's work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, other than the work itself, including the loss of use resulting therefrom and (2) is caused in whole or in part by any wrongful or negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. Contractor shall similarly protect, indemnify and hold and save harmless the Owner, its officers, officials, employees, volunteers and agents, against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of, any provision of the Contract.

SAMPLE LIABILITY INSURANCE ENDORSEMENT

The following spaces preceded by an asterisk (*) need not be completed if this endorsement and policy have the same inception date.

ATTACHED TO AND FORMING PART OF POLICY NUMBER	*EFFECTIVE DATE OF ENDORSEMENT	*ISSUED TO

This endorsement changes the policy. Please read it carefully.

AUTOMATIC ADDITIONAL INSUREDS

The following provision is added to (SECTION II), Who Is An Insured.

5. Any entity you are required in a written contract (hereinafter called Additional Insured) to name as an insured is an insured but only with respect to liability arising out of your premises, "your work" for the Additional Insured, or acts or omissions of the Additional Insured in connection with the general supervision of "your work" to the extent set forth below.

a. The Limits of Insurance provided on behalf of the Additional Insured are not greater than those required by such contract.

b. The coverage provided to the Additional Insured(s) is not greater than that customarily provided by the policy forms specified in and required by the contract.

c. All insuring agreements, exclusions and conditions of this policy apply.

d. In no event shall the coverages or Limits of Insurance in this Coverage Form be increased by such contract.

Except when required otherwise by contract, this insurance does not apply to:

1) "Bodily injury" or "property damage" occurring after

a) All work on the project (other than service, maintenance or repairs) to be performed by or on behalf of the Additional Insured(s) at the site of the covered operations has been completed; or

b) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

2) "Bodily injury" or "property damage" arising out of any act or omission of the Additional Insured(s) or any of their employees, other than the general supervision of work performed for the Additional Insured(s) by you.

3) "Property damage" to

a) Property owned, used or occupied by or rented to the Additional Insured(s);

b) Property in the care, custody or control of the Additional Insured(s) or over which the Additional Insured(s) is for any purpose exercising physical control; or

c) "Your work" for the Additional Insured(s).

With respect to Additional Insureds who are architects, engineers or surveyors, this insurance does not apply "bodily injury", "property damage", "personal injury" or "advertising injury" arising out of the rendering of or the failure to render any professional services by or for you, including:

a) The preparing, approving, or failing to prepare or approve maps, drawings, opinions, reports, surveys, change orders, designs or specifications; and

b) Supervisory, inspection or engineering services.

Any coverages provided hereunder shall be excess over any other valid and collectible insurance available to the Additional Insured(s) whether primary, excess, contingent or on any other basis unless a contract specifically requires that this insurance be primary or you request that it apply on a primary basis.

No person or organization is an Additional Insured with respect to the conduct of any current or past partnership or joint venture that is not shown as a Named Insured in the Declarations.

END OF ATTACHMENT A.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	1
	ILLINOIS	CONTRACT NO.		

INDEX OF SHEETS

1	COVER SHEET
2	GENERAL NOTES
3	SUMMARY OF QUANTITES
4-5	SCHEDULE OF QUANTITIES
6-9	TYPICAL SECTIONS
10-11	ALIGNMENT, TIES AND BENCHMARKS
12	REMOVAL PLAN
13-18	PLAN AND PROFILE
19-34	STRUCTURE PLANS
35	CURB OUTLET DETAILS
36	DETOUR
37-53	CROSS SECTIONS

HIGHWAY STANDARDS

NO.	REV.	DESCRIPTION
000001	-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001	-02	AREAS OF REINFORCEMENT BARS
001006		DECIMAL OF AN INCH AND OF A FOOT
280001	-07	TEMPORARY EROSION CONTROL SYSTEMS
515001	-03	NAME PLATE FOR BRIDGES
602301	-03	INLET - TYPE A
604036	-02	GRATE TYPE 8
701421	-05	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >/= 45 MPH TO 55MPH
701602	-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701901	-02	TRAFFIC CONTROL DEVICES
720001	-01	SIGN PANEL MOUNTING DETAILS
720006	-03	SIGN PANEL ERECTION DETAILS
720011	-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001	-01	APPLICATION OF TYPES A & B METAL POSTS (FOR SIGN & MARKERS)
780001	-03	TYPICAL PAVEMENT MARKINGS

PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, IL

PLANS FOR PROPOSED LOCAL IMPROVEMENT

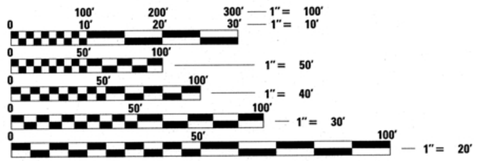
PEORIA PARK DISTRICT – ROCK ISLAND GREENWAY
KNOXVILLE CROSSING
FAP ROUTE 646 (IL 40)
PEORIA COUNTY



LOCATION OF SECTION INDICATED THUS: –■–

PROJECT IMPROVEMENTS
BEGIN STA. 81+34.23

PROPOSED IMPROVEMENT: THIS PROJECT CONSISTS OF THE CONSTRUCTION OF 0.47 MILES OF BICYCLING TRAIL ALONG THE FORMER PEORIA AND PEORIA HEIGHTS RAILROAD SERVICE FROM NORTHMOOR RD. TO EAST OF KNOXVILLE AVE. CONSTRUCTION CONSISTS OF EARTHWORK, HOT-MIX ASPHALT PAVEMENT, TRAIL SIGNING, PEDESTRIAN OVERPASS, AND RETAINING WALLS.



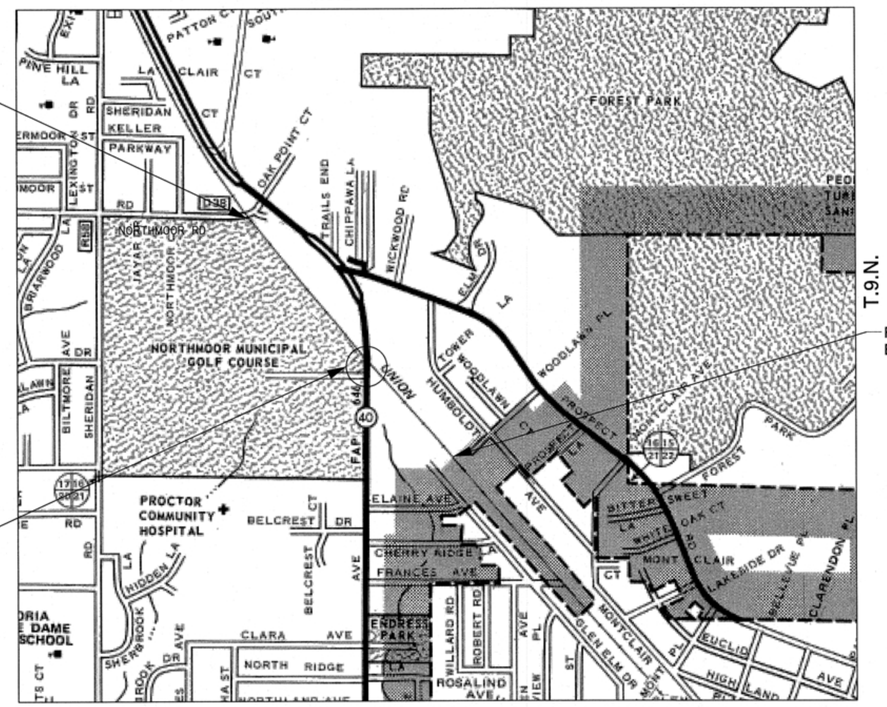
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: BRANDI THIERER
PROJECT MANAGER: RICK ANDERSON

MAURER-STUTZ
ENGINEERS SURVEYORS
3116 DRIES LN STE 100
PEORIA, ILLINOIS 61604
PH. (309) 693-7615
FAX (309) 693-7616
PROFESSIONAL DESIGN FIRM #184-005754

R.8.E. 4TH P.M.



LOCATION MAP

GROSS LENGTH = 2465.8 FT. = 0.47 MILE
NET LENGTH = 2465.8 FT. = 0.47 MILE
FUNCTIONAL CLASSIFICATION: BIKEWAY
DESIGN SPEED: 20 MPH
DESIGN GUIDELINES: BUREAU OF LOCAL ROADS & STREETS MANUAL

AGENCY RESPONSIBLE FOR LETTING

APPROVED June 17, 2013

PLEASURE DRIVEWAY & PARK DISTRICT OF PEORIA, IL

ENGINEER SIGNATURE

MAURER-STUTZ ENGINEERS SURVEYORS

LICENSED PROFESSIONAL ENGINEER — BRANDI A. THIERER — 062-060336 — ILLINOIS

6/7/13

BRANDI A. THIERER, P.E. — DATE
IL. REG. NO. 062-060336
EXP. DATE 11/30/2013

GENERAL NOTES

THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2012 AND THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2013 SHALL GOVERN THE CONSTRUCTION OF THE PROPOSED WORK EXCEPT AS MODIFIED BY THE DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES ON SITE PRIOR TO ANY CONSTRUCTION AND WILL BE HELD RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THEIR FACILITIES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF THE UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. @ 1-800-892-0123 FOR UTILITY LOCATIONS.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRS TO ANY UTILITY LINES AND EXISTING IMPROVEMENTS TO REMAIN THAT ARE DAMAGED AS A RESULT OF THE WORK.

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN---ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

ALL EXISTING SURROUNDING AREA AND PROPERTY SHALL BE PROTECTED FROM DAMAGE AND LEFT UNDAMAGED BY THE OPERATION OF THE CONTRACTOR. ANY OF THE SURROUNDING PROPERTY DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO AN EQUAL OR BETTER CONDITION THAN WHAT EXISTED PRIOR TO CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.

WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A FULL DEPTH SAWCUT SHALL BE MADE TO ACHIEVE A CLEAN BREAK BETWEEN THE PROPOSED AND THE EXISTING PAVEMENT. THE SAWCUT IS TO BE INCLUDED IN THE COST OF THE PAVEMENT REMOVAL.

ADJUSTMENTS OF PROPOSED GRADES TO MATCH EXISTING ENTRANCES OR OTHER FIELD CONDITIONS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.

EXCESS MATERIAL, IF NOT USED FOR OTHER ON-SITE PURPOSES, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.

EXISTING SIGNS THAT INTERFERE WITH THE CONSTRUCTION WILL BE RELOCATED AS DIRECTED BY THE ENGINEER OR OWNER. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL REPLACE THE SIGNS AS DIRECTED. SIGN REMOVAL, STORAGE AND RELOCATION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.

SIGN LOCATIONS MAY VARY FROM THE STATIONS SHOWN ON THE PLANS IN ACCORDANCE WITH DIRECTIONS FROM THE ENGINEER AT THE TIME OF CONSTRUCTION. SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID ANY FOUND UTILITIES.

THE WORK AREA SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.

CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED.

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE(S):	SURFACE COURSE
RAP % (MAX)**:	30%
AC/PG:	PG 58-22
DESIGN AIR VOIDS:	3.0% @N50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.0 OR IL 12.5
FRICTION AGGREGATE	MIXTURE C

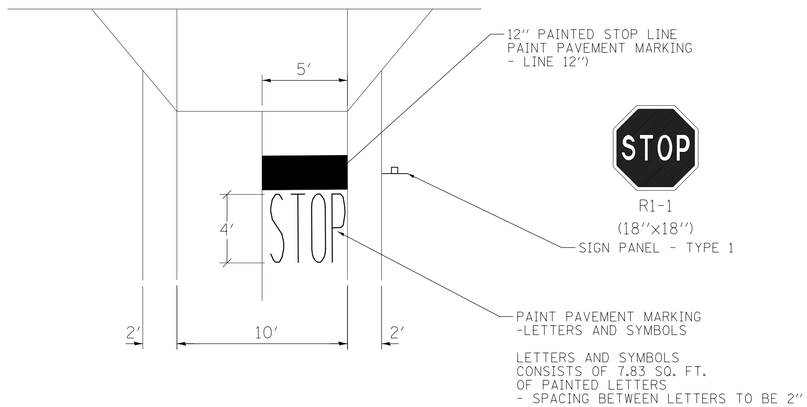
**IF THE RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED; THIS WILL BE DETERMINED BY THE ENGINEER.

THE FOLLWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

HOT-MIX ASPHALT:	112 LBS/SQYD/INCH
NUTRIENTS:	90 LBS/ACRE
BITUMINOUS MATERIALS (PRIME COAT)	0.5 GAL/SQYD

ALL EMBANKMENT MATERIAL ON FILL AREAS SHALL BE APPROVED BY THE ENGINEER.

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.



PAVEMENT MARKING AND SIGN DETAIL
(NOT TO SCALE)

FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-gennotes.dgn	USER NAME = jdspiller	DESIGNED - BT	REVISED -
MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 20.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
GENERAL NOTES

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	2
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	126
20100500	TREE REMOVAL, ACRES	ACRE	0.25
20200100	EARTH EXCAVATION	CU YD	1405
20400800	FURNISHED EXCAVATION	CU YD	2390
20800150	TRENCH BACKFILL	CU YD	8
21101610	TOPSOIL FURNISH AND PLACE, 3"	SQ YD	8986
25000200	SEEDING, CLASS 2	ACRE	2
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	167
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	167
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	167
25100115	MULCH, METHOD 2	ACRE	2
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	400
28000305	TEMPORARY DITCH CHECKS	FOOT	420
28000400	PERIMETER EROSION BARRIER	FOOT	725
28000500	INLET AND PIPE PROTECTION	EACH	4
28100105	STONE RIPRAP, CLASS A3	SQ YD	40
28200200	FILTER FABRIC	SQ YD	40
35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	2102

CODE NO.	ITEM	UNIT	QUANTITY
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	990
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	329
44000100	PAVEMENT REMOVAL	SQ YD	362
44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	18
48101200	AGGREGATE SHOULDERS, TYPE B	TON	304
50105220	PIPE CULVERT REMOVAL	FOOT	21
50200100	STRUCTURE EXCAVATION	CU YD	344
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	1037
50300225	CONCRETE STRUCTURES	CU YD	114.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	384.0
50800105	REINFORCEMENT BARS	POUND	40190
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	24440
50901720	BICYCLE RAILING	FOOT	1092
51500100	NAME PLATES	EACH	1
51603000	DRILLED SHAFT IN SOIL	CU YD	103.3
550B0040	STORM SEWERS, CLASS B, TYPE 1 10"	FOOT	32
550B0050	STORM SEWERS, CLASS B, TYPE 1 12"	FOOT	8
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	2

CODE NO.	ITEM	UNIT	QUANTITY
60262700	INLETS TO BE RECONSTRUCTED	EACH	1
60403400	GRATES, TYPE A	EACH	2
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	2.7
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6
67100100	MOBILIZATION	L SUM	1
72000100	SIGN PANEL - TYPE 1	SQ FT	2.3
72900100	METAL POST - TYPE A	FOOT	12
78001100	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	7.8
78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	5
X0322508	PEDESTRIAN TRUSS SUPERSTRUCTURE	SQ FT	5084
X4400220	CURB REMOVAL AND REPLACEMENT	FOOT	15
X5030306	CONCRETE WEARING SURFACE, 6"	SQ YD	564
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0034210	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	11167
Z0038150	PRECAST CONCRETE SUBSTRUCTURE	L SUM	1
Z0056644	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 8"	FOOT	106

PAY ITEMS AND QUANTITIES ARE FOR INFORMATION ONLY. PROJECT IS PAID AS LUMP SUM.

20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)

LOCATION				UNIT	REMARKS
82+45.19		17.0'	LT	8.0	
82+62.95		18.0'	LT	11.0	
101+52.14		22.0'	LT	9.0	
101+54.70		21.0'	LT	6.0	
101+97.00		27.5'	LT	6.0	
101+98.62		26.5'	LT	12.0	
101+99.29		14.0'	LT	6.0	
101+99.59		28.5'	LT	7.0	
102+01.19		15.0'	LT	7.0	
102+45.90		13.5'	LT	6.0	
102+53.72		19.0'	LT	8.0	
102+55.63		20.0'	LT	7.0	
103+07.66		12.0'	LT	8.0	
103+11.77		13.0'	LT	6.0	
103+14.18		13.0'	LT	6.0	
103+14.55		18.0'	LT	7.0	
103+16.36		12.5'	LT	6.0	
			TOTAL	126.0	

20100500 TREE REMOVAL, ACRES

LOCATION				ACRE	REMARKS
103+73.37	TO	106+00.00	LT	0.13	
104+28.07	TO	105+64.76	RT	0.03	
			TOTAL	0.25	MINIMUM QUANTITY = 0.25 ACRE

20200100 EARTH EXCAVATION

LOCATION	CU YD	REMARKS
ENTIRE PROJECT	1405.0	SEE EARTHWORK BALANCE TABLE ON SHEET 5
TOTAL	1405.0	

20400800 FURNISHED EXCAVATION

LOCATION	CU YD	REMARKS
ENTIRE PROJECT	2390.0	SEE EARTHWORK BALANCE TABLE ON SHEET 5
TOTAL	2390.0	

20800150 TRENCH BACKFILL

LOCATION		CU YD	REMARKS
81+90.00	LT/RT	7.7	
TOTAL		8.0	

21101610 TOPSOIL FURNISH AND PLACE, 3"

LOCATION				SQ YD	REMARKS
81+34.23	TO	98+15.33	LT	2042.22	
81+34.23	TO	98+15.33	RT	5315.07	
98+15.33	TO	102+18.67	LT	148.20	
98+15.33	TO	102+18.67	RT	211.18	
102+18.67	TO	106+00.00	LT	844.69	
102+18.67	TO	106+00.00	RT	424.56	
			TOTAL	8986.0	

25000200 SEEDING, CLASS 2

LOCATION				ACRE	REMARKS
81+34.00	TO	98+15.33	LT	0.42	
81+34.00	TO	98+15.33	RT	1.10	
98+15.33	TO	102+18.67	LT	0.03	
98+15.33	TO	102+18.67	RT	0.04	
102+18.67	TO	106+00.00	LT	0.17	
102+18.67	TO	106+00.00	RT	0.09	
			TOTAL	2.0	

25000400 NITROGEN FERTILIZER NUTRIENT

LOCATION				POUND	REMARKS
81+34.22	TO	98+15.33	LT	37.80	
81+34.22	TO	98+15.33	RT	99.00	
98+15.33	TO	102+18.67	LT	2.70	
98+15.33	TO	102+18.67	RT	3.60	
102+18.67	TO	106+00.00	LT	15.30	
102+18.67	TO	106+00.00	RT	8.10	
			TOTAL	167.0	

25000500 PHOSPHORUS FERTILIZER NUTRIENT

LOCATION				POUND	REMARKS
81+34.22	TO	98+15.33	LT	37.80	
81+34.22	TO	98+15.33	RT	99.00	
98+15.33	TO	102+18.67	LT	2.70	
98+15.33	TO	102+18.67	RT	3.60	
102+18.67	TO	106+00.00	LT	15.30	
102+18.67	TO	106+00.00	RT	8.10	
			TOTAL	167.0	

25000600 POTASSIUM FERTILIZER NUTRIENT

LOCATION				POUND	REMARKS
81+34.22	TO	98+15.33	LT	37.8	
81+34.22	TO	98+15.33	RT	99.0	
98+15.33	TO	102+18.67	LT	2.7	
98+15.33	TO	102+18.67	RT	3.6	
102+18.67	TO	106+00.00	LT	15.3	
102+18.67	TO	106+00.00	RT	8.1	
			TOTAL	167.0	

25100115 MULCH, METHOD 2

LOCATION				ACRE	REMARKS
81+34.00	TO	98+15.33	LT	0.42	
81+34.00	TO	98+15.33	RT	1.10	
98+15.33	TO	102+18.67	LT	0.03	
98+15.33	TO	102+18.67	RT	0.04	
102+18.67	TO	106+00.00	LT	0.17	
102+18.67	TO	106+00.00	RT	0.09	
			TOTAL	2.0	

28000250 TEMPORARY EROSION CONTROL SEEDING

LOCATION	POUND	REMARKS
ENTIRE PROJECT	400.0	
TOTAL	400.0	

28000305 TEMPORARY DITCH CHECKS

LOCATION		FOOT	REMARKS
81+40.00	LT	10.0	
81+80.00	LT	10.0	
83+40.00	LT	10.0	
85+00.00	LT	10.0	
86+60.00	LT	10.0	
88+20.00	LT	10.0	
89+80.00	LT	10.0	
91+40.00	LT	10.0	
92+00.00	LT	10.0	
93+00.00	LT	10.0	
94+00.00	LT	10.0	
95+00.00	LT	10.0	
96+00.00	LT	10.0	
97+00.00	LT	10.0	
97+65.00	LT	10.0	
101+55.00	LT	10.0	
101+80.00	LT	10.0	
102+05.00	LT	10.0	
102+30.00	LT	10.0	
102+65.00	LT	10.0	
103+00.00	LT	10.0	
104+00.00	LT	10.0	
104+70.00	LT	10.0	
105+40.00	LT	10.0	
105+70.00	LT	10.0	
106+00.00	LT	10.0	
81+40.00	RT	10.0	
81+80.00	RT	10.0	
82+00.00	RT	10.0	
84+00.00	RT	10.0	
86+00.00	RT	10.0	
88+00.00	RT	10.0	
90+00.00	RT	10.0	
92+00.00	RT	10.0	
93+50.00	RT	10.0	
95+00.00	RT	10.0	
96+50.00	RT	10.0	
98+00.00	RT	10.0	
98+45.00	RT	10.0	
98+90.00	RT	10.0	
99+35.00	RT	10.0	
99+80.00	RT	10.0	
TOTAL		420.0	

28000400 PERIMETER EROSION BARRIER

LOCATION				FOOT	REMARKS
87+00.00	TO	89+50.00	RT	250.0	
102+00.00	TO	106+00.00	RT	439.0	
103+35.00	TO	103+65.00	LT	36.0	
			TOTAL	725.0	

28000500 INLET AND PIPE PROTECTION

LOCATION			EACH	REMARKS
81+90.00	12.4'	RT	1	
81+90.00	13.4'	LT	1	
95+51.58	7.8'	RT	1	
104+87.42	7.8'	RT	1	
TOTAL			4	

28100105 STONE RIPRAP, CLASS A3

LOCATION			SQ YD	REMARKS
95+45.87	32.7'	RT	11.1	
104+90.02	16.5'	RT	28.3	
TOTAL			40.0	

28200200 FILTER FABRIC

LOCATION			SQ YD	REMARKS
95+45.87	32.7'	RT	11.1	
104+90.02	16.5'	RT	28.3	
TOTAL			40.0	

35101800 AGGREGATE BASE COURSE, TYPE B 6"

LOCATION			SQ YD	REMARKS
81+34.22	TO	94+49.58	1635.5	ROCK ISLAND GREENWAY
104+74.42	TO	106+00.00	153.3	ROCK ISLAND GREENWAY
500+00.00	TO	502+38.76	312.3	JC ACCESS PATH
TOTAL			2102.0	

40600100 BITUMINOUS MATERIALS (PRIME COAT)

LOCATION			GALLON	REMARKS
81+34.22	TO	94+49.58	762.5	ON AGG BASE - ROCK ISLAND GREENWAY
104+74.42	TO	106+00.00	71.4	ON AGG BASE - ROCK ISLAND GREENWAY
500+00.00	TO	502+38.76	156.1	ON AGG BASE - JC ACCESS PATH
TOTAL			990.0	

40603310 HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

LOCATION			TON	REMARKS
81+34.22	TO	94+49.58	256.2	ROCK ISLAND GREENWAY
104+74.42	TO	106+00.00	24.0	ROCK ISLAND GREENWAY
500+00.00	TO	502+38.76	49.0	JC ACCESS PATH
TOTAL			329	

44000100 PAVEMENT REMOVAL

LOCATION			SQ YD	REMARKS
103+21.40	TO	106+00.00	361.9	
TOTAL			362	

44201721 CLASS D PATCHES, TYPE III, 6 INCH

LOCATION			SQ YD	REMARKS
81+94.16	TO	82+04.44 LT	18.0	
TOTAL			18.0	

48101200 AGGREGATE SHOULDERS, TYPE B

LOCATION				TON	REMARKS
81+27.93	TO	94+49.58	RT	117.7	ROCK ISLAND GREENWAY
81+37.78	TO	94+49.58	LT	116.7	ROCK ISLAND GREENWAY
104+74.42	TO	106+00.00	RT	11.1	ROCK ISLAND GREENWAY
104+74.42	TO	106+00.00	LT	11.1	ROCK ISLAND GREENWAY
500+00.00	TO	502+36.39	RT	23.7	JC ACCESS PATH
500+00.00	TO	502+36.39	LT	22.7	JC ACCESS PATH
TOTAL				304	

50105220 PIPE CULVERT REMOVAL

LOCATION				FOOT	REMARKS
103+24.60	TO	103+45.06	LT	20.5	
			TOTAL	21	

550B0040 STORM SEWERS, CLASS B, TYPE 1 10"

LOCATION				FOOT	REMARKS
95+55.00	TO	95+64.58	RT	32.0	
			TOTAL	32.0	

550B0050 STORM SEWERS, CLASS B, TYPE 1 12"

LOCATION				FOOT	REMARKS
104+87.42	TO	104+90.02	RT	8.0	
			TOTAL	8.0	

60236200 INLETS, TYPE A, TYPE 8 GRATE

LOCATION			EACH	REMARKS
81+90.00	12.4'	RT	1	
81+90.00	13.4'	LT	1	
		TOTAL	2	

60262700 INLETS TO BE RECONSTRUCTED

LOCATION			EACH	REMARKS
82+04.59	93.4'	LT	1	
		TOTAL	1	

60403400 GRATES, TYPE A

LOCATION			EACH	REMARKS
95+51.58	7.8'	RT	1	
104+87.42	7.8'	RT	1	
		TOTAL	2	

60600095 CLASS SI CONCRETE (OUTLET)

LOCATION				CU YD	REMARKS
95+50.08	TO	95+64.58	RT	1.34	
104+74.42	TO	104+88.92	RT	1.34	
			TOTAL	2.7	

67000400 ENGINEER'S FIELD OFFICE, TYPE A

LOCATION	CAL MO	REMARKS
ENTIRE PROJECT	6.0	
TOTAL	6.0	

67100100 MOBILIZATION

LOCATION	L SUM	REMARKS
ENTIRE PROJECT	1	
TOTAL	1	

72000100 SIGN PANEL - TYPE 1

LOCATION			SQ FT	REMARKS
81+63.30	8.6'	LT	2.3	
	TOTAL		2.3	

72900100 METAL POST - TYPE A

LOCATION			FOOT	REMARKS
81+63.30	8.6'	LT	12.0	
	TOTAL		12.0	

78001100 PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS

LOCATION			SQ FT	REMARKS
81+66.14	2.3'	LT	7.8	
	TOTAL		7.8	

78001150 PAINT PAVEMENT MARKING - LINE 12"

LOCATION			FOOT	REMARKS
81+63.71		LT	5.0	
	TOTAL		5.0	

X4400220 CURB REMOVAL AND REPLACEMENT

LOCATION				FOOT	REMARKS
81+96.17	TO	82+03.51	LT	15.2	
			TOTAL	15	

X7010216 TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

LOCATION	L SUM	REMARKS
ENTIRE PROJECT	1	
TOTAL	1	

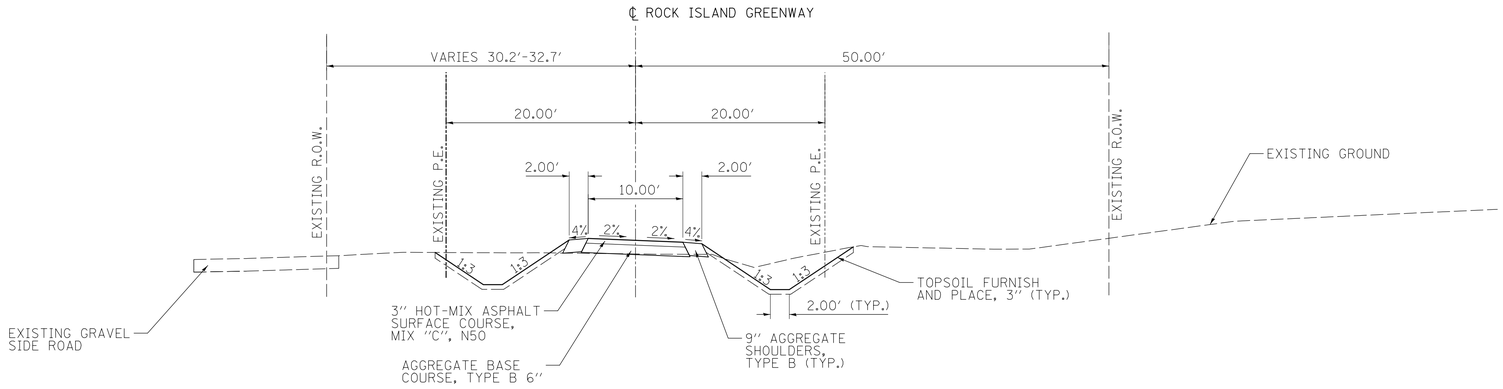
Z0013798 CONSTRUCTION LAYOUT

LOCATION	L SUM	REMARKS
ENTIRE PROJECT	1.0	
TOTAL	1.0	

Z0056644 STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 8"

LOCATION				FOOT	REMARKS
81+90.00	TO	81+90.00	RT/LT	26	
81+90.14	TO	82+04.44	LT	80	
			TOTAL	106	

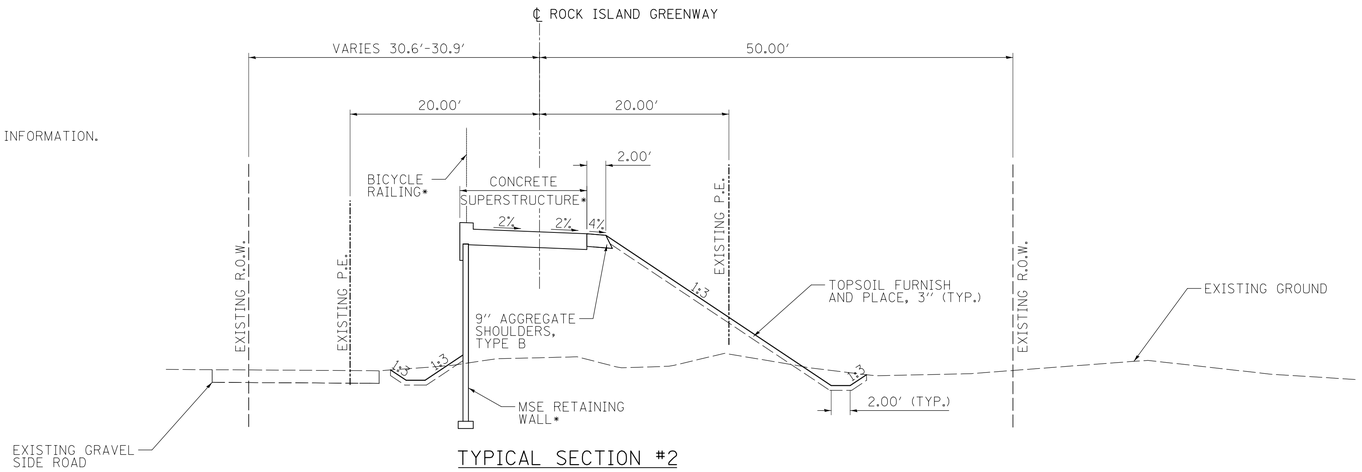
LOCATION	EARTH EXCAVATION	EXCAVATION ADJUSTED FOR STRUCTURE EX & SHRINKAGE (25%)	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
STA. 81+34.23 TO STA. 98+15.33	1167.19	1084.56	2001.71	-917.15
BRIDGE OMISSION (DITCH WORK)	68.74	51.55	63.98	-12.42
STA. 102+18.67 TO STA. 106+00.00	166.30	145.98	1603.73	-1457.75
TOTAL	1402.23	1282.09	3669.42	-2387.32



TYPICAL SECTION #1

STA. 81+34.23 TO STA. 94+49.58

* SEE STRUCTURE PLANS FOR INFORMATION.



TYPICAL SECTION #2

STA. 94+49.58 TO STA. 95+64.58

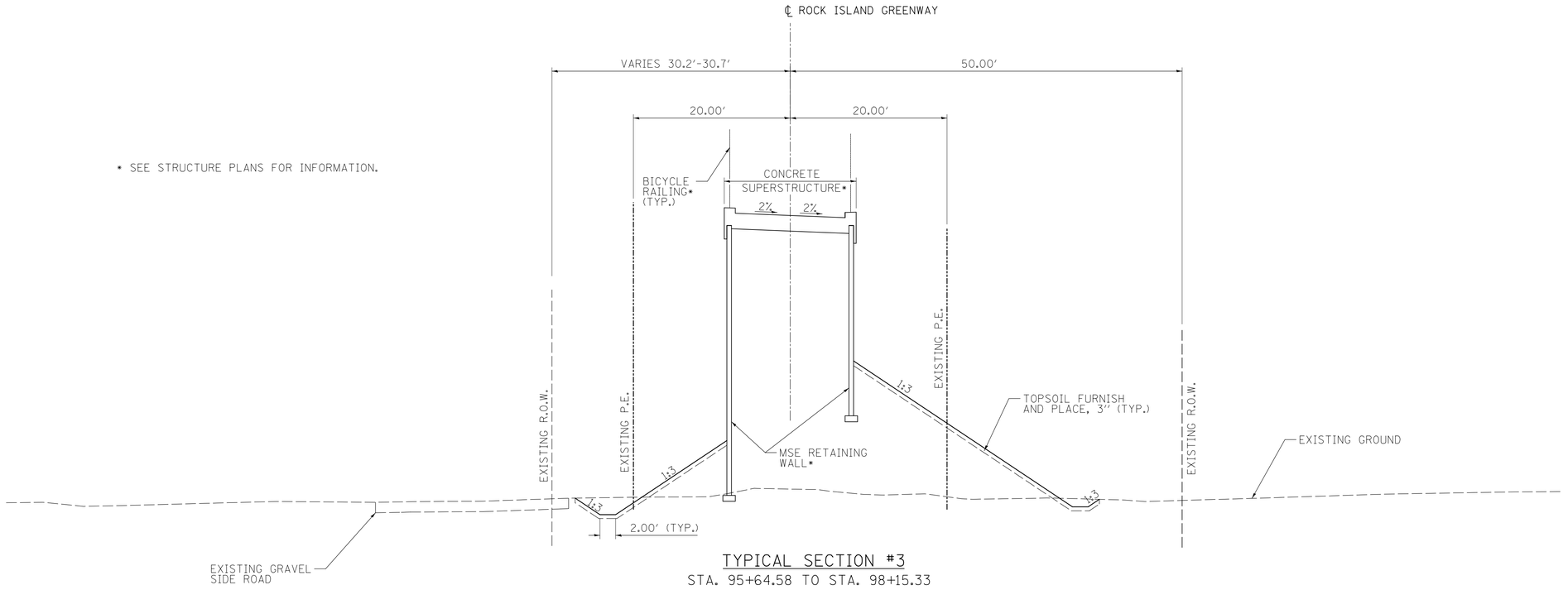
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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 8.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
TYPICAL SECTIONS

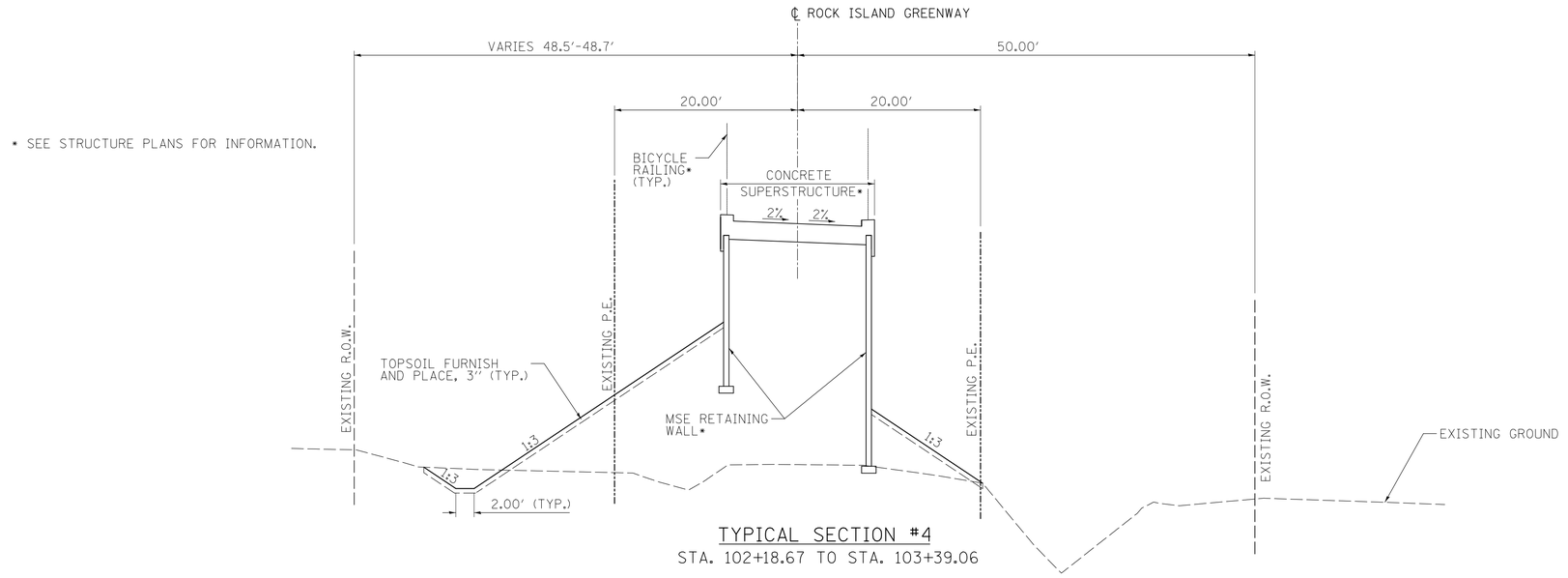
SCALE: | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	6
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			



TYPICAL SECTION #3
STA. 95+64.58 TO STA. 98+15.33

PEDESTRIAN STRUCTURE OMISSION
STA. 98+15.33 TO STA. 102+18.67



TYPICAL SECTION #4
STA. 102+18.67 TO STA. 103+39.06

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	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

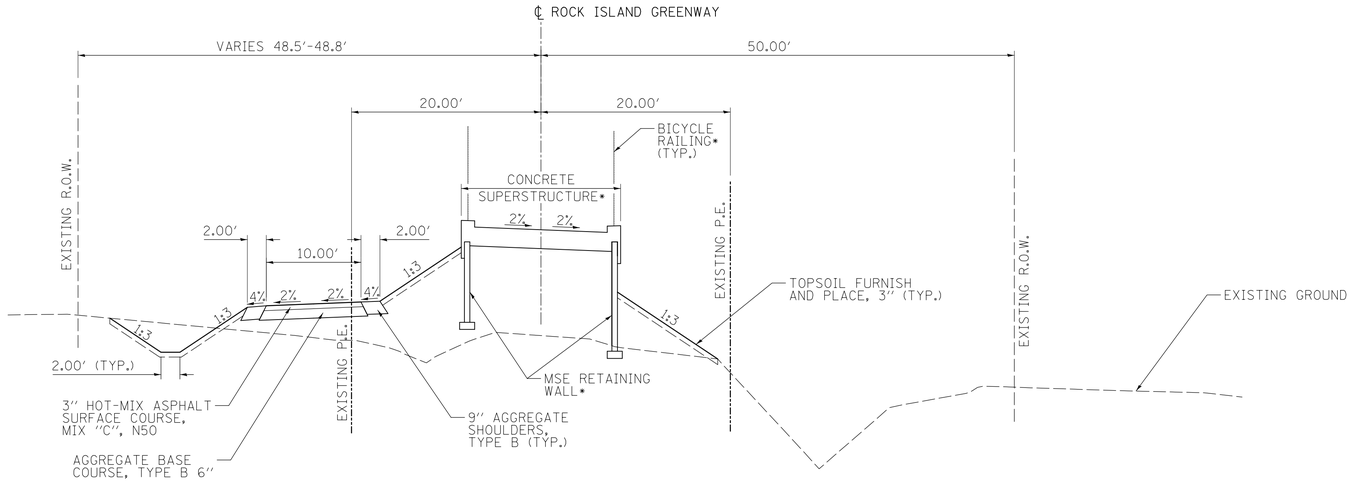
PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
TYPICAL SECTIONS

SCALE: | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	7
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

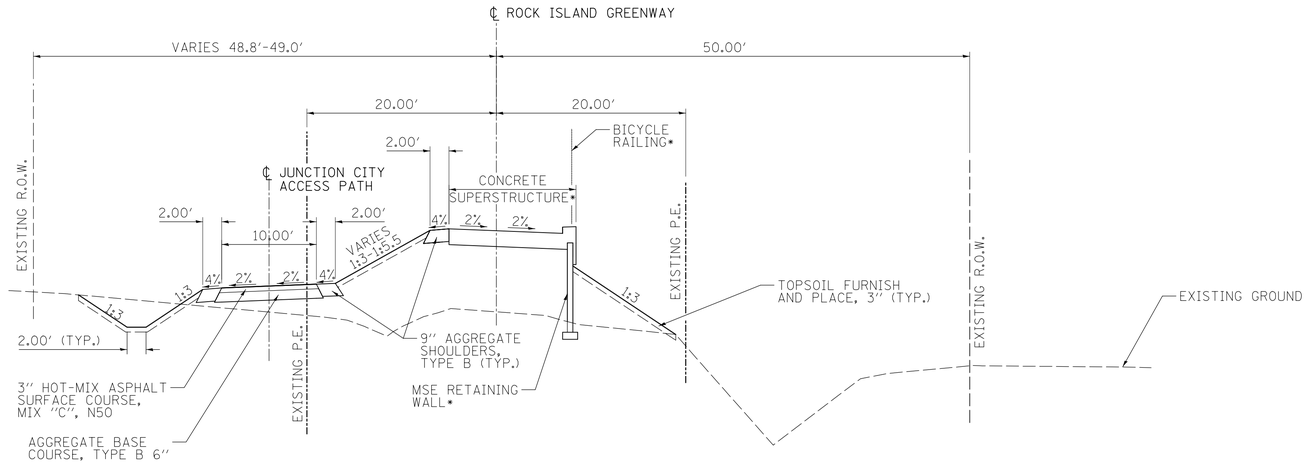
* SEE STRUCTURE PLANS FOR INFORMATION.



TYPICAL SECTION #5

STA. 103+39.06 TO STA. 104+39.42

* SEE STRUCTURE PLANS FOR INFORMATION.



TYPICAL SECTION #6

STA. 104+39.42 TO STA. 104+74.42

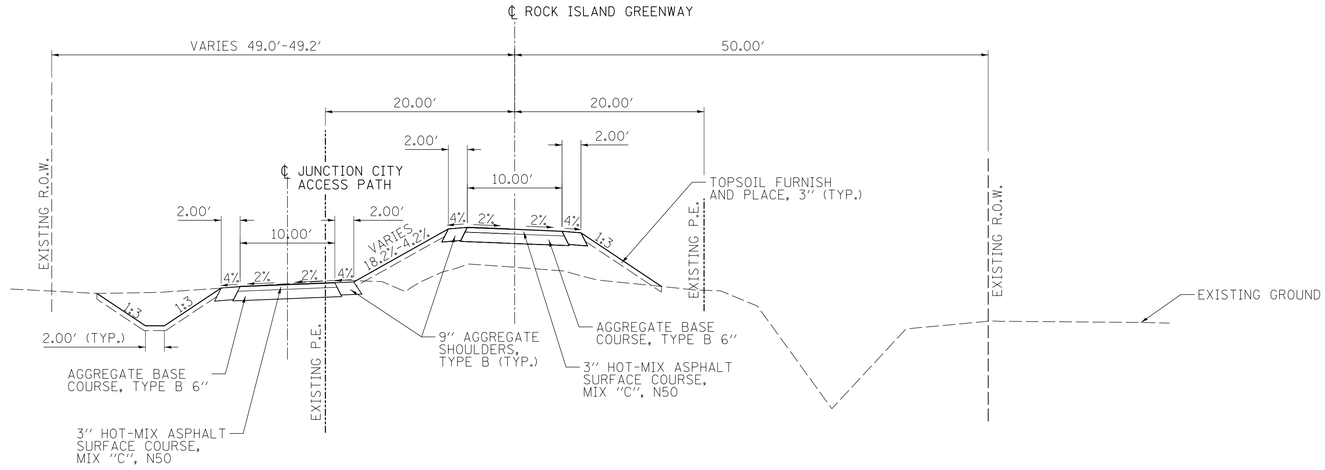
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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 8.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
TYPICAL SECTIONS

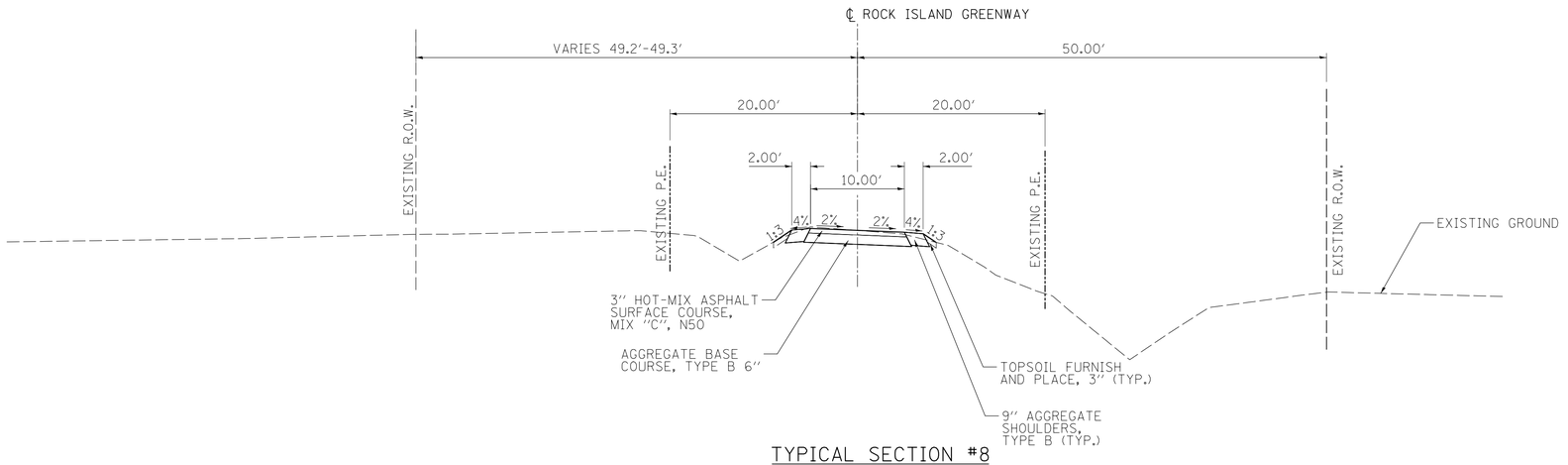
SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	8
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION #7

STA. 104+74.42 TO STA. 105+56.75



TYPICAL SECTION #8

STA. 105+56.75 TO STA. 106+00.00

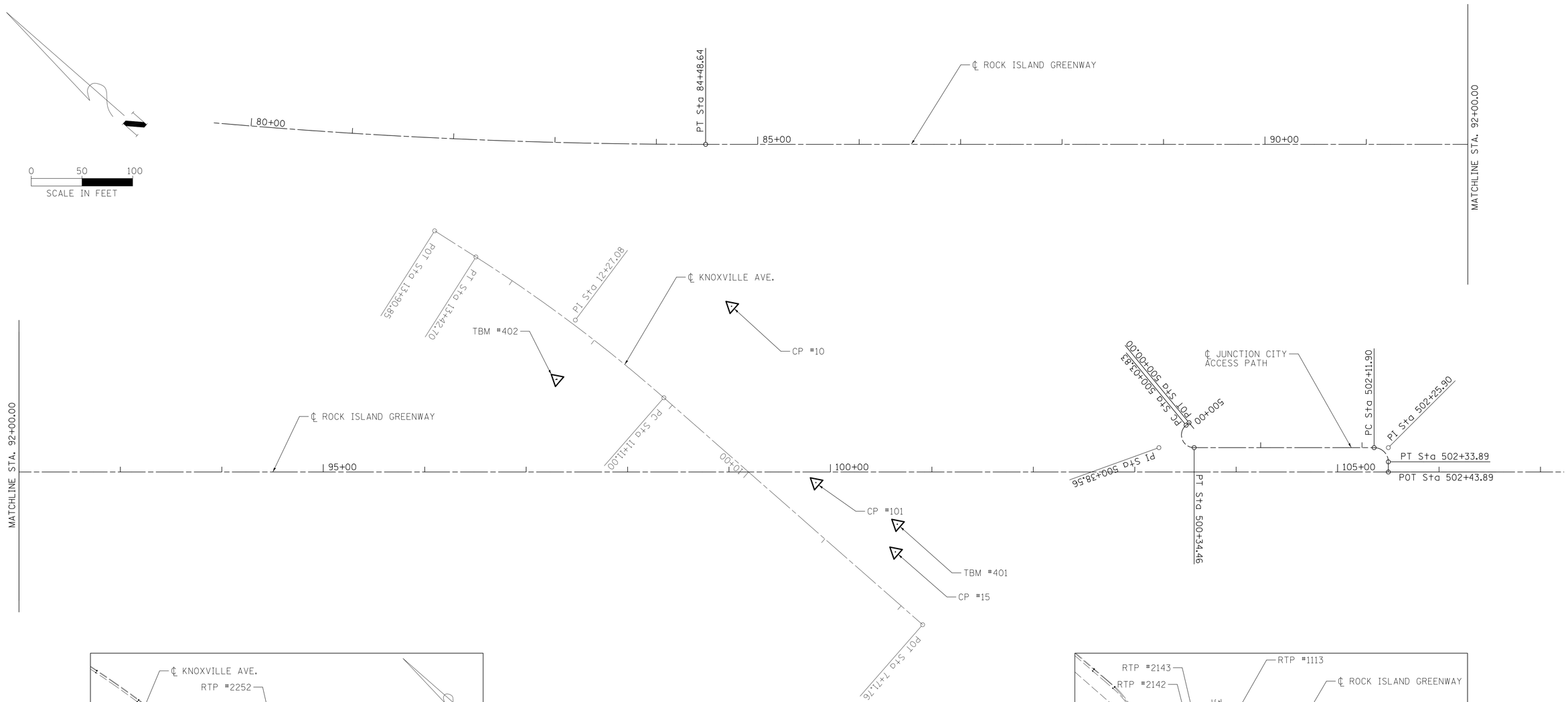
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	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

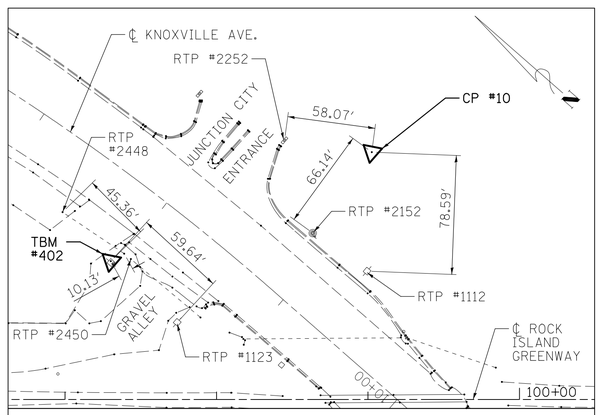
PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
TYPICAL SECTIONS

SCALE: | SHEET 4 OF 4 SHEETS | STA. | TO STA.

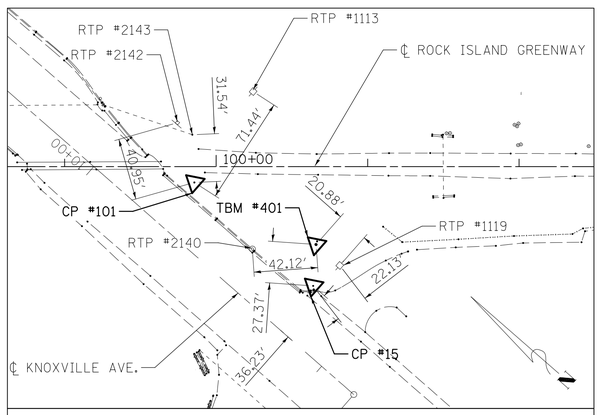
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	9
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			





CONTROL POINT #10 AND TBM #402 (NOT TO SCALE)

REFERENCE TIE POINTS (RTP)					
RTP#	CP/TBM#	CHAIN	STATION	OFFSET	DESCRIPTION
1112	10	RCLEKNOXA	10+70.78	50.65', RT	POWER POLE W/LIGHT
2252	10	RCLEKNOXA	11+65.74	80.74' RT	INLET
2152	10	RCLEKNOXA	11+14.21	45.86', RT	VAULT
2448	402	RCLEKNOXA	12+52.14	46.14', LT	END OF PIPE CULVERT
1123	402	RCLEKNOXA	11+43.99	57.05', LT	POWER POLE
2450	402	RCLEKNOXA	11+95.81	43.80', LT	END OF PIPE CULVERT
1119	15	RCLEPATHA	100+81.59	65.26', RT	POWER POLE
2140	401	RCLEPATHA	100+23.93	54.43', RT	GAS VALVE
2143	101	RCLEPATHA	99+84.32	21.05', LT	PIPE CULVERT
2142	101	RCLEPATHA	99+74.46	28.93', LT	WARNING SIGN
1113	101	RCLEPATHA	100+24.43	49.52', LT	POWER POLE W/LIGHT



CONTROL POINTS #15/#101 AND TBM #401 (NOT TO SCALE)

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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 50.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
ALIGNMENTS, TIES AND BENCHMARKS

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	10
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

CENTER LINE OF PROPOSED ROCK ISLAND GREENWAY

<* 1 DESCRIBE CHAIN RCLEPATHA

Chain RCLEPATHA contains:
RCEPATH01

Beginning chain RCLEPATHA description
==========

Point RCEPATH01 N 1,498,982.6410 E 2,450,849.6162 Sta 0+00.0000

Course from RCEPATH01 to RCEPATH02 S 89° 48' 27.1875" E Dist 56.0399

Point RCEPATH02 N 1,498,982.4527 E 2,450,905.6558 Sta 0+56.0399

Course from RCEPATH02 to PC RCEPATH01 S 24° 48' 52.0213" E Dist 6,803.5389

Curve Data

Curve RCEPATH01
P.I. Station 76+59.5788 N 1,492,080.9360 E 2,454,096.7167
Delta = 16° 24' 02.9094" (LT)
Degree = 1° 01' 55.5872"
Tangent = 800.0000
Length = 1,589.0600
Radius = 5,551.3381
External = 57.3475
Long Chord = 1,583.6404
Mid. Ord. = 56.7612
P.C. Station 68+59.5787 N 1,492,807.0733 E 2,453,760.9719
P.T. Station 84+48.6387 N 1,491,479.1444 E 2,454,623.8285
C.C. N 1,495,136.8645 E 2,458,799.7641
Back = S 24° 48' 52.0213" E
Ahead = S 41° 12' 54.9306" E
Chord Bear = S 33° 00' 53.4759" E

Course from PT RCEPATH01 to PC RCEPATH02 S 41° 12' 54.9306" E Dist 8,240.3190

Curve Data

Curve RCEPATH02
P.I. Station 171+13.9577 N 1,484,960.7495 E 2,460,333.3189
Delta = 21° 49' 02.0984" (LT)
Degree = 2° 35' 53.5396"
Tangent = 425.0000
Length = 839.7046
Radius = 2,205.2059
External = 40.5808
Long Chord = 834.6407
Mid. Ord. = 39.8475
P.C. Station 166+88.9577 N 1,485,280.4512 E 2,460,053.2908
P.T. Station 175+28.6623 N 1,484,768.0184 E 2,460,712.1061
C.C. N 1,486,733.4389 E 2,461,712.1337
Back = S 41° 12' 54.9306" E
Ahead = S 63° 01' 57.0290" E
Chord Bear = S 52° 07' 25.9798" E

Course from PT RCEPATH02 to PC RCEPATH03 S 63° 01' 57.0290" E Dist 252.5448

==========

Ending chain RCLEPATHA description

CENTER LINE OF EXISTING KNOXVILLE AVENUE

<* 2 DESCRIBE CHAIN RCLEKNOXA

Chain RCLEKNOXA contains:
RCEKNOX01 CUR RCEKNOX01 RCEKNOX02

Beginning chain RCLEKNOXA description
==========

Point RCEKNOX01 N 1,490,144.6510 E 2,455,592.7210 Sta 7+71.7626

Course from RCEKNOX01 to PC RCEKNOX01 N 0° 01' 14.0620" E Dist 339.2370

Curve Data

Curve RCEKNOX01
P.I. Station 12+27.0808 N 1,490,599.9692 E 2,455,592.8845
Delta = 8° 51' 01.1030" (LT)
Degree = 3° 49' 10.9871"
Tangent = 116.0811
Length = 231.7005
Radius = 1,500.0000
External = 4.4849
Long Chord = 231.4702
Mid. Ord. = 4.4715
P.C. Station 11+10.9996 N 1,490,483.8880 E 2,455,592.8428
P.T. Station 13+42.7001 N 1,490,714.6746 E 2,455,575.0662
C.C. N 1,490,484.4266 E 2,454,092.8429
Back = N 0° 01' 14.0620" E
Ahead = N 8° 49' 47.0411" W
Chord Bear = N 4° 24' 16.4895" W

Course from PT RCEKNOX01 to RCEKNOX02 N 8° 49' 47.0412" W Dist 48.1450

Point RCEKNOX02 N 1,490,762.2490 E 2,455,567.6760 Sta 13+90.8451

==========

Ending chain RCLEKNOXA description

CENTERLINE OF PROPOSED JUNCTION CITY ACCESS ROAD

<* 3 DESCRIBE CHAIN RLTPACCSA

Chain RLTPACCSA contains:
RLPACCS01 RLPACCS02 CUR RLPACCS01 RLPACCS03 RLPACCS04 CUR RLPACCS02 RLPACCS05 - RLPACCS06

Beginning chain RLTPACCSA description
==========

Point RLPACCS01 N 1,490,078.2034 E 2,455,915.4874 Sta 500+00.0000

Course from RLPACCS01 to RLPACCS02 N 80° 48' 18.3131" W Dist 3.8259

Point RLPACCS02 N 1,490,078.8148 E 2,455,911.7106 Sta 500+03.8259

Curve Data

Curve RLPACCS01
P.I. Station 500+38.5557 N 1,490,084.3644 E 2,455,877.4271
Delta = 140° 24' 36.6162" (LT)
Degree = 458° 21' 58.4500"
Tangent = 34.7298
Length = 30.6327
Radius = 12.5000
External = 24.4108
Long Chord = 23.5228
Mid. Ord. = 8.2668
P.C. Station 500+03.8259 N 1,490,078.8148 E 2,455,911.7106
P.T. Station 500+34.4586 N 1,490,058.2393 E 2,455,900.3102
C.C. N 1,490,066.4754 E 2,455,909.7132
Back = N 80° 48' 18.3144" W
Ahead = S 41° 12' 54.9306" E
Chord Bear = S 28° 59' 23.3775" W

Point RLPACCS03 N 1,490,058.2393 E 2,455,900.3102 Sta 500+34.4586

Course from RLPACCS03 to RLPACCS04 S 41° 12' 54.9306" E Dist 177.4396

Point RLPACCS04 N 1,489,924.7622 E 2,456,017.2233 Sta 502+11.8982

Curve Data

Curve RLPACCS02
P.I. Station 502+25.8982 N 1,489,914.2309 E 2,456,026.4478
Delta = 90° 00' 00.0000" (RT)
Degree = 409° 15' 20.0446"
Tangent = 14.0000
Length = 21.9911
Radius = 14.0000
External = 5.7990
Long Chord = 19.7990
Mid. Ord. = 4.1005
P.C. Station 502+11.8982 N 1,489,924.7622 E 2,456,017.2233
P.T. Station 502+33.8894 N 1,489,905.0064 E 2,456,015.9165
C.C. N 1,489,915.5378 E 2,456,006.6920
Back = S 41° 12' 54.9306" E
Ahead = S 48° 47' 05.0694" W
Chord Bear = S 3° 47' 05.0694" W

Point RLPACCS05 N 1,489,905.0064 E 2,456,015.9165 Sta 502+33.8894

Course from RLPACCS05 to RLPACCS06 S 48° 47' 05.0675" W Dist 10.0000

Point RLPACCS06 N 1,489,898.4175 E 2,456,008.3941 Sta 502+43.8894

==========

Ending chain RLTPACCSA description

BENCHMARKS (TBM)

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
401	1490228.66	2455650.77	796.41	RCLEPATHA	100+65.95	51.43', RT	CHISLED SQUARE IN N.E. CORNER OF GAS VAULT
402	1490575.27	2455536.98	798.59	RCLEPATHA	97+30.24	91.35', LT	RAILROAD SPIKE IN POWER POLE

VERTICAL AND HORIZONTAL CONTROL POINTS (CP)

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
10	1490493.10	2455704.57	797.55	RCLEPATHA	99+02.48	163.28', LT	5/8" ROD SET N. SIDE OF ROCK ISLAND GREENWAY
15	1490212.10	2455628.97	797.96	RCLEPATHA	100+64.04	78.73', RT	5/8" ROD SET E. SIDE OF KNOXVILLE AVE, N. OF ENTRANCE S. OF ROCK ISLAND GREENWAY
101	1490316.07	2455628.67	798.03	RCLEPATHA	99+85.63	10.46', RT	1/2" ROD SET S.E. QUADRANT OF ROCK ISLAND GREENWAY AND KNOXVILLE AVE.

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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
ALIGNMENTS, TIES AND BENCHMARKS

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	11
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

LEGEND

PAVEMENT REMOVAL

TREE REMOVAL (ACRES)

TREE REMOVAL (6 TO 15 UNITS DIAMETER)

0 10 20

SCALE IN FEET

EXISTING PAVED PEDESTRIAN PATH

POWER POLE TO REMAIN IN PLACE

EXISTING RR R.O.W.

CONSTRUCTION LIMITS (TYP.)

PIPE CULVERT REMOVAL

TRAIL PERMANENT EASEMENT

3

104

105+00

106

SEE SCHEDULE OF QUANTITIES FOR LOCATIONS OF TREE REMOVAL

℄ ROCK ISLAND GREENWAY

TRAIL PERMANENT EASEMENT

EXISTING DITCH

EXISTING RR R.O.W.

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	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
REMOVAL PLAN

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	12
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

NORTHMOOR RD.

STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 8" 79.7' @ 2.3%

INLETS TO BE RECONSTRUCTED STA. 82+04.59 93.4', LT S. INV. ELEV. = 792.64

CURB REMOVAL AND REPLACEMENT

CLASS D PATCHES, TYPE III, 6"

FOUND MONUMENT

INLETS, TYPE A TYPE 8 GRATE STA. 81+90.00 13.4', LT RIM ELEV. = 796.60 N. INV. ELEV. = 794.50 S. INV. ELEV. = 794.60

PEORIA PARK DISTRICT PARKING LOT (PAVED)

PAVEMENT REMOVAL

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

STA. 81+63.30, 8.6' LT SIGN PANEL - TYPE 1 (R1-1)

EXISTING GRAVEL ACCESS ROAD

EXISTING RR R.O.W.

TREE REMOVAL (6 TO 15 UNITS DIAMETER)

PT. STA. 84+48.64

20.00' TO PE

AND VARIES

32.41'

PROJECT IMPROVEMENTS BEGIN STA. 81+34.23

TRAIL PERMANENT EASEMENT

SIDEWALK

5.00'

2.00'

AGGREGATE SHOULDERS, TYPE B

℄ ROCK ISLAND GREENWAY

81

82

83

84

85+00

86

2.00' (TYP.)

EXISTING

29.00' R (TYP.)

5.00'

2.00'

TRAIL PERMANENT EASEMENT

20.00' TO PE

50.00'

STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 8" 26.4' @ 0.6%

PROPOSED DITCH FLOWLINE (TYP.)

EXISTING RR R.O.W.

MATCHLINE STA. 86+50.00

PAINT PAVEMENT MARKING - LINE 12"

PAINT PAVEMENT MARKING -LETTERS AND SYMBOLS (SEE GENERAL NOTES SHEET FOR DETAIL)

INLETS, TYPE A TYPE 8 GRATE STA. 81+90.00 12.4', RT RIM ELEV. = 796.75 N. INV ELEV. = 794.75

CONSTRUCTION LIMITS (TYP.)

0 20 40

SCALE IN FEET

PLAN

SURVEYED
PLOTTED
DRAWN
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME

NOTE BOOK
NO.

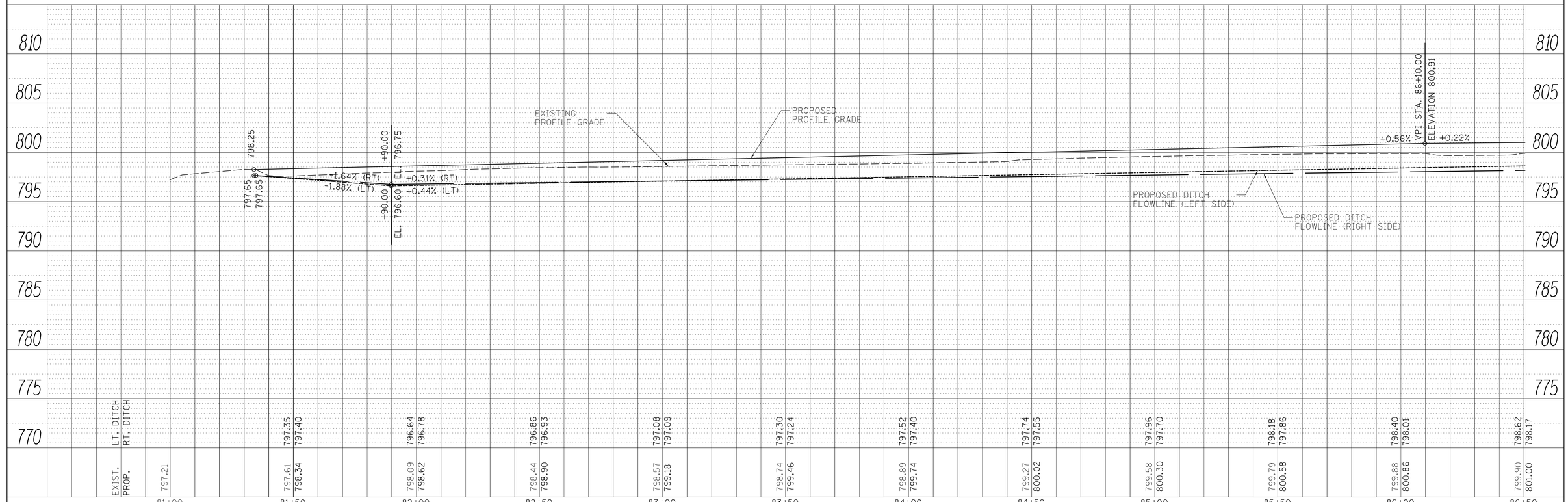
BY
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PROFILE

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DESIGN CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD

NOTE BOOK
NO.

BY
DATE



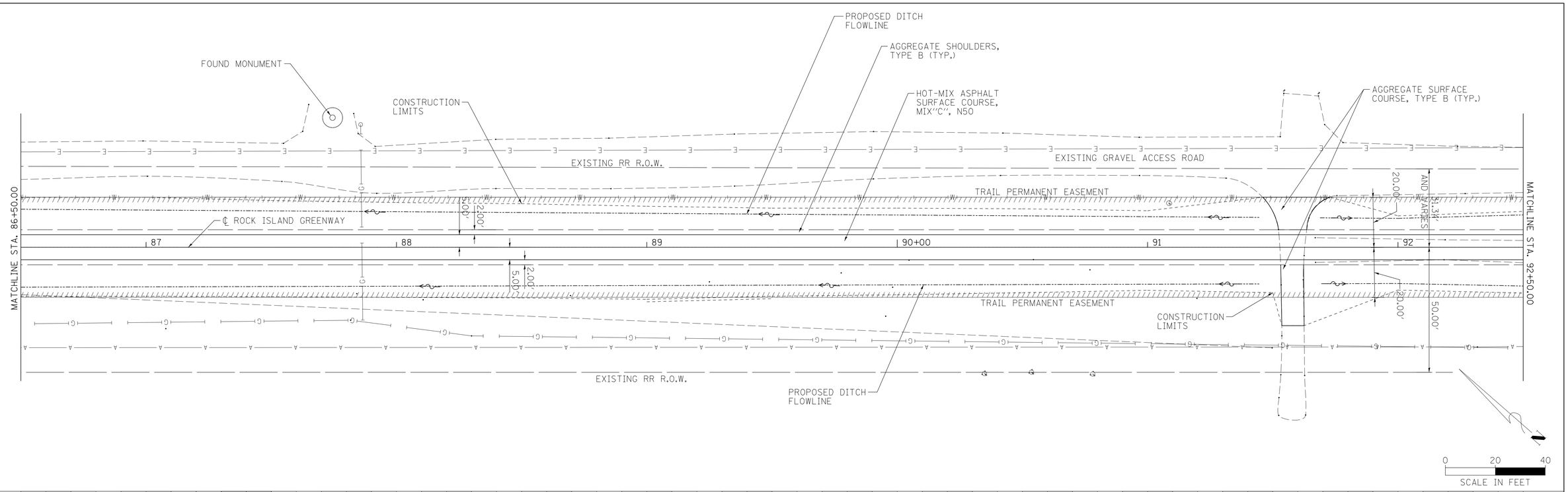
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	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

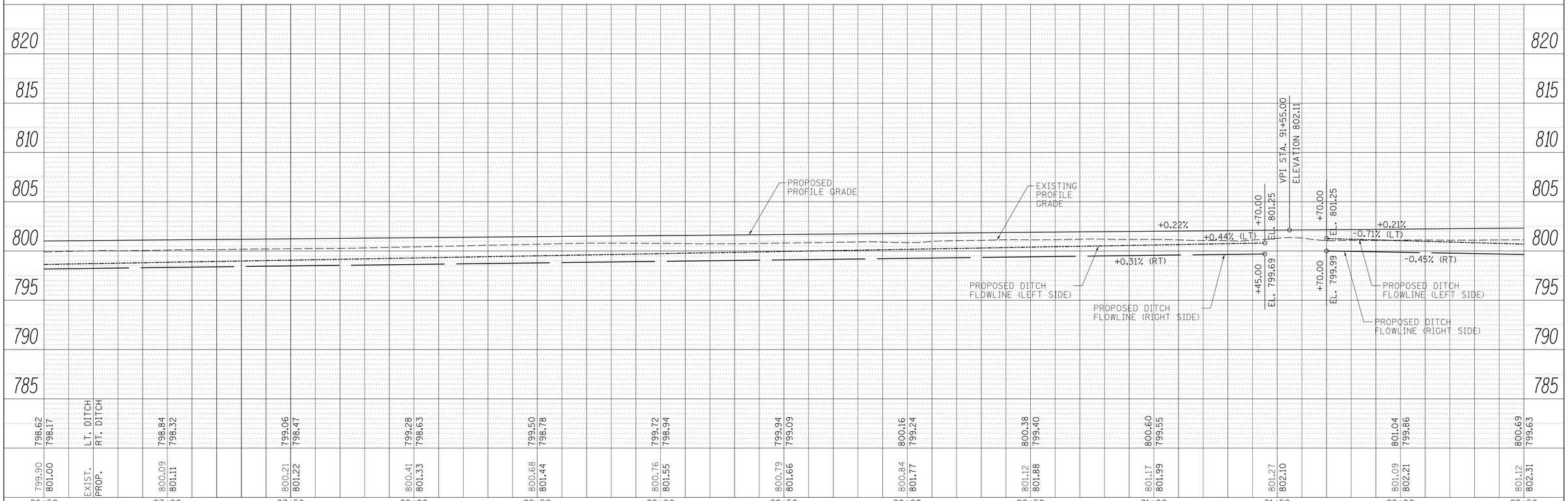
PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
PLAN AND PROFILE

SCALE: | SHEET 1 OF 5 SHEETS | STA. 81+34.22 | TO STA. 86+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	13
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		





PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
ALIGNMENT CHECKED
B.M. NOTED
STRUCTURE NO'S/TYP'S CHK'D
NOTE BOOK
NO.
BY
DATE

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	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
PLAN AND PROFILE

SCALE: | SHEET 2 OF 5 SHEETS | STA. 86+50.00 TO STA. 92+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	14
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

PLAN
SURVEYED
PLOTTED
DRAWN
CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

EXISTING RR R.O.W.

℄ ROCK ISLAND GREENWAY

EXISTING GRAVEL ACCESS ROAD

CONCRETE SUPERSTRUCTURE (SEE STRUCTURE PLANS)

CONSTRUCTION LIMITS

TRAIL PERMANENT EASEMENT

BORING B-01

BORING B-03

BORING B-02

AGGREGATE SHOULDERS, TYPE B

20.00'

AND VARIES

31.19'

10.00'

4.00'

2.00'

5.00'

20.00'

50.00'

MATCHLINE STA. 92+50.00

MATCHLINE STA. 98+50.00

93 | 94 | 95+00 | 96 | 97 | 98

CLASS SI CONCRETE (OUTLET) (SEE CURB OUTLET DETAILS)

CONSTRUCTION LIMITS

STORM SEWERS, CLASS B, TYPE 1 10" L = 32'
RIM ELEV. = 806.44
INV. (IN) = 804.27
INV. (OUT) = 798.22
(SLOPE FOLLOWS GROUND SLOPE, SEE CURB OUTLET DETAIL SHEET)

TRAIL PERMANENT EASEMENT

MSE WALL (SEE STRUCTURE PLANS)

PROPOSED STRUCTURE (SEE STRUCTURE PLANS)

KNOXVILLE AVE. ROW

℄ KNOXVILLE AVE.

EXISTING RR R.O.W.

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

CONCRETE SUPERSTRUCTURE (SEE STRUCTURE PLANS)

STA. 94+49.58

STA. 95+64.58

STONE RIPRAP, CLASS A3 (10'X10')

PROPOSED DITCH FLOWLINE (TYP.)

0 20 40
SCALE IN FEET

PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

825 820 815 810 805 800 795 790

PROPOSED PROFILE GRADE

EXISTING PROFILE GRADE

PROPOSED DITCH FLOWLINE (RIGHT SIDE)

PROPOSED DITCH FLOWLINE (LEFT SIDE)

+16.33 EL. 802.67

K = 26
150.00' V.C.

+66.33 EL. 807.33

+41.33 EL. 811.33

K = 46
175.00' V.C.

+16.33 EL. 819.01

VPI STA. 97+28.83
ELEVATION 817.08

+6.00%

+2.20%

+0.21%

+6.00%

-0.71% (LT)

+50.00
EL. 799.27

VPI STA. 94+91.33
ELEVATION 802.83

-0.71% (LT)

+00.00
EL. 797.50

-1.09% (LT)

-0.45% (RT)

+00.00
EL. 797.16

796.41

-1.57% (RT)

| | | |

PLAN
SURVEYED
PLOTTED
DRAWN
CHECKED
R/W CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
R/W CHECKED
NOTE BOOK
NO.
BY
DATE
B.M. NOTED
STRUCTURE NOTATNS CHKD

STA. 99+19.26 (ROCK ISLAND GREENWAY) =
STA. 10+00.00 (KNOXVILLE AVE)

PROPOSED STRUCTURE
(SEE STRUCTURE PLANS)

EXISTING RR R.O.W.

TREE REMOVAL
(6 TO 15 UNITS DIAMETER)
-SEE SCHEDULES FOR
SIZES AND LOCATIONS

CONSTRUCTION
LIMITS

PROPOSED DITCH
FLOWLINE (TYP.)

FOUND MONUMENT

AGGREGATE SHOULDERS,
TYPE B

PC STA. 500+03.83

PCC STA. 500+00.00

BORING
B-04

BORING
B-06

℄ ROCK ISLAND GREENWAY

TRAIL PERMANENT EASEMENT

MATCHLINE STA. 98+50.00

99

100+00

101

102

103

104

501

PT STA. 500+38.56

PT STA. 500+34.46

PC STA. 501+39.42

MATCHLINE STA. 104+50.00

48.45' AND VARIES

20.00'

50.00'

BORING
B-05

CONSTRUCTION
LIMITS

BORING
B-07

BORING
B-08

BORING
B-09

BORING
B-10

TRAIL PERMANENT. EASEMENT

MSE WALL
(SEE STRUCTURE PLANS)

EXISTING R.O.W.

℄ KNOXVILLE AVE.

EXISTING R.O.W.

EXISTING R.O.W.

CONCRETE SUPERSTRUCTURE
(SEE STRUCTURE PLANS)

PROPOSED DITCH
FLOWLINE (TYP.)

0 20 40
SCALE IN FEET

830
825
820
815
810
805
800
795

PROPOSED PROFILE
GRADE

℄ KNOXVILLE AVE.

+19.26

+2.20%

VPI STA. 100+17.00
ELEVATION 823.42

-5.00%

-5.00%

VPI STA. 102+17.67
ELEVATION 813.39

-6.00%

+17.67 EL. 813.39

K = 56
401.34' V.C.

EXISTING
PROFILE
GRADE

PROPOSED DITCH
FLOWLINE (RIGHT SIDE)
-1.57% (RT)

PROPOSED DITCH
FLOWLINE (LEFT SIDE)

+89.07 794.19

+18.67 EL. 792.36

+2.94% (LT)

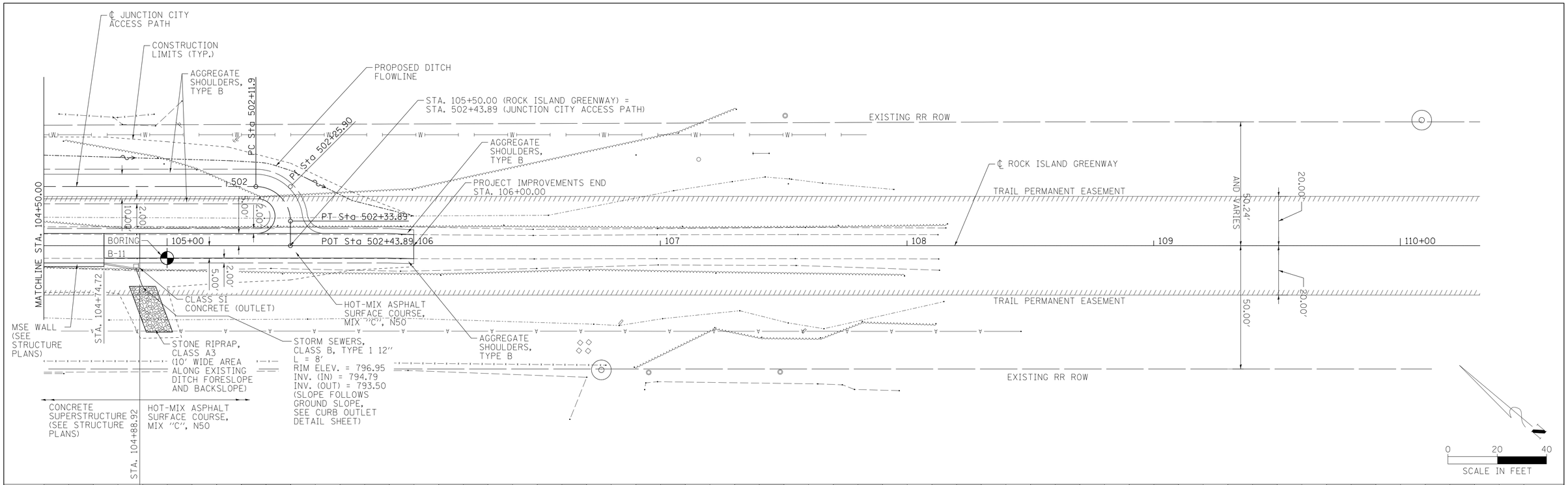
+2.00% (LT)

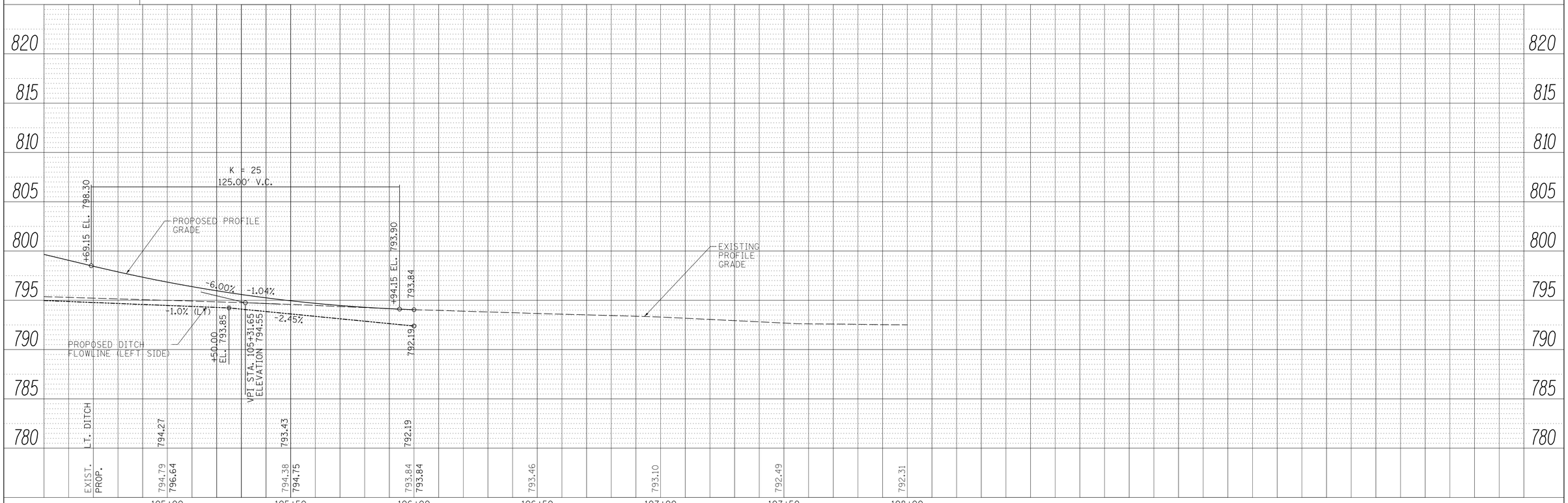
-1.00% (LT)

+25.00 794.48

+64.10 795.63

| | | |





PLAN — SURVEYED; PLOTTED; DRAWN; CHECKED; ALIGNMENT CHECKED; RT. OF WAY CHECKED; CADD FILE NAME; NOTE BOOK; NO.; BY; DATE

PROFILE — SURVEYED; PLOTTED; DRAWN; CHECKED; B.M. NOTED; STRUCTURE NOTATNS CHKD; NOTE BOOK; NO.; BY; DATE

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	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

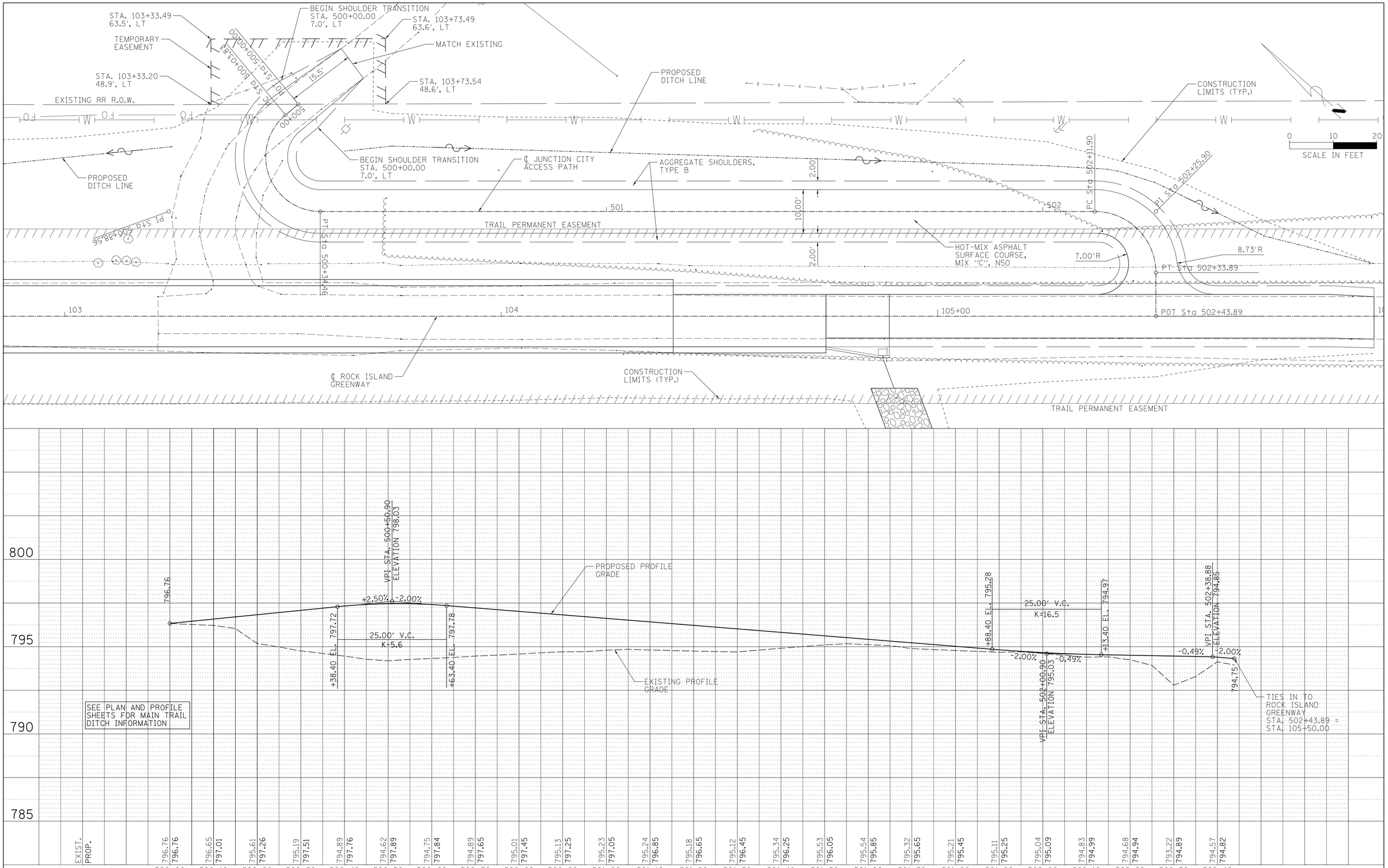
ROCK ISLAND GREENWAY KNOXVILLE CROSSING
PLAN AND PROFILE

SCALE: | SHEET 5 OF 5 SHEETS | STA. 104+50.00 TO STA. 106+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	17
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

PLAN

DATE	BY	
		SURVEYED
		PLOTTED
		ALIGNMENT CHECKED
		RT. OF WAY CHECKED
		CADD FILE NAME
		NOTE BOOK
		NO.



PROFILE

DATE	BY	
		SURVEYED
		PLOTTED
		CROSS CHECKED
		B.M. NOTED
		STRUCTURE NOTATNS CHKD
		NOTE BOOK
		NO.

	EXIST.	PROP.
500+00	796.76	796.76
500+10	796.65	797.01
500+20	795.61	797.26
500+30	795.19	797.51
500+40	794.89	797.76
500+50	794.62	797.89
500+60	794.75	797.84
500+70	794.89	797.65
500+80	795.01	797.45
500+90	795.13	797.25
501+00	795.23	797.05
501+10	795.24	796.85
501+20	795.18	796.65
501+30	795.12	796.45
501+40	795.34	796.25
501+50	795.53	796.05
501+60	795.54	795.85
501+70	795.32	795.65
501+80	795.21	795.45
501+90	795.11	795.25
502+00	795.04	795.09
502+10	794.83	794.99
502+20	794.68	794.94
502+30	793.22	794.89
502+40	794.57	794.82

FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-plnprf-spur.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
	PLOT SCALE = 10.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

MAURER-STUTZ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

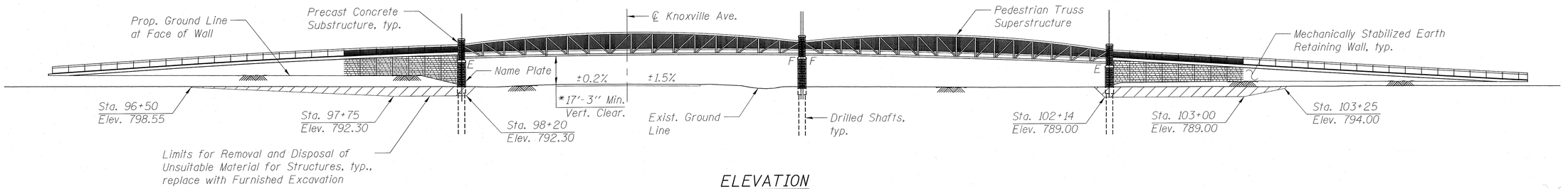
ROCK ISLAND GREENWAY KNOXVILLE CROSSING
PLAN AND PROFILE (JUNCTION CITY ACCESS PATH)

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	18
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

Bench Mark: TBM 401, Chisled Square in N.E. Corner of Gas Vault, Sta. 100+65.95 (Rock Island Greenway), 51.43' RT., Elev. 796.41.
TBM 402, Railroad Spike in Power Pole, Sta. 97+30.24 (Rock Island Greenway), 91.35' LT., Elev. 798.59.

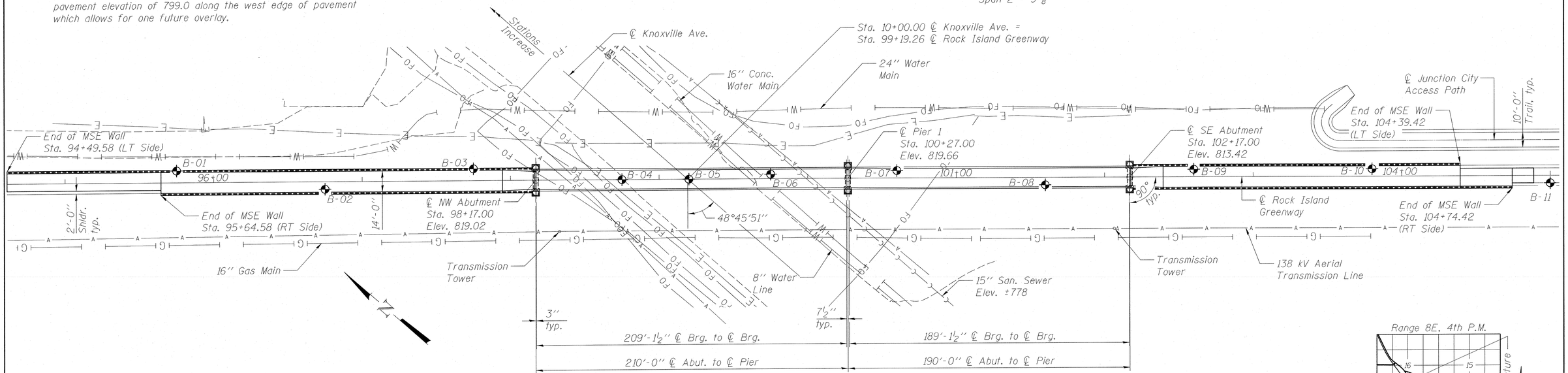
Existing Structure: None



ELEVATION

Note:
Truss camber after dead load deflection:
Span 1 - $11\frac{3}{4}$''
Span 2 - $9\frac{5}{8}$''

* Vertical Clearance over Knoxville Ave. is measured from a pavement elevation of 799.0 along the west edge of pavement which allows for one future overlay.



PLAN

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3 Truss Superstructure
4. NW Abutment
5. SE Abutment
6. Pier 1
7. Substructure Details
8. Approach Sections
9. MSE Wall Elevations
10. Approach Pavement
11. Approach Pavement Sections
12. Approach Pavement Details
13. Bicycle Railing
14.-16. Soil Borings

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PEDESTRIAN TRUSS SUPERSTRUCTURE

fy = 50,000 psi (M270 Grade 50W)

PRECAST FACE PANELS

See Special Provision for Mechanically Stabilized Earth Retaining Walls

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition
LRFD Guide Specifications for Design of Pedestrian Bridges, 2nd Edition

LOADING 90 psf

H-10 Vehicle (separately)

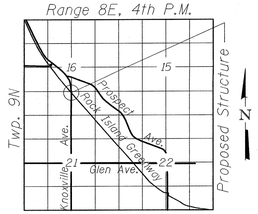
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.078
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.130
Soil Site Class = C

STATE OF ILLINOIS
BRYAN A. SWANSON
081-006716
PEORIA, IL
LICENSED STRUCTURAL ENGINEER

Bryan Swanson

Date Signed: 6/7/2013
Exp. Date: 11/30/2014



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
PEORIA PARK DISTRICT ROCK ISLAND GREENWAY OVER KNOXVILLE AVE.
PEORIA COUNTY
STA. 100+17.00
STRUCTURE NO. 072-6009

FILE NAME = D412002-001-GPE.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
		CHECKED - JAE	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

SHEET NO. 1 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	19
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of masked off connection surfaces and field installed fasteners. These surfaces and any damaged areas shall be touched up in the field. The color of the truss structure shall be Black; verify color with the Owner prior to painting the structure.

Alternate Bid Item 1:
In place of the Urethane Paint System, a Zinc Rich Urethane Primer / Fluoropolymer / Fluoropolymer Topcoat Paint System shall be used for painting of the structural steel. The entire system shall still be shop applied as indicated in the general note.

STATION 100+17
BUILT 20__ BY
PEORIA PARK DISTRICT
LOADING 90 PSF
STRUCTURE NO. 072-6009

NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.		344	344
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.		1037	1037
Concrete Structures	Cu. Yd.		114.0	114.0
Concrete Superstructure	Cu. Yd.	384.0		384.0
Reinforcement Bars	Pound		40190	40190
Reinforcement Bars, Epoxy Coated	Pound	20440	4000	24440
Bicycle Railing	Foot	1092		1092
Name Plates	Each	1		1
Drilled Shaft in Soil	Cu. Yd.		103.3	103.3
Pedestrian Truss Superstructure	Sq. Ft.	5084		5084
Concrete Wearing Surface, 6''	Sq. Yd.	564		564
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.		11167	11167
Precast Concrete Substructure	L. Sum		1	1

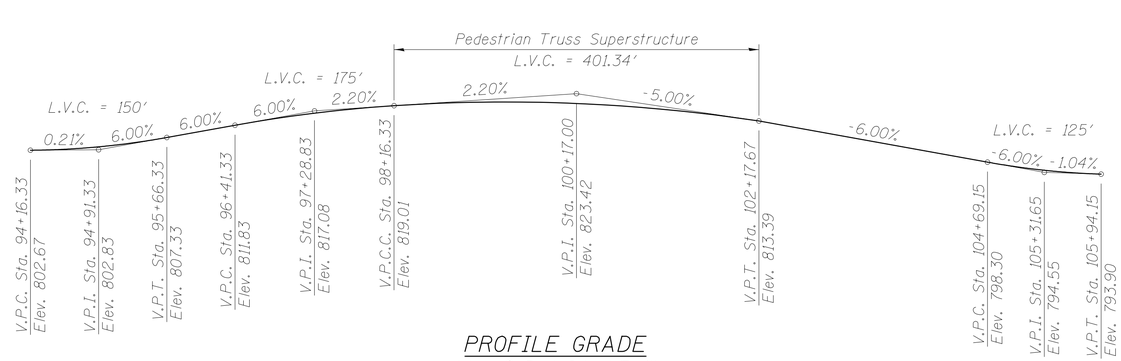
ASSUMED SUPERSTRUCTURE REACTIONS

LOAD CASE	P (kips)		H (kips)		L (kips)	
	Span 1	Span 2	Span 1	Span 2	Span 1	Span 2
Dead Load	103.1	91.9	--	--	--	--
Pedestrain Live Load	62.9	56.9	--	--	--	--
Vehicle Live Load	10.0	10.0	--	--	--	--
Wind (max. transverse)	±29.6	±26.4	25.1	22.7	--	--
Wind, Uplift	-24.3	-21.9	--	--	--	--
Thermal	--	--	--	--	15.5	13.8

P - Vertical Reaction (+ve acting down on bearing)
H - Lateral Reaction acting perpendicular to truss
L - Lateral Reaction acting parallel to truss span

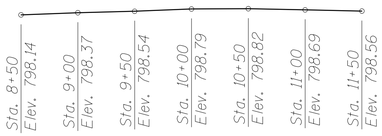
Reactions shown are for each truss end post.

The foundation design is based on the above maximum reactions. The Manufacturer shall verify that the proposed truss reactions do not exceed these values. If the design parameters are exceeded, the actual reactions shall be submitted to the Engineer to review the substructure design.



PROFILE GRADE

(along ℄ Rock Island Trail)



PROFILE GRADE

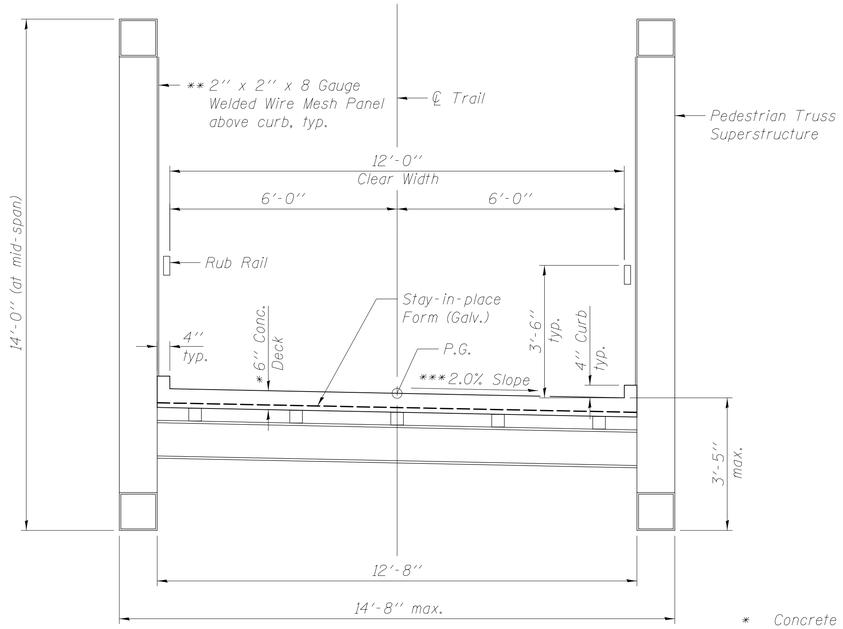
(along ℄ Knoxville Ave.)

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MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

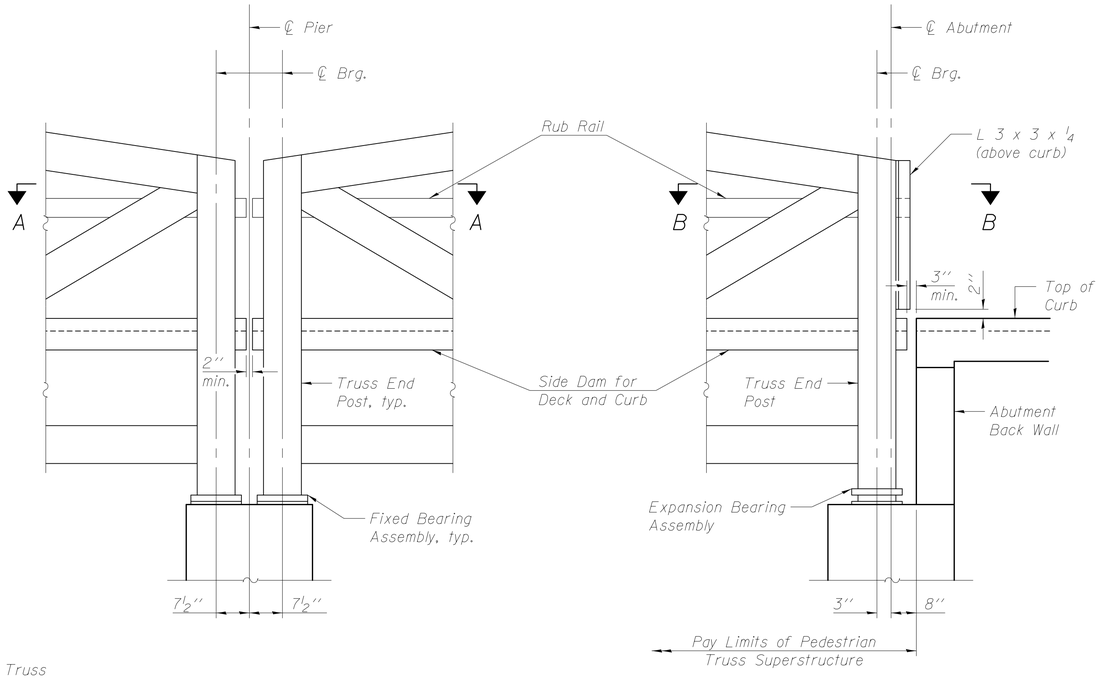
PEORIA PARK DISTRICT

GENERAL DATA
STRUCTURE NO. 072–6009
SHEET NO. 2 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	20
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			



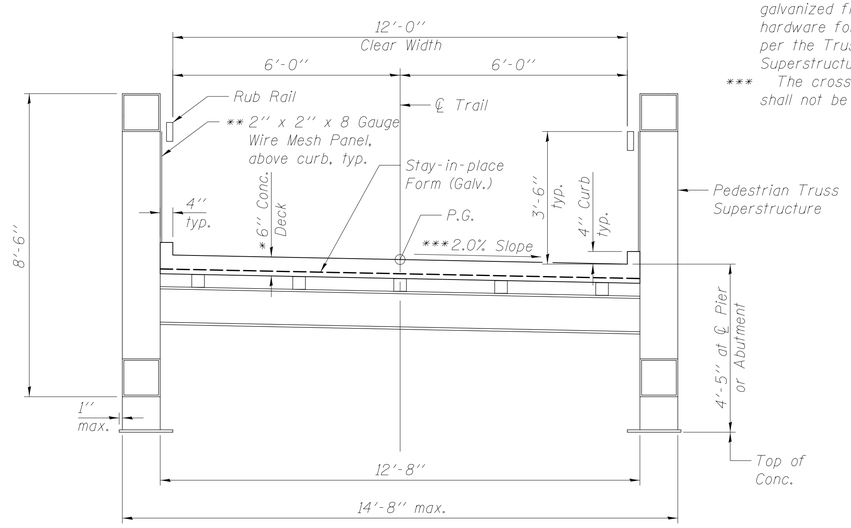
NEAR MID-SPAN



AT PIER

AT ABUTMENT

TRUSS BEARING ELEVATIONS



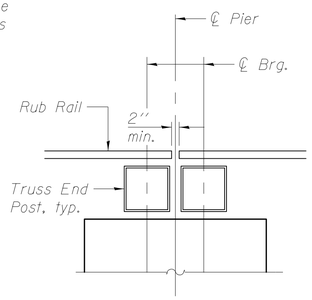
AT SUPPORTS

TYP. TRUSS SECTION

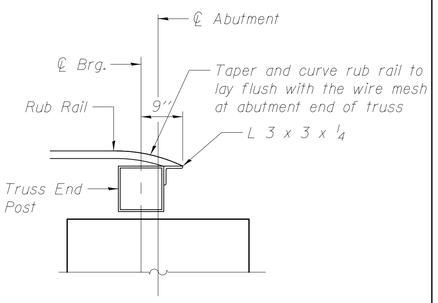
* Concrete deck and curbs shall be reinforced per the Truss Manufacturer's design (epoxy-coated or galvanized reinforcement). The cost of deck concrete and reinforcement shall be included in Concrete Wearing Surface, 6''.

** Wire mesh panels shall be galvanized with a continuous galvanized frame around all edges of each panel. Details and hardware for attaching the wire mesh panels to the truss shall be per the Truss Manufacturer. Cost included with Pedestrian Truss Superstructure.

*** The cross slope of the concrete deck surface shall not be permitted to exceed 2.0%.



SECTION A-A



SECTION B-B

Notes:

Rubrail shall be HSS 6 x 2 x ¼. Paint rub rail to match the truss. Connection of the rub rail to the truss shall be by the Truss Manufacturer.

Truss Manufacturer shall provide a joint detail for the gap in the deck at the pier and abutments consisting of a neoprene strip seal or embedded slip plate. This detail shall extend to the top of the curb and shall convey deck runoff across the joint to the bridge approach.

Provide ¼'' x ¾'' formed joints in the deck at ±15 foot intervals across the length of the bridge. Fill the joints with elastomeric sealant. The sealant shall be a non-staining gray non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type M or S, Grade NS, Class 25, Use T.

The stay-in-place form and side dam for the concrete deck shall be fabricated to follow the Profile Grade after all dead load deflections.

Alternate Bid Item 2:

In place of galvanized welded wire mesh panels with continuous frame, these items shall be black, vinyl-coated after being cut to size and length.

BILL OF MATERIAL

Item	Unit	Quantity
Pedestrian Truss Superstructure	Sq. Ft.	5084
Concrete Wearing Surface, 6''	Sq. Yd.	564

FILE NAME = D412002-003-Truss.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/14/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

TRUSS SUPERSTRUCTURE
STRUCTURE NO. 072-6009
SHEET NO. 3 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	21
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

Notes:

For Section D-D and bar details, see Sheet 7 of 16.

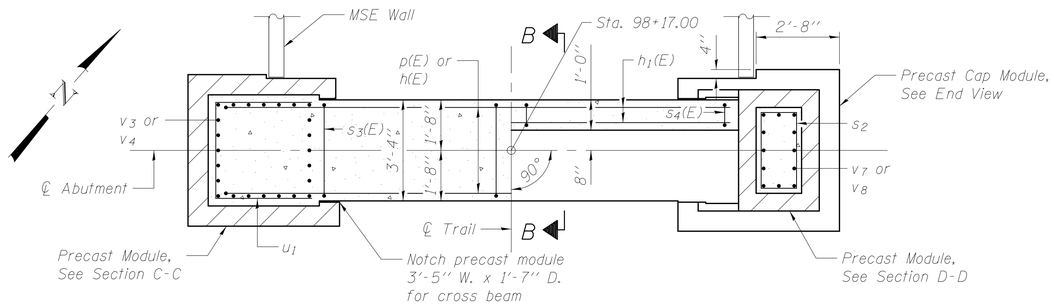
Cast in place concrete above the Drilled Shafts, including the concrete within the precast modules, shall be paid for as Concrete Structures.

Precast Modules shall be paid for as Precast Concrete Substructure. See Sheet 7 of 16 for additional notes and details.

The number, size, embedment, and location of the anchor bolts shall be as determined by the truss superstructure manufacturer's design. Cost of the anchor bolts shall be included in Pedestrian Truss Superstructure.

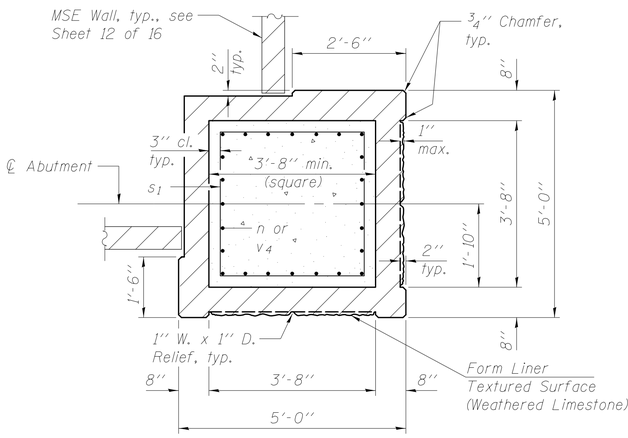
Embankment shall not be placed against the abutment until the cast in place concrete has attained the required flexural strength and the curing period is completed. In the absense of tests to determine the flexural strength, at least 14 days shall have elapsed after placing the concrete.

The concrete back wall shall not be poured until all the precast units have been placed. Pour the back wall against the face of the precast unit.

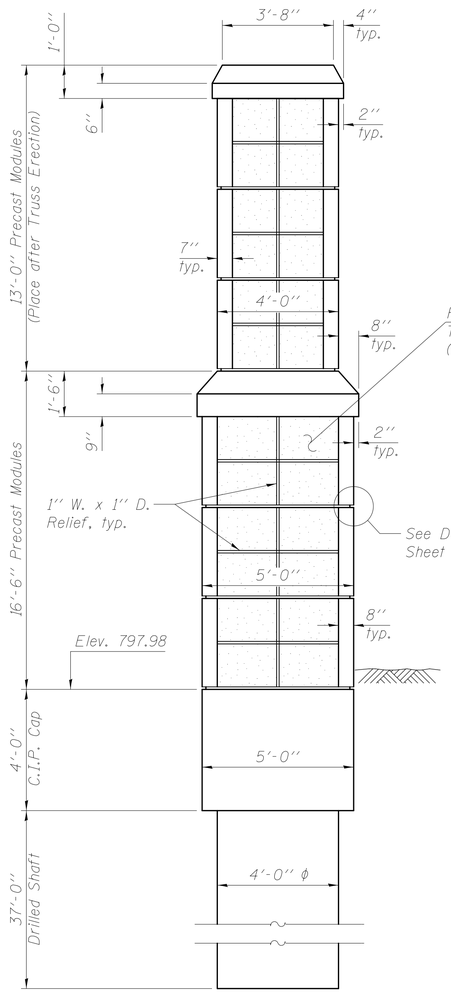


THRU CROSS BEAM THRU BACK WALL

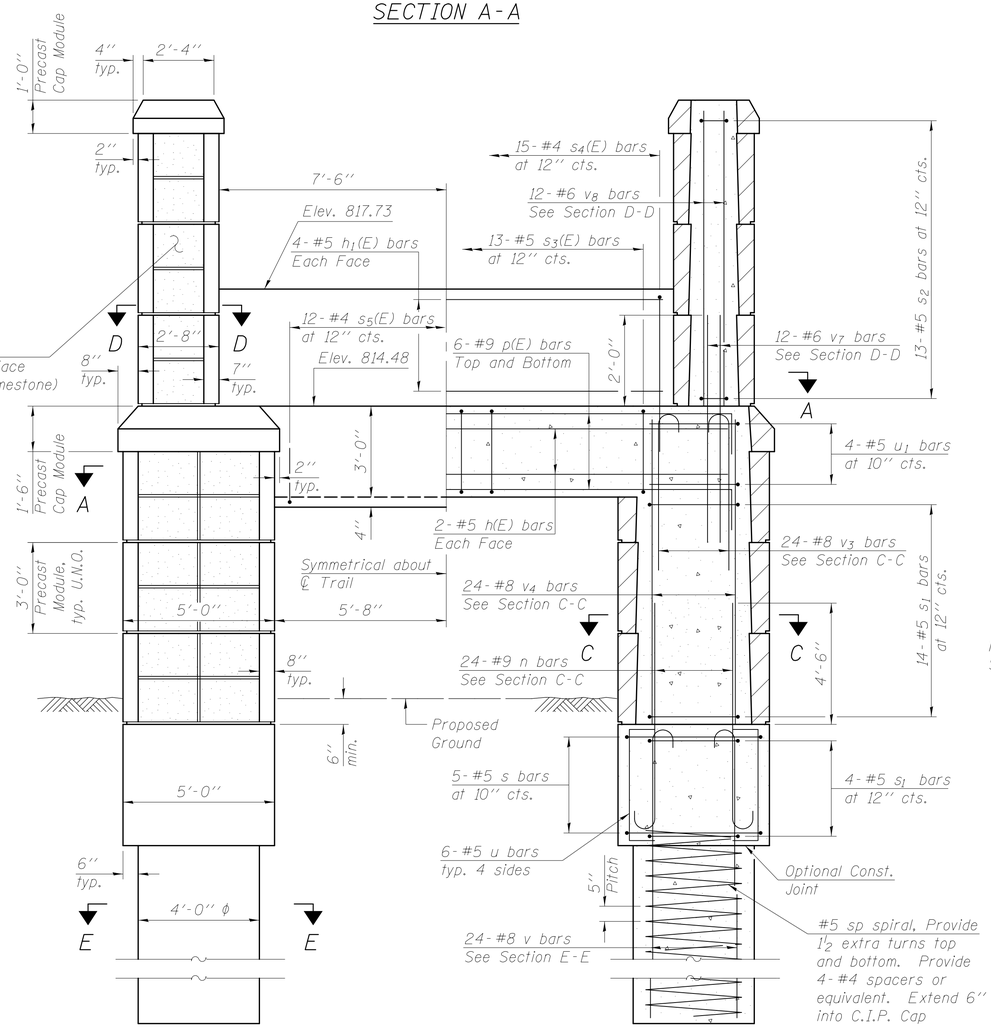
SECTION A-A



SECTION C-C



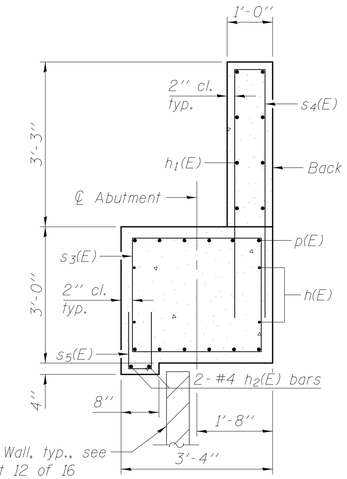
END VIEW



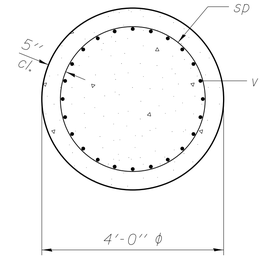
SHOWING SURFACE SHOWING REINFORCEMENT

ELEVATION

(Looking NW)



SECTION B-B



SECTION E-E

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h(E)	4	#5	19'-2"	——
	h1(E)	8	#5	14'-8"	——
	h2(E)	2	#4	11'-0"	——
	n	48	#9	9'-6"	
	p(E)	12	#9	22'-4"	
	s	10	#5	19'-7"	
	s1	36	#5	13'-7"	
	s2	26	#5	7'-7"	
	s3(E)	13	#5	12'-3"	
	s4(E)	15	#4	10'-4"	
	s5(E)	12	#4	3'-0"	
**	sp	2	#5	37'-3"	
	u	48	#5	5'-4"	
	u1	8	#5	9'-6"	
	v	48	#8	41'-5"	
	v3	48	#8	5'-5"	
	v4	48	#8	16'-2"	——
	v7	24	#6	3'-6"	——
	v8	24	#6	12'-9"	——
	Concrete Structures			Cu. Yd.	35.6
	Reinforcement Bars			Pound	13400
	Reinforcement Bars, Epoxy Coated			Pound	1420
	Drilled Shaft in Soil			Cu. Yd.	34.4

Space cross beam reinforcement to miss anchor bolts.

Minimum lap for spirals = 2'-6"

** Length is height of spiral.

Notes:

For Section D-D and bar details, see Sheet 7 of 16.

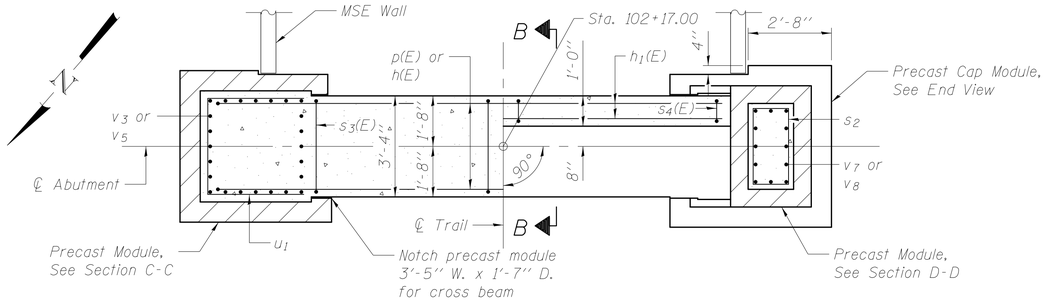
Cast in place concrete above the Drilled Shafts, including the concrete within the precast modules, shall be paid for as Concrete Structures.

Precast Modules shall be paid for as Precast Concrete Substructure. See Sheet 7 of 16 for additional notes and details.

The number, size, embedment, and location of the anchor bolts shall be as determined by the truss superstructure manufacturer's design. Cost of the anchor bolts shall be included in Pedestrian Truss Superstructure.

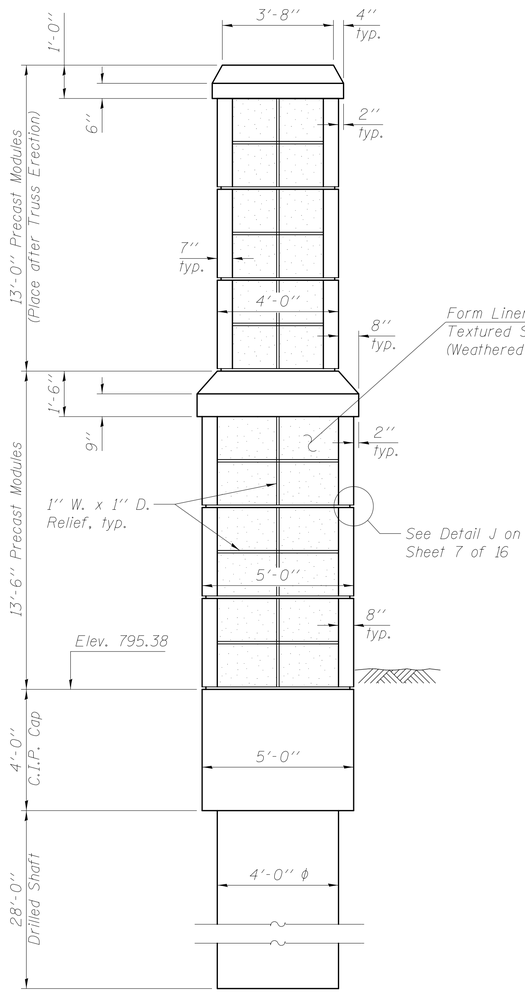
Embankment shall not be placed against the abutment until the cast in place concrete has attained the required flexural strength and the curing period is completed. In the absense of tests to determine the flexural strength, at least 14 days shall have elapsed after placing the concrete.

The concrete back wall shall not be poured until all the precast units have been placed. Pour the back wall against the face of the precast unit.

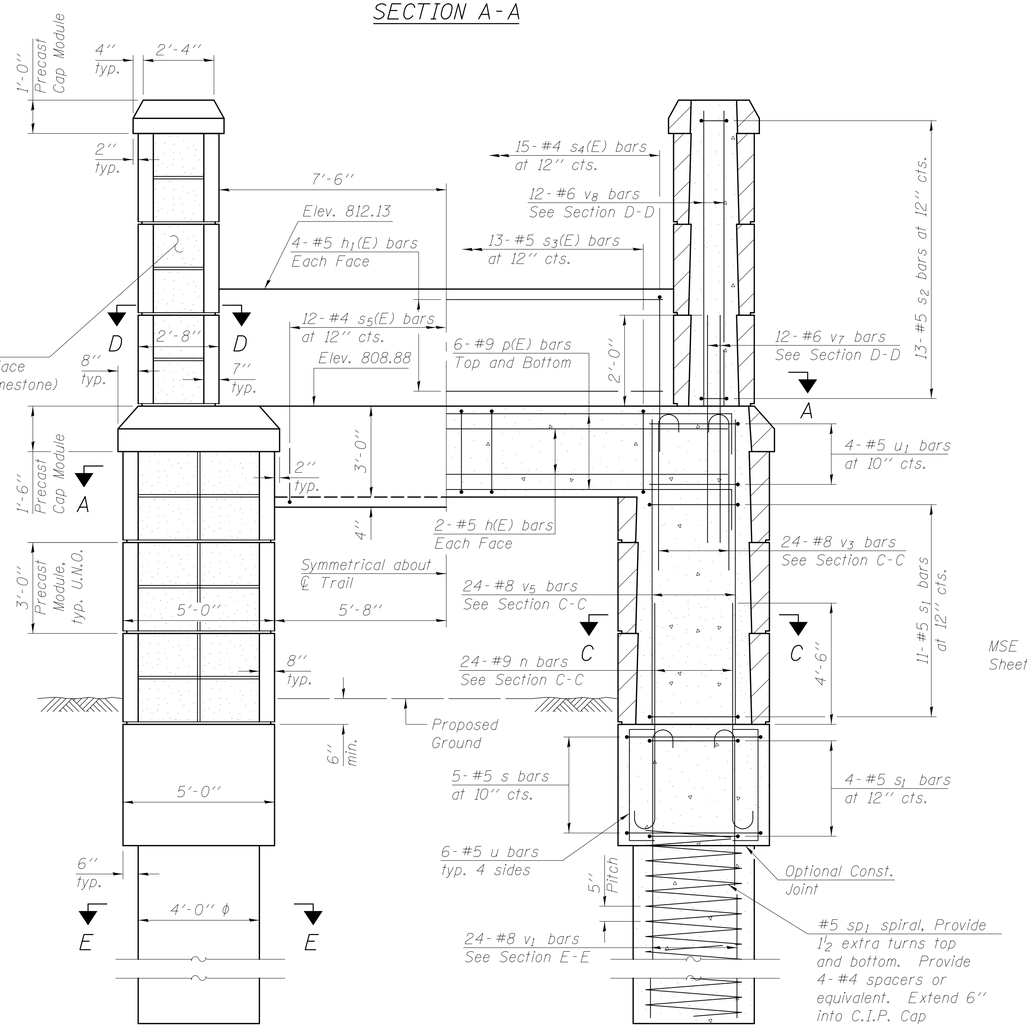


THRU CROSS BEAM THRU BACK WALL

SECTION A-A

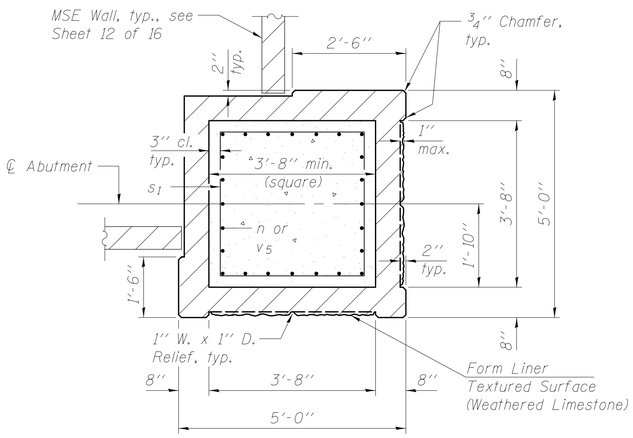


END VIEW

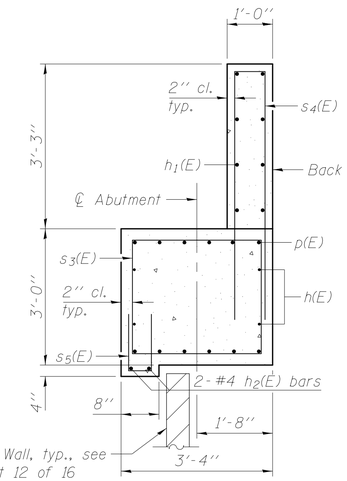


SHOWING SURFACE SHOWING REINFORCEMENT

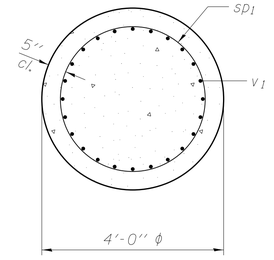
ELEVATION
(Looking SE)



SECTION C-C



SECTION B-B



SECTION E-E

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h(E)	4	#5	19'-2"	——
	h1(E)	8	#5	14'-8"	——
	h2(E)	2	#4	11'-0"	——
	n	48	#9	9'-6"	
	p(E)	12	#9	22'-4"	
	s	10	#5	19'-7"	
	s1	30	#5	13'-7"	
	s2	26	#5	7'-7"	
	s3(E)	13	#5	12'-3"	
	s4(E)	15	#4	10'-4"	
	s5(E)	12	#4	3'-0"	
**	sp1	2	#5	28'-3"	
	u	48	#5	5'-4"	
	u1	8	#5	9'-6"	
	v1	48	#8	32'-5"	
	v3	48	#8	5'-5"	
	v5	48	#8	13'-2"	——
	v7	24	#6	3'-6"	——
	v8	24	#6	12'-9"	——

Concrete Structures	Cu. Yd.	32.5
Reinforcement Bars	Pound	11320
Reinforcement Bars, Epoxy Coated	Pound	1420
Drilled Shaft in Soil	Cu. Yd.	26.1

Space cross beam reinforcement to miss anchor bolts.

Minimum lap for spirals = 2'-6"

** Length is height of spiral.

Notes:

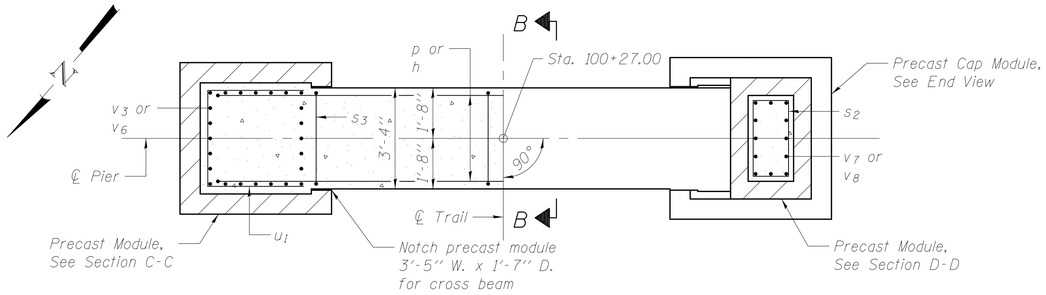
For Section D-D and bar details, see Sheet 7 of 16.

Cast in place concrete above the Drilled Shafts, including the concrete within the precast modules, shall be paid for as Concrete Structures.

Precast Modules shall be paid for as Precast Concrete Substructure. See Sheet 7 of 16 for additional notes and details.

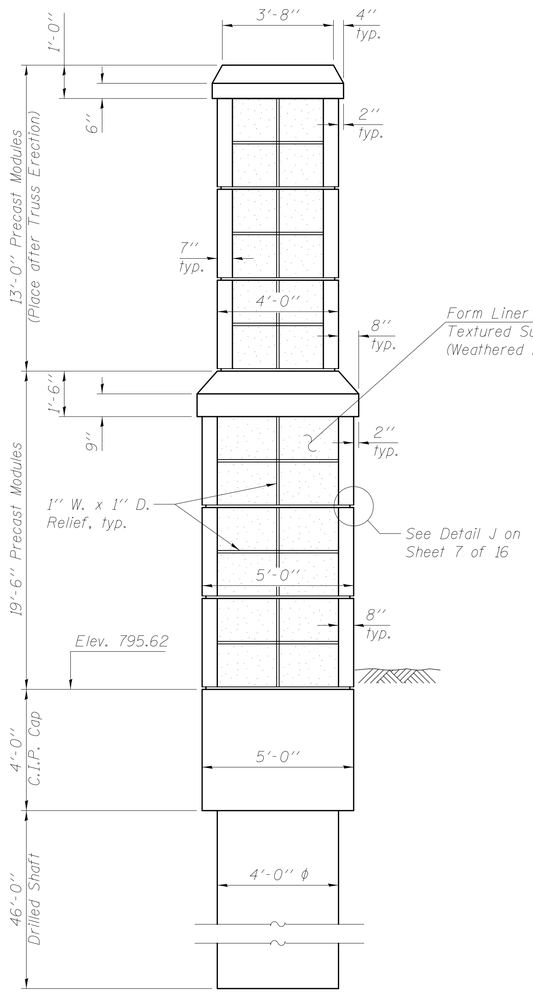
The number, size, embedment, and location of the anchor bolts shall be as determined by the truss superstructure manufacturer's design. Cost of the anchor bolts shall be included in Pedestrian Truss Superstructure.

The southern drilled shaft will be in close proximity (±5 feet) to a sanitary sewer pipe encased in concrete. If this encasement is encountered, the Contractor shall stop drilling on this shaft and inform the Engineer. The auger may be battered up to $\frac{1}{2}$'' to the east in 1'-0'' to avoid this potential conflict.

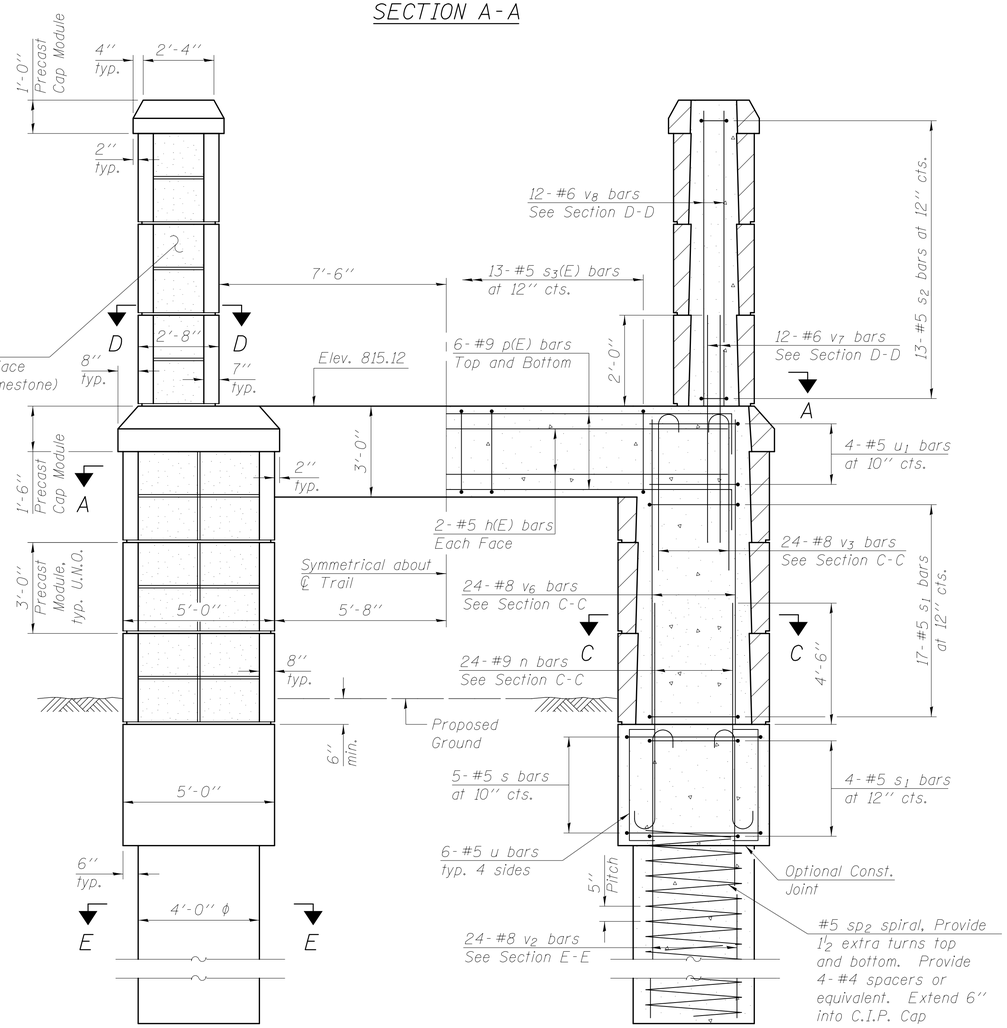


THRU CROSS BEAM THRU BACK WALL

SECTION A-A

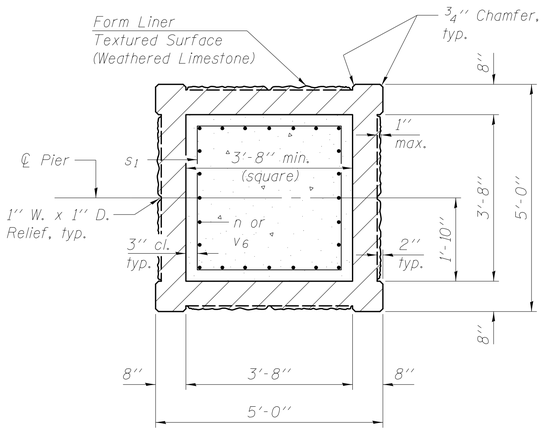


END VIEW

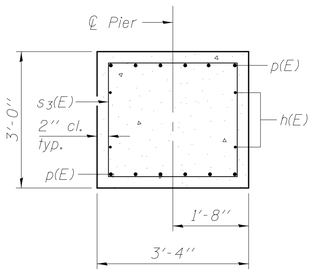


SHOWING SURFACE SHOWING REINFORCEMENT

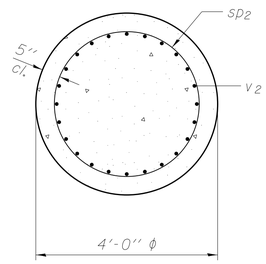
ELEVATION
(Looking SE)



SECTION C-C



SECTION B-B



SECTION E-E

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h(E)	4	#5	19'-2''	——
	n	48	#9	9'-6''	⊃
	p(E)	12	#9	22'-4''	⌐
	s	10	#5	19'-7''	□
	s_1	42	#5	13'-7''	□
	s_2	26	#5	7'-7''	□
	s_3(E)	13	#5	12'-3''	□
**	sp_2	2	#5	46'-3''	∿∿
	u	48	#5	5'-4''	⊐
	u_1	8	#5	9'-6''	⊐
	v_2	48	#8	50'-5''	⊃
	v_3	48	#8	5'-5''	⊃
	v_6	48	#8	19'-2''	——
	v_7	24	#6	3'-6''	——
	v_8	24	#6	12'-9''	——
	Structure Excavation			Cu. Yd.	29
	Concrete Structures			Cu. Yd.	36.8
	Reinforcement Bars			Pound	15470
	Reinforcement Bars, Epoxy Coated			Pound	1160
	Drilled Shaft in Soil			Cu. Yd.	42.8

Space cross beam reinforcement to miss anchor bolts.

Minimum lap for spirals = 2'-6''

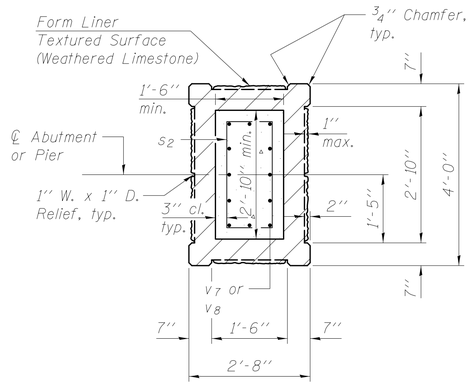
** Length is height of spiral.

FILE NAME = D412002-006-Pier 1.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

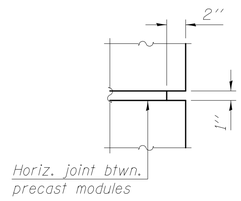
PEORIA PARK DISTRICT

PIER 1
STRUCTURE NO. 072-6009
SHEET NO. 6 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	24
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		



SECTION D-D



DETAIL J

Precast Notes:

Surfaces detailed as form liner, textured surface shall be similar to Custom Rock Pattern #11002 (Weathered Limestone). See Special Provisions for Form Liner, Textured Surface. Cost included with Precast Concrete Substructures.

Remaining exposed surfaces of the precast modules shall have a smooth, light-sand blasted finish.

Concrete surfaces labeled to have a Weathered Limestone texture shall be stained to a buff tint to replicate the appearance of Alamosa Limestone. See Special Provisions for Staining Concrete Structures. Cost included with Precast Concrete Substructures.

The Contractor shall ensure the stability of the precast modules prior to and during the casting of the concrete core.

The precast modules shall be constructed in accordance with the special provision for Precast Concrete Substructures.

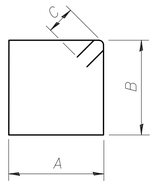
The top precast cap module may alternately be cast as a solid unit. This alternate module shall be secured to the structure below using grouted dowel pockets.

PRECAST MODULE SCHEDULE

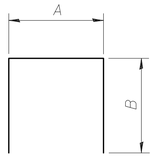
Size	NW Abut.	SE Abut.	Pier 1
5'-0" x 5'-0" x 3'-0"	10	8	12
5'-4" x 5'-4" x 1'-6"	2	2	2
4'-0" x 2'-8" x 3'-0"	8	8	8
4'-4" x 3'-0" x 1'-0"	2	2	2
Item		Unit	Quantity
Precast Concrete Substructure		L. Sum	1



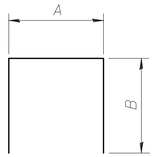
TEXTURED SURFACE



BARS s thru s3(E)



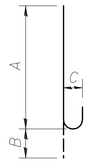
BARS s4(E) thru s5(E)



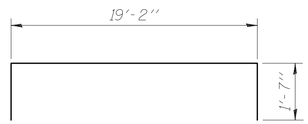
BARS u & u1

A, B & C DIMENSIONS

Bar	A	B	C
n	8'-3"	1'-3"	11 3/4"
s	4'-8"	4'-8"	5 1/2"
s1	3'-2"	3'-2"	5 1/2"
s2	2'-4"	1'-0"	5 1/2"
s3(E)	3'-0"	2'-8"	5 1/2"
s4(E)	8"	4'-10"	
s5(E)	4"	1'-4"	
u	3'-8"	10"	
u1	3'-2"	3'-2"	
v	40'-6"	11"	8"
v1	31'-6"	11"	8"
v2	49'-6"	11"	8"
v3	4'-6"	11"	8"



BARS n & v thru v3



BAR p(E)

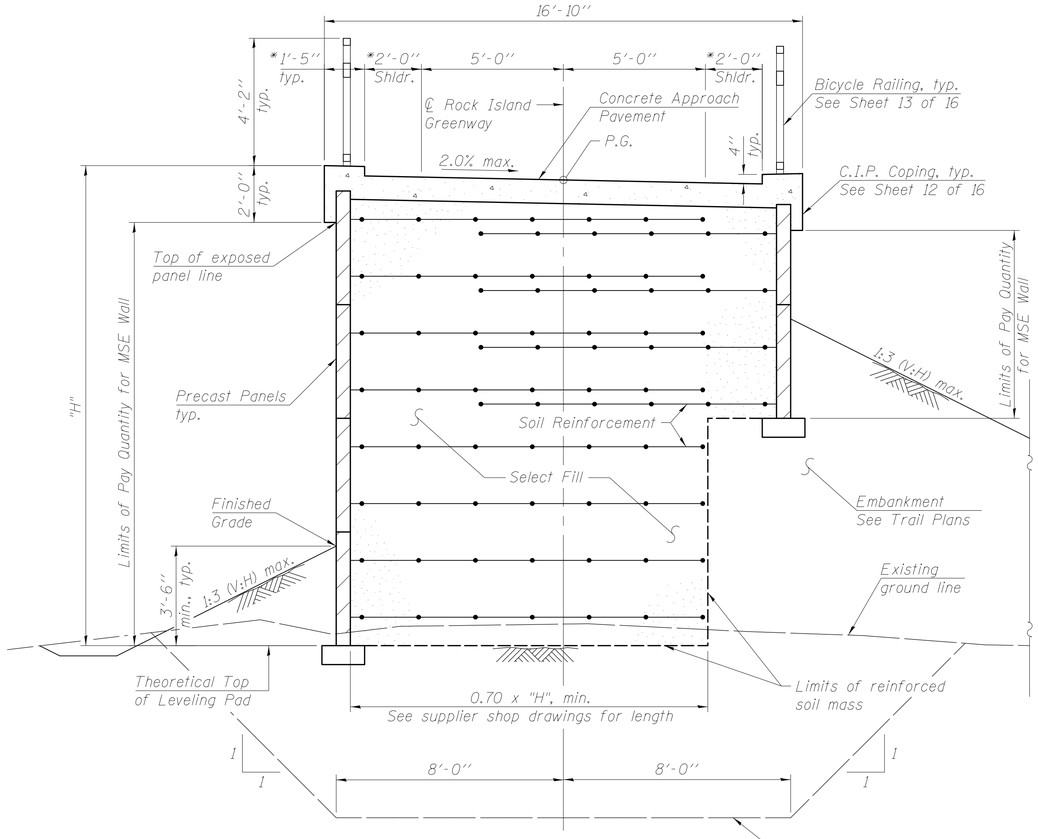
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MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

SUBSTRUCTURE DETAILS
STRUCTURE NO. 072-6009
SHEET NO. 7 OF 16 SHEETS

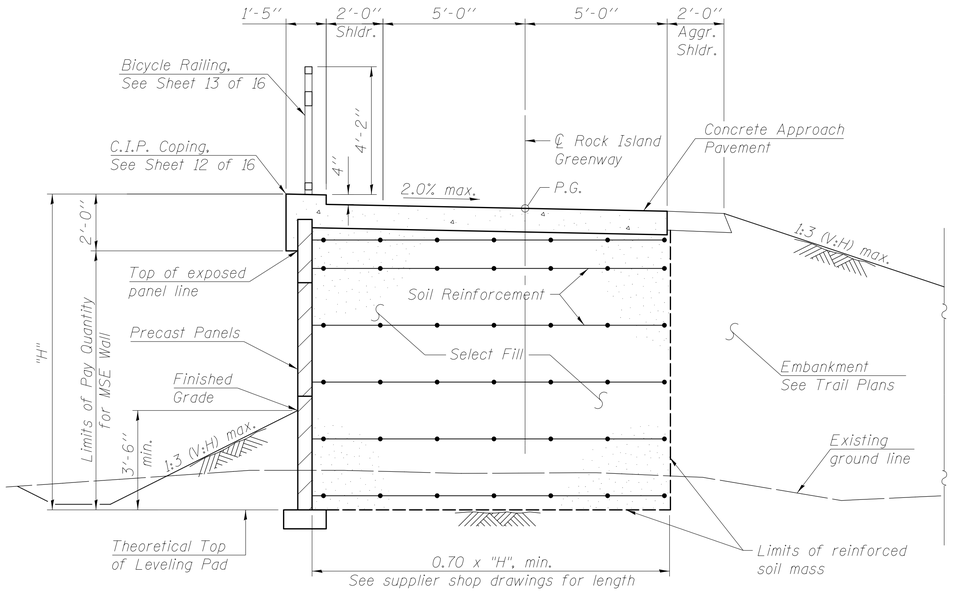
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	25
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

* Shoulder width varies from 2'-0" to 1'-0" across Approach Slab at each abutment.



TYP. APPROACH EMBANKMENT

Sta. 95+64.58 to Sta. 98+15.00
Sta. 102+19.00 to Sta. 104+39.42



TYP. APPROACH EMBANKMENT

Sta. 104+39.42 to Sta. 104+74.42

Notes:

See sheets 10 thru 12 of 16 for details of the approach pavement and coping.

Excavation necessary for the reinforced soil mass outside the limits of Removal and Disposal of Unsuitable Material for Structures shall be paid for as Structure Excavation.

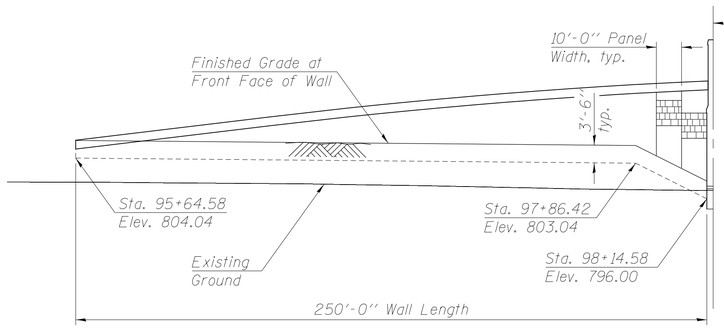
Replace unsuitable material with Embankment per Section 205 of the Standard Specifications. See Trail Plans.

FILE NAME = D412002-008-WallSect.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

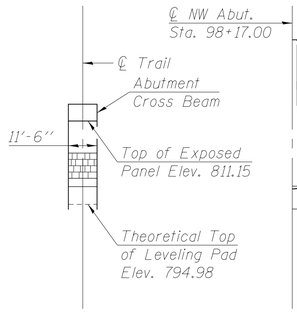
PEORIA PARK DISTRICT

APPROACH SECTIONS
STRUCTURE NO. 072-6009
SHEET NO. 8 OF 16 SHEETS

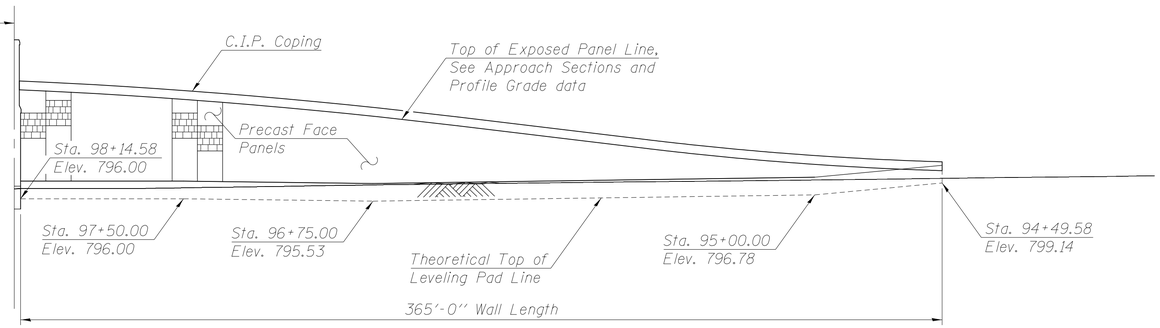
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	26
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



AT OFFSET 7.5' RT.

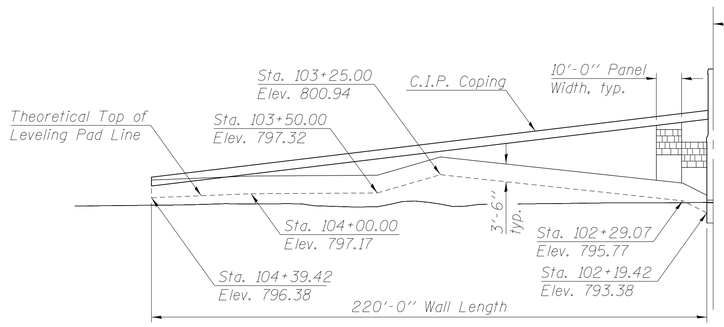


AT STATION 98+16.50
(BELOW ABUTMENT)

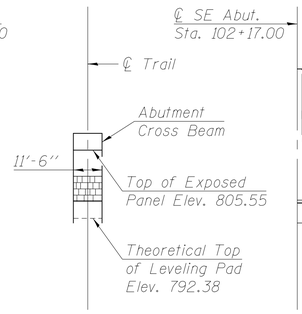


AT OFFSET 7.5' LT.

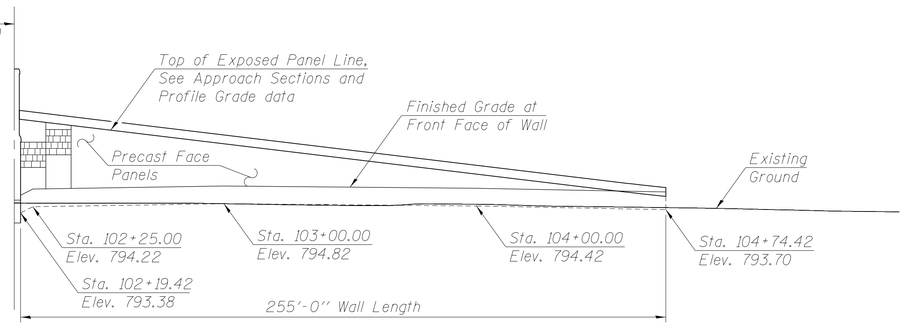
MSE WALL - WEST APPROACH



AT OFFSET 7.5' LT.



AT STATION 102+17.50
(BELOW ABUTMENT)



AT OFFSET 7.5' RT.

MSE WALL - EAST APPROACH

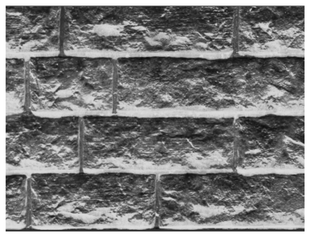
Notes:

Offsets and stations shown represent the locations of the back face of the precast panels.

The front face of the precast panels shall be provided with a cut stone form liner surface similar to Custom Rock Pattern #1104. The coursing shall be ±15". See Special Provision for Form Liner, Textured Surface. Cost included with Mechanically Stabilized Earth Retaining Walls.

The front face of the precast panels shall be stained to a buff tint to replicate the appearance of Alamosa Limestone. See Special Provisions for Staining Concrete Structures. Cost included with Mechanically Stabilized Earth Retaining Walls.

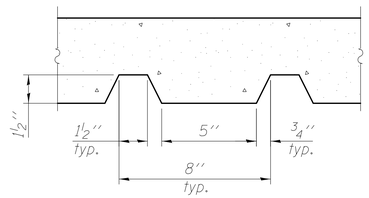
Cut precast panels in field as necessary to fit around C.I.P. drilled shaft cap at bottom of abutments.



FORM LINER, TEXTURED SURFACE

Alternate Bid Item 3:

In place of the cut stone form liner surface for the MSE precast panels, the panels shall be fabricated with vertical rustication strips per the detail below. No staining of the wall panels will be included in this alternate.



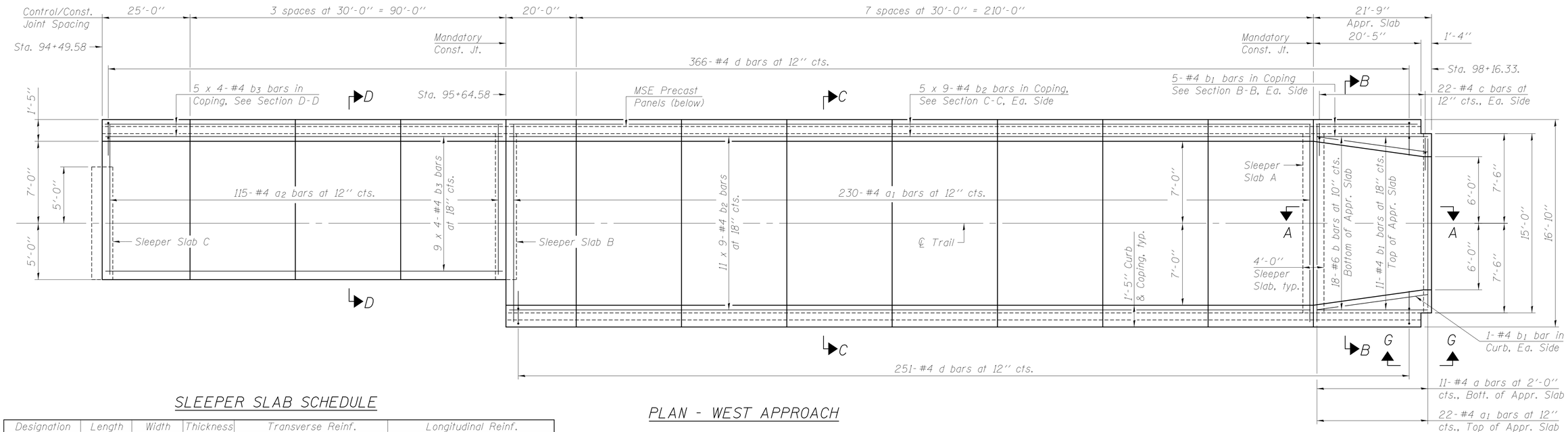
RUSTICATION DETAIL

FILE NAME = D412002-009-WallElev.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

MSE WALL ELEVATIONS
STRUCTURE NO. 072-6009
SHEET NO. 9 OF 16 SHEETS

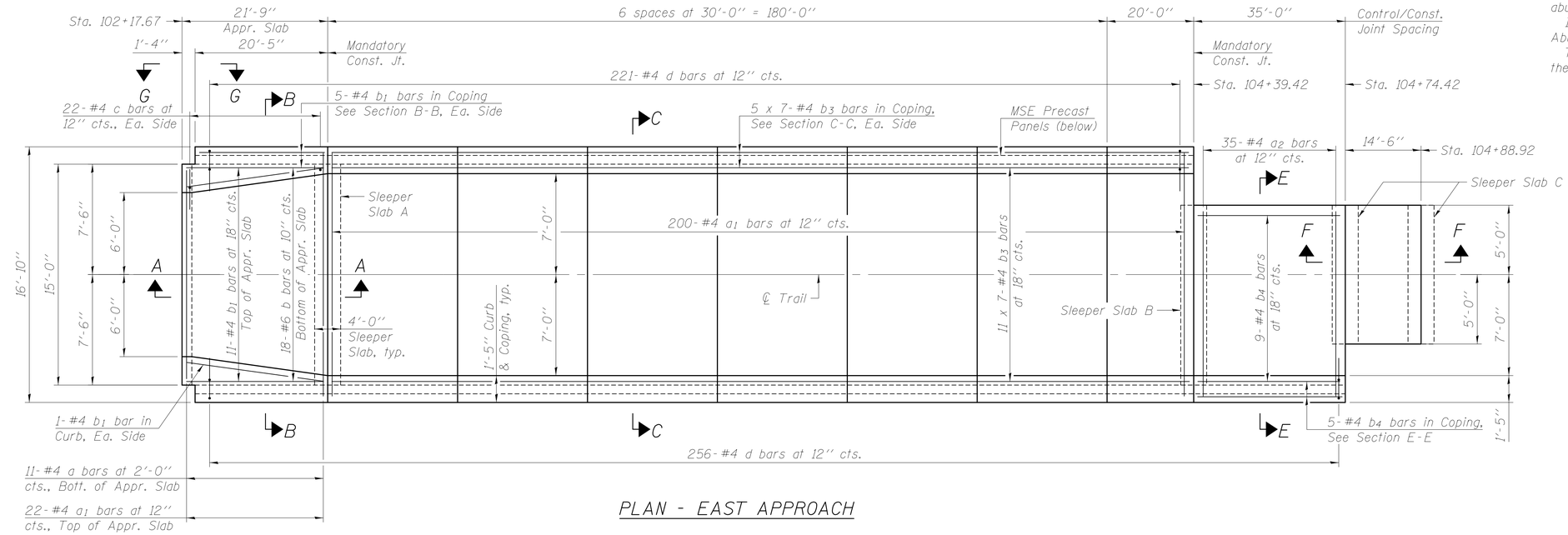
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	27
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



SLEEPER SLAB SCHEDULE

Designation	Length	Width	Thickness	Transverse Reinf.	Longitudinal Reinf.
Slab A	15'-0"	4'-0"	10"	15-#4 t(E) bars at 12" cts.	4-#4 w(E) bars at 12" cts.
Slab B	12'-6"	4'-0"	8"	13-#4 t(E) bars at 12" cts.	4-#4 w_1(E) bars at 12" cts.
Slab C	10'-0"	4'-0"	8"	10-#4 t(E) bars at 12" cts.	4-#4 w_2(E) bars at 12" cts.

PLAN - WEST APPROACH



PLAN - EAST APPROACH

Notes:

See sheet 11 of 16 for Sections A-A thru F-F.

See sheet 12 of 16 for View G-G and control joint details.

Bars indicated thus 9 x 4-#4 etc. indicates 9 lines of bars with 4 lengths per line.

Cut a_1(E) and b_1(E) bars as necessary to fit around the abutment towers.

Install $\frac{1}{2}$" P.J.F. between Approach Slab and Precast Abutment Units. Cost included in Concrete Superstructure.

The tops of Sleeper Slabs B and C shall follow the bottom of the thicker concrete pavement at that joint.

MINIMUM BAR LAP

#5 bar = 1'-9"

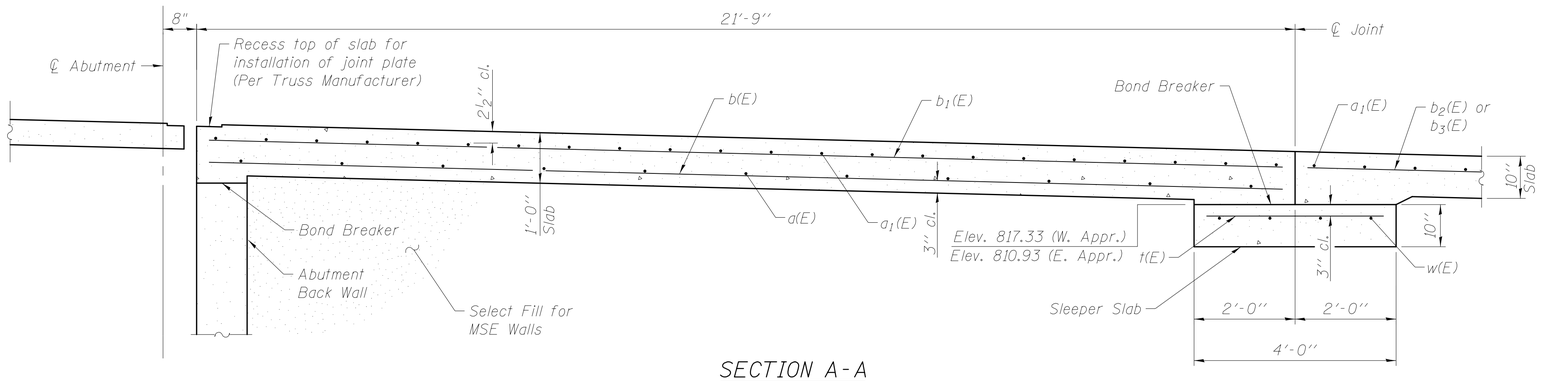
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MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED	
	PLOT SCALE =	DRAWN - BAS	REVISED	
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED	

PEORIA PARK DISTRICT

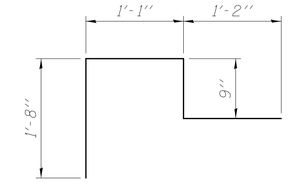
APPROACH PAVEMENT
STRUCTURE NO. 072-6009
SHEET NO. 10 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	28
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

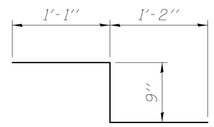
Notes:
Approach pavement and coping shall be paid for as Concrete Superstructure.
Sleeper slab concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars.
For additional coping details, see sheet 12 of 16.
Provide a fine broom finish to the approach pavement surface in accordance with Article 424.06 of the Standard Specifications.



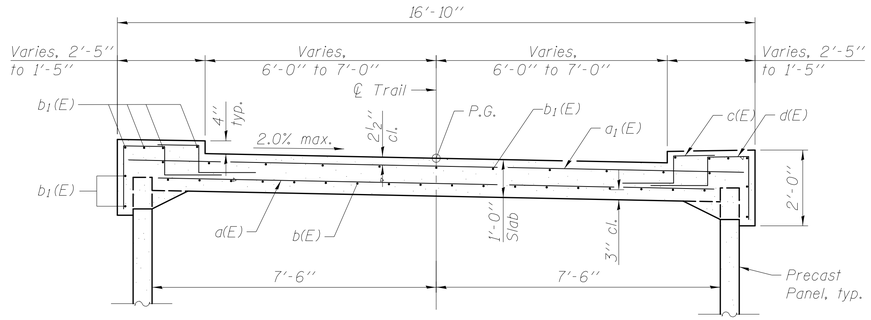
SECTION A-A



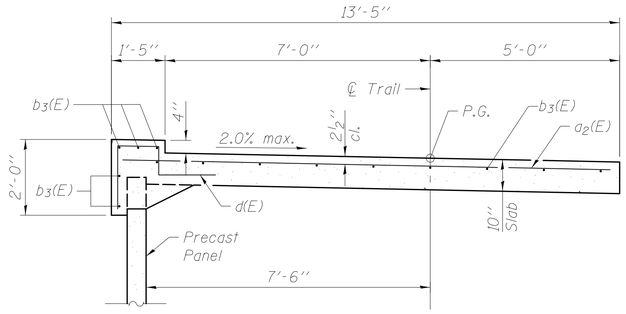
BAR d(E)



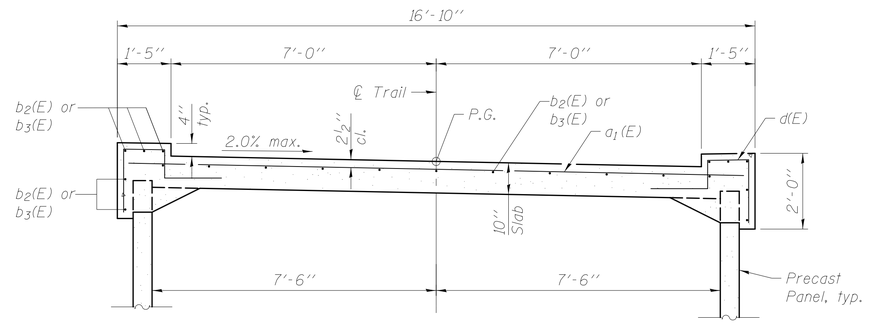
BAR c(E)



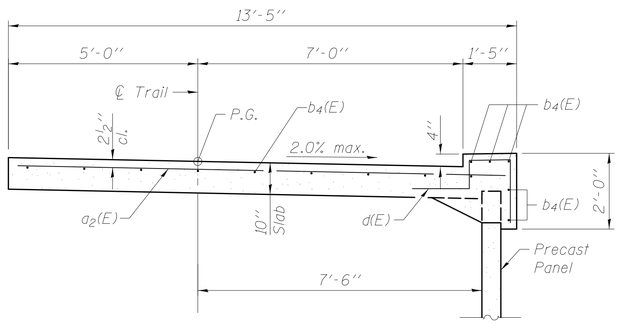
SECTION B-B



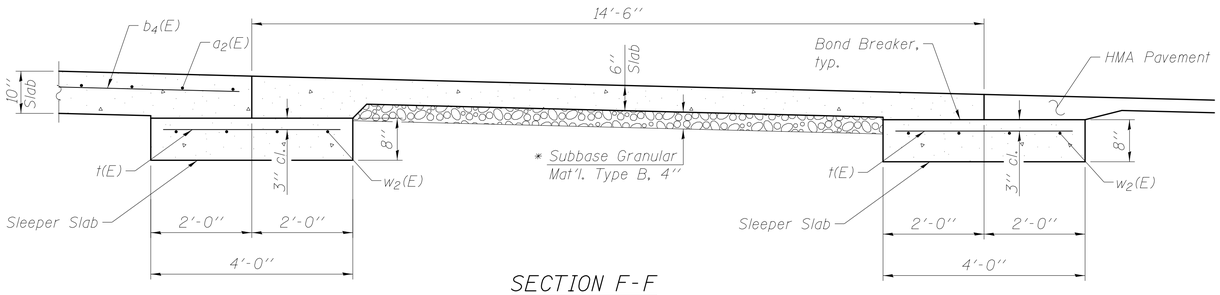
SECTION D-D



SECTION C-C



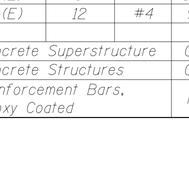
SECTION E-E



SECTION F-F



BAR $d_1(E)$



BAR $d_2(E)$

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	22	#4	14'-8"	—
$a_1(E)$	474	#4	16'-5"	—
$a_2(E)$	150	#4	13'-0"	—
b(E)	36	#6	21'-5"	—
$b_1(E)$	46	#4	21'-5"	—
$b_2(E)$	189	#4	27'-2"	—
$b_3(E)$	203	#4	30'-1"	—
$b_4(E)$	14	#4	34'-8"	—
c(E)	88	#4	3'-0"	⌐
d(E)	1094	#4	4'-8"	⌐
$d_1(E)$	12	#4	5'-7"	⌐
$d_2(E)$	16	#4	10"	⌐
t(E)	86	#4	3'-8"	—
w(E)	8	#4	14'-8"	—
$w_1(E)$	8	#4	12'-2"	—
$w_2(E)$	12	#4	9'-8"	—
Concrete Superstructure			Cu. Yd.	384.0
Concrete Structures			Cu. Yd.	9.1
Reinforcement Bars, Epoxy Coated			Pound	20440

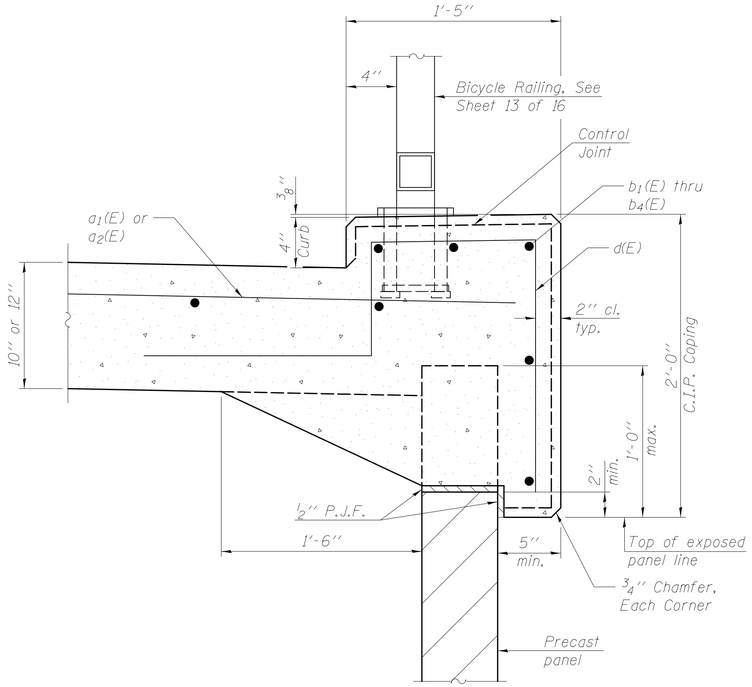
* Cost included with Concrete Superstructure.

FILE NAME = D412002-010-Appr Pavt.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

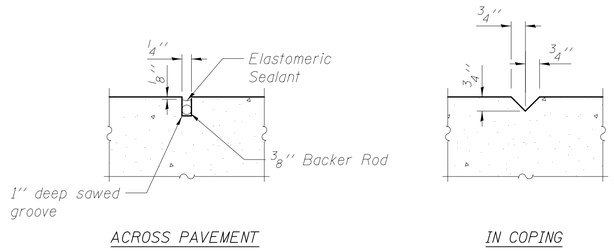
PEORIA PARK DISTRICT

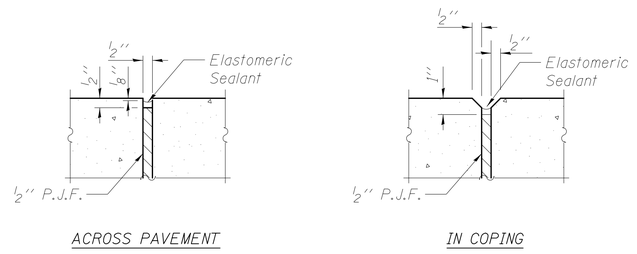
APPROACH PAVEMENT SECTIONS
STRUCTURE NO. 072-6009
SHEET NO. 11 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	29
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

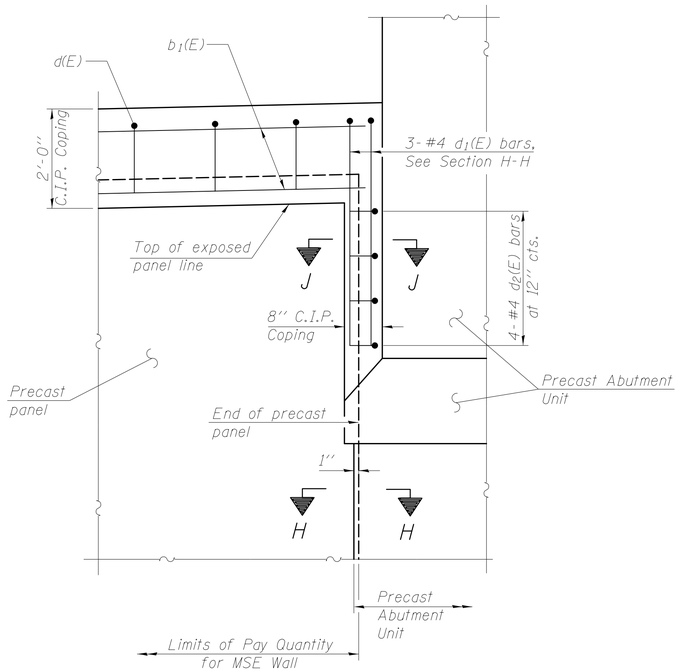


CURB & COPING DETAIL

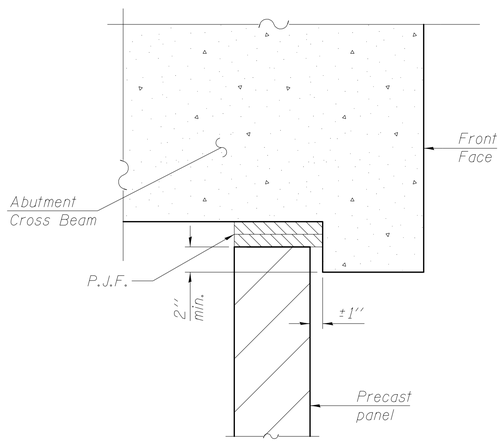




CONSTRUCTION JOINT DETAILS



VIEW G-G



ABUTMENT MSE WALL DETAIL

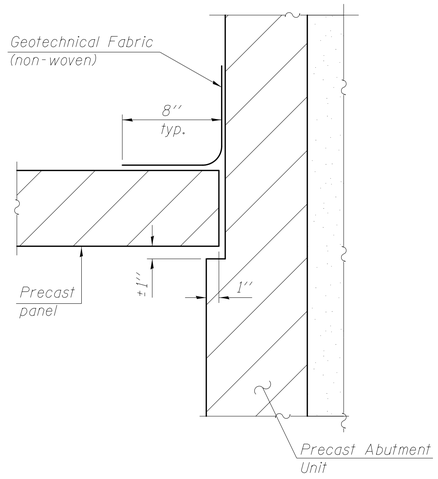
Notes:

The joint between the MSE wall precast panel and the precast abutment unit shall be wrapped with a 16" wide strip of geotechnical fabric. The fabric shall be in accordance with Article 1080.05 of the Standard Specifications. Adhere the fabric to the face of the abutment unit prior to backfilling. Cost included with Mechanically Stabilized Earth Retaining Wall.

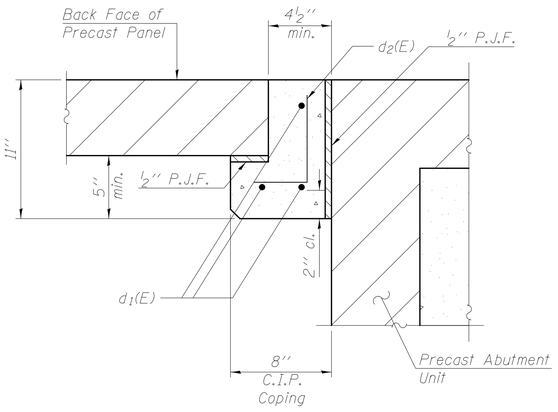
Adjust the stated locations of the control joints if necessary to align with joints in the MSE precast panels.

Elastomeric sealant shall be a non-staining gray non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type M or S, Grade NS, Class 25, Use T.

See sheet 11 of 16 for details of $d_1(E)$ and $d_2(E)$ bars.



SECTION H-H



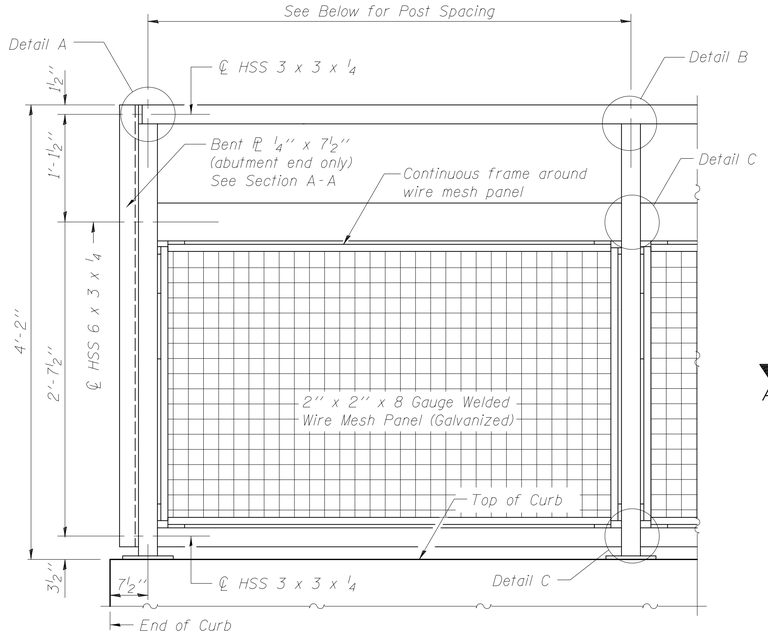
SECTION J-J

FILE NAME = D412002-012-Appr Detail.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED	
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED	
	PLOT SCALE =	DRAWN - BAS	REVISED	
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED	

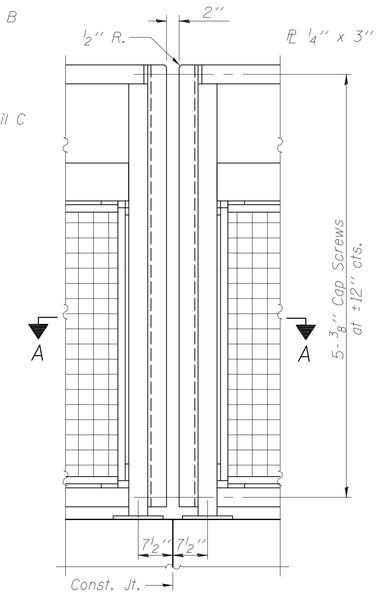
PEORIA PARK DISTRICT

APPROACH PAVEMENT DETAILS
STRUCTURE NO. 072-6009
SHEET NO. 12 OF 16 SHEETS

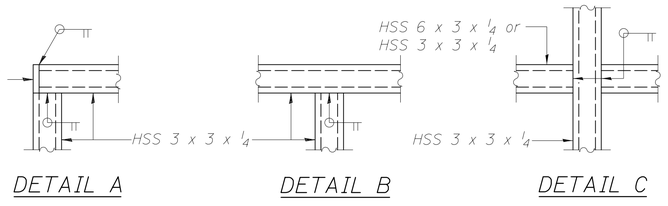
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	30
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



BICYCLE RAILING



BICYCLE RAILING OPEN JOINT



DETAIL A DETAIL B DETAIL C

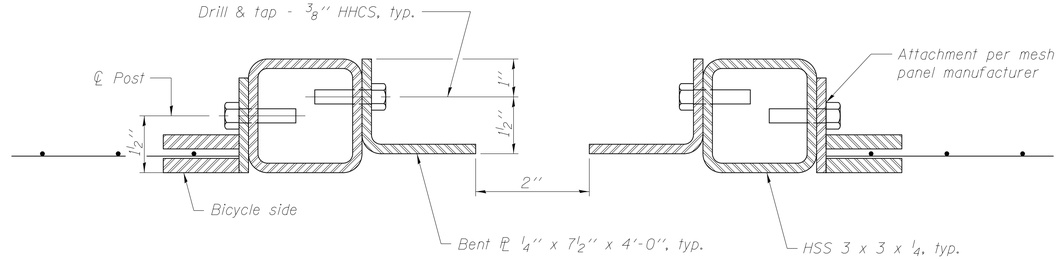
Notes:

All Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

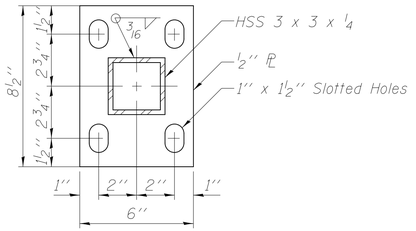
Wire mesh panel shall be galvanized. The mesh panel manufacture shall be the same as used for the Pedestrian Truss Superstructure.

Alternate Bid Item 2:

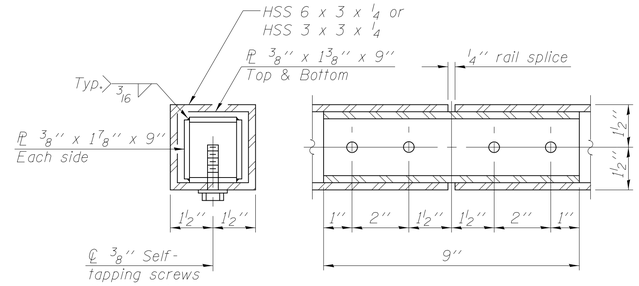
In place of galvanized welded wire mesh and continuous frame, these items shall be black, vinyl-coated after being cut to size and length.



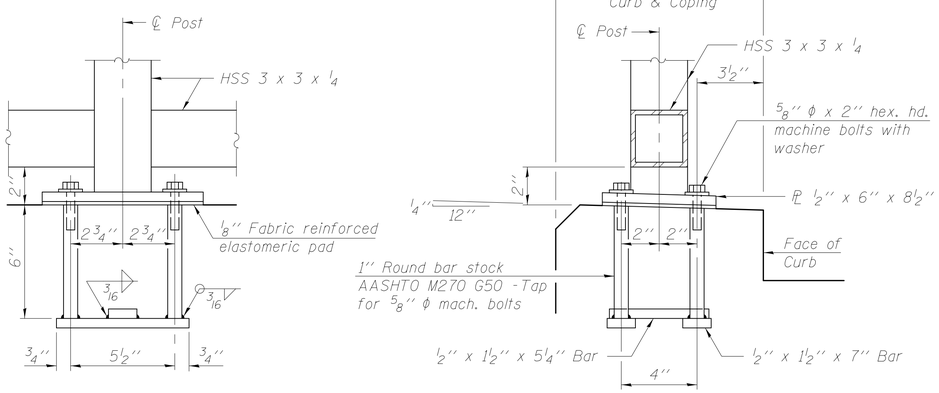
SECTION A-A



BASE PL

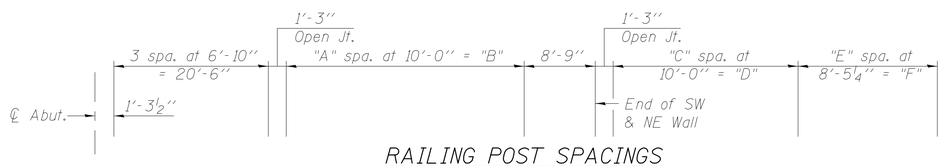


RAIL SPLICE



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



RAILING POST SPACINGS

RAIL SPACING DIMENSIONS

Location	"A"	"B"	"C"	"D"	"E"	"F"
NW Wall	22	220'-0"	8	80'-0"	4	33'-9"
SW Wall	22	220'-0"	--	--	--	--
NE Wall	19	190'-0"	--	--	--	--
SE Wall	19	190'-0"	--	--	4	33'-9"

BILL OF MATERIAL

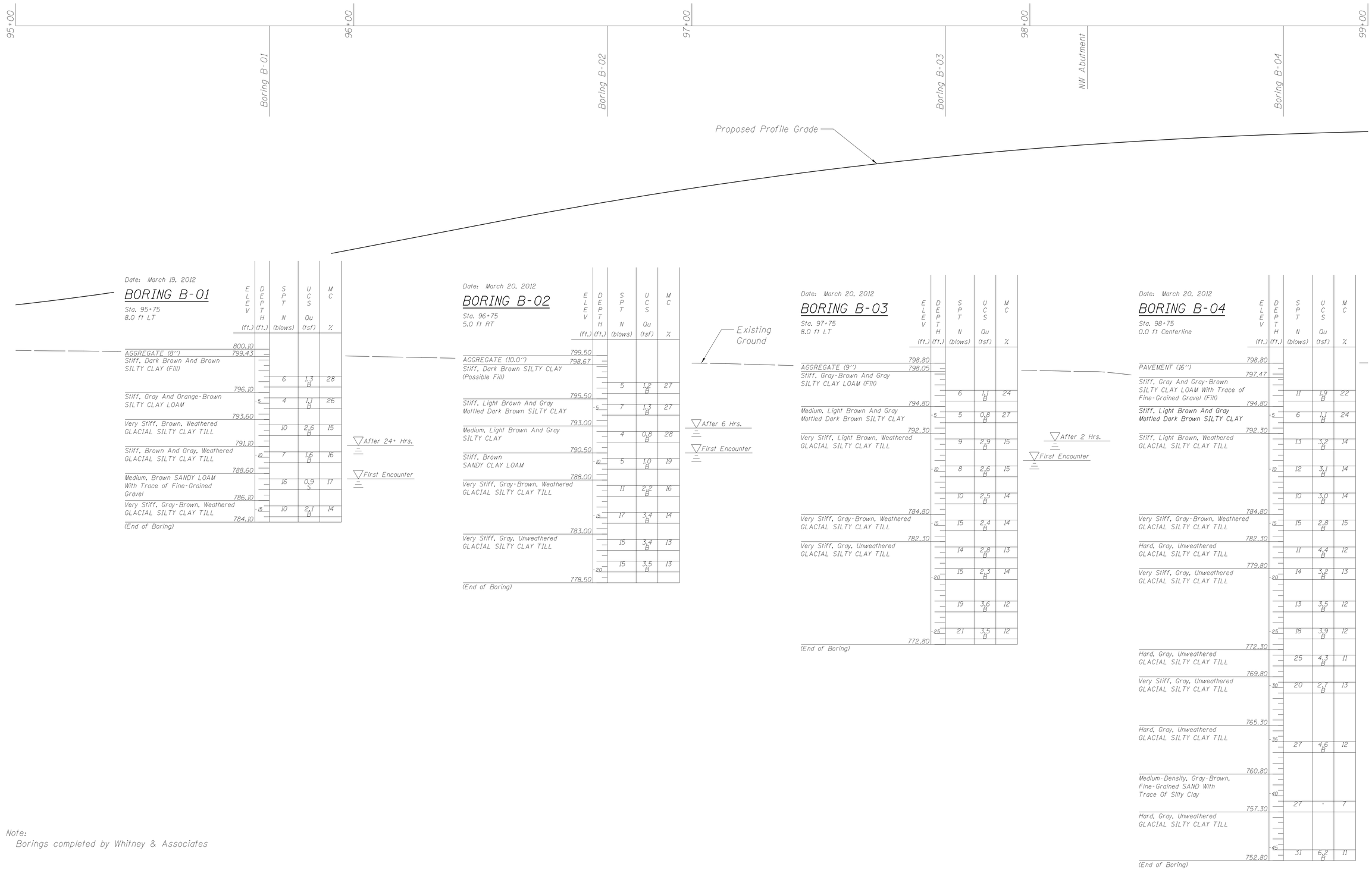
Item	Unit	Quantity
Bicycle Railing	Foot	1092

FILE NAME = D412002-013-Railing.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

BICYCLE RAILING
STRUCTURE NO. 072-6009
SHEET NO. 13 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	31
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		



Date: March 19, 2012

BORING B-01

Sta. 95+75
8.0 ft LT

Elev (ft.)	Depth (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
800.10				
AGGREGATE (8") 799.43				
Stiff, Dark Brown And Brown SILTY CLAY (Fill)		6	1.3 B	28
796.10				
Stiff, Gray And Orange-Brown SILTY CLAY LOAM	-5	4	1.1 B	26
793.60				
Very Stiff, Brown, Weathered GLACIAL SILTY CLAY TILL		10	2.6 B	15
791.10				
Stiff, Brown And Gray, Weathered GLACIAL SILTY CLAY TILL	-10	7	1.6 B	16
788.60				
Medium, Brown SANDY LOAM With Trace of Fine-Grained Gravel 786.10		16	0.9 S	17
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL	-15	10	2.1 B	14
784.10				

(End of Boring)

After 24+ Hrs.
First Encounter

Date: March 20, 2012

BORING B-02

Sta. 96+75
5.0 ft RT

Elev (ft.)	Depth (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
799.50				
AGGREGATE (10.0") 798.67				
Stiff, Dark Brown SILTY CLAY (Possible Fill)		5	1.2 B	27
795.50				
Stiff, Light Brown And Gray Mottled Dark Brown SILTY CLAY	-5	7	1.3 B	27
793.00				
Medium, Light Brown And Gray SILTY CLAY		4	0.8 B	28
790.50				
Stiff, Brown SANDY CLAY LOAM	-10	5	1.0 B	19
788.00				
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL		11	2.2 B	16
	-15	17	3.4 B	14
783.00				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL		15	3.4 B	13
	-20	15	3.5 B	13
778.50				

(End of Boring)

After 6 Hrs.
First Encounter

Date: March 20, 2012

BORING B-03

Sta. 97+75
8.0 ft LT

Elev (ft.)	Depth (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
798.80				
AGGREGATE (9") 798.05				
Stiff, Gray-Brown And Gray SILTY CLAY LOAM (Fill)		6	1.1 B	24
794.80				
Medium, Light Brown And Gray Mottled Dark Brown SILTY CLAY	-5	5	0.8 B	27
792.30				
Very Stiff, Light Brown, Weathered GLACIAL SILTY CLAY TILL		9	2.9 B	15
	-10	8	2.6 B	15
		10	2.5 B	14
784.80				
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL	-15	15	2.4 B	14
782.30				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL		14	2.8 B	13
	-20	15	2.3 B	14
		19	3.6 B	12
	-25	21	3.5 B	12
772.80				

(End of Boring)

After 2 Hrs.
First Encounter

Date: March 20, 2012

BORING B-04

Sta. 98+75
0.0 ft Centerline

Elev (ft.)	Depth (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
798.80				
PAVEMENT (16") 797.47				
Stiff, Gray And Gray-Brown SILTY CLAY LOAM With Trace of Fine-Grained Gravel (Fill)		11	1.9 B	22
794.80				
Stiff, Light Brown And Gray Mottled Dark Brown SILTY CLAY	-5	6	1.1 B	24
792.30				
Stiff, Light Brown, Weathered GLACIAL SILTY CLAY TILL		13	3.2 B	14
	-10	12	3.1 B	14
		10	3.0 B	14
784.80				
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL	-15	15	2.8 B	15
782.30				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL		11	4.4 B	12
779.80				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL	-20	14	3.2 B	13
		13	3.5 B	12
	-25	18	3.9 B	12
772.30				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL		25	4.3 B	11
769.80				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL	-30	20	2.7 B	13
765.30				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-35	27	4.6 B	12
760.80				
Medium-Density, Gray-Brown, Fine-Grained SAND With Trace Of Silty Clay	-40	27	-	7
757.30				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL				
	-45	31	6.2 B	11
752.80				

(End of Boring)

Note:
Borings completed by Whitney & Associates

FILE NAME = D412002-014-Borings.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

SOIL BORINGS
STRUCTURE NO. 072–6009
SHEET NO. 14 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	32
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		



Existing Ground

Date: March 20, 2012

BORING B-05

Sta. 99+20
0.0 ft Centerline

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
798.90				
PAVEMENT (12")				
797.90				
Very Stiff, Gray And Dark Gray SILTY CLAY LOAM (Fill)		10	2.1 B	22
794.90				
Stiff, Light Brown And Gray-Brown SILTY CLAY	-5	7	1.2 B	26
792.40				
Medium, Gray And Orange-Brown SILTY CLAY		6	0.7 B	28
789.90				
▽ First Encounter				
Loose, Brown, Medium-Grained SAND And SILTY CLAY LOAM	-10	8	-	19
787.40				
Very Stiff, Brown, Weathered GLACIAL SILTY CLAY TILL		15	2.5 B	14
784.90				
Stiff, Brown, Weathered GLACIAL SILTY CLAY TILL	-15	12	1.8 B	15
782.40				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL		22	3.7 B	13
779.90				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-20	22	4.2 B	12
777.40				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL		17	3.2 B	13
774.90				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-25	20	4.4 B	12
		21	4.6 B	12
	-30	22	4.3 B	12
	-35	19	4.0 B	12
761.40				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL	-40	16	3.5 B	13
756.90				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-45	33	4.2 B	12
752.90				
(End of Boring)				

Date: March 19, 2012

BORING B-06

Sta. 99+75
3.0 ft Lt

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
797.50				
Dark Brown SILTY CLAY With Some Crushed Limestone And Slag. (7.0")				
796.92				
Medium, Gray-Brown SILTY CLAY LOAM With Some Coarse-Grained Sand And Wood (Fill)		4	0.7 B	26
793.50	-5	5	0.7 B	28
Medium, Light Brown And Gray, SILTY CLAY				
791.00		13	3.1 B	14
Very Stiff, Brown, Weathered GLACIAL SILTY CLAY TILL	-10	11	2.4 B	15
		18	2.9 B	15
783.50				
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL	-15	18	3.5 B	14
781.00				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL		16	2.8 B	15
778.50				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-20	20	4.1 B	13
		22	4.4 B	12
773.50				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL	-25	21	3.8 B	13
		20	3.7 B	13
768.50				
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-30	21	4.2 B	12
	-35	15	4.6 B	12
	-40	26	4.3 B	11
753.50				
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL	-45	19	3.6 B	12
751.50				
(End of Boring)				

Date: March 19, 2012

BORING B-07

Sta. 100+60
5.0 ft Lt

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
796.60				
AGGREGATE (12")				
795.60				
Stiff, Light Brown And Gray SILTY CLAY		5	1.5 B	27
792.60	-5	7	1.1 B	25
Stiff, Light Brown, Gray And Orange-Brown SILTY CLAY LOAM				
790.10		10	3.4 B	14
Very Stiff, Light Brown And Gray, Weathered GLACIAL SILTY CLAY TILL	-10	13	-	16
787.60				
MediumDensity, Light Brown, Fine-To Medium Grained SAND With Considerable Silt		12	2.1 B	15
785.10	-15	13	2.2 B	15
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL				
780.10		12	1.3 B	18
Stiff, Gray SANDY CLAY				
777.60	-20	11	1.6 B	15
Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL				
775.10		15	2.4 B	14
Very Stiff, Gray, Unweathered GLACIAL SILTY CLAY TILL	-25	13	2.3 B	14
770.60				
(End of Boring)				

▽ After 1 Hr.

▽ First Encounter

Date: March 19, 2012

BORING B-08

Sta. 101+60
5.0 ft Rt

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
795.60				
AGGREGATE (18")				
794.10				
Very Stiff, Dark Brown And Brown SILTY CLAY LOAM With Some Coarse-Grained Sand (Fill)		6	2.5 B	23
791.60	-5	5	0.8 B	26
Medium, Light Brown And Gray SILTY CLAY (Possible Fill)				
789.10		5	1.1 B	26
Stiff, Gray SILTY CLAY (Possible Fill)				
787.60				
Medium, Brown And Gray-Brown SILTY CLAY	-10	4	0.9 B	28
784.10				
Loose, Light Brown, Fine-To Medium-Grained SAND And SILTY CLAY LOAM		7	-	22
781.60	-15	11	2.2 B	15
Very Stiff, Gray-Brown, Weathered GLACIAL SILTY CLAY TILL				
778.60		18	4.8 B	11
Hard, Gray, Unweathered GLACIAL SILTY CLAY TILL	-20	22	4.9 B	11
774.60				
(End of Boring)				

▽ After 2 Hrs.

▽ First Encounter

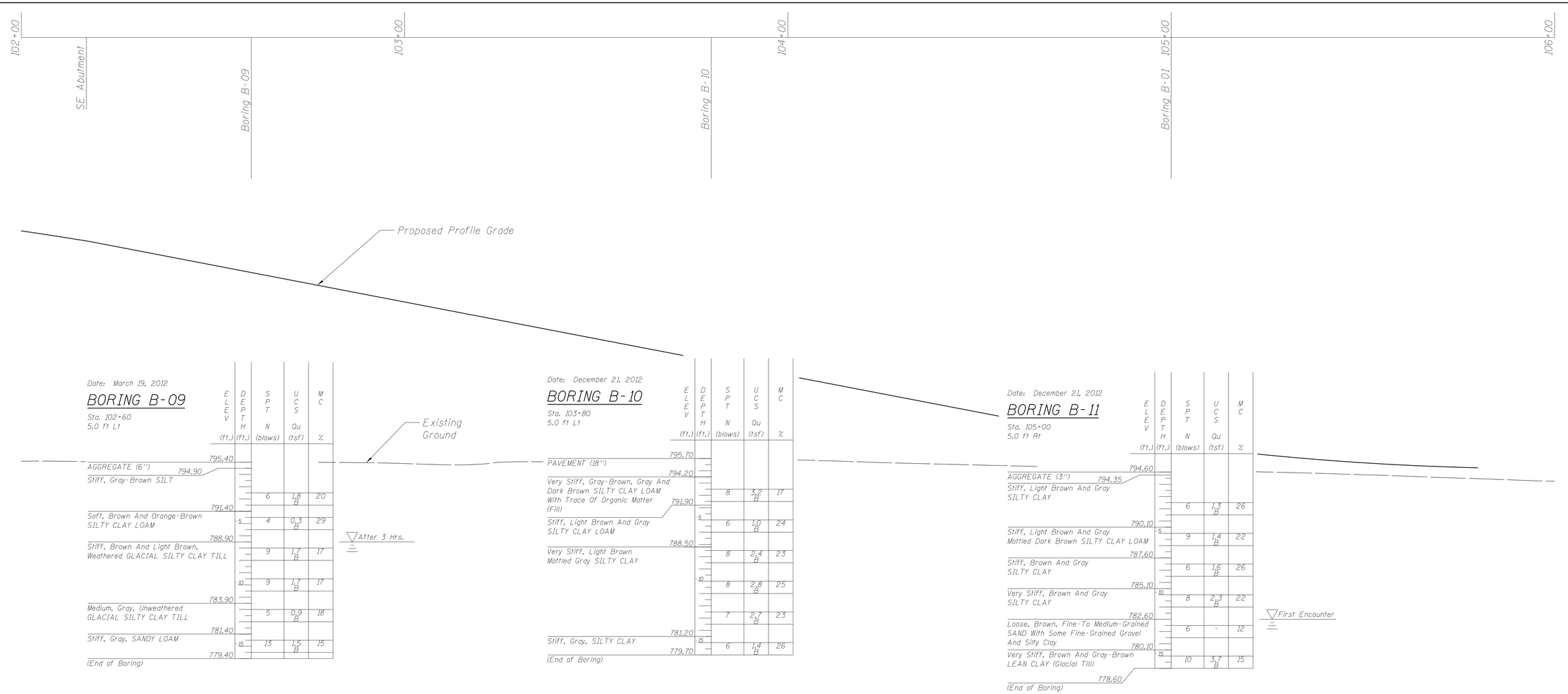
Note:
Borings completed by Whitney & Associates

FILE NAME = D412002-014-Borings.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

SOIL BORINGS
STRUCTURE NO. 072-6009
SHEET NO. 15 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	33
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			



Date: March 19, 2012

BORING B-09

Sta. 102+60
5.0 ft Lt

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
795.40				
AGGREGATE (6") 794.90				
Stiff, Gray-Brown SILTY CLAY LOAM		6	1.8 B	20
791.40				
Soft, Brown And Orange-Brown SILTY CLAY LOAM	5	4	0.3 B	29
788.90				
Stiff, Brown And Light Brown, Weathered GLACIAL SILTY CLAY TILL		9	1.7 B	17
	10	9	1.7 B	17
783.90				
Medium, Gray, Unweathered GLACIAL SILTY CLAY TILL		5	0.9 B	18
781.40				
Stiff, Gray, SANDY LOAM	15	13	1.5 B	15
779.40				

(End of Boring)

Date: December 21, 2012

BORING B-10

Sta. 103+80
5.0 ft Lt

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
795.70				
PAVEMENT (18") 794.20				
Very Stiff, Gray-Brown, Gray And Dark Brown SILTY CLAY LOAM With Trace Of Organic Matter (Fill) 791.90		8	3.2 B	17
Stiff, Light Brown And Gray SILTY CLAY LOAM	5	6	1.0 B	24
788.50				
Very Stiff, Light Brown Mottled Gray SILTY CLAY		8	2.4 B	23
	10	8	2.8 B	25
		7	2.7 B	23
781.20				
Stiff, Gray, SILTY CLAY	15	6	1.4 B	26
779.70				

(End of Boring)

Date: December 21, 2012

BORING B-11

Sta. 105+00
5.0 ft Rt

ELEV (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MC %
794.60				
AGGREGATE (3") 794.35				
Stiff, Light Brown And Gray SILTY CLAY		6	1.3 B	26
790.10				
Stiff, Light Brown And Gray Mottled Dark Brown SILTY CLAY LOAM	5	9	1.4 B	22
787.60				
Stiff, Brown And Gray SILTY CLAY		6	1.6 B	26
785.10				
Very Stiff, Brown And Gray SILTY CLAY	10	8	2.3 B	22
782.60				
Loose, Brown, Fine-To Medium-Grained SAND With Some Fine-Grained Gravel And Silty Clay 780.10		6	-	12
Very Stiff, Brown And Gray-Brown LEAN CLAY (Glacial Till)	15	10	3.7 B	15
778.60				

(End of Boring)

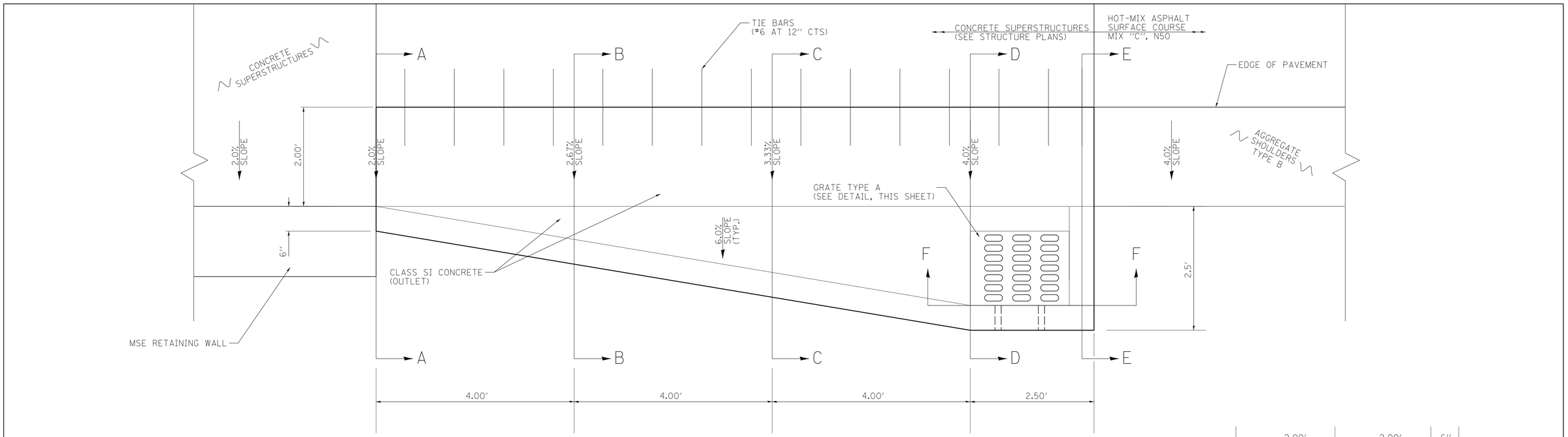
Note:
Borings completed by Whitney & Associates

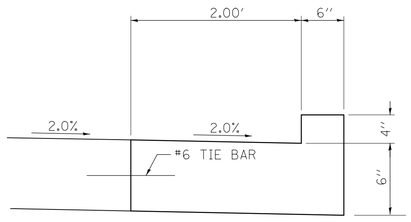
FILE NAME = D412002-014-Borings.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED
	PLOT SCALE =	DRAWN - BAS	REVISED
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED

PEORIA PARK DISTRICT

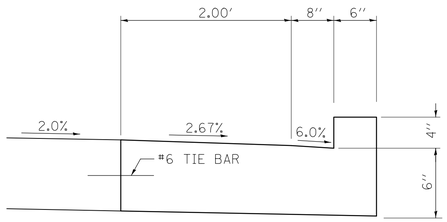
SOIL BORINGS
STRUCTURE NO. 072-6009
SHEET NO. 16 OF 16 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	34
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

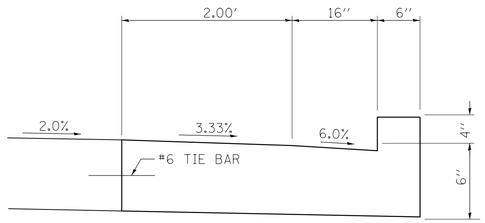




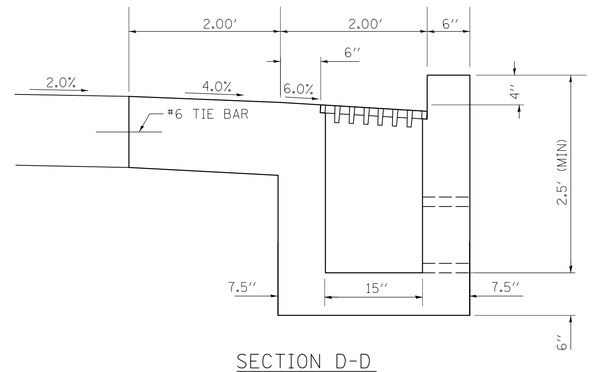
SECTION A-A



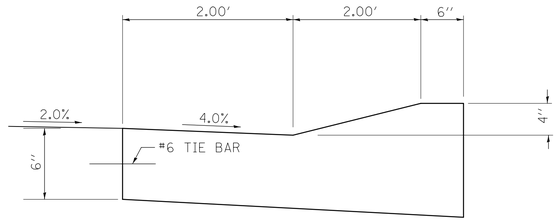
SECTION B-B



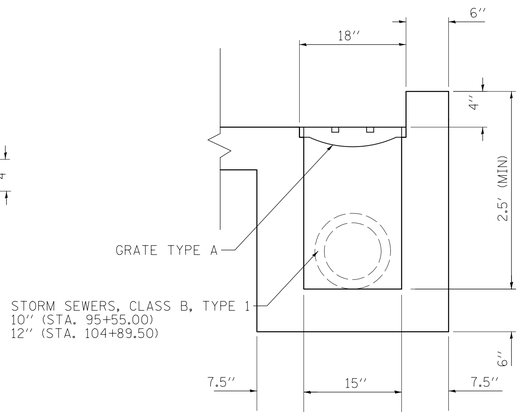
SECTION C-C



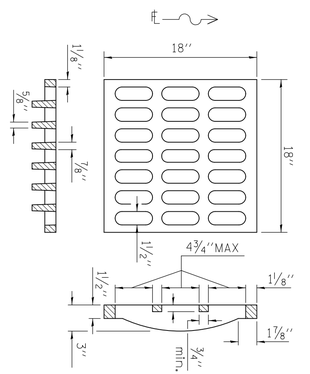
SECTION D-D



SECTION E-E

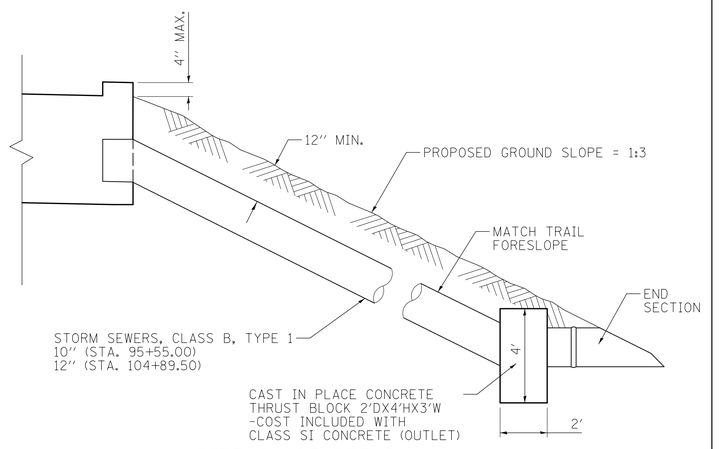


SECTION F-F



GRATE TYPE A DETAIL

NEENAH STD# R-4660
OR EQUIVALENT



PIPE SLOPE DETAIL

FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-detail curb d	USER NAME = ccmartin	DESIGNED - BT	REVISED -
MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 1.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY KNOXVILLE CROSSING
CURB OUTLET DETAILS

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	35
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

SEQUENCE OF CONSTRUCTION

IN GENERAL, THE STAGING OF CONSTRUCTION FOR THE PROJECT SHALL BE AS FOLLOWS:

-COORDINATE WITH UTILITIES.

-SET UP TEMPORARY EROSION CONTROL MEASURES.

-CLEAR OUT VEGETATION, STRIP TOPSOIL, REMOVE PAVEMENT/PIPES ETC.

-CONSTRUCT THE PROPOSED ABUTMENTS AND PIERS.

-BUILD UP EMBANKMENT/REINFORCED SOIL MASS AND MSE WALLS TO PROVIDE MAXIMUM) CONSOLIDATION.

-CONSTRUCT THE PROPOSED DITCHES, SUBGRADES, AGGREGATE BASE COURSES, 15"STORM SEWERS AND HMA PAVEMENT.

-SET THE EAST TRUSS IN PLACE FIRST

-SET UP CHANGEABLE MESSAGE BOARDS AND TRAFFIC CONTROL FOR ROAD CLOSURE.

-SET THE WEST TRUSS IN PLACE OVER KNOXVILLE AVE.

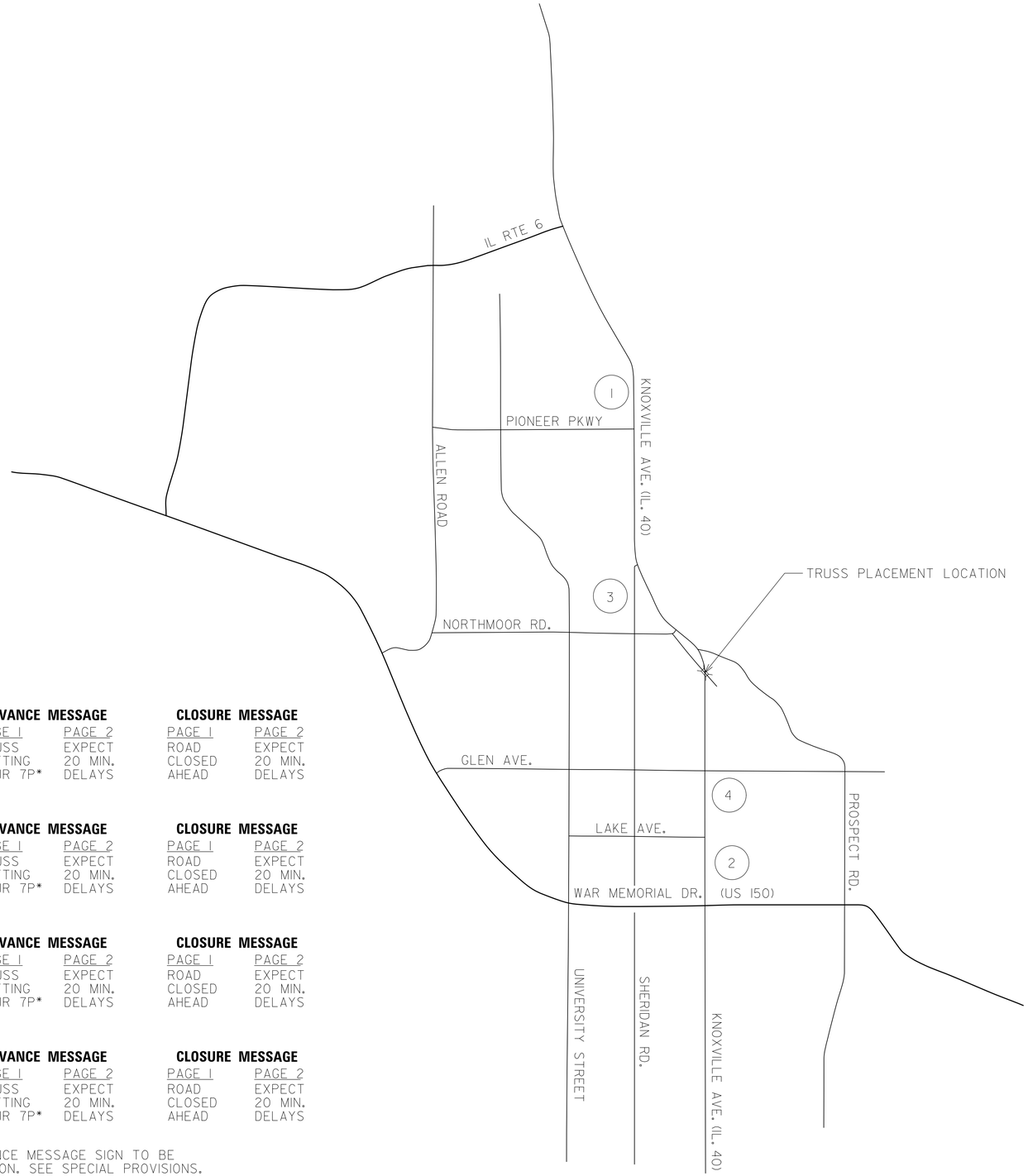
-REMOVE CHANGEABLE MESSAGE BOARDS AND TRAFFIC CONTROL.

CHANGEABLE MESSAGE SIGNS

THE CONTRACTOR SHALL PLACE ELECTRONIC CHANGEABLE MESSAGE BOARDS TO WARN THE PUBLIC OF THE PENDING CLOSURE. THE MESSAGE BOARDS WILL NEED TO BE PLACED AND SET OUT FOR FIVE (5) DAYS IN ADVANCE OF THE ANTICIPATED DAY OF THE ROAD CLOSURE AT KNOXVILLE AVE IN ORDER TO PLACE THE TRUSS. THE CONTRACTOR WILL COORDINATE WITH THE RESIDENT ENGINEER ON THE EXACT PLACEMENT OF THE MESSAGE BOARDS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

		ADVANCE MESSAGE		CLOSURE MESSAGE	
		PAGE 1	PAGE 2	PAGE 1	PAGE 2
1	MESSAGE BOARD 1	TRUSS SETTING THUR 7P*	EXPECT 20 MIN. DELAYS	ROAD CLOSED AHEAD	EXPECT 20 MIN. DELAYS
2	MESSAGE BOARD 2	TRUSS SETTING THUR 7P*	EXPECT 20 MIN. DELAYS	ROAD CLOSED AHEAD	EXPECT 20 MIN. DELAYS
3	MESSAGE BOARD 3	TRUSS SETTING THUR 7P*	EXPECT 20 MIN. DELAYS	ROAD CLOSED AHEAD	EXPECT 20 MIN. DELAYS
4	MESSAGE BOARD 4	TRUSS SETTING THUR 7P*	EXPECT 20 MIN. DELAYS	ROAD CLOSED AHEAD	EXPECT 20 MIN. DELAYS

* DAY AND TIME SHOWN ON ADVANCE MESSAGE SIGN TO BE DETERMINED DURING CONSTRUCTION. SEE SPECIAL PROVISIONS.



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	PLOT DATE = 6/17/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

PEORIA PARK DISTRICT

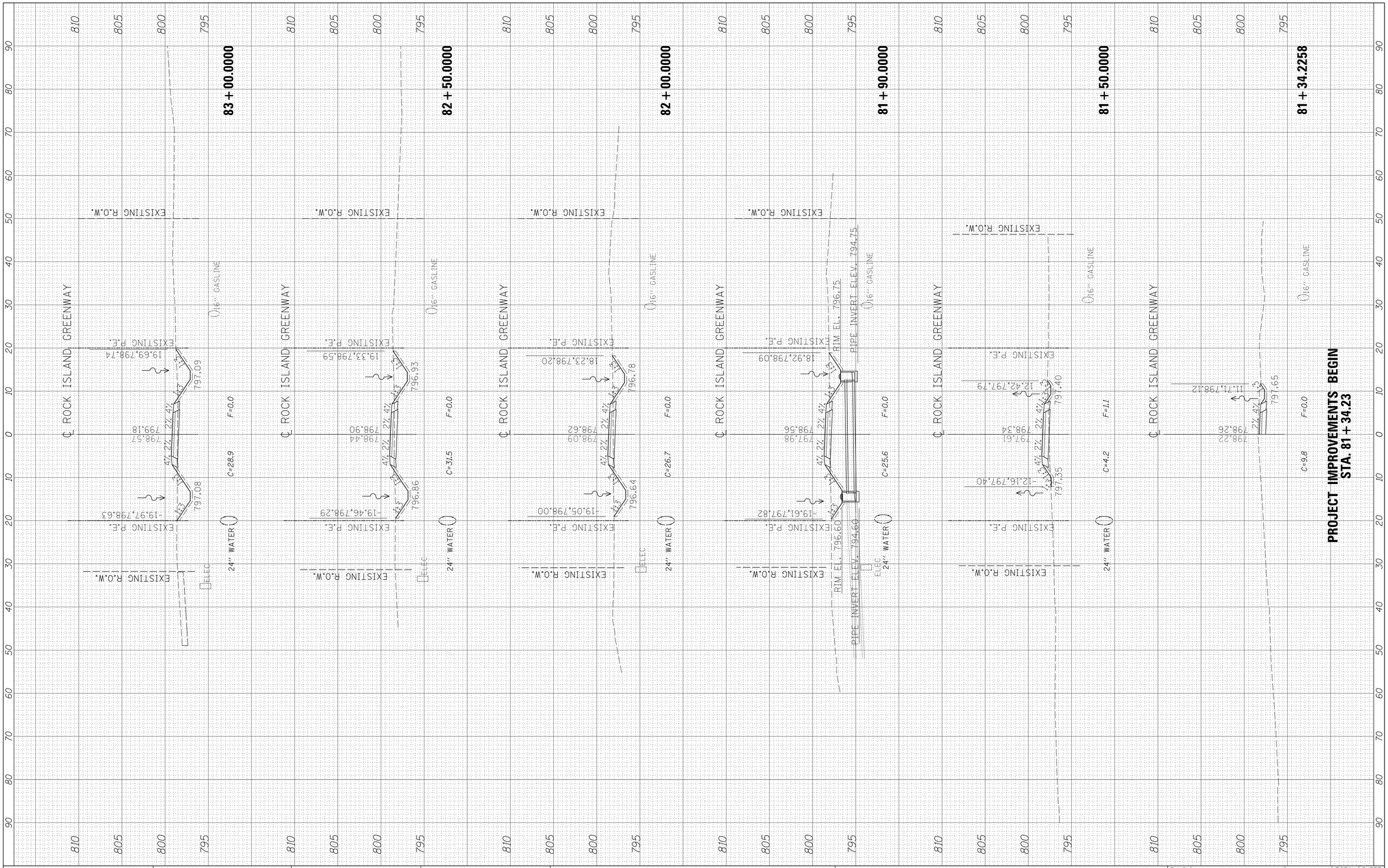
ROCK ISLAND GREENWAY KNOXVILLE CROSSING
TRAFFIC CONTROL DETAIL

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	36
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



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	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ
$MODELNAME$ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

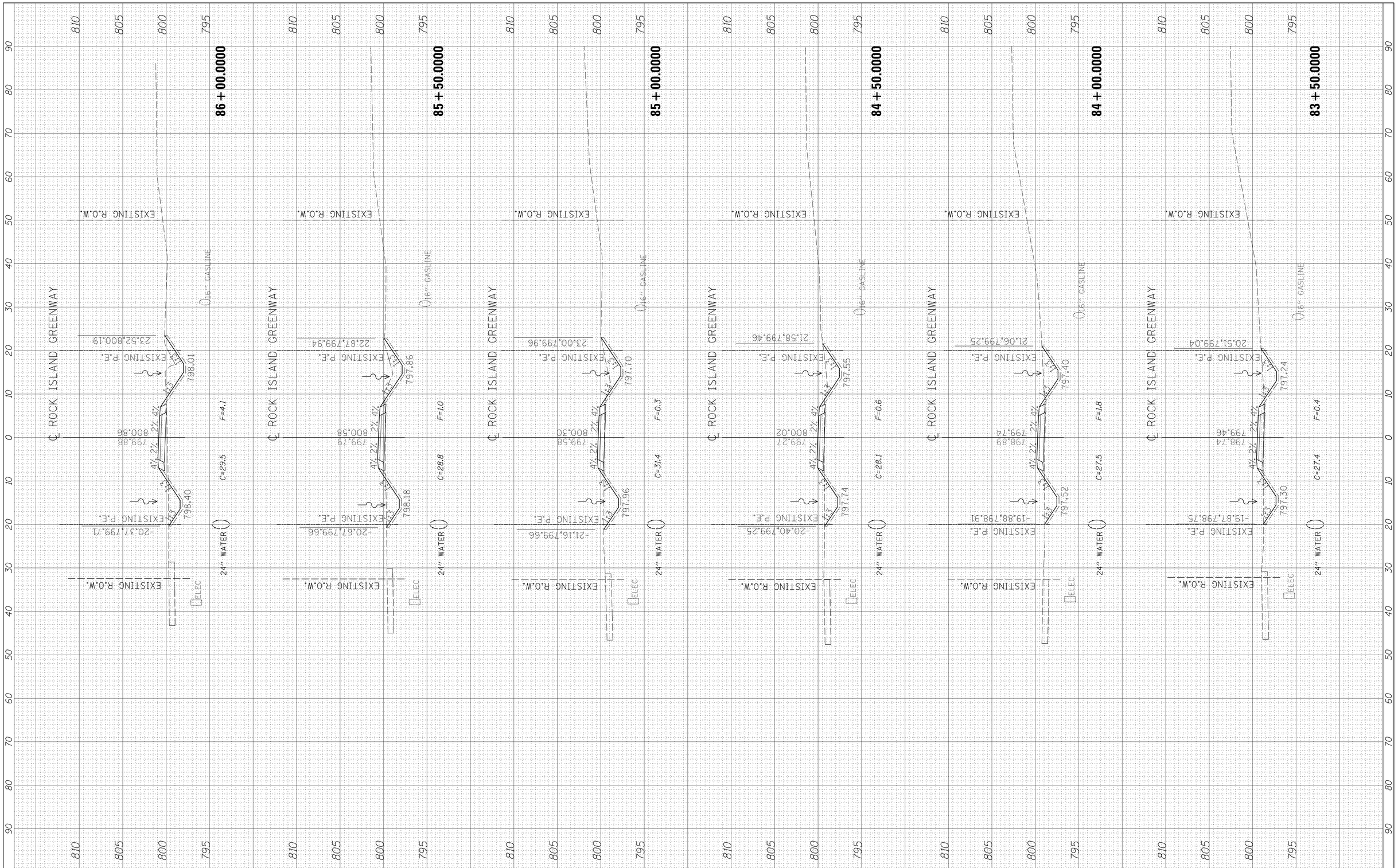
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 81+34.2258 | TO STA. 83+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	37
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME =	USER NAME = ccmartin	DESIGNED - BT	REVISED -
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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODELNAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

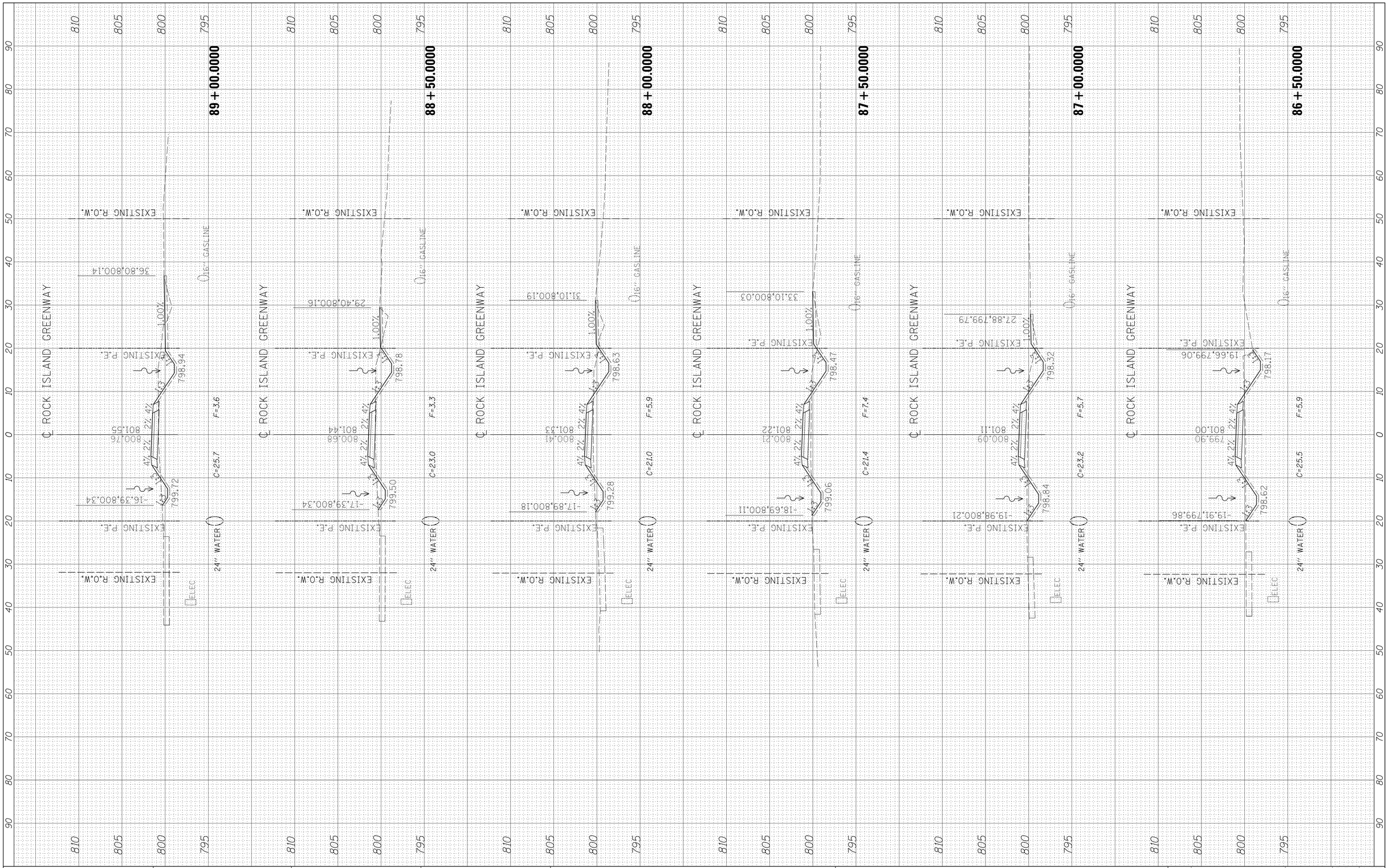
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 83+50.0000 TO STA. 86+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	38
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		



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MAURER-STUTZ ENGINEERS SURVEYORS $MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 86+50.0000 TO STA. 89+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	39
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODELNAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

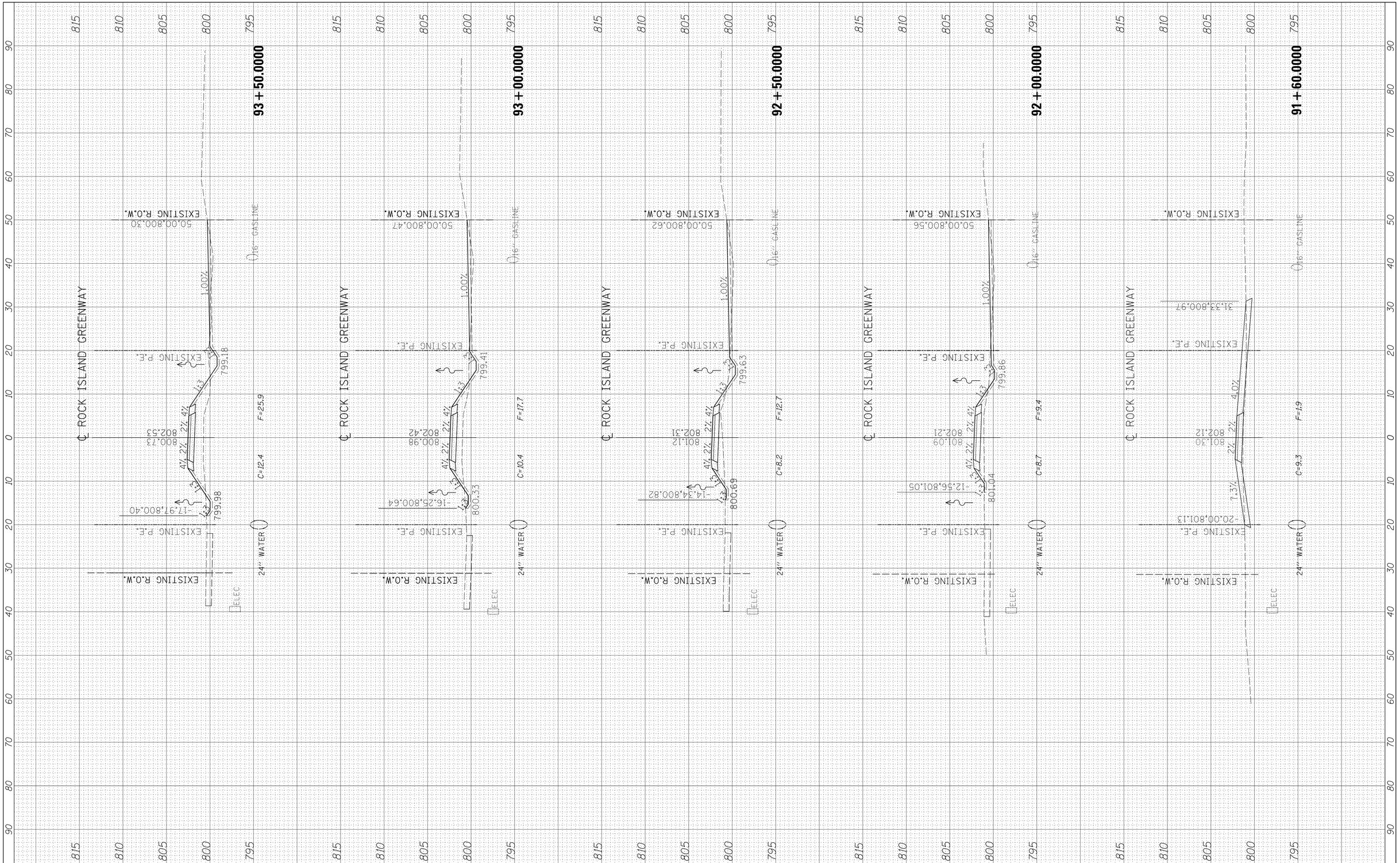
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 89+50.0000 TO STA. 91+50.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	40
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



FILE NAME =	USER NAME = ccmartin	DESIGNED - BT	REVISED -
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MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODELNAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 91+60.0000 TO STA. 93+50.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	41
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

NOTE:
1. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.

95 + 50.0000

℄ ROCK ISLAND GREENWAY

EXISTING R.O.W.

16" GASLINE

EXISTING P.E.

EXISTING P.T.

2% 4% 4:3

34.53,798.86

799.76 806.40

REINFORCED SOIL MASS

798.28

-15.73,799.11

798.56

STRUCTURE EXCAVATION

24" WATER

ELEC.

F=108.5

C=9.5

95 + 25.0000

℄ ROCK ISLAND GREENWAY

EXISTING R.O.W.

50.00,799.19

16" GASLINE

EXISTING P.E.

EXISTING P.T.

2% 4% 4:3

799.91 805.18

REINFORCED SOIL MASS

798.40

-15.66,799.27

798.74

STRUCTURE EXCAVATION

24" WATER

ELEC.

F=81.2

C=17.5

95 + 00.0000

℄ ROCK ISLAND GREENWAY

EXISTING R.O.W.

50.00,799.32

16" GASLINE

EXISTING P.E.

EXISTING P.T.

2% 4% 4:3

799.99 804.20

REINFORCED SOIL MASS

798.51

-15.58,799.42

798.92

STRUCTURE EXCAVATION

24" WATER

ELEC.

F=61.3

C=21.5

94 + 50.0000

℄ ROCK ISLAND GREENWAY

EXISTING R.O.W.

50.00,799.63

16" GASLINE

EXISTING P.E.

EXISTING P.T.

2% 4% 4:3

800.17 802.96

REINFORCED SOIL MASS

798.73

-21.24,799.64

799.27

STRUCTURE EXCAVATION

24" WATER

ELEC.

F=45.4

C=21.1

94 + 00.0000

℄ ROCK ISLAND GREENWAY

EXISTING R.O.W.

50.00,800.04

16" GASLINE

EXISTING P.E.

EXISTING P.T.

2% 4% 4:3

800.63 802.40

REINFORCED SOIL MASS

798.96

-19.25,800.02

799.63

STRUCTURE EXCAVATION

24" WATER

ELEC.

F=36.1

C=14.5

FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
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	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ
$MODELNAME$ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

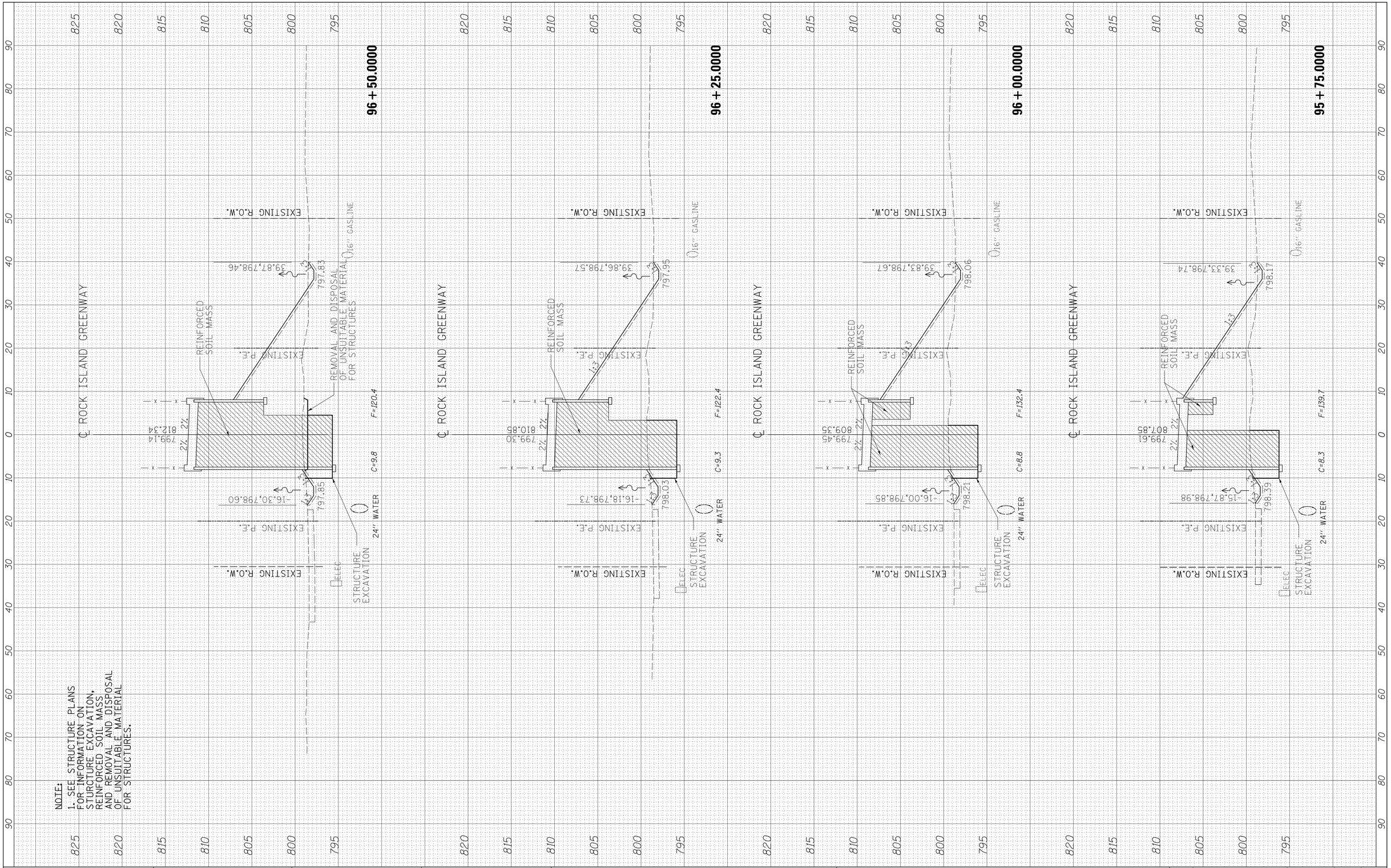
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 94+00.0000 TO STA. 95+50.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	42
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
	PLOT SCALE = 10.0000 ' / in.	DRAWN - BT/WLL	REVISED -
	PLOT DATE = 6/7/2013	CHECKED - RJA	REVISED -
		DATE -	REVISED -

MAURER-STUTZ
$MODELNAME$ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

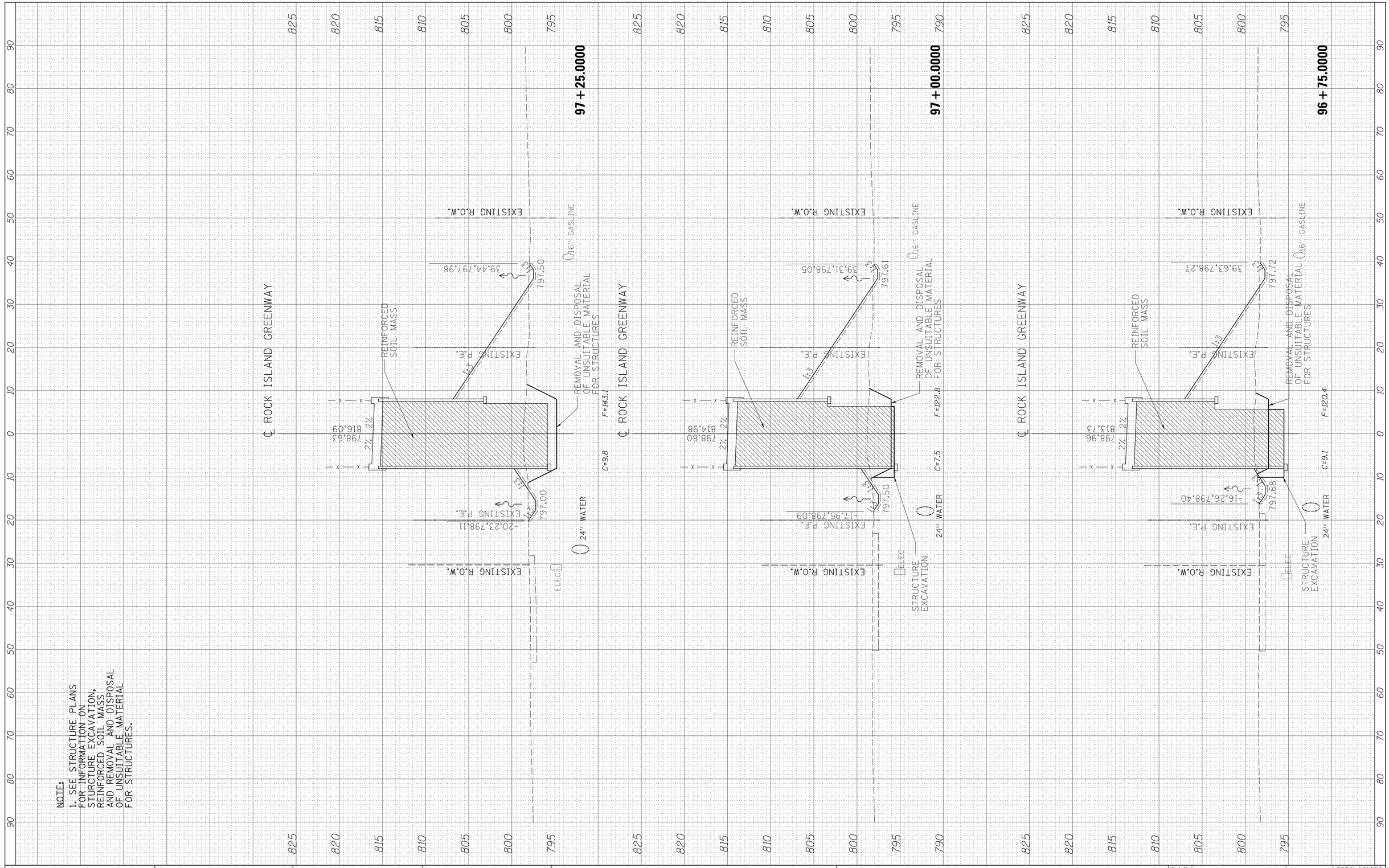
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 95+75.0000 TO STA. 96+50.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	43
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



NOTE:
1. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.

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	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ ENGINEERS SURVEYORS
$MODELNAME$

PEORIA PARK DISTRICT

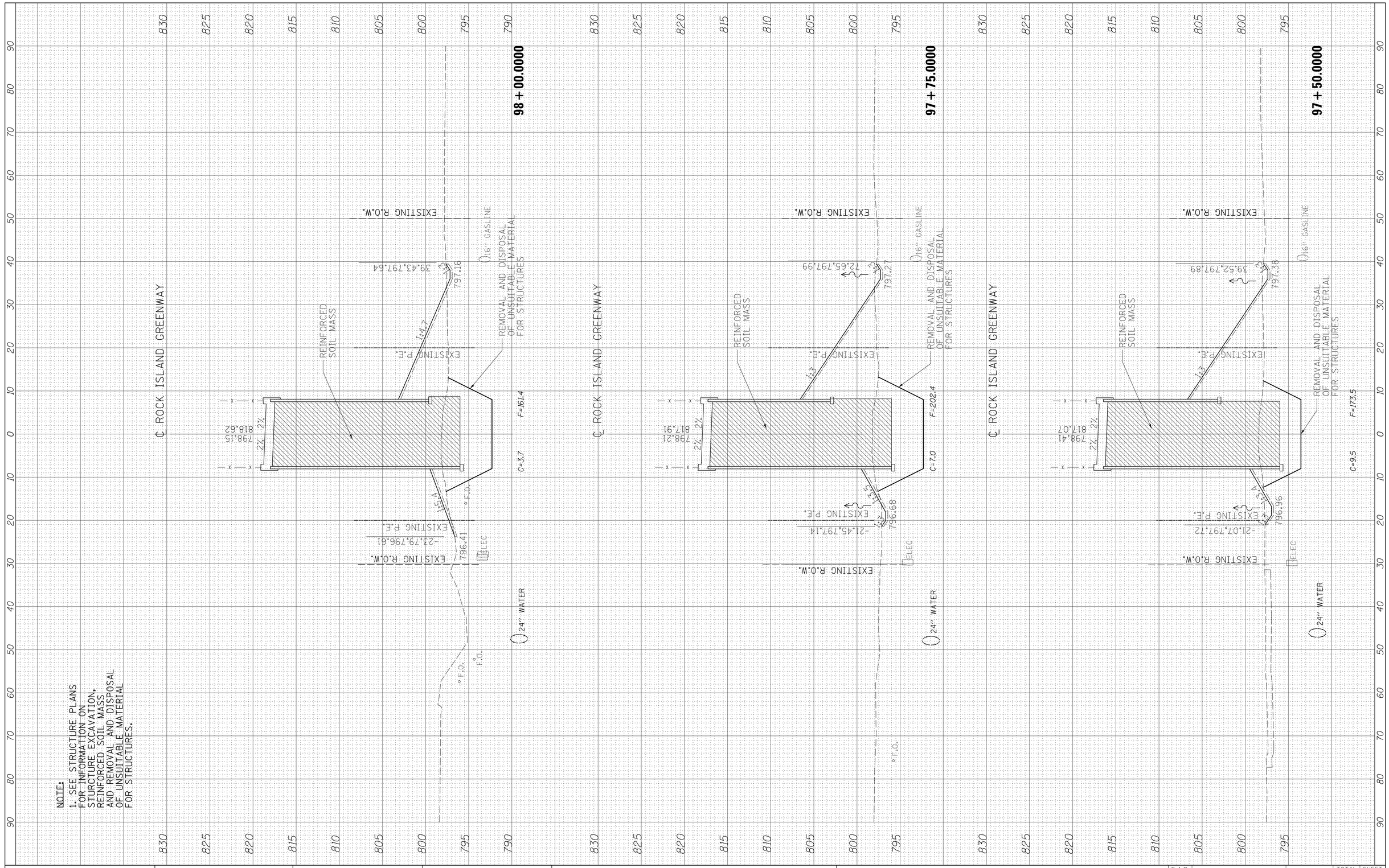
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 96+75.0000 TO STA. 97+25.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	44
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



NOTE:
1. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.

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	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ ENGINEERS SURVEYORS
$MODELNAME$

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 97+50.0000 TO STA. 98+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	45
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
PAGE NO.	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
PAGE NO.	AREAS		
	AREAS CHECKED		

NOTES:

1. CROSS SECTIONS WITHIN PEDESTRIAN STRUCTURE OMISSION SHOW PROPOSED DITCH INFORMATION ONLY.

2. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS, AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.

99+00.0000

98+75.0000

98+50.0000

98+25.0000

98+15.3300

℄ ROCK ISLAND GREENWAY

EXISTING P.E.

EXISTING R.O.W.

EXISTING R.O.W. (KNOX. AVE.)

16" GASLINE

ELEC

F.O.

8" WATER

16" WATER

24" WATER

C=6.4 F=0.0

C=7.6 F=0.0

C=6.5 F=0.0

C=4.0 F=0.0

C=8.4 F=126.9

49.38,796.49

795.59

39.93,797.17

47.03,796.95

795.98

38.31,797.25

44.37,797.41

796.37

37.20,797.15

41.50,797.60

796.17

35.44,797.50

39.56,797.44

796.92

798.04

818.98

27.

27.

1.96

794.76

PEDESTRIAN STRUCTURE OMISSION
STA. 98+15.33 TO STA. 102+18.67

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES

FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
		DRAWN - BT/WLL	REVISED -
	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ
$MODELNAME$ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 98+15.3300 TO STA. 99+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	46
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

NOTES:
1. CROSS SECTIONS WITHIN PEDESTRIAN STRUCTURE OMISSION SHOW PROPOSED DITCH INFORMATION ONLY.
2. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.

101+75.0000

101+50.0000

99+89.0716

99+75.0000

99+50.0000

99+25.0000

℄ ROCK ISLAND GREENWAY

EXISTING P.E.

EXISTING R.O.W.

EXISTING R.O.W. (KNOX. AVE.)

EXISTING 36" RCP PIPE

EXISTING CULVERT IS SILTED IN. (BOTTOM OF EX. CULVERT APPROX. 790.00)

16" GASLINE

8" WATER

16" WATER

24" WATER

4" WATER

ELEC.

F.O.

C=12.6

C=10.4

C=8.9

C=6.6

F=0.0

791.27

791.69

791.072

790.34

794.19

794.41

794.80

795.20

-33.54,794.04

112.18,794.95

98.52,797.76

91.13,795.50

77.38,797.82

70.27,796.01

59.45,797.33

FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
		DRAWN - BT/WLL	REVISED -
MAURER-STUTZ ENGINEERS SURVEYORS $MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 99+25.0000 TO STA.101+75.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	47
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

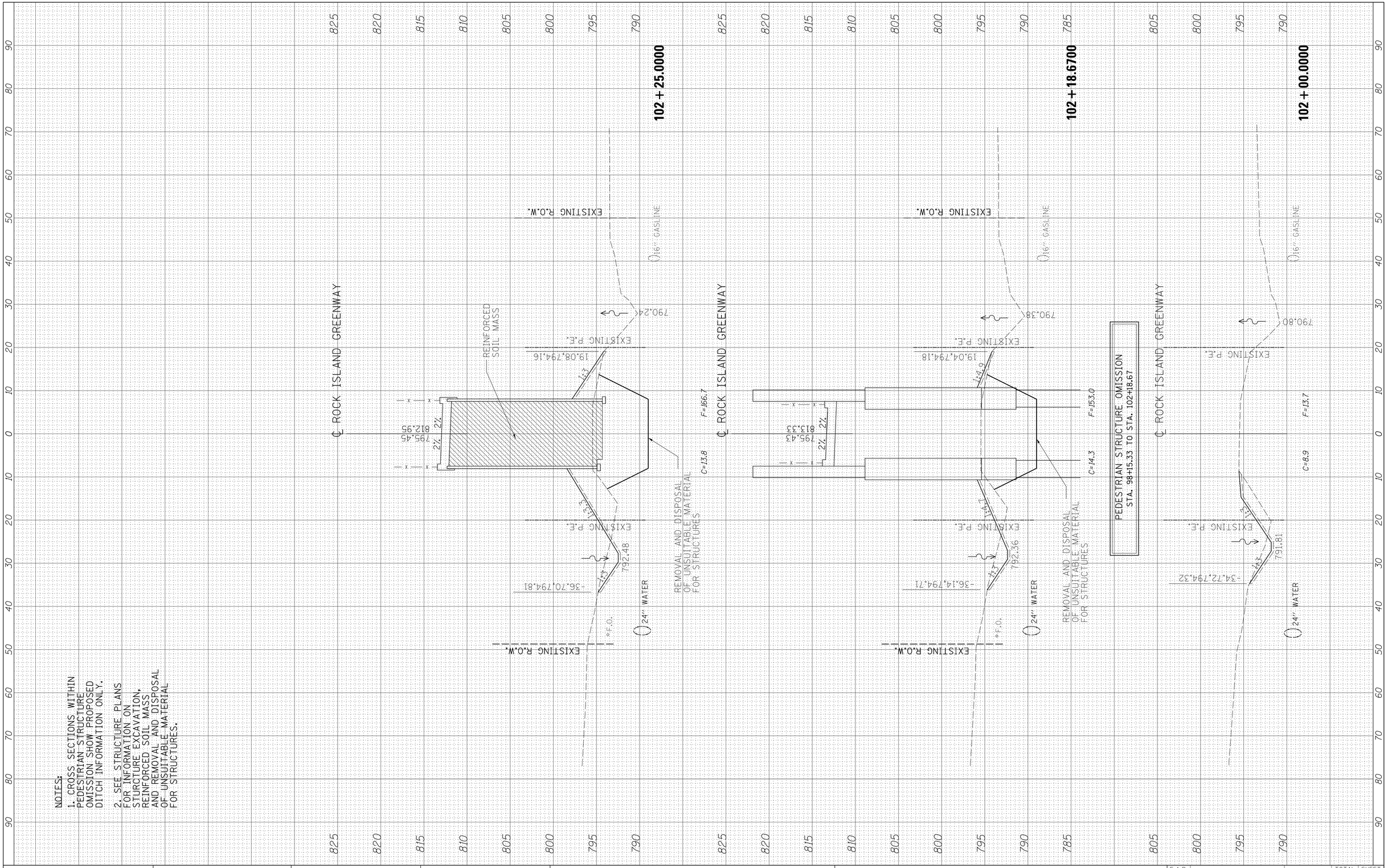
ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

NOTES:
1. CROSS SECTIONS WITHIN PEDESTRIAN STRUCTURE OMISSION SHOW PROPOSED DITCH INFORMATION ONLY.

2. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.



FILE NAME =	USER NAME = ccmartin	DESIGNED - BT	REVISED -
S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	DRAWN - BT/WLL	REVISED -	
MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODEL_NAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 102+00.0000 TO STA. 102+25.0000

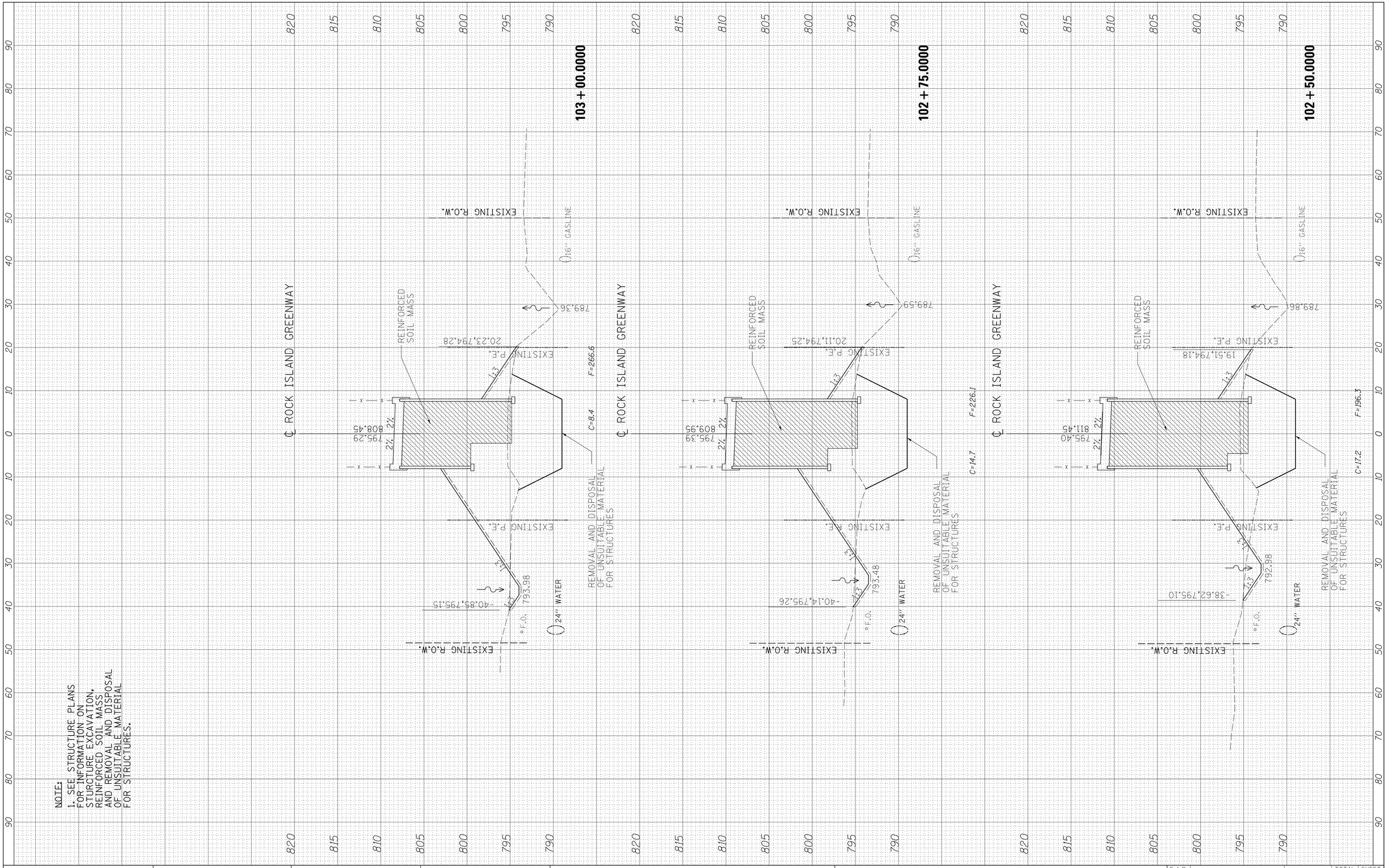
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	48
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

NOTE:

1. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.



FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
		DRAWN - BT/WLL	REVISED -
	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODEL_NAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

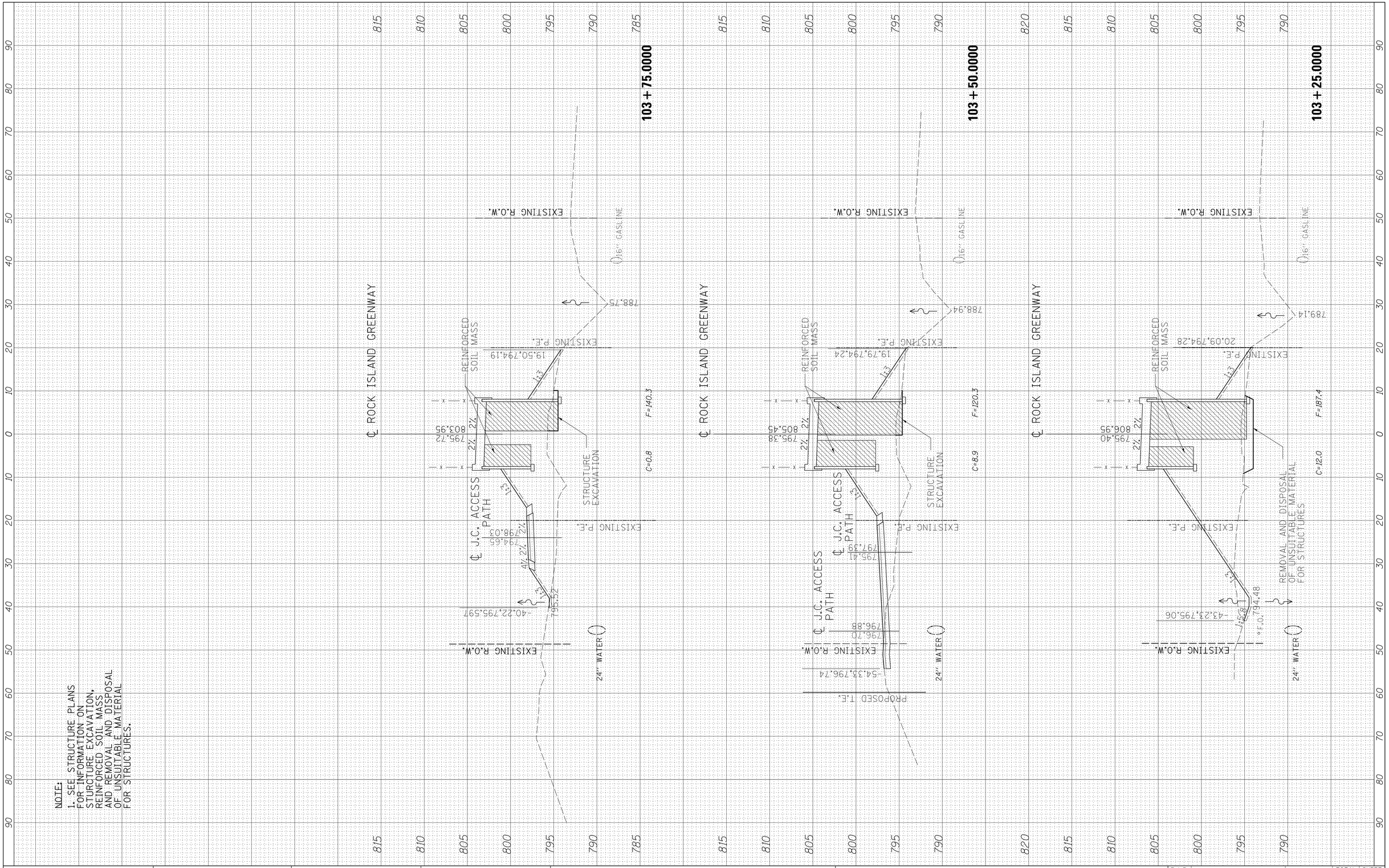
SCALE: | SHEET OF SHEETS | STA. 102+50.0000 TO STA.103+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	49
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

NOTE:
1. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.



FILE NAME =	USER NAME = ccmartin	DESIGNED - BT	REVISED -
S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn		DRAWN - BT/WLL	REVISED -
$MODELNAME$	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
MAURER-STUTZ ENGINEERS SURVEYORS	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

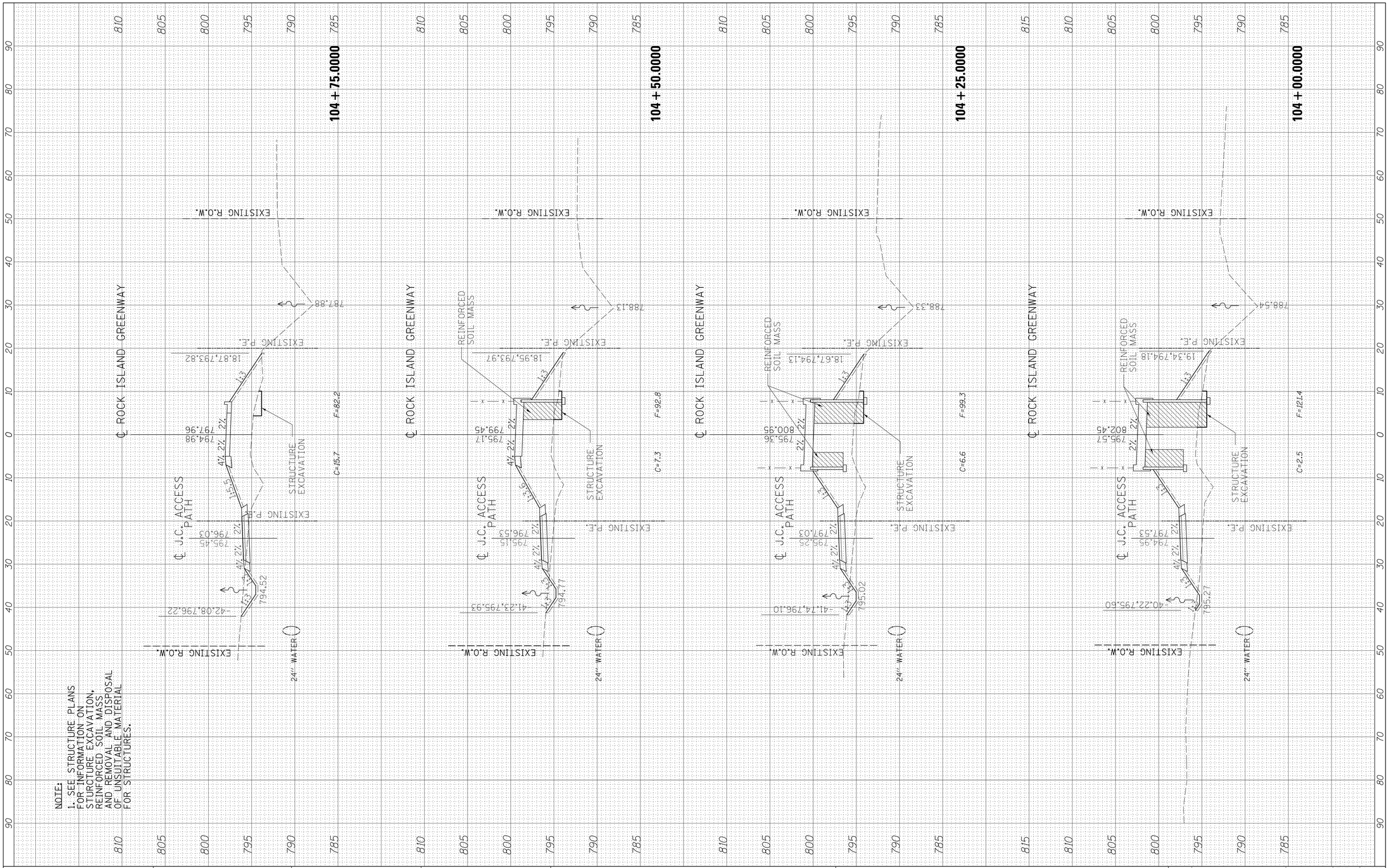
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 103+25.0000 TO STA.103+75.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	50
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



NOTE:
1. SEE STRUCTURE PLANS FOR INFORMATION ON STURCTURE EXCAVATION, REINFORCED SOIL MASS AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES.

FILE NAME =	USER NAME = ccmartin	DESIGNED - BT	REVISED -
S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn		DRAWN - BT/WLL	REVISED -
MAURER-STUTZ ENGINEERS SURVEYORS	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODELNAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

PEORIA PARK DISTRICT

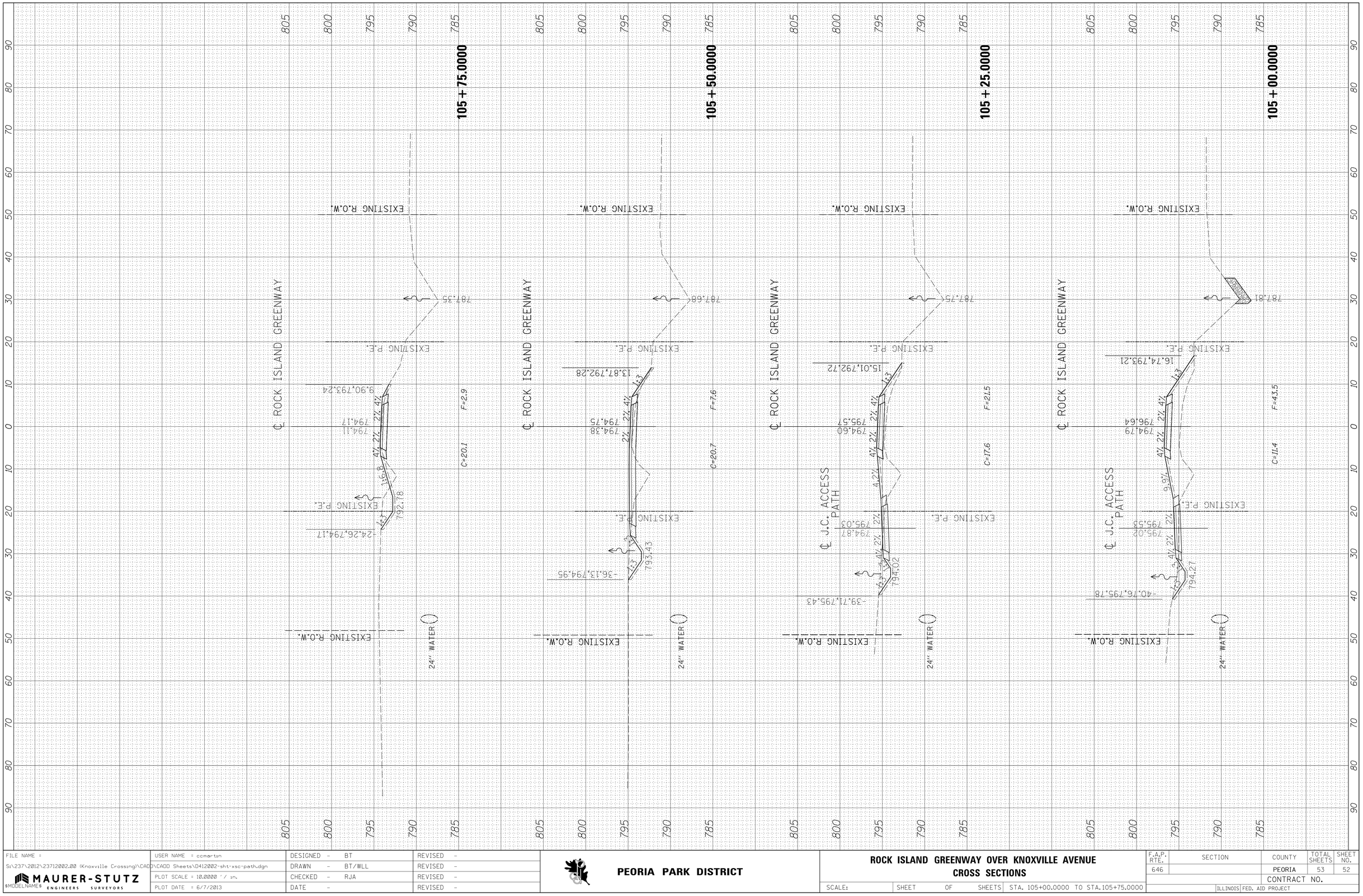
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 104+00.0000 TO STA.104+75.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	51
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
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	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
$MODELNAME$	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ ENGINEERS SURVEYORS

PEORIA PARK DISTRICT

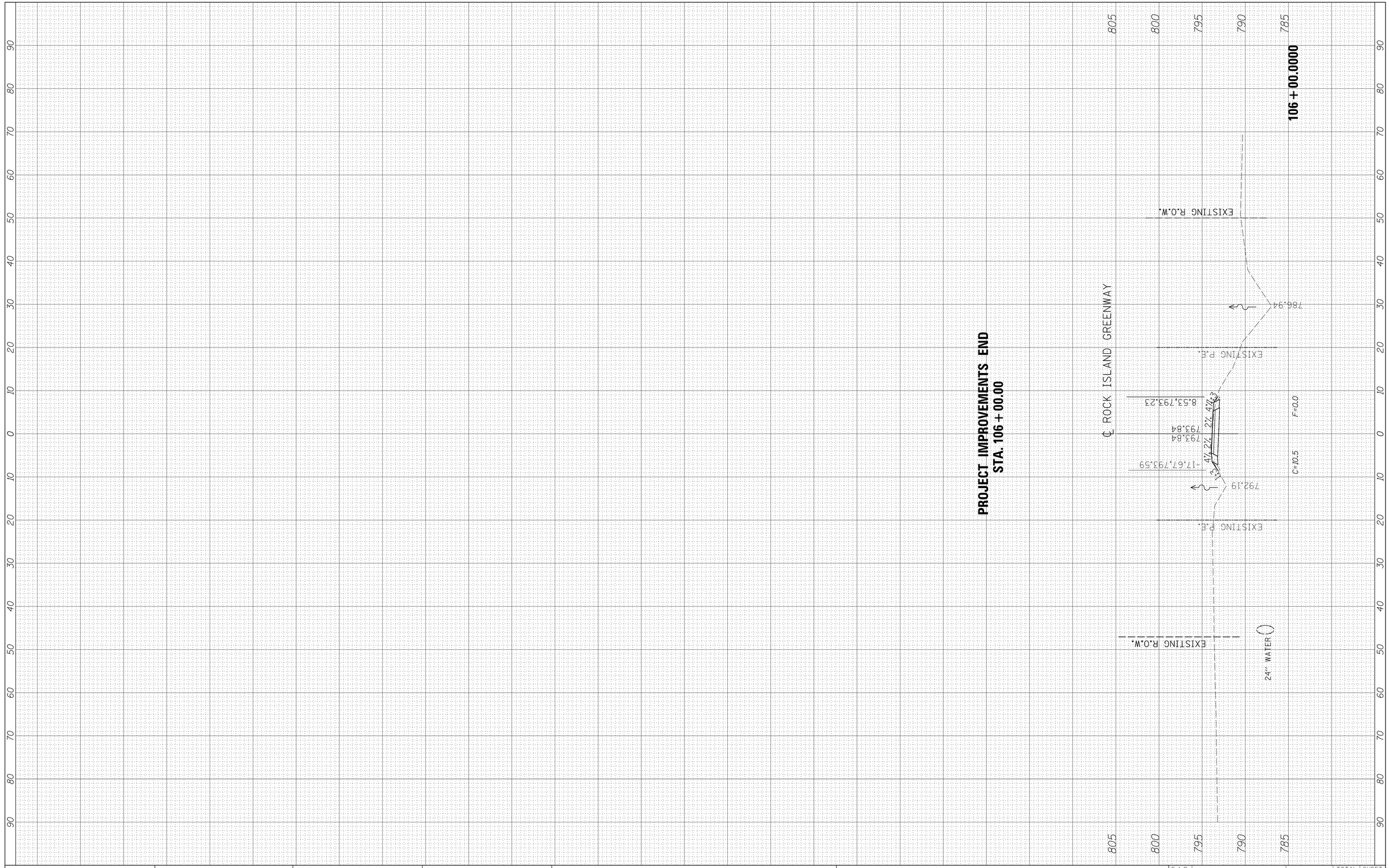
ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 105+00.0000 TO STA.105+75.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	52
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



FILE NAME = S:\237\2012\23712002.00 (Knoxville Crossing)\CADD\CADD Sheets\D412002-sht-xsc-path.dgn	USER NAME = ccmartin	DESIGNED - BT	REVISED -
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	PLOT SCALE = 10.0000 ' / in.	CHECKED - RJA	REVISED -
	PLOT DATE = 6/7/2013	DATE -	REVISED -

MAURER-STUTZ ENGINEERS SURVEYORS
$MODELNAME$

PEORIA PARK DISTRICT

ROCK ISLAND GREENWAY OVER KNOXVILLE AVENUE
CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. 106+00.0000 TO STA.106+00.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646		PEORIA	53	53
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

ABV	ABOVE
A/C	ACCESS CONTROL
AC	ACRE
ADJ	ADJUST
AS	AERIAL SURVEYS
AGG	AGGREGATE
AH	AHEAD
APT	APARTMENT
ASPH	ASPHALT
AUX	AUXILIARY
AGS	AUXILIARY GAS VALVE (SERVICE)
AVE	AVENUE
AX	AXIS OF ROTATION
BK	BACK
B-B	BACK TO BACK
BKPL	BACKPLATE
B	BARN
BARR	BARRICADE
BGN	BEGIN
BM	BENCHMARK
BIND	BINDER
BIT	BITUMINOUS
BTM	BOTTOM
BLVD	BOULEVARD
BRK	BRICK
BBOX	BUFFALO BOX
BLDG	BUILDING
CIP	CAST IRON PIPE
CB	CATCH BASIN
C-C	CENTER TO CENTER
CL	CENTERLINE OR CLEARANCE
CL-E	CENTERLINE TO EDGE
CL-F	CENTERLINE TO FACE
CTS	CENTERS
CERT	CERTIFIED
CHSLD	CHISELED
CS	CITY STREET
CP	CLAY PIPE
CLSD	CLOSED
CLID	CLOSED LID
CT	COAT OR COURT
COMB	COMBINATION
C	COMMERCIAL BUILDING
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CONST	CONSTRUCT
CONTD	CONTINUED
CONT	CONTINUOUS
COR	CORNER
CORR	CORRUGATED
CMP	CORRUGATED METAL PIPE
CNTY	COUNTY
CH	COUNTY HIGHWAY
CSE	COURSE
XSECT	CROSS SECTION
m^3	CUBIC METER
mm^3	CUBIC MILLIMETER
CU YD	CUBIC YARD
CULV	CULVERT
C&G	CURB & GUTTER
D	DEGREE OF CURVE
DC	DEPRESSED CURVE
DET	DETECTOR
DIA	DIAMETER
DIST	DISTRICT
DOM	DOMESTIC
DBL	DOUBLE
DSEL	DOWNSTREAM ELEVATION
DSFL	DOWNSTREAM FLOWLINE
DR	DRAINAGE OR DRIVE
DI	DRAINAGE INLET OR DROP INLET
DRV	DRIVEWAY
DCT	DUCT
EA	EACH
EB	EASTBOUND
EOP	EDGE OF PAVEMENT
E-CL	EDGE TO CENTERLINE
E-E	EDGE TO EDGE
EL	ELEVATION
ENTR	ENTRANCE
EXC	EXCAVATION
EX	EXISTING
EXPWAY	EXPRESSWAY
E	EXTERNAL DISTANCE OF HORIZONTAL CURVE
E	OFFSET DISTANCE TO VERTICAL CURVE
F-F	FACE TO FACE
FA	FEDERAL AID
FAI	FEDERAL AID INTERSTATE
FAP	FEDERAL AID PRIMARY
FAS	FEDERAL AID SECONDARY
FAUS	FEDERAL AID URBAN SECONDARY
FP	FENCE POST
FE	FIELD ENTRANCE
FH	FIRE HYDRANT
FL	FLOW LINE
FB	FOOT BRIDGE
FDN	FOUNDATION
FR	FRAME
F&G	FRAME & GRATE
FRWAY	FREEWAY
GAL	GALLON
GALV	GALVANIZED
G	GARAGE
GM	GAS METER
GV	GAS VALVE
GRAN	GRANULAR
GR	GRATE
GRVL	GRAVEL
GND	GROUND
GUT	GUTTER
GP	GUY POLE
GW	GUY WIRE
HH	HANDHOLE
HATCH	HATCHING
HD	HEAD
HDW	HEADWALL
HDUTY	HEAVY DUTY
ha	HECTARE
HMA	HOT MIX ASPHALT
HWY	HIGHWAY
HORIZ	HORIZONTAL
HSE	HOUSE
IL	ILLINOIS
IMP	IMPROVEMENT
IN DIA	INCH DIAMETER
INL	INLET
INST	INSTALLATION
IDS	INTERSECTION DESIGN STUDY
INV	INVERT
IP	IRON PIPE
IR	IRON ROD
JT	JOINT
kg	KILOGRAM
km	KILOMETER
LS	LANDSCAPING
LN	LANE
LT	LEFT
LP	LIGHT POLE
LGT	LIGHTING
LF	LINEAL FEET OR LINEAR FEET
L	LITER OR CURVE LENGTH
LC	LONG CHORD
LNG	LONGITUDINAL
L SUM	LUMP SUM
MACH	MACHINE
MB	MAIL BOX
MH	MANHOLE
MATL	MATERIAL
MED	MEDIAN
m	METER
METH	METHOD
M	MID-ORDINATE
mm	MILLIMETER
mm DIA	MILLIMETER DIAMETER
MIX	MIXTURE
MBH	MOBILE HOME
MOD	MODIFIED
MFT	MOTOR FUEL TAX
N & BC	NAIL & BOTTLE CAP
N & C	NAIL & CAP
N & W	NAIL & WASHER
NOAA	NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION
NC	NORMAL CROWN
NB	NORTHBOUND
NE	NORTHEAST
NW	NORTHWEST
OLID	OPEN LID
PAT	PATTERN
PVD	PAVED
PVMT	PAVEMENT
PM	PAVEMENT MARKING
PED	PEDESTAL
PNT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION OF HORIZONTAL CURVE
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENCY
POT	POINT ON TANGENT
POLYETH	POLYETHYLENE
PCC	PORTLAND CEMENT CONCRETE
PP	POWER POLE OR PRINCIPAL POINT
PRM	PRIME
PE	PRIVATE ENTRANCE
PROF	PROFILE
PGL	PROFILE GRADELINE
PROJ	PROJECT
P.C.	PROPERTY CORNER
PL	PROPERTY LINE
PR	PROPOSED
R	RADIUS
RR	RAILROAD
RRS	RAILROAD SPIKE
RPS	REFERENCE POINT STAKE
REF	REFLECTIVE
RCCP	REINFORCED CONCRETE CULVERT PIPE
REINF	REINFORCEMENT
REM	REMOVAL
RC	REMOVE CROWN
REP	REPLACEMENT
REST	RESTAURANT
RESURF	RESURFACING
RET	RETAINING
RT	RIGHT
ROW	RIGHT-OF-WAY
RD	ROAD
RDWY	ROADWAY
RTE	ROUTE
SAN	SANITARY
SANS	SANITARY SEWER
SEC	SECTION
SEED	SEEDING
SHAP	SHAPING
S	SHED
SH	SHEET
SHLD	SHOULDER
SW	SIDEWALK OR SOUTHWEST
SIG	SIGNAL
SOD	SODDING
SM	SOLID MEDIAN
SB	SOUTHBOUND
SE	SOUTHEAST
SPL	SPECIAL
SD	SPECIAL DITCH
SQ FT	SQUARE FEET
m^2	SQUARE METER
mm^2	SQUARE MILLIMETER
SQ YD	SQUARE YARD
STB	STABILIZED
STD	STANDARD
SBI	STATE BOND ISSUE
SR	STATE ROUTE
STA	STATION
SPBGR	STEEL PLATE BEAM GUARDRAIL
SS	STORM SEWER
STY	STORY
ST	STREET
STR	STRUCTURE
e	SUPERELEVATION RATE
S.E. RUN.	SUPERELEVATION RUNOFF LENGTH
SURF	SURFACE
SMK	SURVEY MARKER
T	TANGENT DISTANCE
T.R.	TANGENT RUNOUT DISTANCE
TEL	TELEPHONE
TB	TELEPHONE BOX
TP	TELEPHONE POLE
TEMP	TEMPORARY
TBM	TEMPORARY BENCH MARK
TD	TILE DRAIN
TBE	TO BE EXTENDED
TBR	TO BE REMOVED
TBS	TO BE SAVED
TWP	TOWNSHIP
TR	TOWNSHIP ROAD
TS	TRAFFIC SIGNAL
TSCB	TRAFFIC SIGNAL CONTROL BOX
TSC	TRAFFIC SYSTEMS CENTER
TRVS	TRANSVERSE
TRVL	TRAVEL
TRN	TURN
TY	TYPE
T-A	TYPE A
TYP	TYPICAL
UNDGND	UNDERGROUND
USGS	U.S. GEOLOGICAL SURVEY
USEL	UPSTREAM ELEVATION
USFL	UPSTREAM FLOWLINE
UTIL	UTILITY
VBOX	VALVE BOX
VV	VALVE VAULT
VLT	VAULT
VEH	VEHICLE
VP	VENT PIPE
VERT	VERTICAL
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
WM	WATER METER
WV	WATER VALVE
WMAIN	WATER MAIN
WB	WESTBOUND
WILDFL	WILDFLOWERS
W	WITH
WO	WITHOUT

Illinois Department of Transportation

PASSED January 1. 2011
Michael Brand
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1. 2011
Scott Bush
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-11	Updated abbreviations
	and symbols.
1-1-08	Updated abbreviations
	and symbols.

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

ADJUSTMENT ITEMS

	EX	PR
Structure To Be Adjusted		ADJ
Structure To Be Cleaned		C
Main Structure To Be Filled		FM
Structure To Be Filled		F
Structure To Be Filled Special		FSP
Structure To Be Removed		R
Structure To Be Reconstructed		REC
Structure To Be Reconstructed Special		RSP
Frame and Grate To Be Adjusted		A
Frame and Lid To Be Adjusted		A
Domestic Service Box To Be Adjusted		A
Valve Vault To Be Adjusted		A
Special Adjustment		SP
Item To Be Abandoned		AB
Item To Be Moved		M
Item To Be Relocated		REL
Pavement Removal and Replacement		

Illinois Department of Transportation

PASSED January 1. 2011
Michael Brand
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1. 2011
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

ALIGNMENT ITEMS

	EX	PR
Baseline		
Centerline		
Centerline Break Circle		
Baseline Symbol		
Centerline Symbol		
PI Indicator		
Point Indicator		
Horizontal Curve Data (Half Size)	CURVE P.I. STA= Δ= D= R= T= L= E= e= T.R.= S.E. RUN= P.C. STA= P.T. STA=	CURVE P.I. STA= Δ= D= R= T= L= E= e= T.R.= S.E. RUN= P.C. STA= P.T. STA=

BOUNDARIES ITEMS

	EX	PR
Dashed Property Line		
Solid Property/Lot Line		
Section/Grant Line		
Quarter Section Line		
Quarter/Quarter Section Line		
County/Township Line		
State Line		
Iron Pipe Found		
Iron Pipe Set		
Survey Marker		
Property Line Symbol		
Same Ownership Symbol (Half Size)		
Northwest Quarter Corner (Half Size)		
Section Corner (Half Size)		
Southeast Quarter Corner (Half Size)		

CONTOUR ITEMS

	EX	PR
Approx. Index Line		
Approx. Intermediate Line		
Index Contour		
Intermediate Contour		

DRAINAGE ITEMS

	EX	PR
Channel or Stream Line		
Culvert Line		
Grading & Shaping Ditches		
Drainage Boundary Line		
Paved Ditch		
Aggregate Ditch		
Pipe Underdrain		
Storm Sewer		
Flowline		
Ditch Check		
Headwall		
Inlet		
Manhole		
Summit		
Roadway Ditch Flow		
Swale		
Catch Basin		
Culvert End Section		
Water Surface Indicator		
Riprap		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

EROSION & SEDIMENT CONTROL ITEMS

	EX	PR
Cleaning & Grading Limits		
Dike		
Erosion Control Fence		
Perimeter Erosion Barrier		
Temporary Fence		
Ditch Check Temporary		
Ditch Check Permanent		
Inlet & Pipe Protection		
Sediment Basin		
Erosion Control Blanket		
Fabric Formed Concrete Revetment Mat		
Turf Reinforcement Mat		
Mulch Temporary		
Mulch Method 1		
Mulch Method 2 Stabilized		
Mulch Method 3 Hydraulic		

NON–HIGHWAY IMPROVEMENT ITEMS

	EX	PR
Noise Attn./Levee		
Field Line		
Fence		
Base of Levee		
Mailbox		
Multiple Mailboxes		
Pay Telephone		
Advertising Sign		

LANDSCAPING ITEMS

	EX	PR
Contour Mounding Line		
Fence		
Fence Post		
Shrubs		
Mowline		
Perennial Plants		
Seeding Class 2		
Seeding Class 2A		
Seeding Class 4		
Seeding Class 4 & 5 Combined		

EXISTING LANDSCAPING ITEMS (contd.)

	EX	PR
Seeding Class 5		
Seeding Class 7		
Seedlings Type 1		
Seedlings Type 2		
Sodding		
Mowstake w/Sign		
Tree Trunk Protection		
Evergreen Tree	E	
Shade Tree	E	+

LIGHTING

	EX	PR
Duct		
Conduit		
Electrical Aerial Cable	A	A
Electrical Buried Cable	L	L
Controller		
Underpass Luminaire		
Power Pole		

Illinois Department of Transportation

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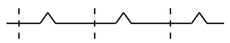
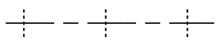
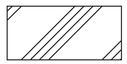
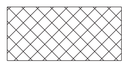
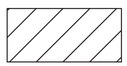
STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

LIGHTING (contd.)

	EX	PR
Pull Point		
Handhole		
Heavy Duty Handhole		
Junction Box		
Light Unit Comb.		
Electrical Ground		
Traffic Flow Arrow		
High Mast Pole (Half Size)		
Light Unit-1		

PAVEMENT (MISC.)

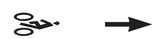
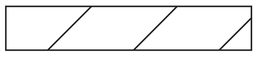
	EX	PR
Keyed Long. Joint		
Keyed Long. Joint w/Tie Bars		
Sawed Long. Joint w/Tie Bars		
Bituminous Shoulder		
Bituminous Taper		
Stabilized Driveway		
Widening		

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PAVEMENT MARKINGS

	EX	PR
Bike Lane Symbol		
Bike Lane Text		
Handicap Symbol		
RR Crossing		
Raised Marker Amber 1 Way		
Raised Marker Amber 2 Way		
Raised Marker Crystal 1 Way		
Two Way Turn Left		
Shoulder Diag. Pattern		
Skip-Dash White		
Skip-Dash Yellow		
Stop Line		
Solid Line		
Double Centerline		
Dotted Lines		
CL 2Ln 2Way RRPM 12.2 m (40') o.c.		
CL 2Ln 2Way RRPM 80' (24.4 m) o.c.		
CL Multilane Div. RRPM 40' (12.2 m) o.c.		
CL Multilane Div. RRPM 80' (24.4 m) o.c.		
CL Multilane Div. Dbl. RRPM 80' (24.4 m) o.c.		
CL Multilane Undiv.		
Two Way Turn Left Line		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 4 of 8)

STANDARD 000001–06

PAVEMENT MARKINGS (contd.)

	EX	PR
Urban Combination Left		
Urban Combination Right		
Urban Left Turn Arrow		
Urban Right Turn Arrow		
Urban Left Turn Only		
Urban Right Turn Only		
Urban Thru Only		
Urban U-Turn		
Urban Combined U-Turn		
Rural Combination Left		
Rural Combination Right		
Rural Left Turn Arrow		
Rural Right Turn Arrow		
Rural Left Turn Only		
Rural Right Turn Only		
Rural Thru Only		

RAILROAD ITEMS	EX	PR
Abandoned Railroad		
Railroad		
Railroad Point		
Control Box		
Crossing Gate		
Flashing Signal		
Railroad Cant. Mast Arm		
Crossbuck		

REMOVAL ITEMS	EX	PR
Removal Tic		
Bituminous Removal		
Hatch Pattern		
Tree Removal Single		

RIGHT OF WAY ITEMS	EX	PR
Future ROW Corner Monument		
ROW Marker		
ROW Line		
Easement		
Temporary Easement		

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STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

RIGHT OF WAY ITEMS (contd.)

	EX	PR
Access Control Line	—— AC ——	—— AC ——
Access Control Line & ROW	— —— AC ——	—— –AC– –
Access Control Line & ROW with Fence	—x—— AR ——	·x–AC–x——
Excess ROW Line		—— XS —— —

ROADWAY PLAN ITEMS

	EX	PR
Cable Barrier		
Concrete Barrier		
Edge of Pavement		
Bit Shoulders, Medians and C&G Line		
Aggregate Shoulder		
Sidewalks, Driveways		
Guardrail		
Guardrail Post		
Traffic Sign		
Corrugated Median		
Impact Attenuator		
North Arrow with District Office (Half Size)	N	
Match Line		STA. 45+00
Slope Limit Line		
Typical Cross-Section Line		

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ROADWAY PROFILES

	EX	PR
P.I. Indicator	△	△
Point Indicator	○	○
Earthworks Balance Point		
Begin Point		
Vert. Curve Data	VPI = ELEV= L = E =	VPI = ELEV= L = E =
Ditch Profile Left Side		
Ditch Profile Right Side		
Roadway Profile Line		
Storm Sewer Profile Left Side		
Storm Sewer Profile Right Side		

SIGNING ITEMS

	EX	PR
Cone, Drum or Barricade		○
Barricade Type II		
Barricade Type III		
Barricade With Edge Line		
Flashing Light Sign		
Panels I		
Panels II		
Direction of Traffic		
Sign Flag (Half Size)		

SIGNING ITEMS (contd.)

	EX	PR
Reverse Left W1-4L (Half Size)		
Reverse Right W1-4R (Half Size)		
Two Way Traffic Sign W6-3 (Half Size)		
Detour Ahead W20-2(0) (Half Size)		DETOUR AHEAD
Left Lane Closed Ahead W20-5L(0) (Half Size)		LEFT LANE CLOSED AHEAD
Right Lane Closed Ahead W20-5R(0) (Half Size)		RIGHT LANE CLOSED AHEAD
Road Closed Ahead W20-3(0) (Half Size)		ROAD CLOSED AHEAD
Road Construction Ahead W20-1-(0) (Half Size)		ROAD CONSTRUCTION AHEAD
Single Lane Ahead (Half Size)		SINGLE LANE AHEAD
Transition Left W4-2L (Half Size)		
Transition Right W4-2R (Half Size)		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

SIGNING ITEMS (contd.)

	EX	PR
One Way Arrow Lrg. W1-6-(0) (Half Size)		
Two Way Arrow Large W1-7-(0) (Half Size)		
Detour M4-10L-(0) (Half Size)		
Detour M4-10R-(0) (Half Size)		
One Way Left R6-1L (Half Size)		
One Way Right R6-1R (Half Size)		
Left Turn Lane R3-I100L (Half Size)		
Keep Left R4-7AL (Half Size)		
Keep Left R4-7BL (Half Size)		
Keep Right R4-7AR (Half Size)		
Keep Right R4-7BR (Half Size)		
Stop Here On Red R10-6-AL (Half Size)		
Stop Here On Red R10-6-AR (Half Size)		
No Left Turn R3-2 (Half Size)		
No Right Turn R3-1 (Half Size)		
Road Closed R11-2 (Half Size)		
Road Closed Thru Traffic R11-2 (Half Size)		

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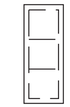
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STRUCTURES ITEMS

	EX	PR
Box Culvert Barrel		
Box Culvert Headwall		
Bridge Pier		
Bridge		
Retaining Wall		
Temporary Sheet Piling		

TRAFFIC SHEET ITEMS

	EX	PR
Cable Number		
Left Turn Green		
Left Turn Yellow		
Signal Backplate		
Signal Section 8" (200 mm)		
Signal Section 12" (300 mm)		
Walk/Don't Walk Letters		
Walk/Don't Walk Symbols		

TRAFFIC SIGNAL ITEMS

	EX	PR
Galv. Steel Conduit		
Underground Cable		
Detector Loop Line		
Detector Loop Large		
Detector Loop Small		
Detector Loop Quadrapole		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

TRAFFIC SIGNAL ITEMS (contd.)

	EX	PR
Detector Raceway		
Aluminum Mast Arm		
Steel Mast Arm		
Veh. Detector Magnetic		
Conduit Splice		
Controller		
Gulfbox Junction		
Wood Pole		
Temp. Signal Head		
Handhole		
Double Handhole		
Heavy Duty Handhole		
Junction Box		
Ped. Pushbutton Detector		
Ped. Signal Head		
Power Pole Service		
Priority Veh. Detector		
Signal Head		
Signal Head w/Backplate		
Signal Post		
Closed Circuit TV		
Video Detector System		

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UNDERGROUND UTILITY ITEMS

	EX	PR	ABANDONED
Cable TV	CTV	CTV	CTV
Electric Cable	E	E	E
Fiber Optic	FO	FO	FO
Gas Pipe	G	G	G
Oil Pipe	O	O	O
Sanitary Sewer			
Telephone Cable	T	T	T
Water Pipe	W	W	W

UTILITIES ITEMS

	EX	PR
Controller		
Double Handhole		
Fire Hydrant		
GuyWire or Deadman Anchor		
Handhole		
Heavy Duty Handhole		
Junction Box		
Light Pole		
Manhole		
Pipeline Warning Sign		
Power Pole		
Power Pole with Light		
Sanitary Sewer Cleanout		
Splice Box Above Ground		
Telephone Splice Box Above Ground		
Telephone Pole		

UTILITY ITEMS (contd.)

	EX	PR
Traffic Signal		
Traffic Signal Control Box	TS	
Water Meter		
Water Meter Valve Box		
Profile Line		
Aerial Power Line	A A	A A

VEGETATION ITEMS

	EX	PR
Deciduous Tree		
Bush or Shrub		
Evergreen Tree		
Stump		
Orchard/Nursery Line		
Vegetation Line		
Woods & Bush Line		

WATER FEATURE ITEMS

	EX	PR
Stream or Drainage Ditch		
Waters Edge		
Water Surface Indicator		
Water Point		
Disappearing Ditch		
Marsh		
Marsh/Swamp Boundary		

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

STANDARD 000001–06

REINFORCEMENT BARS - ENGLISH (METRIC)

Bar Size English (metric)	Dia. in. mm	Cross-Sectional Area sq. in. (sq. mm)	Weight lbs./ft. kg/m	SPACING, in. (mm)													
				4 (100)	4½ (115)	5 (125)	5½ (140)	6 (150)	6½ (165)	7 (175)	7½ (190)	8 (200)	8½ (215)	9 (225)	10 (250)	11 (275)	12 (300)
				AREA OF STEEL PER FOOT (METER), sq. in. (sq. mm)													
3 (10)	0.375 (9.5)	0.110 (71)	0.376 (0.560)	0.330 (710)	0.293 (617)	0.264 (568)	0.240 (507)	0.220 (473)	0.203 (430)	0.189 (406)	0.176 (374)	0.165 (355)	0.155 (330)	0.147 (316)	0.132 (284)	0.120 (258)	0.110 (237)
4 (13)	0.500 (12.7)	0.196 (129)	0.668 (0.944)	0.588 (1290)	0.523 (1122)	0.470 (1032)	0.428 (921)	0.392 (860)	0.362 (782)	0.336 (737)	0.314 (679)	0.294 (645)	0.277 (600)	0.261 (573)	0.235 (516)	0.214 (469)	0.196 (430)
5 (16)	0.625 (15.9)	0.307 (199)	1.043 (1.552)	0.921 (1990)	0.819 (1730)	0.737 (1592)	0.670 (1421)	0.614 (1327)	0.567 (1206)	0.526 (1137)	0.491 (1047)	0.461 (995)	0.433 (926)	0.409 (884)	0.368 (796)	0.335 (724)	0.307 (663)
6 (19)	0.750 (19.1)	0.442 (284)	1.502 (2.235)	1.326 (2840)	1.179 (2470)	1.061 (2272)	0.964 (2029)	0.884 (1893)	0.816 (1721)	0.758 (1623)	0.707 (1495)	0.663 (1420)	0.624 (1321)	0.589 (1262)	0.530 (1136)	0.482 (1033)	0.442 (947)
7 (22)	0.875 (22.2)	0.601 (387)	2.044 (3.042)	1.803 (3870)	1.603 (3365)	1.442 (3096)	1.311 (2764)	1.202 (2580)	1.110 (2345)	1.030 (2211)	0.962 (2037)	0.902 (1935)	0.848 (1800)	0.801 (1720)	0.721 (1548)	0.656 (1407)	0.601 (1290)
8 (25)	1.000 (25.4)	0.785 (510)	2.670 (3.973)	2.355 (5100)	2.093 (4435)	1.884 (4080)	1.713 (3543)	1.570 (3400)	1.449 (3091)	1.346 (2914)	1.256 (2684)	1.178 (2550)	1.108 (2372)	1.047 (2267)	0.942 (2040)	0.856 (1855)	0.785 (1700)
9 (29)	1.128 (28.7)	1.000 (645)	3.400 (5.060)	3.000 (6450)	2.667 (5609)	2.400 (5160)	2.182 (4607)	2.000 (4300)	1.846 (3909)	1.714 (3686)	1.600 (3395)	1.500 (3225)	1.412 (3000)	1.333 (2867)	1.200 (2580)	1.091 (2345)	1.000 (2150)
10 (32)	1.270 (32.3)	1.267 (819)	4.303 (6.404)	3.801 (8190)	3.379 (7122)	3.041 (6552)	2.764 (5850)	2.534 (5460)	2.339 (4964)	2.172 (4680)	2.027 (4311)	1.901 (4095)	1.789 (3809)	1.689 (3640)	1.520 (3276)	1.382 (2978)	1.267 (2730)
11 (36)	1.410 (35.8)	1.561 (1006)	5.313 (7.907)	4.683 (10060)	4.163 (8748)	3.746 (8048)	3.406 (7186)	3.122 (6707)	2.882 (6097)	2.676 (5749)	2.498 (5295)	2.342 (5030)	2.204 (4679)	2.081 (4471)	1.873 (4024)	1.703 (3658)	1.561 (3353)

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DATE	REVISIONS
1-1-09	Switched units to
	English (metric).
1-1-07	Deleted metric table.
	Soft converted English
	table.

AREAS OF REINFORCEMENT BARS

STANDARD 001001–02

DECIMAL OF AN INCH AND OF A FOOT

A	B	A	B	A	B	A	B	A	B	A	B
0.0052	1/16	11/64 0.171875	2 1/16	0.3385	4 1/16	0.5052	6 1/16	43/64 0.671875	8 1/16	0.8385	10 1/16
0.0104	1/8	0.1771	2 1/8	11/32 0.34375	4 1/8	0.5104	6 1/8	0.6771	8 1/8	27/32 0.84375	10 1/8
1/64 0.015625	3/16	0.1823	2 3/16	0.3490	4 3/16	33/64 0.515625	6 3/16	0.6823	8 3/16	0.8490	10 3/16
0.0208	1/4	3/16 0.1875	2 1/4	0.3542	4 1/4	0.5208	6 1/4	11/16 0.6875	8 1/4	0.8542	10 1/4
0.0260	5/16	0.1927	2 5/16	23/64 0.359375	4 5/16	0.5260	6 5/16	0.6927	8 5/16	55/64 0.859375	10 5/16
1/32 0.03125	3/8	0.1979	2 3/8	0.3646	4 3/8	17/32 0.53125	6 3/8	0.6979	8 3/8	0.8646	10 3/8
0.0365	7/16	13/64 0.203125	2 7/16	0.3698	4 7/16	0.5365	6 7/16	45/64 0.703125	8 7/16	0.8698	10 7/16
0.0417	1/2	0.2083	2 1/2	3/8 0.3750	4 1/2	0.5417	6 1/2	0.7083	8 1/2	7/8 0.8750	10 1/2
3/64 0.046875	9/16	0.2135	2 9/16	0.3802	4 9/16	35/64 0.546875	6 9/16	0.7135	8 9/16	0.8802	10 9/16
0.0521	5/8	7/32 0.21875	2 5/8	0.3854	4 5/8	0.5521	6 5/8	23/32 0.71875	8 5/8	0.8854	10 5/8
0.0573	11/16	0.2240	2 11/16	25/64 0.390625	4 11/16	0.5573	6 11/16	0.7240	8 11/16	57/64 0.890625	10 11/16
1/16 0.0625	3/4	0.2292	2 3/4	0.3958	4 3/4	9/16 0.5625	6 3/4	0.7292	8 3/4	0.8958	10 3/4
0.0677	13/16	15/64 0.234375	2 13/16	0.4010	4 13/16	0.5677	6 13/16	47/64 0.734375	8 13/16	0.9010	10 13/16
0.0729	7/8	0.2396	2 7/8	13/32 0.40625	4 7/8	0.5729	6 7/8	0.7396	8 7/8	29/32 0.90625	10 7/8
5/64 0.078125	15/16	0.2448	2 15/16	0.4115	4 15/16	37/64 0.578125	6 15/16	0.7448	8 15/16	0.9115	10 15/16
0.0833	1	1/4 0.2500	3	0.4167	5	0.5833	7	3/4 0.7500	9	0.9167	11
0.0885	1 1/16	0.2552	3 1/16	27/64 0.421875	5 1/16	0.5885	7 1/16	0.7552	9 1/16	59/64 0.921875	11 1/16
3/32 0.09375	1 1/8	0.2604	3 1/8	0.4271	5 1/8	19/32 0.59375	7 1/8	0.7604	9 1/8	0.9271	11 1/8
0.0990	1 3/16	17/64 0.265625	3 3/16	0.4323	5 3/16	0.5990	7 3/16	49/64 0.765625	9 3/16	0.9323	11 3/16
0.1042	1 1/4	0.2708	3 1/4	7/16 0.4375	5 1/4	0.6042	7 1/4	0.7708	9 1/4	15/16 0.9375	11 1/4
7/64 0.109375	1 5/16	0.2760	3 5/16	0.4427	5 5/16	39/64 0.609375	7 5/16	0.7760	9 5/16	0.9427	11 5/16
0.1146	1 3/8	9/32 0.28125	3 3/8	0.4479	5 3/8	0.6146	7 3/8	25/32 0.78125	9 3/8	0.9479	11 3/8
0.1198	1 7/16	0.2865	3 7/16	29/64 0.453125	5 7/16	0.6198	7 7/16	0.7865	9 7/16	61/64 0.953125	11 7/16
1/8 0.1250	1 1/2	0.2917	3 1/2	0.4583	5 1/2	5/8 0.6250	7 1/2	0.7917	9 1/2	0.9583	11 1/2
0.1302	1 9/16	19/64 0.296875	3 9/16	0.4635	5 9/16	0.6302	7 9/16	51/64 0.796875	9 9/16	0.9635	11 9/16
0.1354	1 5/8	0.3021	3 5/8	15/32 0.46875	5 5/8	0.6354	7 5/8	0.8021	9 5/8	31/32 0.96875	11 5/8
9/64 0.140625	1 11/16	0.3073	3 11/16	0.4740	5 11/16	41/64 0.640625	7 11/16	0.8073	9 11/16	0.9740	11 11/16
0.1458	1 3/4	5/16 0.3125	3 3/4	0.4792	5 3/4	0.6458	7 3/4	13/16 0.8125	9 3/4	0.9792	11 3/4
0.1510	1 13/16	0.3177	3 13/16	31/64 0.484375	5 13/16	0.6510	7 13/16	0.8177	9 13/16	63/64 0.984375	11 13/16
5/32 0.15625	1 7/8	0.3229	3 7/8	0.4896	5 7/8	21/32 0.65625	7 7/8	0.8229	9 7/8	0.9896	11 7/8
0.1615	1 15/16	21/64 0.328125	3 15/16	0.4948	5 15/16	0.6615	7 15/16	53/64 0.828125	9 15/16	0.9948	11 15/16
0.1667	2	0.3333	4	1/2 0.5000	6	0.6667	8	0.8333	10	1 1.0000	12

A = Fractions of Inch or Foot

B = Inch Equivalents to Foot Fractions

Illinois Department of Transportation

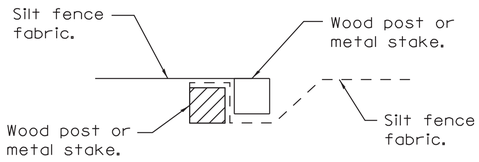
PASSED January 1, 1997
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 1997
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-97	New Standard.

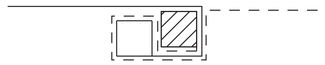
DECIMAL OF AN INCH AND OF A FOOT

STANDARD 001006



Place end-post (stake) of first silt fence adjacent to end-post (stake) of second silt fence with fabric positioned as swown.

STEP 1

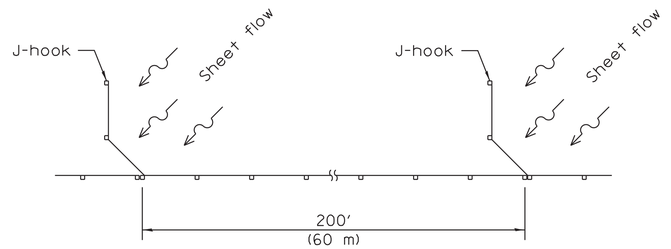


Rotate posts (stakes) together 180° clockwise and drive both posts (stakes) 18 (450) into ground.

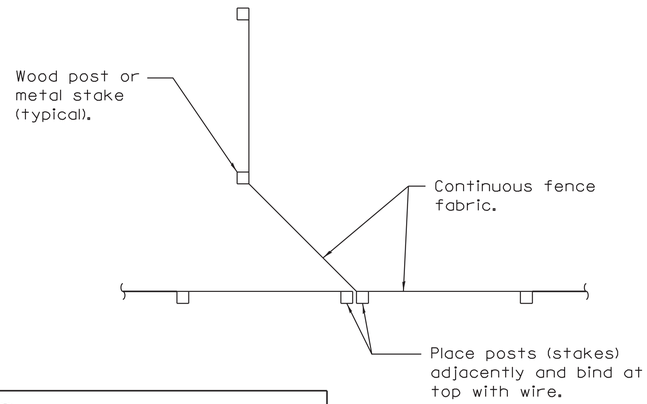
STEP 2

ATTACHING TWO SILT FILTER FENCES

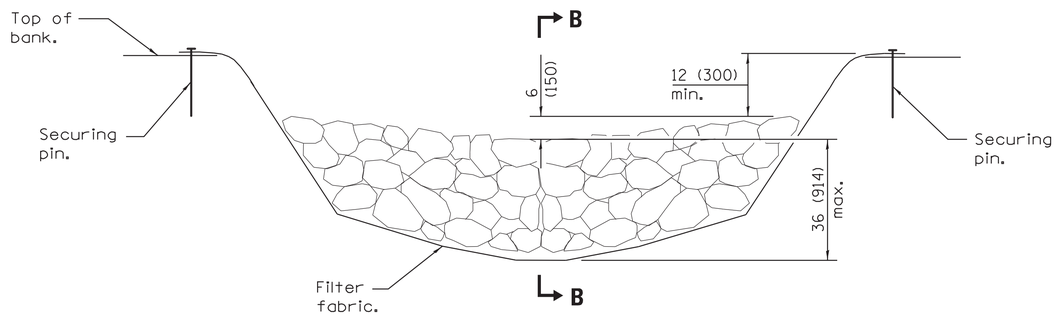
(Not applicable for J-hooks)



SILT FILTER J-HOOK PLACEMENT

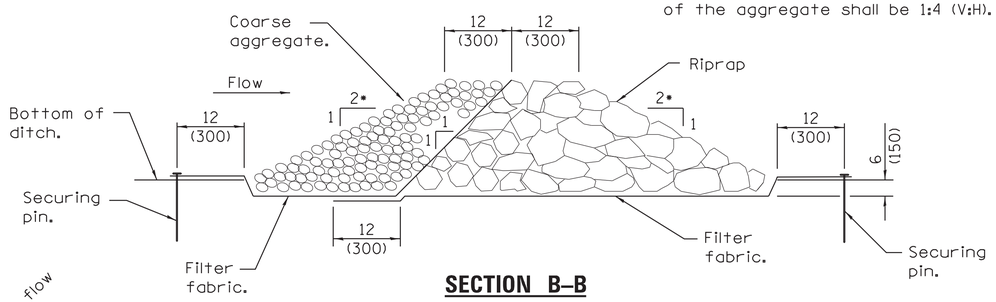


J-HOOK



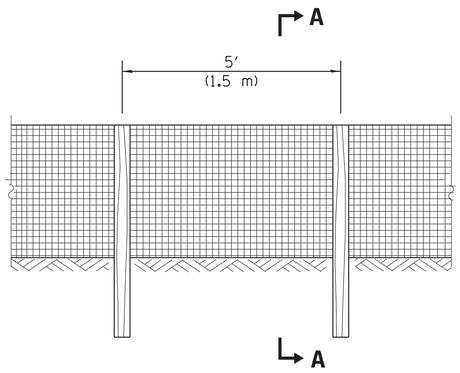
ELEVATION

- When the ditch check is within the clear zone and the road is open to traffic, the traffic approach slope of the aggregate shall be 1:4 (V:H).



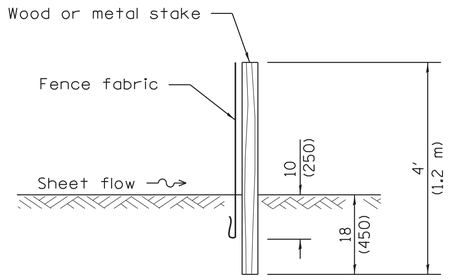
SECTION B–B

AGGREGATE DITCH CHECK

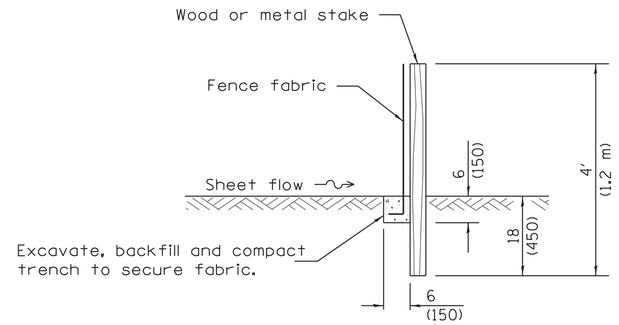


ELEVATION

SILT FILTER FENCE AS A PERIMETER EROSION BARRIER



SLICE METHOD



TRENCH METHOD

SECTION A–A

GENERAL NOTES

The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

PASSED January 1, 2013
Michael Brand
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

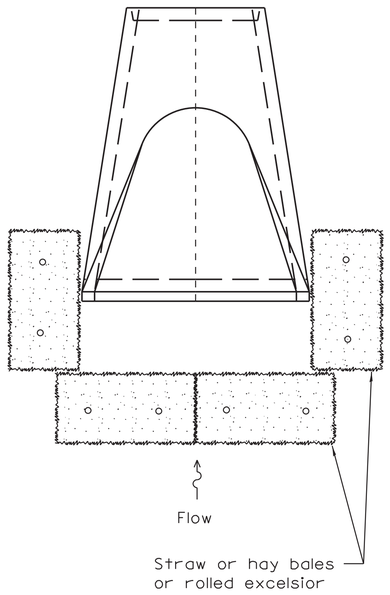
ISSUED 1-1-97

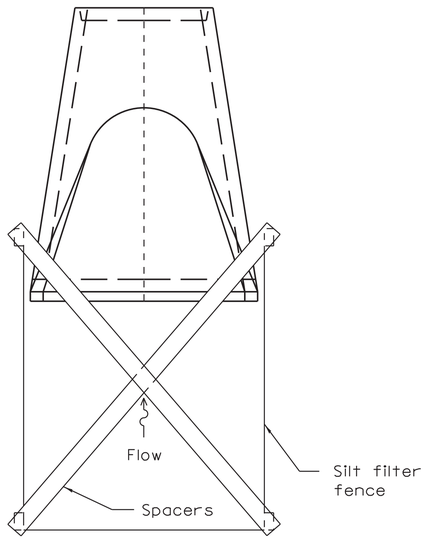
DATE	REVISIONS
1-1-13	Corrected notation for
	flowline (℄) on SEDIMENT
	BASIN ELEVATION.
1-1-12	Omitted hay/straw perimeter
	barrier. Added SLICE METHOD
	to SECTION A-A.

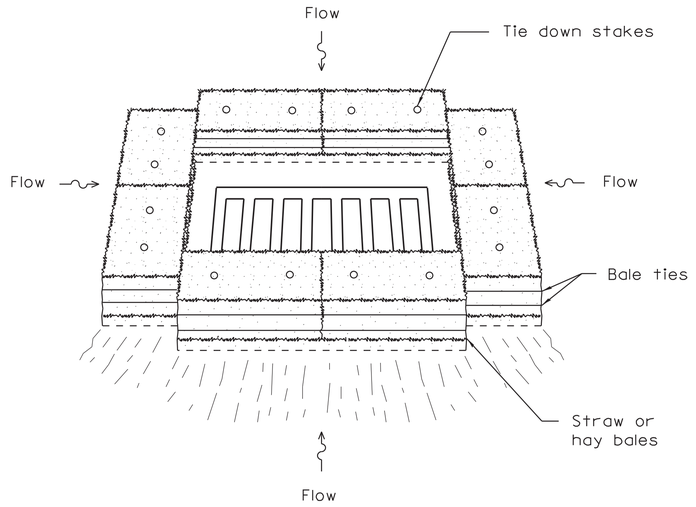
TEMPORARY EROSION CONTROL SYSTEMS

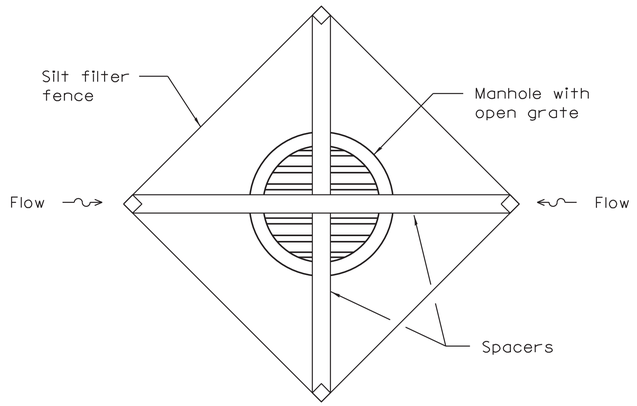
(Sheet 1 of 2)

STANDARD 280001–07

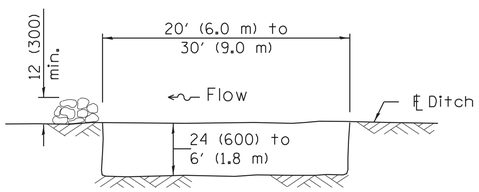






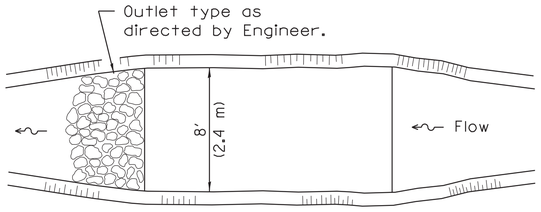


INLET AND PIPE PROTECTION



The performance of the basin
will improve if put into a series.

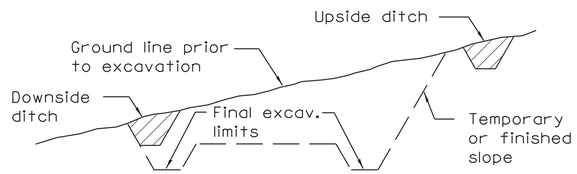
ELEVATION



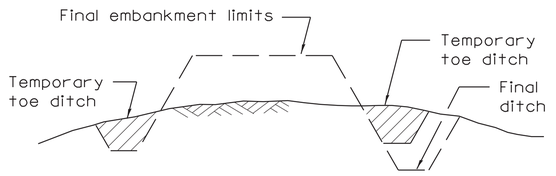
The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed anytime the basins become 75% filled.

PLAN

SEDIMENT BASIN



TYPICAL CUT CROSS-SECTION



TYPICAL FILL CROSS-SECTION

TEMPORARY DITCHES FOR CUT & FILL SECTIONS

Illinois Department of Transportation

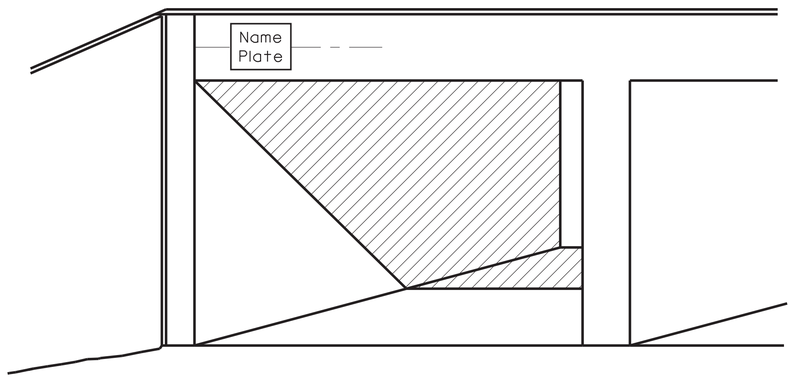
PASSED January 1, 2013
Michael Brand
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

TEMPORARY EROSION CONTROL SYSTEMS

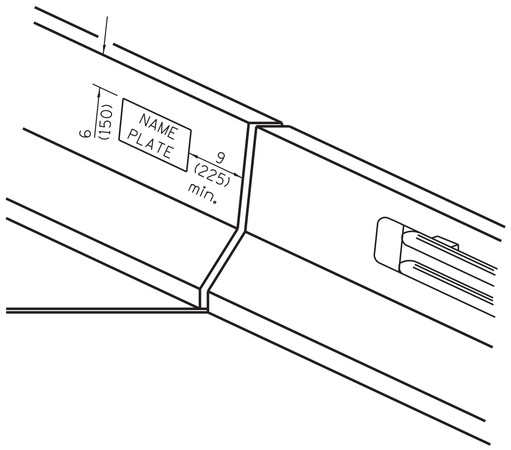
(Sheet 2 of 2)

STANDARD 280001-07

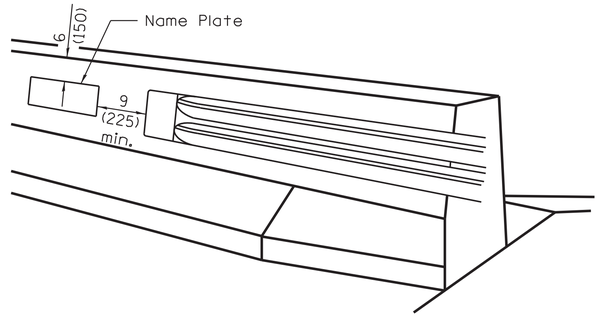


FOR MULTI–SPAN CULVERTS

(Unless otherwise noted on the plans, name plates are not required for stuctures less than 20′ (6.1 m) in length)

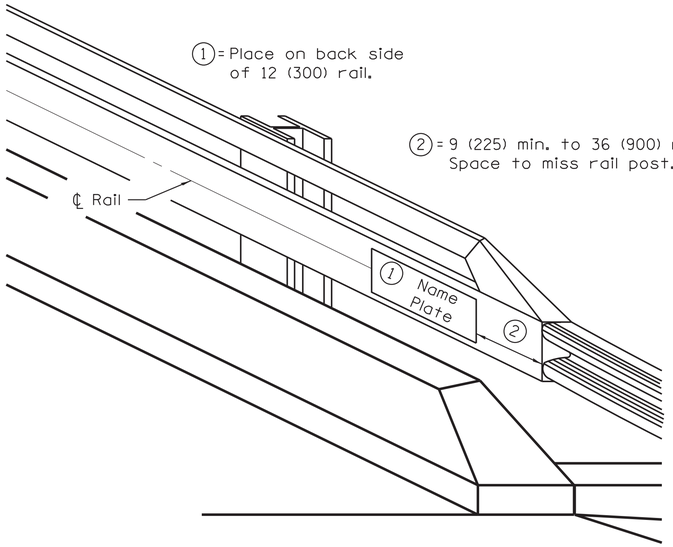


FOR PARAPET AND END POST MOUNTED

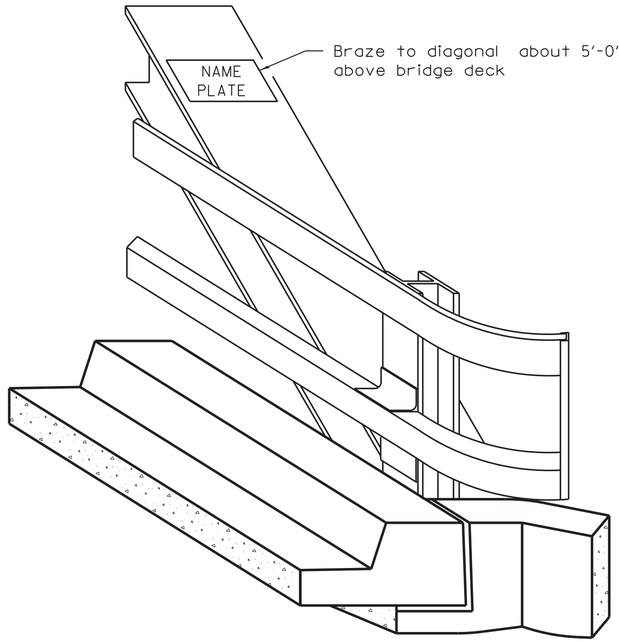


FOR PARAPET

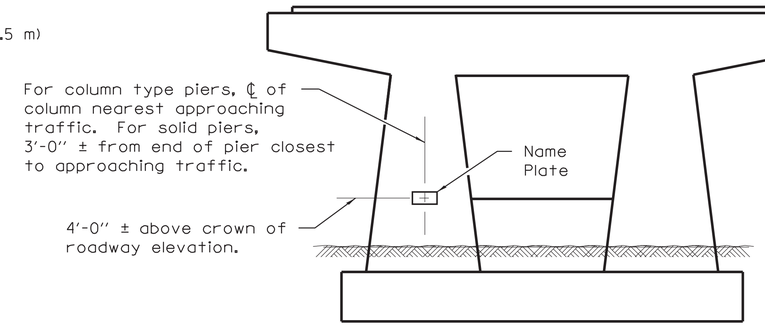
(When Dog Ear Wing is used)



FOR STEEL RAILS



FOR TRUSSES



FOR PIERS ON FAI ROUTES

GENERAL NOTES

On one-way traffic structures, place name plate on right side of approach end. On two-way traffic structures, place name plate on right side of approach end while looking in the direction of increasing stationing.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2009
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

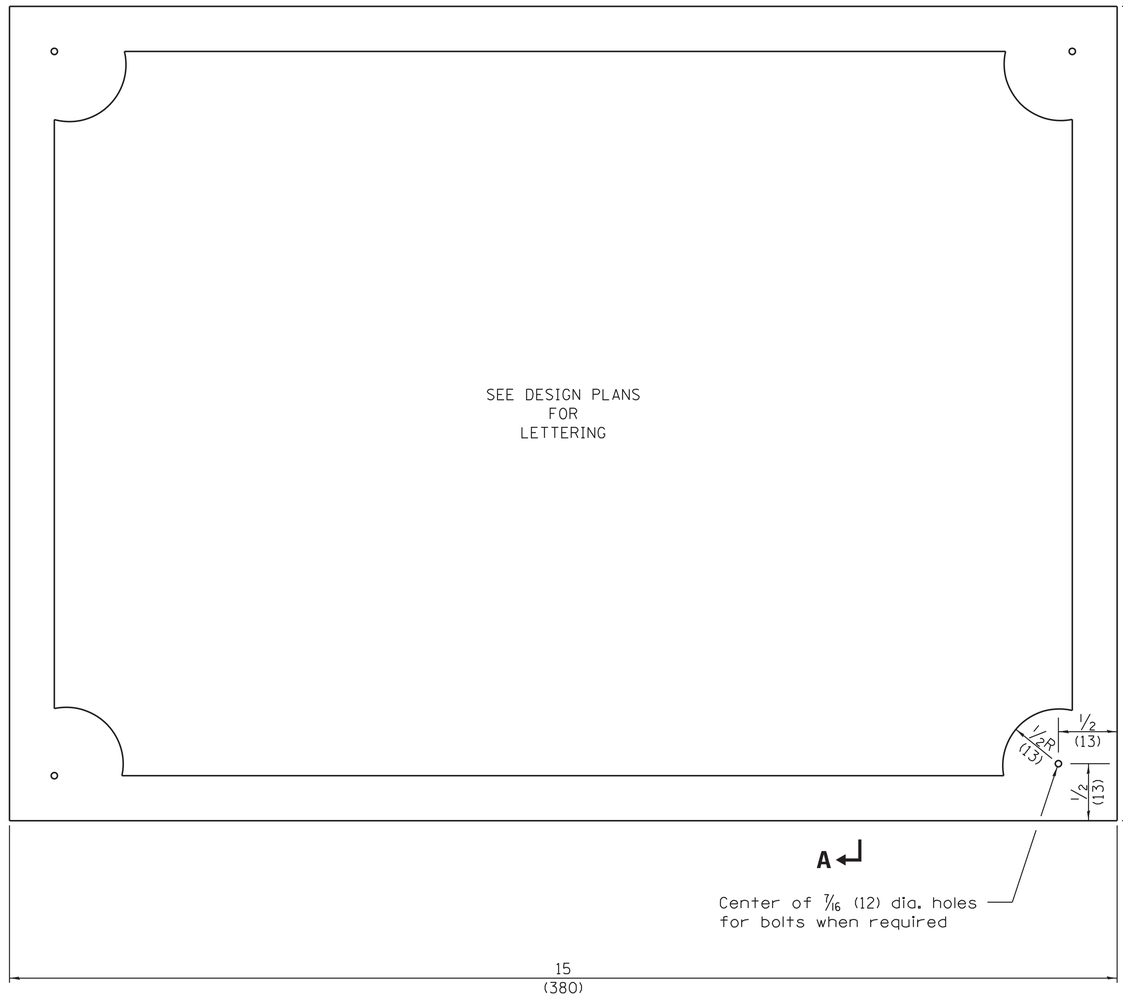
ISSUED 1-1-97

DATE	REVISIONS
1-1-09	Switched units to
	English (metric). Added
	pier detail.
1-1-02	Remove Placing: note on
	sht. 2. Added Braze to
	diag. note on sht. 1.

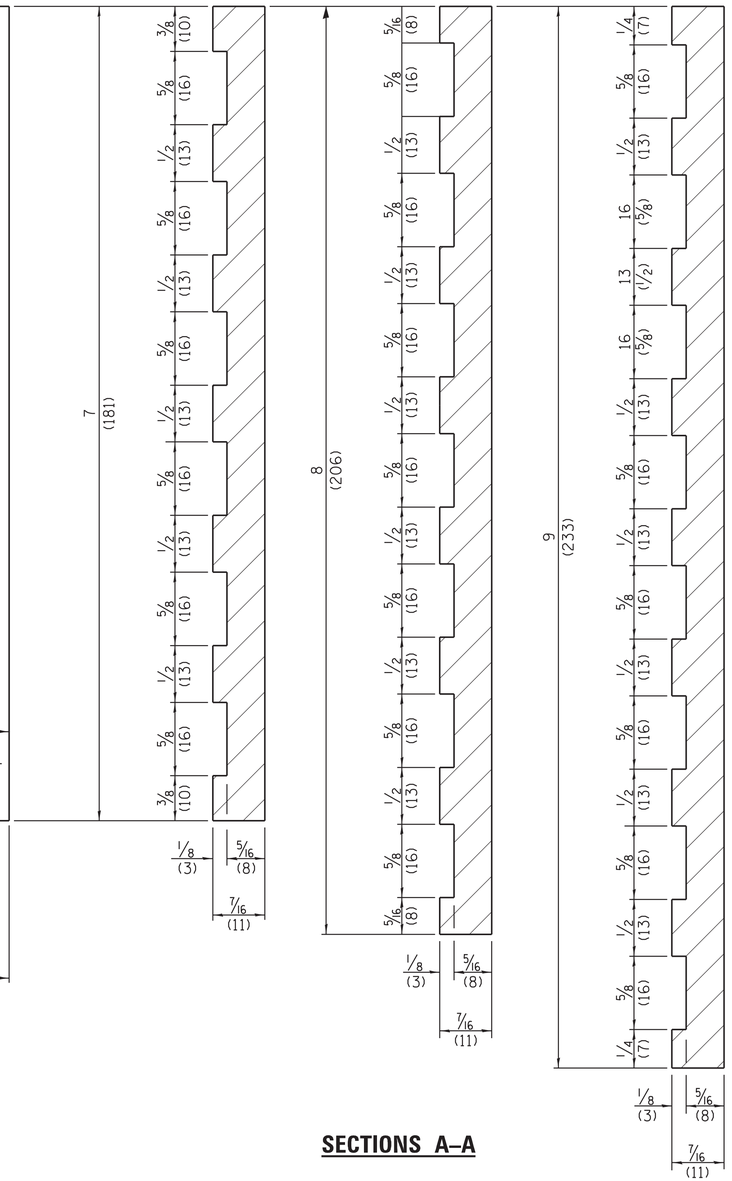
NAME PLATE FOR BRIDGES

(Sheet 1 of 2)

STANDARD 515001–03



Lettering for



SECTIONS A–A

NOTE
Border and lettering:
Raised 1/8 (3), square cut and not tapered.

Illinois Department of Transportation

APPROVED January 1, 2009
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

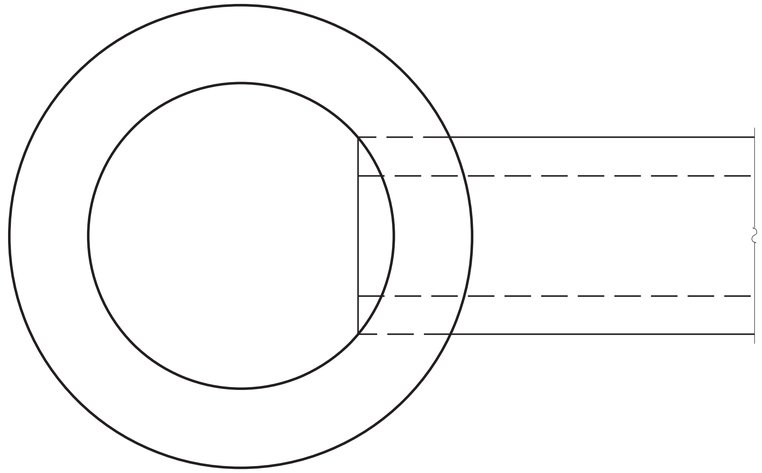
APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

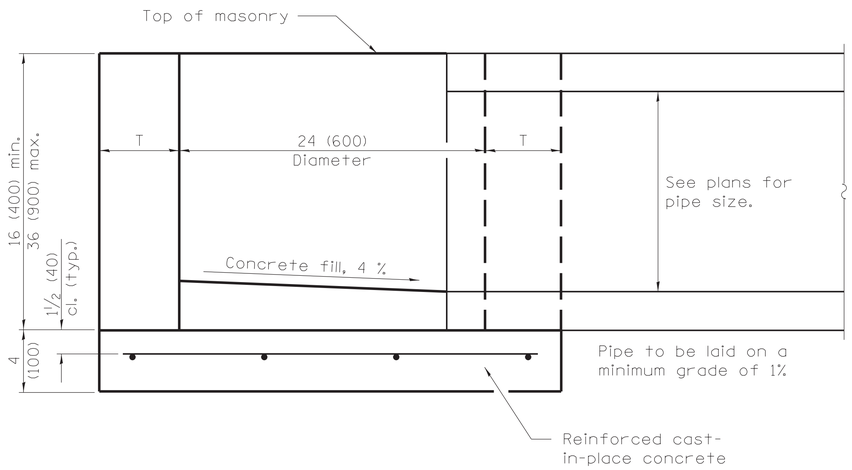
NAME PLATE FOR BRIDGES

(Sheet 2 of 2)

STANDARD 515001–03

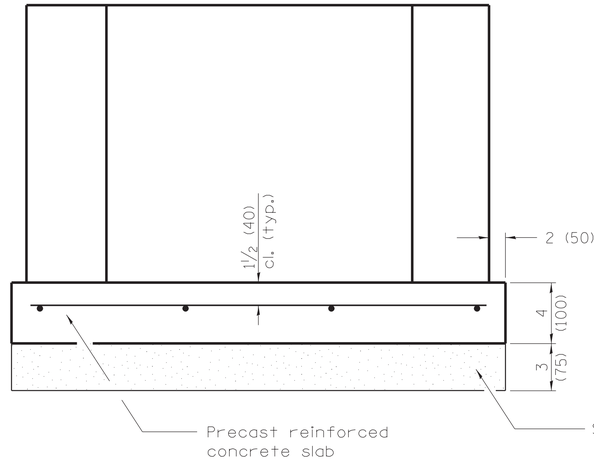


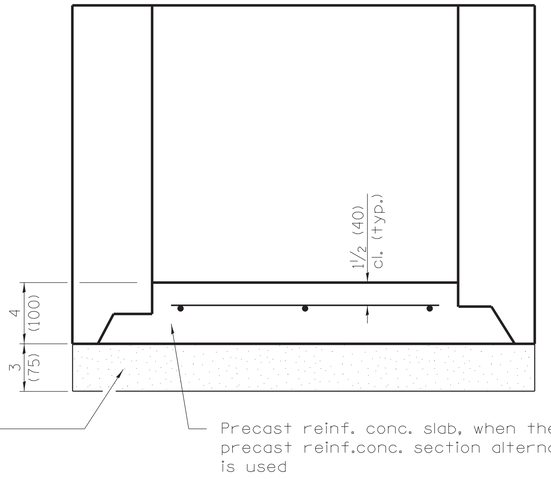
PLAN



ELEVATION

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8 (200)
CAST-IN-PLACE CONCRETE	6 (150)
CONCRETE MASONRY UNIT	5 (125)
PRECAST REINFORCED CONCRETE SECTION	3 (75)





ALTERNATE METHODS

GENERAL NOTES

Bottom slabs shall be reinforced with a minimum of 0.24 sq. in./ft. (510 sq. mm/m) in both directions with a maximum spacing of 10 (250).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

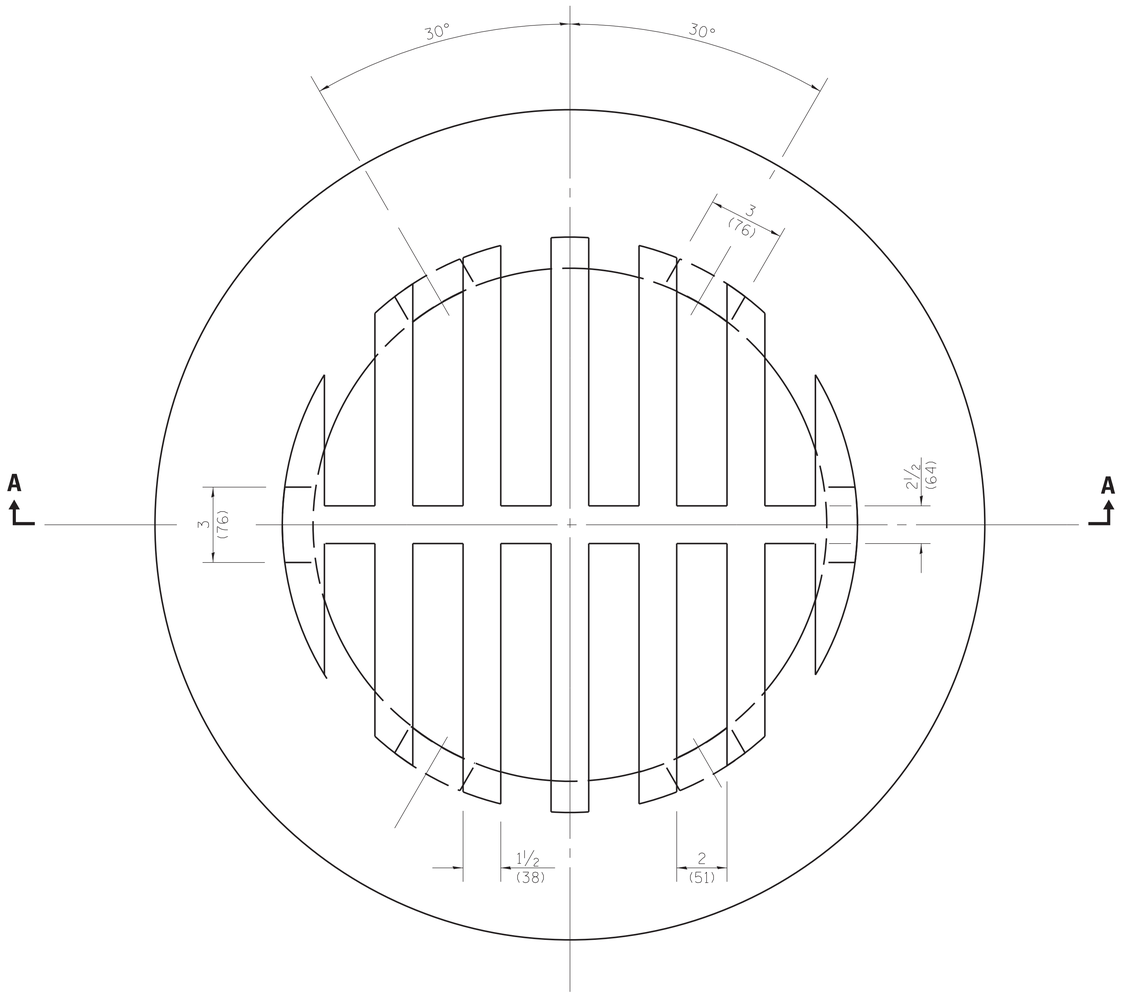
PASSED January 1, 2011
Michael Brand
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2011
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

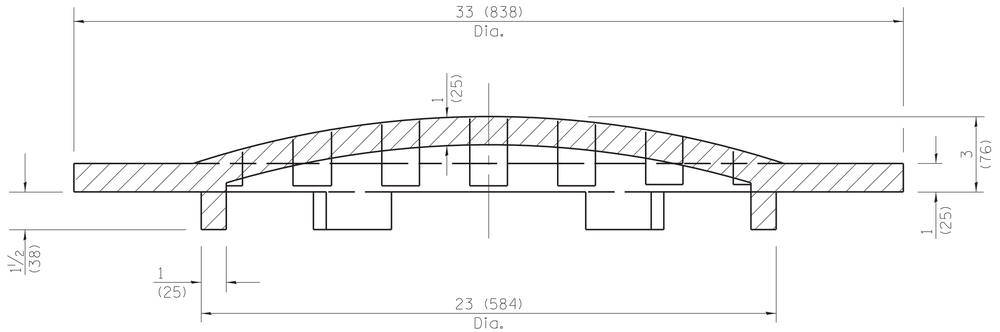
DATE	REVISIONS
1-1-11	Detailed rein. in slabs.
	Added max. limit to height.
	Added general notes.
1-1-09	Switched units to
	English (metric).

INLET – TYPE A

STANDARD 602301–03



CAST GRATE



SECTION A–A

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

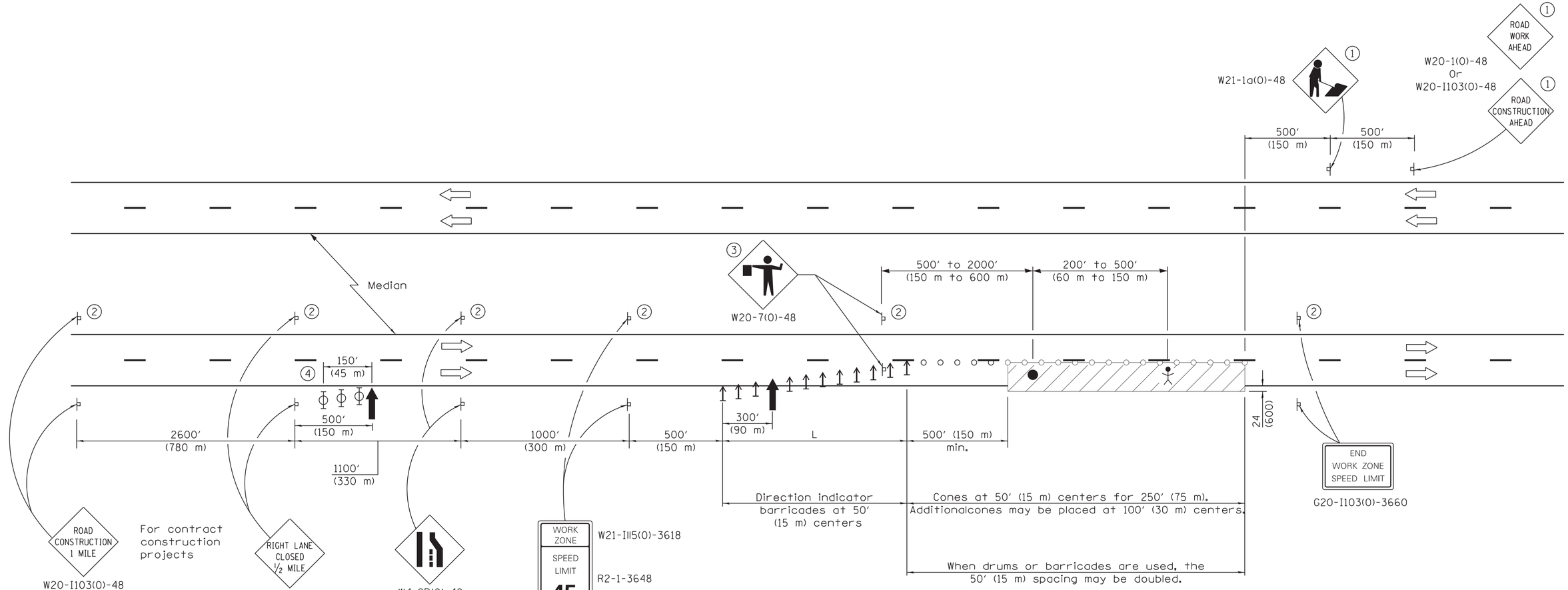
PASSED January 1. 2009
Michael Brand
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1. 2009
Scott Eddy
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-09	Switched units to
	English (metric).
1-1-04	Removed weights.

GRATE TYPE 8

STANDARD 604036–02



L = lane width X taper ratio	
Normal Posted Speed	Taper Ratio
mph	
55	55/1
45	45/1

TYPICAL APPLICATIONS

Pavement patch
Utility operations
Bituminous resurfacing

SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade
- Cone, drum or barricade
- Flagger with traffic control sign
- Worker
- Type II barricade, drum, or vertical barricade with monodirectional flashing light

(1) Undivided roadway only with left lane closure in opposite direction.

(2) Omitted when median is less than 10′ (3 m).

(3) FLAGGER signs shall be moved as necessary to maintain the required spacing between the sign and each separate work activity.

(4) Three Type II barricades, drums, or vertical barricades at 50′ (15 m) centers.

GENERAL NOTES

This Standard is used where at any time, any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24 (600) of the edge of pavement.

This Standard also applies when work is being performed in the left lane. Under these conditions, LEFT LANE CLOSED signs shall be substituted for RIGHT LANE CLOSED signs. On undivided highways, signs shall be added in the opposite direction as shown.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

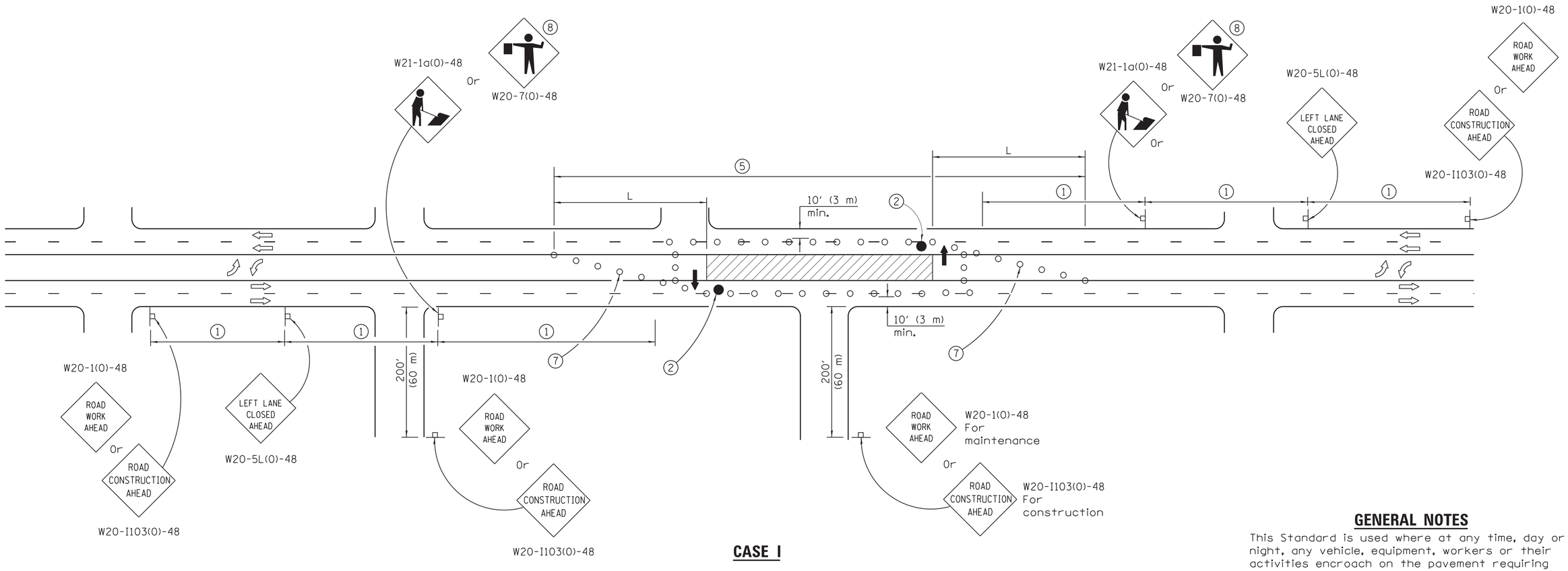
APPROVED January 1, 2013
ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 4-1-04

DATE	REVISIONS
1-1-12	Omit WORKERS sign. Rep. Begins
	sign with PHOTO ENFORCED.
	Added devices at arrowboard.
1-1-12	Corrected work zone
	speed limit sign numbers.

LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH

STANDARD 701421–05



SIGN SPACING	
Posted Speed	Sign Spacing
55 (4)	500' (150 m)
50-45 (4)	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Arrow board
- Work area
- Barricade or drum with steady burning mondirectional light
- Flagger with traffic control sign
- Cone, drum or barricade (Cones for daytime use only)
- Sign on portable or permanent support
- Type III Barricade

CASE I

(1) Refer to SIGN SPACING TABLE for distances.

(2) Required for speeds > 40 mph (70 km/h).

(3) Required if work exceeds 500' (164 m) or 1 block, repeat every 1 mile (1.6 km).

(4) For speeds exceeding 45 mph (80 km/h) contact the District Operations Office for approval of sign spacing.

(5) Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or type I or II barricades are used, the interval between devices may be doubled.

(6) For approved sideroad closures.

(7) Cones, drums or barricades at 20' (6 m) centers in taper.

(8) Use flagger sign only when flagger is present.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an Urban area.

If the work operation is performed between 9:00 a.m. and 3:00 p.m. and does not exceed 15 min. Traffic protection shall be as shown for Standard 701426.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2013
ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

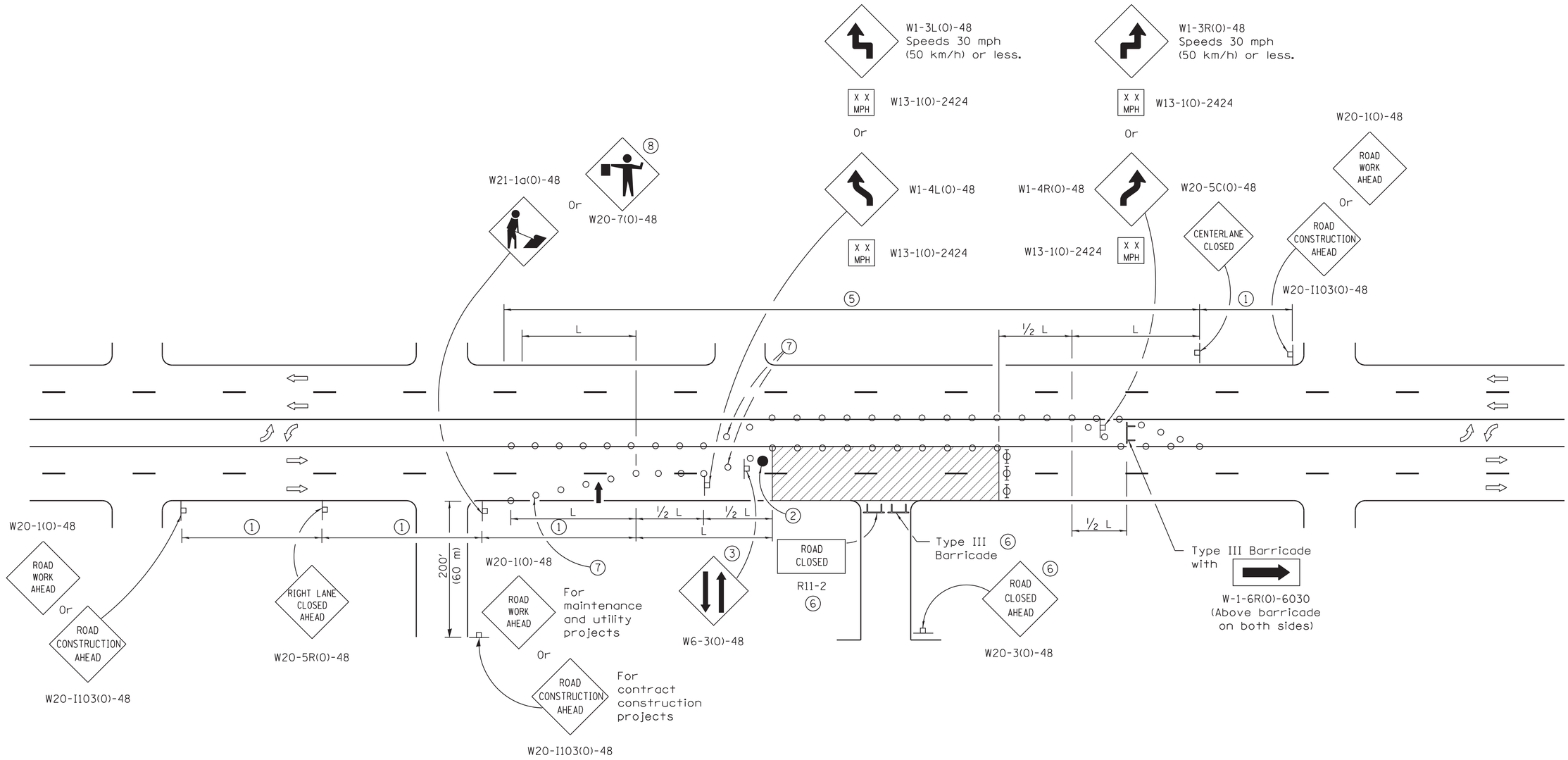
ISSUED 1-1-13

DATE	REVISIONS
1-1-13	Omitted text 'WORKERS'
	sign.
1-1-11	Revised flagger sign.
	Added note (8) .

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 1 of 4)

STANDARD 701602-06



CASE II

Illinois Department of Transportation

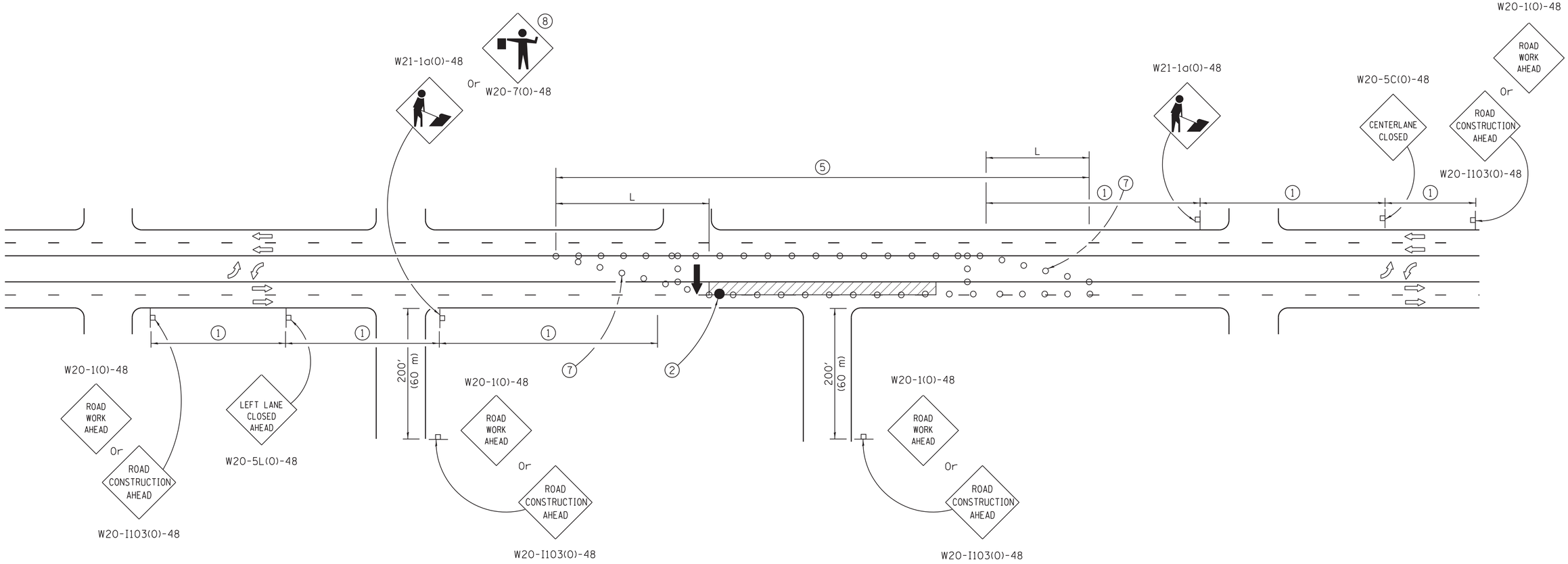
APPROVED January 1, 2013
ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-01

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

STANDARD 701602–06



CASE III

Illinois Department of Transportation

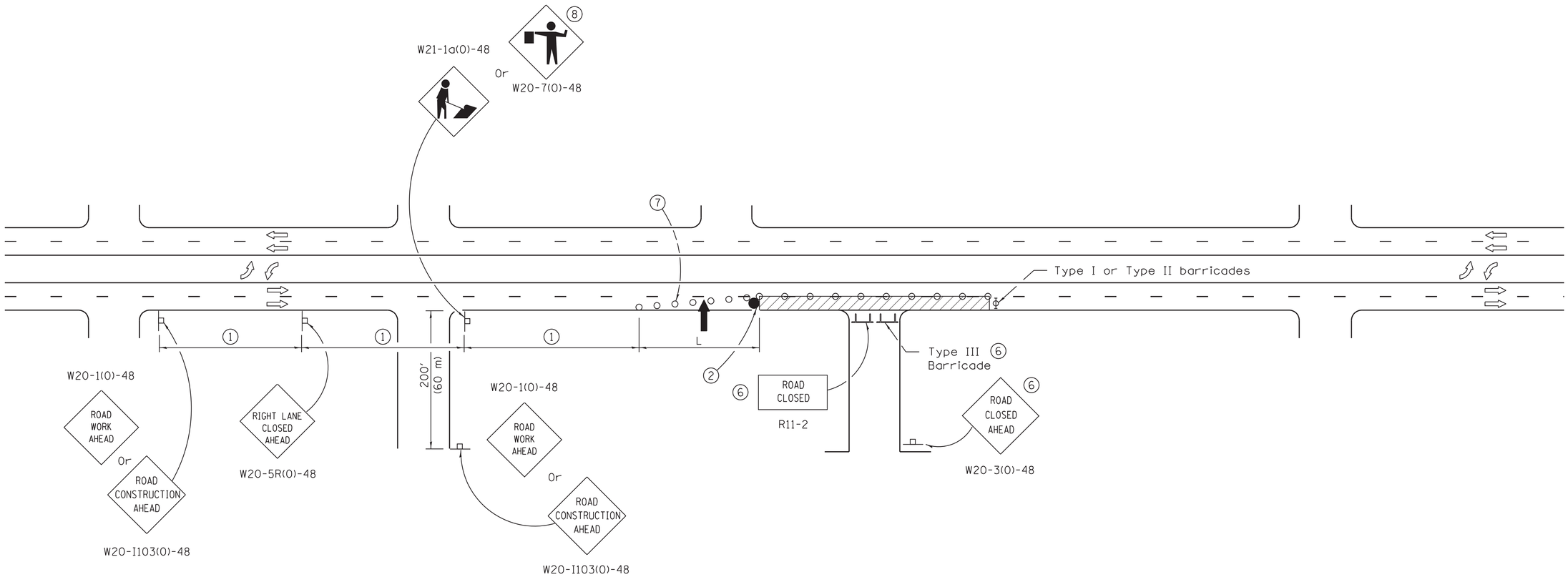
APPROVED January 1, 2013
ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-01

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 3 of 4)

STANDARD 701602–06



CASE IV

Illinois Department of Transportation

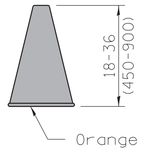
APPROVED January 1, 2013
ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

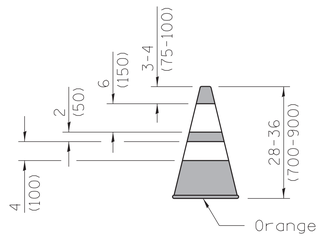
ISSUED 1-1-01

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

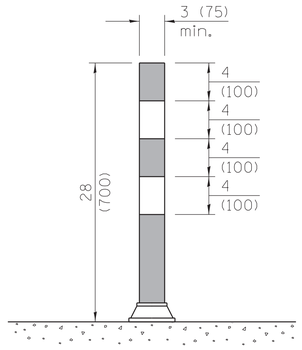
STANDARD 701602–06



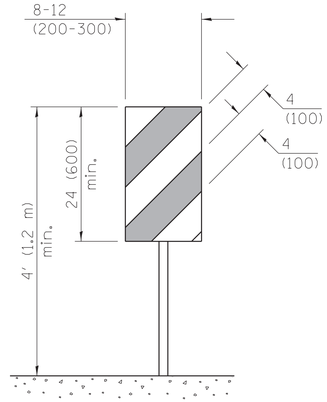
CONE



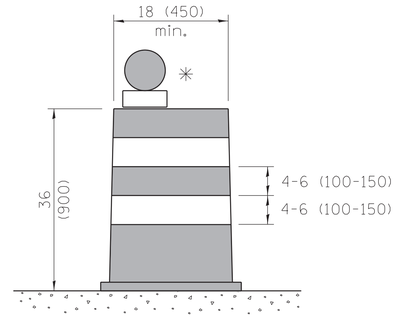
REFLECTORIZED CONE



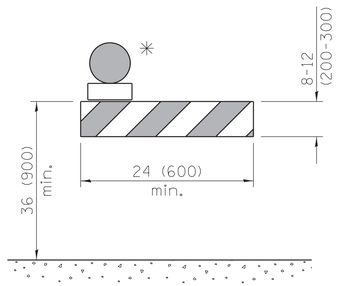
FLEXIBLE DELINEATOR



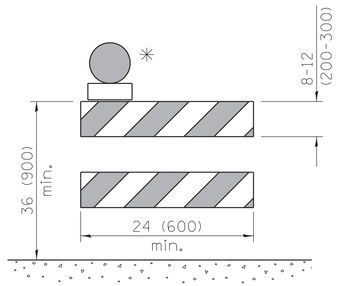
VERTICAL PANEL
POST MOUNTED



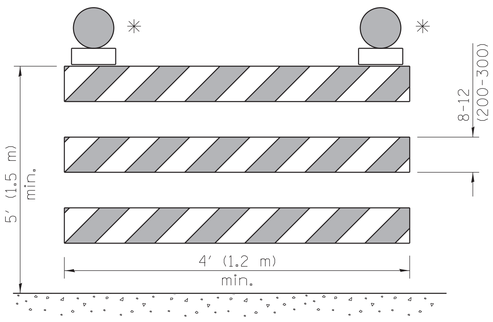
DRUM



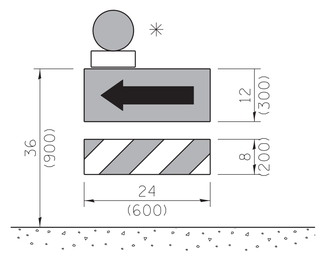
TYPE I BARRICADE



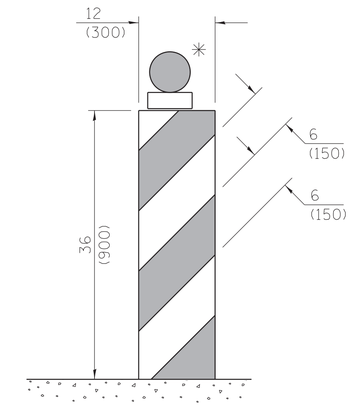
TYPE II BARRICADE



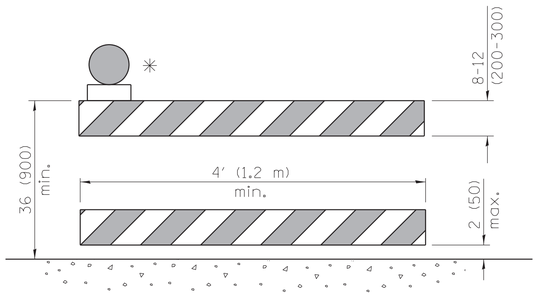
TYPE III BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

✳ Warning lights (if required)

GENERAL NOTES

All heights shown shall be measured above the pavement surface.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2012
ENGINEER OF OPERATIONS

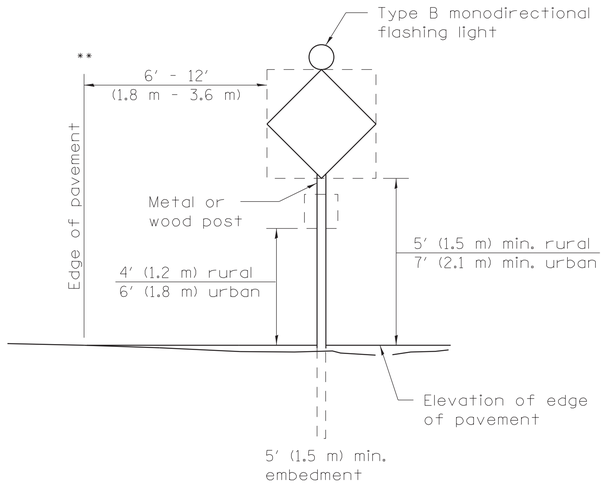
APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-12	Added DETECTABLE PEDESTRIAN
	CHANNELIZING BARRICADE.
1-1-09	Switched units to
	English (metric). Omitted
	light on vertical panel.

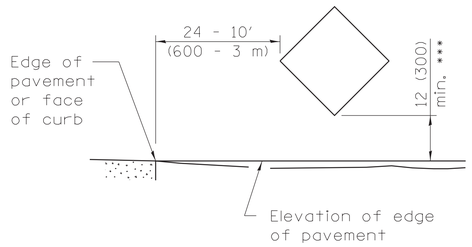
TRAFFIC CONTROL DEVICES

STANDARD 701901–02



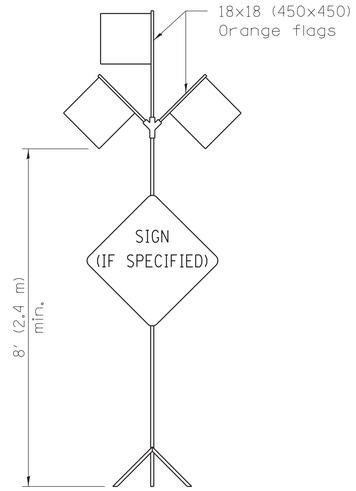
POST MOUNTED SIGNS

** When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6′ (1.8 m) to the outside edge of the paved shoulder.



SIGNS ON TEMPORARY SUPPORTS

*** When work operations exceed four days, this dimension shall be 5′ (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen by motorists.



HIGH LEVEL WARNING DEVICE



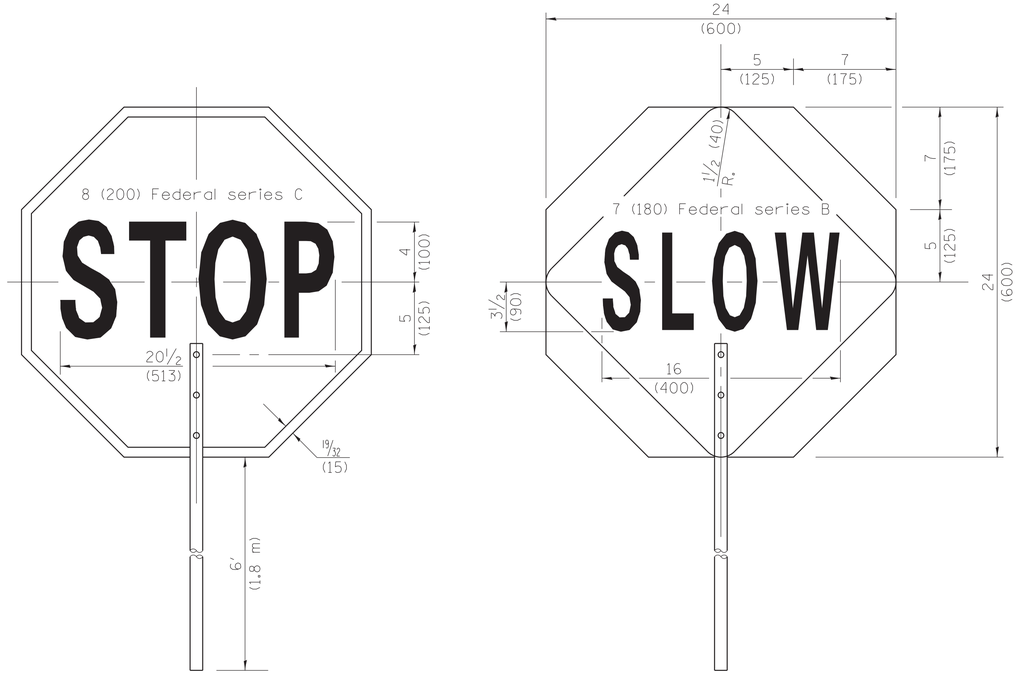
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500′ (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING



FLAGGER TRAFFIC CONTROL SIGN

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

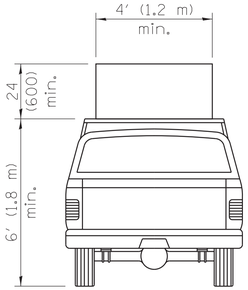
APPROVED January 1, 2012
ENGINEER OF OPERATIONS

APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

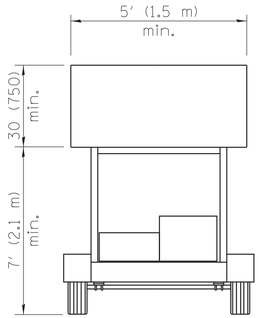
ISSUED 1-1-97

TRAFFIC CONTROL DEVICES

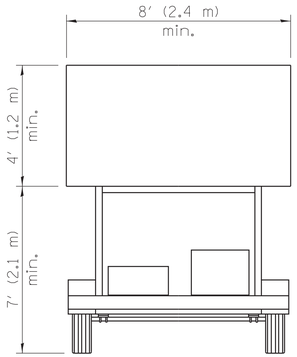
STANDARD 701901–02



TYPE A ROOF MOUNTED

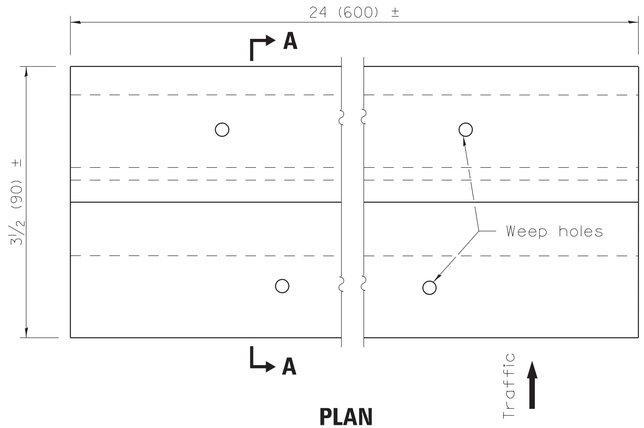


TYPE B ROOF OR TRAILER MOUNTED

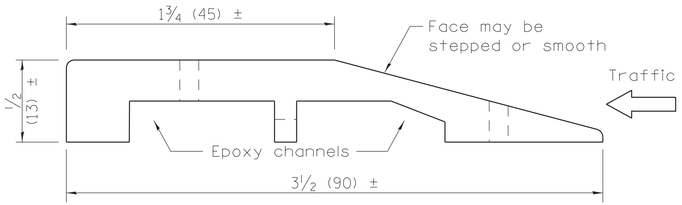


TYPE C TRAILER MOUNTED

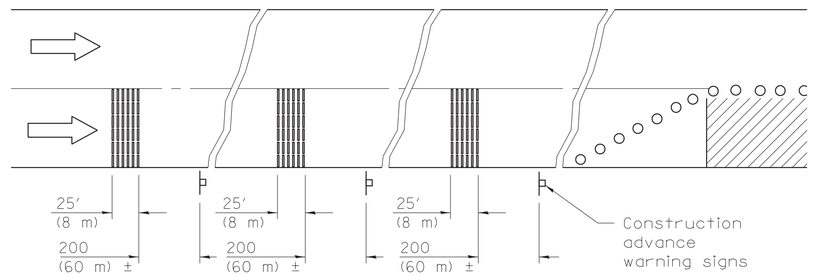
ARROW BOARDS

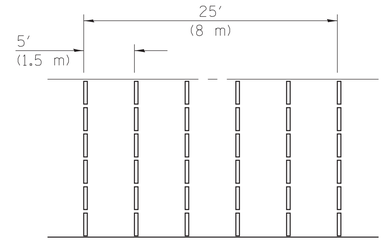


PLAN



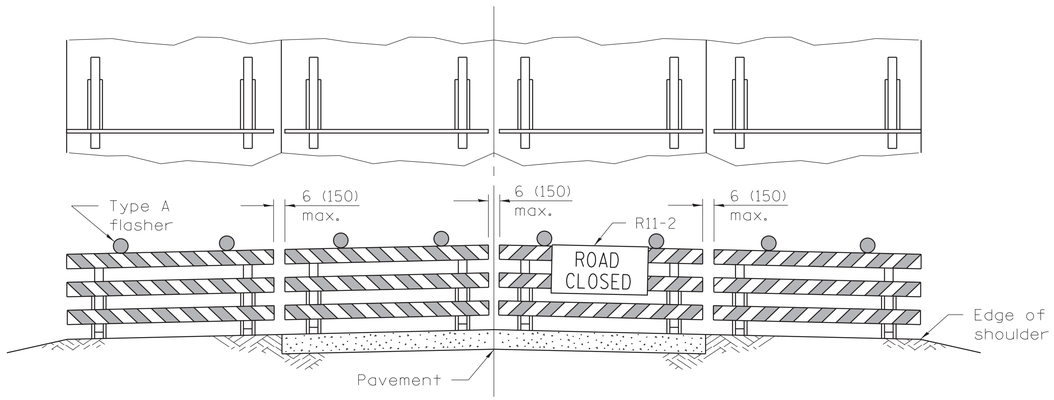
SECTION A–A





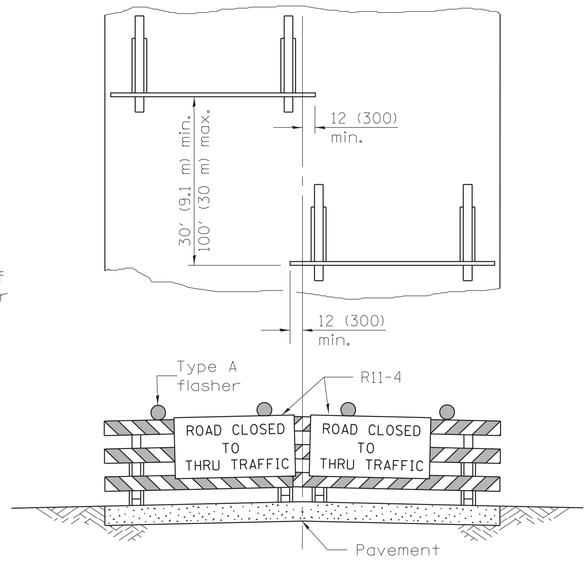
TYPICAL INSTALLATION

TEMPORARY RUMBLE STRIPS



ROAD CLOSED TO ALL TRAFFIC

Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



ROAD CLOSED TO THRU TRAFFIC

Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2012
ENGINEER OF OPERATIONS

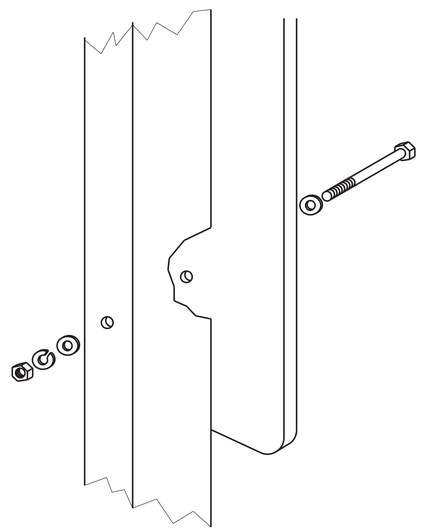
APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

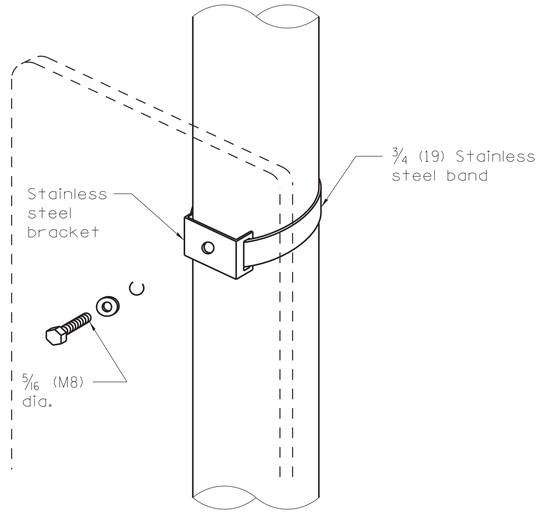
TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

STANDARD 701901–02

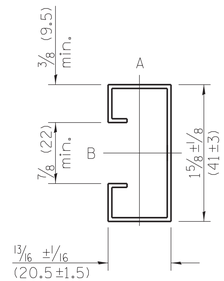


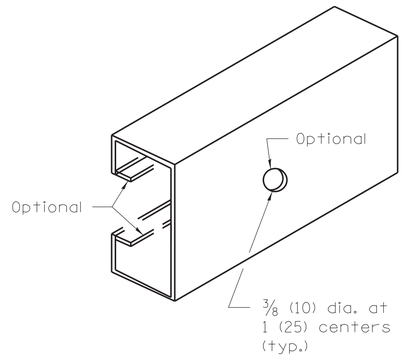
Sign panel 36 (900) wide or less



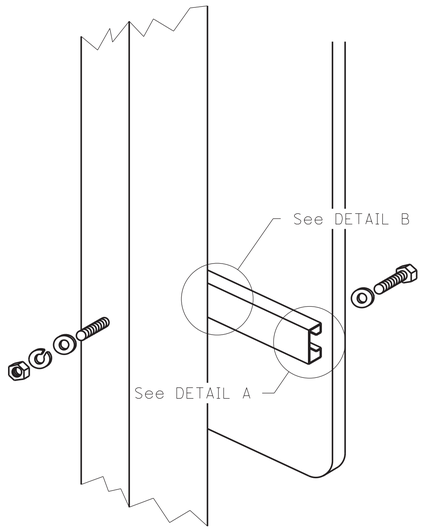
Sign panel 36 (900) wide or less

Section modulus (minimum)	Axis A	Axis B
Steel	0.050 in.^{3} (819 mm^3)	0.105 in.^{3} (1720 mm^3)
Aluminum	0.150 in.^{3} (2458 mm^3)	0.315 in.^{3} (5162 mm^3)

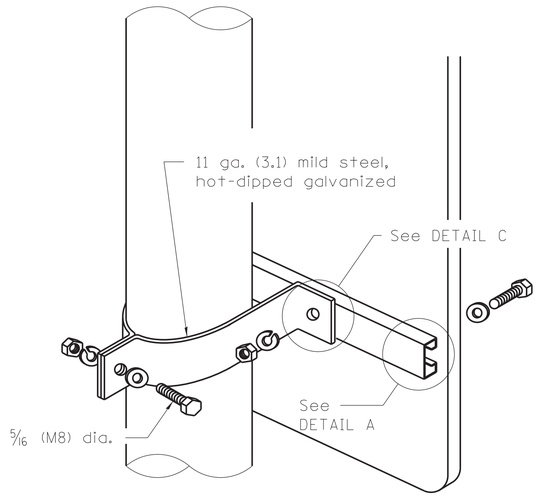




SUPPORTING CHANNEL DETAILS



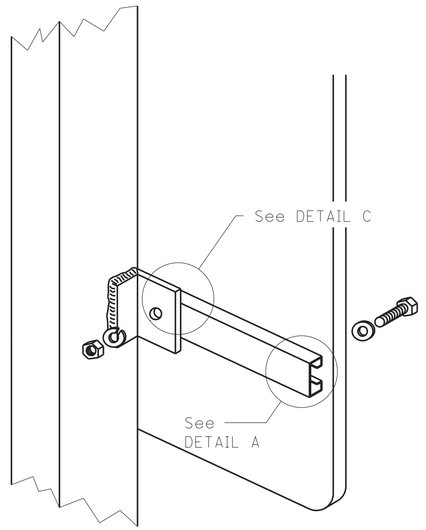
Sign panel over 36 (900) wide



Sign panel over 36 (900) wide

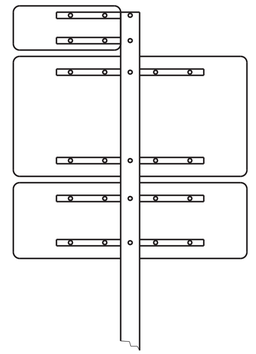
WOOD OR TELESCOPING STEEL POSTS

LIGHT OR SIGNAL STANDARDS

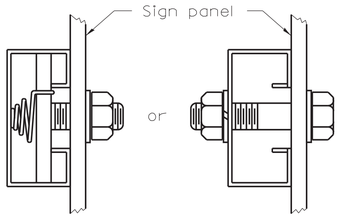


BREAKAWAY STEEL TUBING POSTS

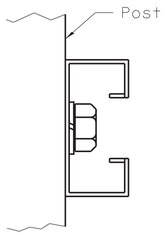
(All sign panel sizes)



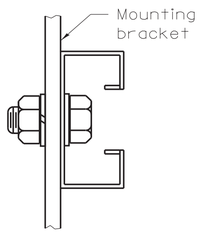
ROUTE MARKER ASSEMBLY



DETAIL A



DETAIL B



DETAIL C

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2009
ENGINEER OF OPERATIONS

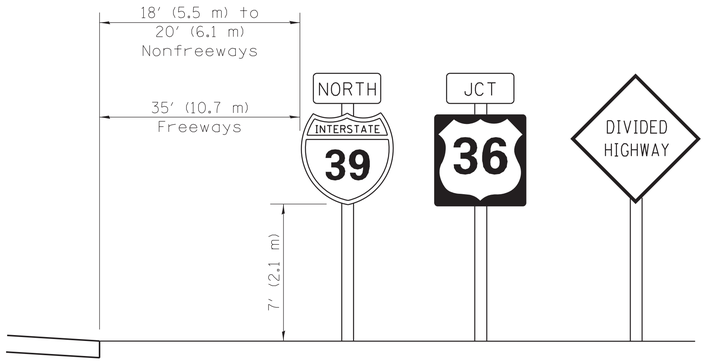
APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

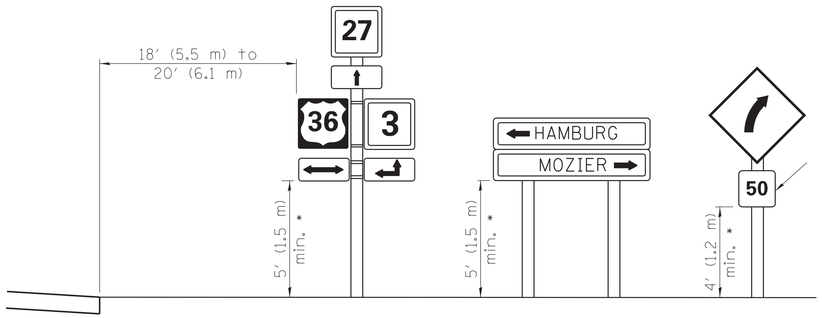
DATE	REVISIONS
1-1-09	Switched units to
	English (metric).
1-1-97	Renum. Standard 2319-6.

SIGN PANEL MOUNTING DETAILS

STANDARD 720001–01

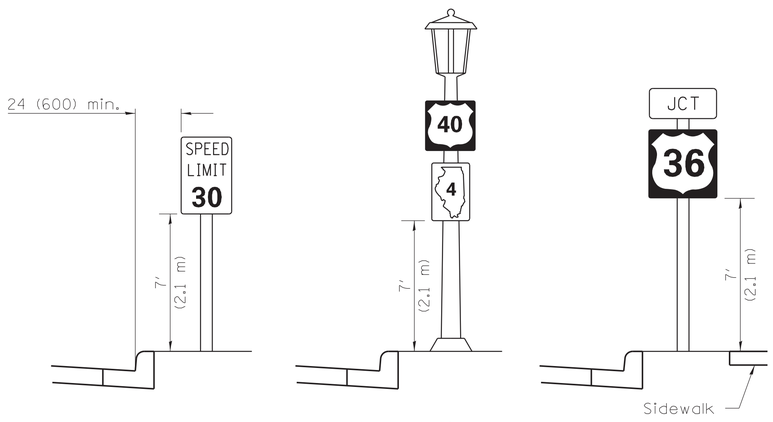


MULTILANE HIGHWAYS



* In any area where parking is likely to occur or where there are obstructions to view or where signs are located over sidewalks, the height shall be at least 7′ (2.1 m).

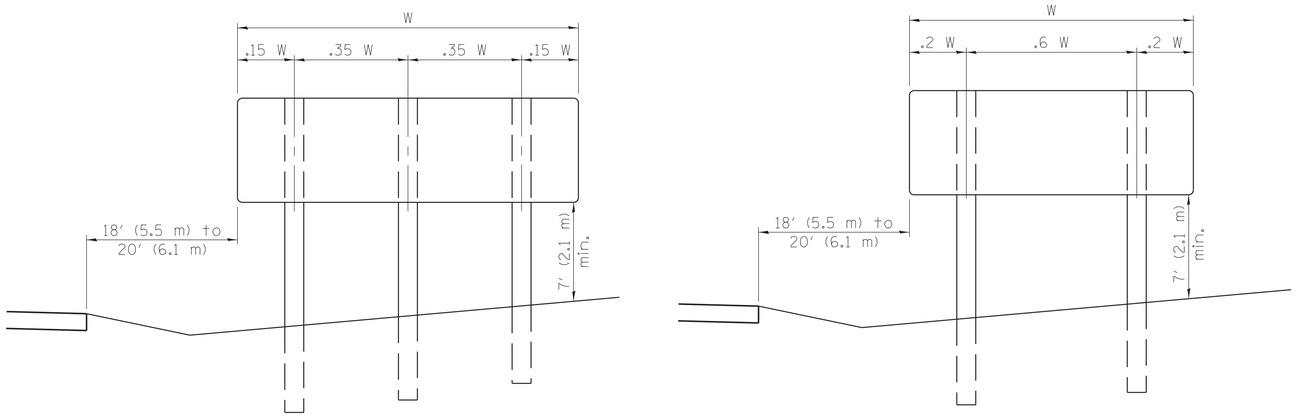
TWO LANE RURAL HIGHWAYS



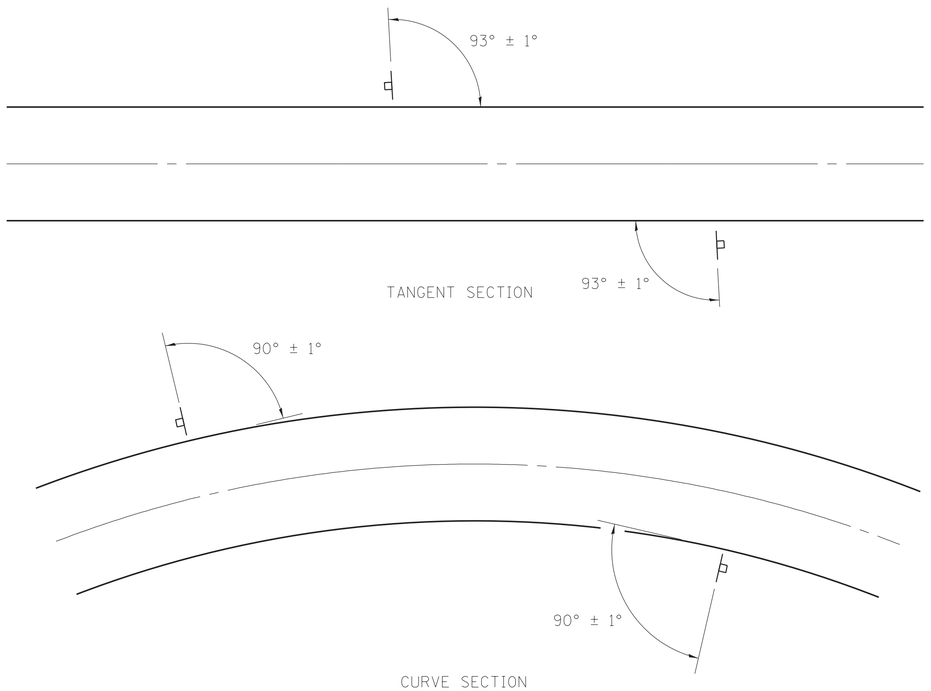
URBAN LOCATIONS

TYPICAL INSTALLATIONS

Signs in any area shall be erected to a uniform height above the edge of the pavement.



POST SPACING FOR NON–FREEWAY SIGN PANELS



GROUND MOUNT SIGN POSITIONING

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2012
ENGINEER OF OPERATIONS

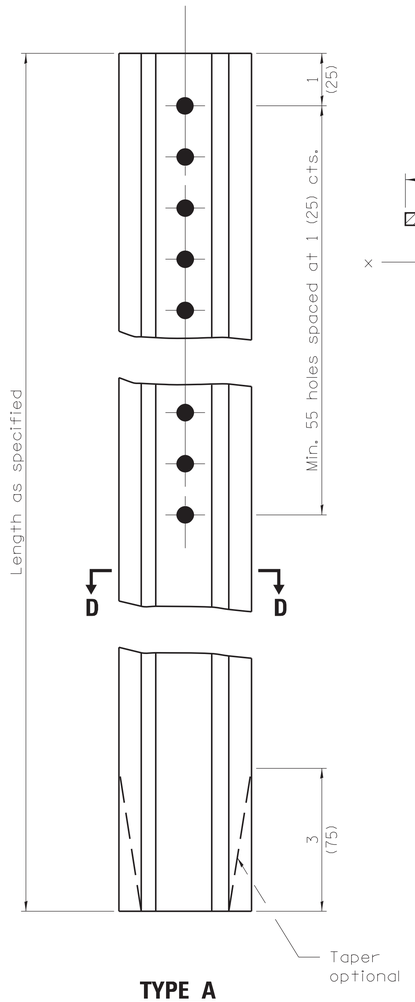
APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

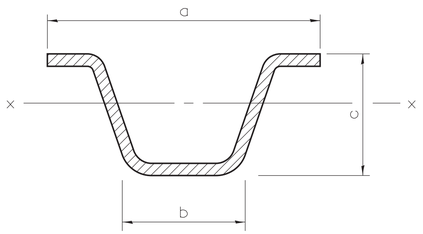
DATE	REVISIONS
1-1-12	Rev. sign elev. for multilane
	hwy's. Revised sign elev. and
	dist. to curb for rural loc.
1-1-09	Switched units to
	English (metric).

SIGN PANEL ERECTION DETAILS

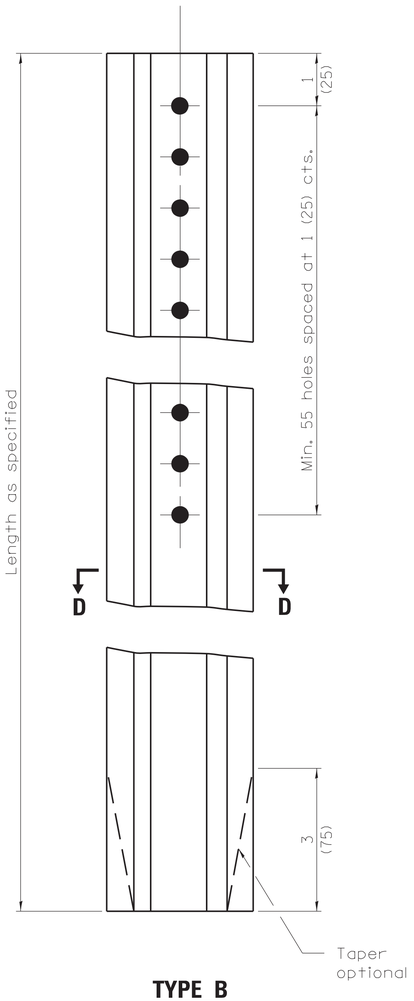
STANDARD 720006–03



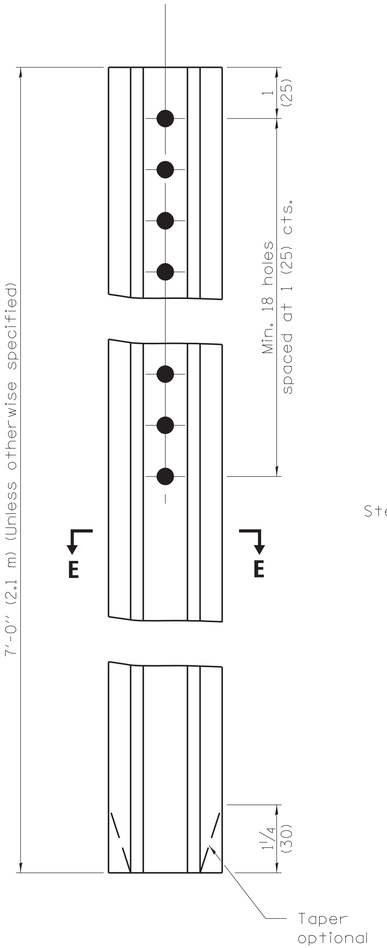
TYPE A



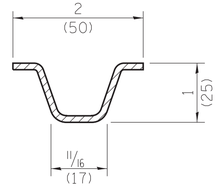
SECTION D–D



TYPE B



TYPE C



SECTION E–E

Steel - 1.12 lbs./ft. (1.67 kg/m)

		a	b	c	Sx-x in.^{3} (mm^3)	lbs./ft. (kg/m)
TYPE A	Steel	3/16 (78)	1¼ (32)	1 7/16 (37)	0.223 (3,654)	2.00 (2.98)
	Aluminum	3½ (89)	1⅝ (41)	1⅞ (48)	0.435 (7,128)	0.90 (1.34)
TYPE B	Steel	3 3/16 (81)	1¼ (32)	1½ (38)	0.341 (5,588)	3.00 (4.46)
	Aluminum	4⅝ (118)	2¼ (57)	2⅜ (60)	0.888 (14,552)	1.30 (1.93)

GENERAL NOTES

Dimensions shown for cross sections are minimum.

All holes are ⅜ (10).

Sx-x is the minimum section modulus about the x-x axis of the post as shown. For posts in which holes are punched or drilled for more than half their length, Sx-x shall be computed for the net section.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

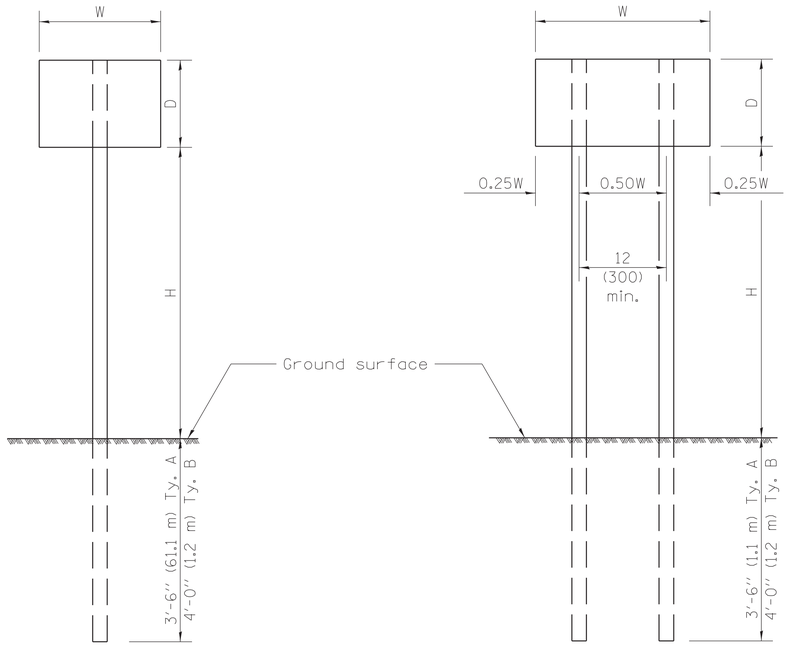
PASSED January 1, 2009
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-09	Switched units to
	English (metric).
1-1-97	Renum. Standard 2350-4.

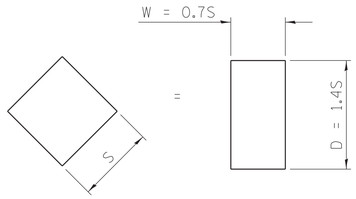
METAL POSTS FOR SIGNS, MARKERS & DELINEATORS

STANDARD 720011–01



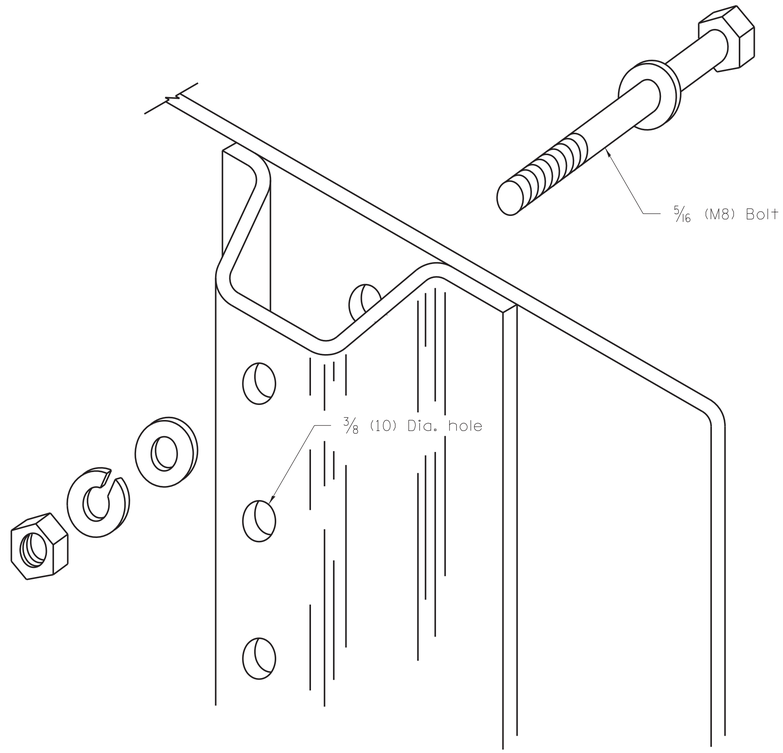
ONE POST INSTALLATION

TWO POST INSTALLATION



For diamond shaped sign with side S as shown, use required post size for a sign with W = 0.7S and D = 1.4S.

SIGN DEPTH (D)	H	NO. AND TYPE OF POST FOR SIGN WIDTH (W)				
		12 (300)	18 (450)	24 (600)	30 (750)	36 (900)
18 (450)	5'-0" (1.5 m)	A	A	A	A	A
	5'-6" (1.7 m)	A	A	A	A	A
	6'-0" (1.8 m)	A	A	A	A	B
	6'-6" (2.0 m)	A	A	A	A	B
	7'-0" (2.1 m)	A	A	A	A	B
	7'-6" (2.3 m)	A	A	A	A	B
	8'-0" (2.4 m)	A	A	A	A	B
	8'-6" (2.6 m)	A	A	A	B	B
	9'-0" (2.7 m)	A	A	A	B	B
24 (600)	5'-0" (1.5 m)	A	A	A	A	B
	5'-6" (1.7 m)	A	A	A	A	B
	6'-0" (1.8 m)	A	A	A	B	B
	6'-6" (2.0 m)	A	A	A	B	B
	7'-0" (2.1 m)	A	A	A	B	B
	7'-6" (2.3 m)	A	A	A	B	B
	8'-0" (2.4 m)	A	A	A	B	2A
	8'-6" (2.6 m)	A	A	B	B	2A
	9'-0" (2.7 m)	A	A	B	B	2A
30 (750)	5'-0" (1.5 m)	A	A	A	B	B
	5'-6" (1.7 m)	A	A	A	B	2A
	6'-0" (1.8 m)	A	A	A	B	2A
	6'-6" (2.0 m)	A	A	A	B	2A
	7'-0" (2.1 m)	A	A	B	B	2A
	7'-6" (2.3 m)	A	A	B	B	2A
	8'-0" (2.4 m)	A	A	B	B	2A
	8'-6" (2.6 m)	A	A	B	2A	2A
	9'-0" (2.7 m)	A	A	B	2A	2A
36 (900)	5'-0" (1.5 m)	A	A	B	B	2A
	5'-6" (1.7 m)	A	A	B	B	2A
	6'-0" (1.8 m)	A	A	B	B	2A
	6'-6" (2.0 m)	A	A	B	2A	2A
	7'-0" (2.1 m)	A	A	B	2A	2A
	7'-6" (2.3 m)	A	A	B	2A	2A
	8'-0" (2.4 m)	A	B	B	2A	2A
	8'-6" (2.6 m)	A	B	B	2A	2B
	9'-0" (2.7 m)	A	B	2A	2A	2B
4'-0" (1.2 m)	5'-0" (1.5 m)	A	A	B	2A	2A
	5'-6" (1.7 m)	A	B	B	2A	2A
	6'-0" (1.8 m)	A	B	B	2A	2A
	6'-6" (2.0 m)	A	B	2A	2A	2B
	7'-0" (2.1 m)	A	B	2A	2A	2B
	7'-6" (2.3 m)	A	B	2A	2B	2B
	8'-0" (2.4 m)	A	B	2A	2B	2B
	8'-6" (2.6 m)	B	B	2B	2B	2B
	9'-0" (2.7 m)	B	2A	2B	2B	2B



DETAIL OF MOUNTING SIGN TO POST

NOTE: Minimum of 2 bolts per post required.

GENERAL NOTES

DESIGN: Current AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

LOADING: for 60 mph (95 km/h) wind velocity with 30% gust factor, normal to sign.

SOIL PRESSURE: Minimum allowable soil pressure 1.25 tsf (120 kPa).

See Standard 720011 for details of Types A and B posts.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

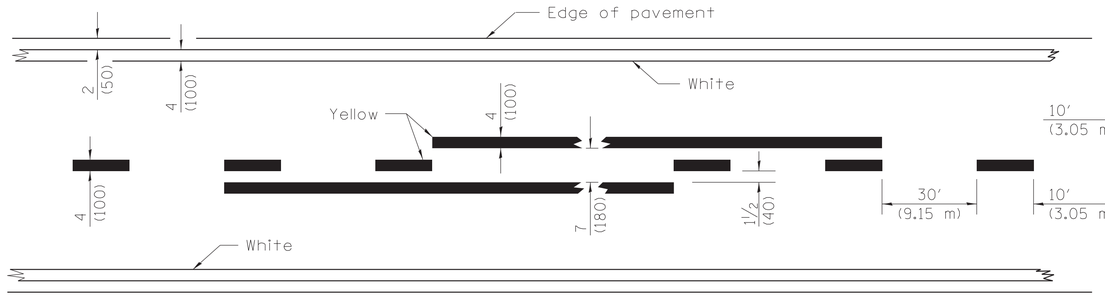
PASSED January 1, 2009
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

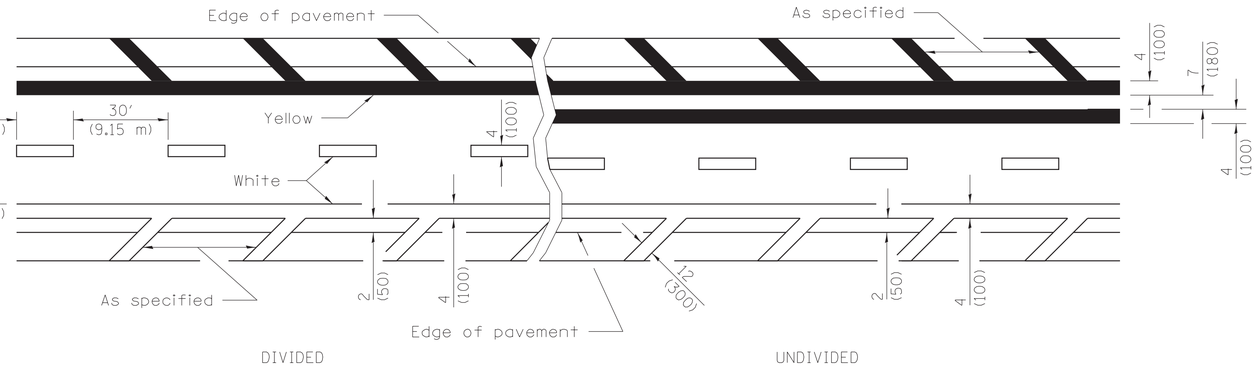
DATE	REVISIONS
1-1-09	Switched units to
	English (metric).
1-1-97	Renum. Standard 2363-2.

APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

STANDARD 729001–01

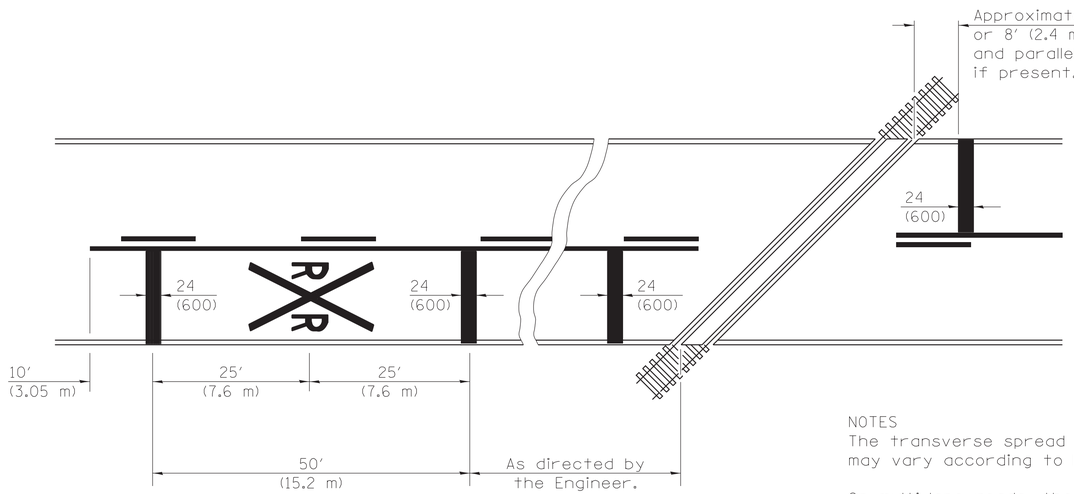


2 LANE



MULTI LANE

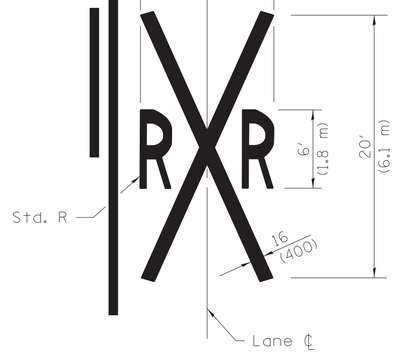
LANE AND EDGE LINES



NOTES
The transverse spread of the "X" may vary according to lane width.

On multi-lane roads, the stop lines shall extend across all approach lanes and separate RXR symbols shall be placed adjacent to each other in each lane.

When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B of the MUTCD.



PAVEMENT MARKINGS AT RAILROAD–HIGHWAY GRADE CROSSING

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2012
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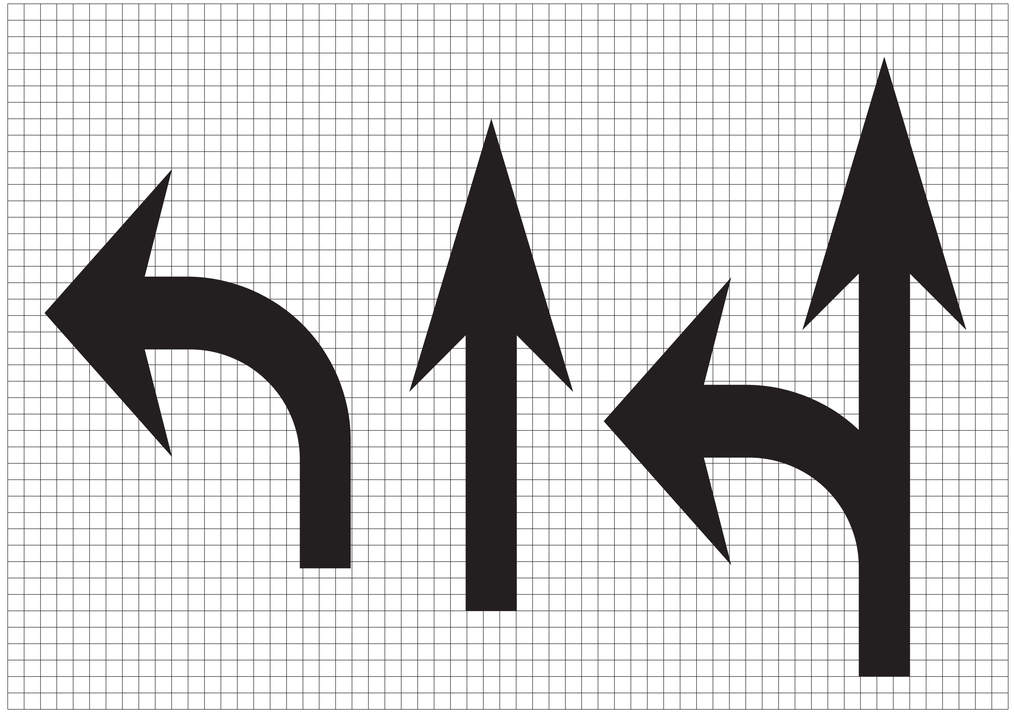
DATE	REVISIONS
1-1-12	Updated reference to
	current MUTCD table in
	notes.
1-1-09	Switched units to
	English (metric).

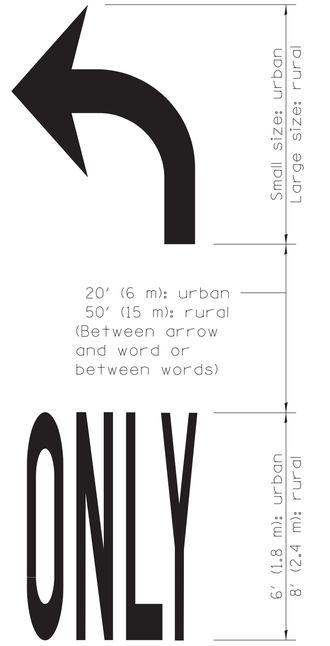
TYPICAL PAVEMENT MARKINGS

(Sheet 1 of 2)

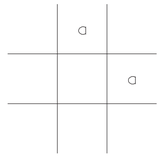
STANDARD 780001–03







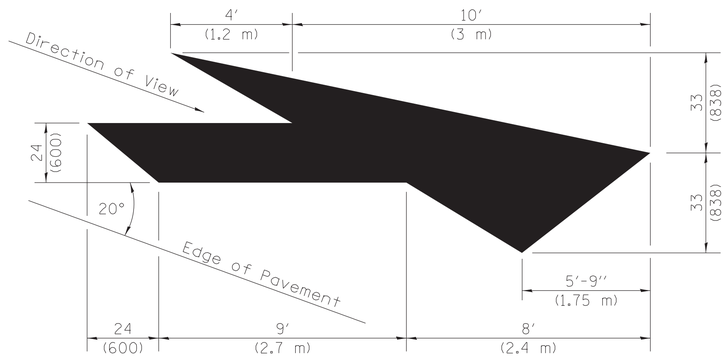
WORD AND ARROW LAYOUT



Legend Height	Arrow Size	a
6′ (1.8 m)	Small	2.9 (74)
8′ (2.4 m)	Large	3.8 (96)

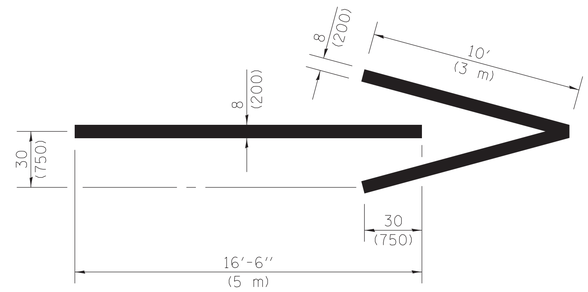
The space between adjacent letters or numerals should be approximately 3 (75) for 6′ (1.8 m) legend and 4 (100) for 8′ (2.4 m) legend.

LETTER AND ARROW GRID SCALE



LANE DROP ARROW

Right lane drop arrow shown.
Use mirror image for left lane.



WRONG WAY ARROW

Illinois Department of Transportation

APPROVED January 1, 2012
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ISSUED 1-1-97

TYPICAL PAVEMENT MARKINGS

(Sheet 2 of 2)

STANDARD 780001–03