

INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals are potential bidding proposals. Each proposal contains all certifications and affidavits, a proposal signature sheet and a proposal bid bond.

PREQUALIFICATION

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

WHO CAN BID ?

Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction. This does not apply to Small Business Set-Asides.

REQUESTS FOR AUTHORIZATION TO BID

Contractors wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) and the ORIGINAL "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date. This does not apply to Small Business Set-Asides.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status"(BDE 124) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued an **Authorization to Bid or Not for Bid Report**, approved by the Central Bureau of Construction that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Authorization to Bid or Not for Bid Report** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions. These documents must be received three days before the letting date.

ADDENDA AND REVISIONS: It is the bidder's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum or revision will be included with the Electronic Plans and Proposals. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda questions may be directed to the Plans and Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

Technical questions about downloading these files may be directed to Tim Garman at (217)524-1642 or Timothy.Garman@illinois.gov.

BID SUBMITTAL GUIDELINES AND CHECKLIST

In an effort to eliminate confusion and standardize the bid submission process the Contracts Office has created the following guidelines and checklist for submitting bids.

This information has been compiled from questions received from contractors and from inconsistencies noted on submitted bids. If you have additional questions please refer to the contact information listed below.

ABOUT SUBMITTING BIDS: It is recommended that bidders deliver bid proposals in person to ensure they arrive at the proper location prior to the time specified for the receipt of bids. Any proposals received at the place of letting after the time specified will not be read.

STANDARD GUIDELINES FOR SUBMITTING BIDS

- All pages should be single sided.
- Use the Cover Page that is provided in the Bid Proposal (posted on the IDOT Web Site) as the first page of your submitted bid. This page has the Item number in the upper left-hand corner and lines provided for your company name and address in the upper right-hand corner.
- Do not use report covers, presentation folders or special bindings and do not staple multiple times on left side like a book. Use only 1 staple in the upper left hand corner. Make sure all elements of your bid are stapled together including the bid bond or guaranty check (if required).
- Do not include any certificates of eligibility, your authorization to bid, Addendum Letters or affidavit of availability.
- Do not include the Subcontractor Documentation with your bid (pages i – iii and pages a – g). This documentation is required only after you are awarded the contract.
- Use the envelope cover sheet (provided with the proposal) as the cover for the proposal envelope.
- Do not rely on overnight services to deliver your proposal prior to 10 AM on letting day. It will not be read if it is delivered after 10 AM.
- Do not submit your Substance Abuse Prevention Program (SAPP) with your bid. If you are awarded the contract this form is to be submitted to the district engineer at the pre-construction conference.

Use the following checklist to ensure completeness and the correct order in assembling your bid

Cover page followed by the Pay Items. If you are using special software or CBID to generate your schedule of prices, do not include the blank schedule of prices.

Page 4 (Item 9) – Check “YES” if you will use a subcontractor(s). Include the subcontractor(s) name, address and the dollar amount (if over \$25,000). If you will use subcontractor(s) but are uncertain who or the dollar amount; check “YES” but leave the lines blank.

After page 4, Insert your Cost Adjustments for Steel, Bituminous and Fuel (if applicable), and your State Board of Elections certificate of registration.

Page 10 (Paragraph J) – Check “YES” or “NO” whether your company has any business in Iran.

Page 10 (Paragraph K) – List the Union Local Name and number or certified training programs that you have in place. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.

Page 11 (Paragraph L) - Insert a copy of your State Board of Elections certificate of registration after page 4 of the bid proposal. Only include the page that has the date stamp on it. Do not include any other certificates or forms showing that you are an Illinois business.

Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.

Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each Form A that is filled out.

Pages 14-17 (Form A) – One Form A (4 pages) is required for each applicable person in your company. Copies of the Forms can be used and only need to be changed when the financial information changes. The certification signature and date must be original for each letting. Do not staple the forms together.

If you answered “NO” to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.

Page 18 (Form B) - If you check “YES” to having other current or pending contracts it is acceptable to use the phrase, “See Affidavit of Availability on file”.

Page 20 (Workforce Projection) – Be sure to include the Duration of the Project. It is acceptable to use the phrase “Per Contract Specifications”.

Bid Bond – Submit your bid bond using the current Bid Bond Form provided in the proposal package. The Power of Attorney page should be stapled to the Bid Bond. If you are using an electronic bond, include your bid bond number on the form and attach the Proof of Insurance printed from the Surety 2000 Web Site.

Disadvantaged Business Utilization Plan and/or Good Faith Effort – The last item in your bid should be the DBE Utilization Plan (SBE 2026), DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation for a Good Faith Effort, it should follow the SBE Forms.

The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:20 AM.

Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the day. You will find the link on the main page of the current letting.

QUESTIONS: pre-letting up to execution of the contract

Contractor/Subcontractor pre-qualification -----217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE) -----217-785-4611
Contracts, Bids, Letting process or Internet downloads-----217-785-0230
Estimates Unit -----217-785-3483

QUESTIONS: following contract execution

Including Subcontractor documentation, payments -----217-782-3413
Railroad Insurance -----217-785-0275

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RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting March 9, 2012

NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction. This does not apply to Small Business Set-Asides.

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

Notice to Bidders, Specifications, Proposal, Contract and Contract Bond



**Illinois Department
of Transportation**

Springfield, Illinois 62764

Contract No. 64540
WHITESIDE-LEE Counties
Section (31,32)RS
Route FAP 561
Project ACF-0561(030)
District 2 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included

Plans Included
Herein

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)

Page intentionally left blank

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____

for the improvement identified and advertised for bids in the Invitation for Bids as:

**Contract No. 64540
WHITESIDE-LEE Counties
Section (31,32)RS
Project ACF-0561(030)
Route FAP 561
District 2 Construction Funds**

3.72 miles of resurfacing along IL 2 from 45th Avenue in Sterling to 0.2 mile west of Plock Road.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

RETURN WITH BID

6. **COMBINATION BIDS.** The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.

If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
8. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.
9. **The services of a subcontractor will or may be used.**

Check box Yes
 Check box No

For known subcontractors with subcontracts with an annual value of more than \$25,000, the contract shall include their name, address, and the dollar allocation for each subcontractor.

10. **EXECUTION OF CONTRACT:** The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer or the State Purchasing Officer is for approval of the procurement process and execution of the contract by the Department. Neither the Chief Procurement Officer nor the State Purchasing Officer shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Illinois Procurement Code.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER - 64540

State Job # - C-92-032-12
 PPS NBR - 2-14410-0000
 County Name - LEE- WHITESIDE-
 Code - 103 - 195 -
 District - 2 - 2 -
 Section Number - (31,32)RS

Project Number
 ACF-0561/030/

Route
 FAP 561

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0322278	RODENT SHIELDS	EACH	1.000				
X6024503	INLET ADJ NEW F&G SPL	EACH	2.000				
X6025600	MAN ADJUST SPL	EACH	3.000				
X7801000	WR THPL PM LTR & SYM	SQ FT	1,008.000				
X7801004	WR THPL PM LINE 4	FOOT	91,621.000				
X7801006	WR THPL PM LINE 6	FOOT	9,650.000				
X7801008	WR THPL PM LINE 8	FOOT	5,947.000				
X7801012	WR THPL PM LINE 12	FOOT	3,734.000				
X7801024	WR THPL PM LINE 24	FOOT	369.000				
X7830068	GRV RCSD PVT LT N SYM	SQ FT	1,254.000				
X7830070	GRV RCSD PVT MRKG 5	FOOT	87,030.000				
X7830074	GRV RCSD PVT MRKG 7	FOOT	9,650.000				
X7830076	GRV RCSD PVT MRKG 9	FOOT	5,947.000				
X7830078	GRV RCSD PVT MRKG 13	FOOT	3,834.000				
X7830090	GRV RCSD PVT MRKG 25	FOOT	369.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT
NUMBER -

64540

State Job # - C-92-032-12
PPS NBR - 2-14410-0000
County Name - LEE- WHITESIDE-
Code - 103 - 195 -
District - 2 - 2 -
Section Number - (31,32)RS

Project Number
ACF-0561/030/

Route
FAP 561

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0005400	BREAKER-RUN CR STONE	TON	40.000				
Z0008758	AERIAL SPEED CHK MK	FOOT	108.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0028415	GEOTECHNICAL REINF	SQ YD	1,366.000				
Z0028700	GRAN SUBGRADE REPL	CU YD	10.000				
Z0034105	MATL TRANSFER DEVICE	TON	16,531.000				
20200100	EARTH EXCAVATION	CU YD	215.000				
20201200	REM & DISP UNS MATL	CU YD	20.000				
25100630	EROSION CONTR BLANKET	SQ YD	1,396.000				
28000305	TEMP DITCH CHECKS	FOOT	117.000				
28000400	PERIMETER EROS BAR	FOOT	426.000				
28100107	STONE RIPRAP CL A4	SQ YD	68.000				
28200200	FILTER FABRIC	SQ YD	68.000				
31100500	SUB GRAN MAT A 6	SQ YD	1,309.000				
40600200	BIT MATLS PR CT	TON	123.000				

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Route
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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
40600300	AGG PR CT	TON	323.000				
40600525	LEV BIND HM N50	TON	102.000				
40600627	LB MM IL-9.5FG N50	TON	8,020.000				
40600895	CONSTRUC TEST STRIP	EACH	1.000				
40600982	HMA SURF REM BUTT JT	SQ YD	547.000				
40600990	TEMPORARY RAMP	SQ YD	664.000				
40601005	HMA REPL OVER PATCH	TON	410.000				
40603310	HMA SC "C" N50	TON	10,163.000				
40603335	HMA SC "D" N50	TON	10,901.000				
40800050	INCIDENTAL HMA SURF	TON	1,220.000				
44000157	HMA SURF REM 2	SQ YD	137,576.000				
44000500	COMB CURB GUTTER REM	FOOT	333.000				
44002224	HMA RM OV PATCH 6	SQ YD	1,237.000				
44004250	PAVED SHLD REMOVAL	SQ YD	1,309.000				
44200108	PAVT PATCH T2 9	SQ YD	291.000				

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Route
 FAP 561

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
44200112	PAVT PATCH T3 9	SQ YD	103.000				
44200114	PAVT PATCH T4 9	SQ YD	149.000				
44201299	DOWEL BARS 1 1/2	EACH	940.000				
44213100	PAVEMENT FABRIC	SQ YD	309.000				
44213200	SAW CUTS	FOOT	2,698.000				
44300200	STRIP REF CR CON TR	FOOT	5,000.000				
48102100	AGG WEDGE SHLD TYPE B	TON	296.000				
48203029	HMA SHOULDERS 8	SQ YD	1,309.000				
51500100	NAME PLATES	EACH	1.000				
54001061	GRATED BC END SEC C01	EACH	1.000				
59300100	CONTR LOW-STRENG MATL	CU YD	24.100				
60100060	CONC HDWL FOR P DRAIN	EACH	1.000				
60100080	FRENCH DRAINS	CU YD	9.000				
60108100	PIPE UNDERDRAIN 4 SP	FOOT	20.000				
60260100	INLETS ADJUST	EACH	1.000				

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Route
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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60605000	COMB CC&G TB6.24	FOOT	148.000				
60605900	COMB CC&G TB9.12	FOOT	185.000				
63200310	GUARDRAIL REMOV	FOOT	318.000				
64200116	SHOULDER RUM STRIP 16	FOOT	32,842.000				
66700305	PERM SURV MKRS T2	EACH	1.000				
67000400	ENGR FIELD OFFICE A	CAL MO	6.000				
67100100	MOBILIZATION	L SUM	1.000				
70100320	TRAF CONT-PROT 701422	L SUM	1.000				
70100450	TRAF CONT-PROT 701201	L SUM	1.000				
70100800	TRAF CONT-PROT 701401	L SUM	1.000				
70102635	TR CONT & PROT 701701	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	20.000				
70300100	SHORT TERM PAVT MKING	FOOT	30,368.000				
70300260	TEMP PVT MK LINE 12	FOOT	1,107.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	4,050.000				

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Project Number
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Route
 FAP 561

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78100100	RAISED REFL PAVT MKR	EACH	849.000				
78300200	RAISED REF PVT MK REM	EACH	724.000				
88600400	DET LOOP SPL	FOOT	1,690.000				

RETURN WITH BID

STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

I. GENERAL

- A.** Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the chief procurement officer to void the contract, or subcontract, and may result in the suspension or debarment of the bidder or subcontractor.

II. ASSURANCES

The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

A. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

- (a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.
- (b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.
- (e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

RETURN WITH BID

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

B. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

(a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

C. Inducements

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

D. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, State purchasing officers, procurement compliance monitors, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

E. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

2. The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid is submitted.

F. Confidentiality

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

2. The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

RETURN WITH BID

G. Insider Information

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

2. The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

III. CERTIFICATIONS

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. Section 50-2 of the Illinois Procurement Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible chief procurement officer whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

1. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any of the certifications required by this Section are false.

RETURN WITH BID

C. Debt Delinquency

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Procurement Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the chief procurement officer may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

F. Educational Loan

1. Section 3 of the Educational Loan Default Act provides:

§ 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

G. Bid-Rigging/Bid Rotating

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

- (b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

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A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

2. The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

H. International Anti-Boycott

1. Section 5 of the International Anti-Boycott Certification Act provides:

§ 5. State contracts. Every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

2. The bidder makes the certification set forth in Section 5 of the Act.

I. Drug Free Workplace

1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

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J. Disclosure of Business Operations in Iran

Section 50-36 of the Illinois Procurement Code, 30ILCS 500/50-36 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

- (1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
(2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

The terms "Business operations", "Company", "Mineral-extraction activities", "Oil-related activities", "Petroleum resources", and "Substantial action" are all defined in the Code.

Failure to make the disclosure required by the Code shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, offer, or proposal or awarding the contract. The name of each Company disclosed as doing business or having done business in Iran will be provided to the State Comptroller.

Check the appropriate statement:

/___/ Company has no business operations in Iran to disclose.

/___/ Company has business operations in Iran as disclosed the attached document.

K. Apprenticeship and Training Certification (Does not apply to federal aid projects)

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.

NA-FEDERAL

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

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L. Political Contributions and Registration with the State Board of Elections

Sections 20-160 and 50-37 of the Illinois Procurement Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of \$50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated entities or affiliated persons whose state contracts in the current year do not exceed an awarded value of \$50,000, but whose aggregate pending bids and proposals on state contracts exceed \$50,000, either alone or in combination with contracts not exceeding \$50,000, are prohibited from making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals is issued and ending on the day after the date of award or selection if the entity was not awarded or selected. Section 20-160 requires certification of registration of affected business entities in accordance with procedures found in Section 9-35 of The Election Code.

By submission of a bid, the contractor business entity acknowledges and agrees that it has read and understands Sections 20-160 and 50-37 of the Illinois Procurement Code, and that it makes the following certification:

The undersigned business entity certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. A copy of the certificate of registration shall be submitted with the bid. The bidder is cautioned that the Department will not award a contract without submission of the certificate of registration.

These requirements and compliance with the above referenced statutory sections are a material part of the contract, and any breach thereof shall be cause to void the contract under Section 50-60 of the Illinois Procurement Code. This provision does not apply to Federal-aid contracts.

M. Lobbyist Disclosure

Section 50-38 of the Illinois Procurement Code requires that any bidder or offeror on a State contract that hires a person required to register under the Lobbyist Registration Act to assist in obtaining a contract shall:

- (i) Disclose all costs, fees, compensation, reimbursements, and other remunerations paid or to be paid to the lobbyist related to the contract,
- (ii) Not bill or otherwise cause the State of Illinois to pay for any of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration, and
- (iii) Sign a verification certifying that none of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration were billed to the State.

This information, along with all supporting documents, shall be filed with the agency awarding the contract and with the Secretary of State. The chief procurement officer shall post this information, together with the contract award notice, in the online Procurement Bulletin.

Pursuant to Subsection (c) of this Section, no person or entity shall retain a person or entity to attempt to influence the outcome of a procurement decision made under the Procurement Code for compensation contingent in whole or in part upon the decision or procurement. Any person who violates this subsection is guilty of a business offense and shall be fined not more than \$10,000.

Bidder acknowledges that it is required to disclose the hiring of any person required to register pursuant to the Illinois Lobbyist Registration Act (25 ILCS 170) in connection with this contract.

Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.

Or

Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:

Name and address of person: _____
All costs, fees, compensation, reimbursements and other remuneration paid to said person: _____

RETURN WITH BID

IV. DISCLOSURES

- A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The bidder further certifies that the Department has received the disclosure forms for each bid.

The chief procurement officer may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Procurement Code. Furthermore, the chief procurement officer may void the contract and the surety providing the performance bond shall be responsible for completion of the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$25,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Procurement Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

The current annual salary of the Governor is \$177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid.**

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO ___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES ___ NO ___
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO ___

(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable.** The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

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Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each bid submitted by the bidding entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

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**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form A
Financial Information &
Potential Conflicts of Interest
Disclosure**

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$25,000, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

The current annual salary of the Governor is \$177,412.00.

DISCLOSURE OF FINANCIAL INFORMATION

- 1. Disclosure of Financial Information.** The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)	
NAME:	_____
ADDRESS	_____
Type of ownership/distributable income share:	
stock _____	sole proprietorship _____
Partnership _____	other: (explain on separate sheet): _____
% or \$ value of ownership/distributable income share: _____	

- 2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

- (a) State employment, currently or in the previous 3 years, including contractual employment of services.
Yes ___ No ___

If your answer is yes, please answer each of the following questions.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary. _____

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3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ___ No ___
4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes ___ No ___

If your answer is yes, please answer each of the following questions.

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
-
3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ___ No ___
4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___ No ___

RETURN WITH BID

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

RETURN WITH BID

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: _____
Signature of Individual or Authorized Representative Date

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

Signature of Authorized Representative Date

The bidder has a continuing obligation to supplement these disclosures under Sec. 50-35 of the Procurement Code.

RETURN WITH BID

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form B
Other Contracts &
Procurement Related Information
Disclosure**

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$25,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If **"No"** is checked, the bidder only needs to complete the signature box on the bottom of this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

<input type="checkbox"/>	_____	_____
	Signature of Authorized Representative	Date

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.

RETURN WITH BID

**Contract No. 64540
WHITESIDE-LEE Counties
Section (31,32)RS
Project ACF-0561(030)
Route FAP 561
District 2 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

- B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) _____ new hires would be recruited from the area in which the contract project is located; and/or (number) _____ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

- C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) _____ persons will be directly employed by the prime contractor and that (number) _____ persons will be employed by subcontractors.

PART III. AFFIRMATIVE ACTION PLAN

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company _____

Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature: _____ Title: _____ Date: _____

Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.

Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.

Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. **CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:**
1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____
 2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

RETURN WITH BID

**Contract No. 64540
WHITESIDE-LEE Counties
Section (31,32)RS
Project ACF-0561(030)
Route FAP 561
District 2 Construction Funds**

PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

(IF AN INDIVIDUAL)

Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP)

Firm Name _____
By _____
Business Address _____
Name and Address of All Members of the Firm: _____

(IF A CORPORATION)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____
Attest _____
Signature _____
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)
Business Address _____

(IF A JOINT VENTURE)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____
Attest _____
Signature _____
Business Address _____

If more than two parties are in the joint venture, please attach an additional signature sheet.



Return with Bid

Division of Highways
Proposal Bid Bond
(Effective November 1, 1992)

Item No. _____

Letting Date _____

KNOW ALL MEN BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

_____ as SURETY, are held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, that whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents, submit a DBE Utilization Plan that is accepted and approved by the Department; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to make the required DBE submission or to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by

their respective officers this _____ day of _____ A.D., _____.

PRINCIPAL

SURETY

(Company Name)

(Company Name)

By _____
(Signature & Title)

By: _____
(Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
County of _____

I, _____, a Notary Public in and for said County, do hereby certify that

_____ and _____
(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____ A.D. _____

My commission expires _____

Notary Public

In lieu of completing the above section of the Proposal Bid Form, the Principal may file an Electronic Bid Bond. By signing the proposal and marking the check box next to the Signature and Title line below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID#

Company / Bidder Name



Signature and Title

PROPOSAL ENVELOPE



PROPOSALS

for construction work advertised for bids by the
Illinois Department of Transportation

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10" x 13" envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

NOTICE

Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

**Contract No. 64540
WHITESIDE-LEE Counties
Section (31,32)RS
Project ACF-0561(030)
Route FAP 561
District 2 Construction Funds**



Illinois Department of Transportation

SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795 and 96-0920, enacted substantial changes to the provisions of the Illinois Procurement Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Chief Procurement Officer within 20 calendar days after execution of the subcontract.

The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Illinois Procurement Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled State Required Ethical Standards Governing Subcontractors.

RETURN WITH SUBCONTRACT

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The chief procurement officer may terminate or void the subcontract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification.

Section 50-2 of the Illinois Procurement Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible chief procurement officer whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any of the certifications required by this Section are false.

RETURN WITH SUBCONTRACT

C. Debt Delinquency

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Procurement Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the chief procurement officer may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction.. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

The undersigned, on behalf of the subcontracting company, has read and understands the above certifications and makes the certifications as required by law.

Name of Subcontracting Company

Authorized Officer

Date

RETURN WITH SUBCONTRACT
SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

- A.** The disclosures hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed. The subcontractor further certifies that the Department has received the disclosure forms for each subcontract.

The chief procurement officer may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Procurement Code. Furthermore, the chief procurement officer may void the contract or subcontract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

The current annual salary of the Governor is \$177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, subcontracts, proposals, leases, or other ongoing procurement relationships the subcontracting entity has with any other unit of state government and shall clearly identify the unit and the contract, subcontract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies.

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the **NOT APPLICABLE STATEMENT** on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO ___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ___ NO ___

(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)

4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO ___

(Note: Only one set of forms needs to be completed per person per subcontract even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the subcontracting entity or the subcontracting entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable.** The person signing can be, but does not have to be, the person for which the form is being completed. The subcontractor is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the **NOT APPLICABLE STATEMENT** on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

RETURN WITH SUBCONTRACT

Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each subcontract submitted by the subcontracting entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.*

The Subcontractor shall identify, by checking Yes or No on Form B, whether it has any pending contracts, subcontracts, leases, bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the subcontractor only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the subcontractor must list all non-IDOT State of Illinois agency pending contracts, subcontracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts or subcontracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included.

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form A
Subcontractor: Financial
Information & Potential Conflicts
of Interest Disclosure**

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

The current annual salary of the Governor is \$177,412.00.

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the SUBCONTRACTOR (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)	
NAME:	_____
ADDRESS	_____
Type of ownership/distributable income share:	
stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):	
% or \$ value of ownership/distributable income share:	_____

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes ___ No ___

If your answer is yes, please answer each of the following questions.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary. _____

RETURN WITH SUBCONTRACT

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___ No ___

4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes ___ No ___

If your answer is yes, please answer each of the following questions.

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority?
Yes ___ No ___

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___ No ___

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.
Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter.
Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.
Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter.
Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.
Yes ___ No ___

RETURN WITH SUBCONTRACT

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

RETURN WITH SUBCONTRACT

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: _____ Date _____
Signature of Individual or Authorized Officer

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page.

_____ Date _____
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT
OF TRANSPORTATION

Form B
Subcontractor: Other Contracts &
Procurement Related Information
Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If "No" is checked, the subcontractor only needs to complete the signature box on the bottom of this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

<input type="checkbox"/>	_____	_____
	Signature of Authorized Officer	Date



NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., March 9, 2012. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.

2. **DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 64540
WHITESIDE-LEE Counties
Section (31,32)RS
Project ACF-0561(030)
Route FAP 561
District 2 Construction Funds**

3.72 miles of resurfacing along IL 2 from 45th Avenue in Sterling to 0.2 mile west of Plock Road.

3. **INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

4. **AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Ann L. Schneider,
Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2012

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

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STATE OF ILLINOIS

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 FAP 561 (IL 2), Project ACF-0561 (030), Section (31, 32)RS, Whiteside & Lee Counties, Contract 64540, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

On IL 2 from 45th Avenue in Sterling to 0.2 mile West of Plock Road.

DESCRIPTION OF PROJECT

Hot-Mix Asphalt resurfacing, milling, HMA patching, and culvert end section.

TRAFFIC CONTROL PLAN

Effective: January 14, 1999

Traffic Control shall be according to the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the National Manual on Uniform Traffic Control Devices for Streets and Highways, Illinois Supplement to the National Manual on Uniform Traffic Control Devices, these special provisions, and any special details and Highway Standards contained herein and in the plans.

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

Standards:

701006	701101	701201	701301	701311	701400
701401	701422	701426	701901	701701	

Details:

Rough Grooved Surface sign detail
TC&P at turn bays to remain open to traffic

General:

Any guardrail removed shall be re-erected by Friday of the same week so that no guardrail is down over weekends, all end sections are installed, and no hazards are present.

Signs:

No bracing shall be allowed on post-mounted signs.

Post-mounted signs shall be installed using standard 720011, 728001, 729001, on 4"x4" wood posts, or on any other "break away" connection if accepted by the FHWA and corresponding letter is provided to the resident.

All signs are required on both sides of the road when the median is greater than 10 feet and on one way roadways.

The "WORKERS" (W21-1a(O)-48) signs shall be replaced with symbol "Right or Left Lane Closed Ahead" (W4-2R or L(O)-48) signs on multilane roadways.

"BUMP" (W8-1(O)48) signs shall be installed as directed by the Engineer.

"UNEVEN LANES" W8-11(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

"LOW SHOULDER" W8-9(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

Eastbound, west of Prairieville Road, Highway Standard 701421 is to be used. Speed limit signing should follow that of the standard until the existing speed limit changes to 65 mph. At that point, Standard 701406 speed limit signing shall be used.

When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

All regulatory signs shall be maintained at a 5 foot minimum bottom (rural), 7 foot minimum (urban).

Devices:

A minimum of 3 drums spaced at 4 feet shall be placed at each return when the sideroad is open.

Direction Indicator Barricades shall exclusively be used in lane closure tapers. They shall be used only when traffic is being merged with an adjacent through lane or shifted onto a median crossover.

Vertical barricades shall not be used as a device.

Lights:

Steady burn mono-directional lights are required on devices delineating a widening trench.

Devices in taper at 40' centers.

Devices in tangent at 80' centers.

Flaggers:

Flagger at Sideroads and Commercial Entrances:

Effective: August 1, 2011

Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" with the following exception: The ANSI Class 2 vest will not be supplied by the Department.

In addition to the flaggers shown on applicable standards, on major sideroads flaggers shall be required on all legs of the intersection. Major sideroads for this project shall be Prairieville Road, Mound Hill Road, Sauk Road and Rock River Drive.

When the mainline flagger is within 200 feet of an intersection, the sideroad flagger shall be required.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

Revise the first and second paragraph of Article 701.20(i) of the Standard Specifications to read:

"Signs, barricades, or other traffic control devices required by the Engineer, over and above those shown on the standard or detailed in the plans and provisions, will be paid for according to Article 109.04. All flaggers required at sideroads and commercial entrances remaining open to traffic not shown on the Highway Standards, required by article 701.13(a) or listed above, shall be paid for according to Article 109.04."

Pavement Marking:

All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

Temporary pavement markings shall not be included in the cost of the standard rather it shall be paid for separately at the contract unit prices of specified temporary pavement marking items.

Short term paint on a milled surface shall be paint.

Highway Standards Application.

Traffic Control and Protection Standards 701401 and 701422: This work shall be done according to Standards 701401 and 701422 and Section 701 of the Standard Specifications. The Contractor shall be required to install the 701401 and 701422 two (2) calendar days in advance of the areas to be patched for the protection of the State personnel laying out the locations for pavement patching.

The barricades as shown in Standard 701401 and 701422 shall not encroach on the lane open to traffic at any time. The only exception to this will be in the immediate work area when workers are present, then the barricades may be moved out to permit the construction operation.

This work shall be included in the contract unit price per Lump Sum for TRAFFIC CONTROL AND PROTECTION STANDARD 701401.

Standards 701400, 701401, 701402, 701406, 701411, 701416, 701421, 701422, 701423, 701426 and 701446: The Contractor shall equip all machinery and vehicles with revolving amber lights, installed so the illumination is visible from all directions.

The median crossover will generally not be available for Contractor use. It may be used only when both lanes adjacent to the median are closed. Under no condition shall left turn lanes be made to cross the median from lanes open to traffic.

Parking of personal vehicles within the IL Route 2 right of way will be strictly prohibited. Parking of construction equipment within the right of way will be permitted only at locations approved by the Engineer.

Standards 701701: Add comments to make applicable for right turn lane.

Maintenance of Traffic: The mainline shall be kept open to one-way traffic at all times during working hours and two-way traffic during non-working hours.

The Contractor shall be required to notify the Whiteside & Lee County Highway Departments, the corresponding Township Commissioners, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall be required to notify the Whiteside & Lee County Highway Departments and/or corresponding Township Commissioners for any sideroad closure or opening.

The Contractor shall have all lanes open on weekends, unless prior approval is obtained from the Resident Engineer. Traffic will not be allowed on milled surfaces.

The pavement patch, sawing, removal and replacement shall be completed using Traffic Control and Protection Standard 701401 and 701422.

The milling and resurfacing shall be completed using Traffic Control and Protection Standard 701401 and 701422.

The resurfacing shall be completed using Traffic Control and Protection Standard 701401 and 701422.

The placing of aggregate shoulder stone shall be completed using Traffic Control and Protection Standard 701201.

The striping shall be completed using Traffic Control and Protection Standard 701426.

Eastbound, west of Prairieville, traffic control shall be set up according to Standard 701421. The signing shall be modified in the following manner: 800' after the ROAD CONSTRUCTION 1 MILE sign, install the work zone public information signs and install a portable changeable message board 800' after that, as shown in Standard 701400.

MILLING RESTRICTIONS

Effective: January 29, 2010

Milling operations shall be performed such that a vertical milled face no greater than 1½" exists between open lanes of traffic. This can be accomplished by one of the following treatment methods: 1) Make multiple passes with the mill, each one less the 1½"; 2) place a temporary wedge or have milled sloped edge with a minimum 1:3 slope; or 3) mill both lanes the same day so that no difference in elevation exists when the lanes are opened.

Other methods may be used if approved by the Engineer prior to implementing the procedure. All short term pavement marking placed on milled surface shall be paint.

This work shall be included in the cost of HMA SURFACE REMOVAL, at the thickness specified.

FURNISHED EXCAVATION

Effective: July 1, 1994

Revised: October 28, 2010

The Furnished Excavation shall be measured by the truck load method. Prior to the start of work the Contractor and the Engineer shall agree to standard volume for the trucks utilized by the Contractor.

Suitable excavated materials from the project shall not be wasted without permission of the Engineer. Embankment and mechanical compaction will not be measured for payment.

This work shall be paid for at the contract unit price per Cubic Yard for FURNISHED EXCAVATION.

DETECTOR LOOP, SPECIAL

Effective: December 15, 2009

Revised: March 11, 2010

This item shall consist of replacing detector loops, furnishing, installing, and testing in accordance with Section 886 of the current "Standards Specifications for Road Bridge Construction".

This item shall include replacing any conduit stubs damaged during the surface grinding process. This shall also include any wire in conduit required to connect the loops.

Any 6'x20' Detector Loops shall have a minimum of three turns of wire, any 6'x6' Detector Loops shall have a minimum of four turns of wire. Detector Loops will be measured for payment along the sawed slot in the pavement only. The cables, from the end of the saw cut to the splice in the handhole, shall not be measured for payment since it is considered to be included in the cost of the Detector Loop.

Seven (7) days prior to any work that may affect the operation of the Detector Loops, and for signal timing adjustments to be made for the construction period and appropriate layout of Detector Loops for reinstallation. Notice shall be given to Scott Kullerstrand at the Illinois Department of Transportation, District 2 (815/284-5468).

This work will be paid for at the contract unit price per Foot for DETECTOR LOOP, SPECIAL, which price shall include furnishing, installing all required components, and testing inductance to assure satisfactory operation.

GUARDRAIL REMOVAL

Effective: August 20, 1990

Revised: August 26, 1997

This work shall be done in accordance with Section 632 of the Standard Specifications except that all removed guardrail will become the property of the Contractor.

This work will be paid for at the contract unit price per Foot for GUARDRAIL REMOVAL, measured from center-to-center of end post.

ADJUSTED PLAN QUANTITY FOR SURFACE COURSE MIXTURES

Effective: June 15, 2010

The adjusted plan quantity for surface course mixtures shall be calculated according to Article 406.13(b) and the following. The maximum allowed average bulk specific gravity for the approved mix design (Gmb) will be:

2.460 for Mixture C

2.470 for Mixture D

2.610 for Mixture E

2.710 for Mixture F

ENGINEER'S FIELD OFFICE TYPE A

Effective: January 1, 2012

Engineer's Field Office Type A shall be in accordance with Article 670.02 of the Standard Specifications:

Add (s) to the end of 670.02

(s) Cellular phone with a minimum of 500 anytime minutes per month for use by the site resident engineer/technician.

WORK ZONE PAVEMENT MARKING AND REMOVAL

Effective: December 29, 2008

This work shall consist of installing and removing temporary pavement marking according to Section 703 of the Standard Specifications and the following:

Paint pavement marking shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts.

All temporary paint on the final wearing surface shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Section 703 of the Standard Specifications and as described herein.

Add the following paragraph to Article 1101.12 of the Standard Specifications.

For the high pressure water spray, the pressure at the nozzle shall be approximately 25,000 psi with maximum flow rate of 15 gal/min. The nozzle shall be in close proximity to the pavement surface.

HOT-MIX ASPHALT MIXTURE IL-9.5FG (BMPR)

Effective: July 1, 2005

Revised: March 1, 2010

Description. This work shall consist of constructing fine graded hot-mix asphalt (HMA) surface course or leveling binder with an IL-9.5FG mixture. Work shall be according to Sections 406, 407 and 1030 of the Standard Specifications, except as modified herein.

Materials. Revise Article 1003.03(c) of the Standard Specifications to read:

“(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, or FA 21. For mixture IL-9.5FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.”

Mixture Design. Add the following to the table in Article 1030.04(a)(1):

High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}		
Sieve Size	IL-9.5FG	
	min	max
1 1/2 in. (37.5 mm)		
1 in. (25 mm)		
3/4 in. (19 mm)		
1/2 in. (12.5 mm)		100
3/8 in. (9.5 mm)	90	100
#4 (4.75 mm)	60 ^{4/}	75 ^{4/}
#8 (2.36 mm)	45 ^{4/}	60 ^{4/}
#16 (1.18 mm)	25	40
#30 (600 μm)	15	30
#50 (300 μm)	8	15
#100 (150 μm)	6	10
#200 (75 μm)	4	6.5
Ratio Dust/Asphalt Binder		1.0

4/ When used as level binder placed equal to or less than 1 inch thick, the min and max percent passing shall each be increased 5%.

Revise the table in Article 1030.04(b)(1) of the Standard Specifications to read:

VOLUMETRIC REQUIREMENTS High ESAL					
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum				Voids Filled with Asphalt Binder (VFA), %
	IL-25.0	IL-19.0	IL-12.5	IL-9.5	
50	12.0	13.0	14.0	15 ^{1/}	65 - 78
70					
90					
105					65 - 75 ^{2/}

1/ The VMA for IL-9.5FG shall be a minimum of 15.0 percent.

2/ The VFA range for IL-9.5FG shall be 65 - 78 percent.

Quality Control/Quality Assurance (QC/QA). Revise the second table in Article 1030.05(d)(4) to read:

DENSITY CONTROL LIMITS			
Mixture Composition		Parameter	Individual Test
IL-9.5FG	Lifts < 1.25 in. (32 mm)	N _{design} 50 - 105	91.0 – 97.0% ^{2/}
	Lifts ≥ 1.25 in. (32 mm)	N _{design} 50 - 105	93.0 – 97.0%
IL-9.5, IL-12.5		N _{design} ≥ 90	92.0 – 96.0 %
IL-9.5, IL-9.5L, IL-12.5		N _{design} < 90	92.5 – 97.4 %
IL-19.0, IL-25.0		N _{design} ≥ 90	93.0 – 96.0 %
IL-19.0, IL-19.0L, IL-25.0		N _{design} < 90	93.0 – 97.4 %
All Other		N _{design} = 30	93.0 ^{1/} - 97.4 %

1/ 92.0 % when placed as first lift on an unimproved subgrade.

2/ Based on core density test results.

CONSTRUCTION REQUIREMENTS

Leveling Binder. Revise the table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

Leveling Binder	
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition
≤ 1 1/4 (32)	IL-9.5, IL-9.5 FG, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5, IL-9.5FG, IL-9.5L, or IL-12.5

The density requirements of Article 1030.05(d)(4) shall apply for leveling binder, machine method, when the nominal, compacted thickness is: ¾ in. or greater for IL-9.5FG mixtures, 1¼ in. or greater for IL-9.5 and IL-9.5L mixtures, and 1½ in. or greater for IL-12.5 mixtures.

Compaction. Add the following footnote 4/ for “V_D” in the “Breakdown Roller” column of Table 1 in Article 406.07 of the Standard Specifications:

“4/ Vibratory rolling will not be permitted for IL-9.5FG leveling binder.”

Delete footnote 3/ from Table 1 of Article 406.07 of the Standard Specifications.

Basis of Payment. Add the following two paragraphs after the third paragraph of Article 406.14 of the Standard Specifications:

”Mixture IL-9.5FG will be paid for at the contract unit price per Ton for LEVELING BINDER (HAND METHOD), IL-9.5FG, of the N_{design} specified; LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the N_{design} specified; or HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the N_{design} specified.

Mixture IL-9.5FG in which polymer modified asphalt binders are required will be paid for at the contract unit price per Ton for POLYMERIZED LEVELING BINDER (HAND METHOD), IL-9.5FG, of the N_{design} specified; POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the N_{design} specified; or POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the N_{design} specified.”

HOT MIX ASPHALT - MIXTURE DESIGN VERIFICATION AND PRODUCTION (BMPR)

Effective: January 1, 2012

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, Reclaimed Asphalt Shingles, or Reclaimed Asphalt Pavement 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 1102.01(a)(10).”

Revise the first three sentences of the second paragraph of Article 1102.01(a)(10) 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.”

MANHOLES TO BE ADJUSTED (SPECIAL)

This work shall be in accordance with Section 602 of the Standard Specifications and as specified herein.

This work shall consist of adjusting existing Pipe Underdrain Manholes that exist in the eastbound shoulder at locations shown in the plans. These structures will need to have the existing frames and lids removed and adjusted to the final surface course mix.

The Contractor will need to install Corrugated Metal Pipe Culvert Extension Insert for the size that is specified in the detail drawing. It will also be required that the Contractor secure the adjustment extension to the existing wall of the pipe culvert, as directed by the Engineer.

The Manhole frame shall be cast into Concrete in a diamond shape pattern at the surface, as directed by the Engineer.

This work shall be paid for at the contract unit price per Each for MANHOLES TO BE ADJUSTED (SPECIAL).

**HOT MIX ASPHALT - PAY FOR PERFORMANCE USING PERCENT WITHIN LIMITS -
JOBSITE SAMPLING (BMPR)**

Effective: April 4, 2008

Revised: December 1, 2011

Description. This special provision describes the procedures used for production, placement and payment for hot-mix asphalt (HMA). This special provision shall apply to all pay items for High ESAL and Low ESAL HMA and SMA mixtures that individually have a minimum quantity of 8000 tons (7260 metric tons) and are placed at a minimum nominal thickness equal to or greater than three times the nominal maximum aggregate size. This special provision shall not apply to shoulders, temporary pavements and patching. This work shall be according to the Standard Specifications except as specified herein.

Delete Articles:	406.06(b), 2 nd paragraph	(Temperature requirements)
	406.06 (e), 3 rd paragraph	(Pavers speed requirements)
	406.07	(Compaction)
	1030.04, last two sentences of first paragraph	(Mix design verification)
	1030.05(a)(4, 5, 7, 8, 9, & 10)	(QC/QA Documents)
	1030.05(d)(2)a.	(Plant Tests)
	1030.05(d)(2)b.	(Dust-to-Asphalt and Moisture Content)
	1030.05(d)(2)d.	(Small Tonnage)
	1030.05(d)(2)f.	(HMA Sampling)
	1030.05(d)(3)	(Required Field Tests)
	1030.05(d)(4)	(Control Limits)
	1030.05(d)(5)	(Control Charts)
	1030.05(d)(6)	(Corrective Action for Required Plant Tests)
	1030.05(d)(7)	(Corrective Action for Field Tests (Density))
	1030.05(e)	(Quality Assurance by the Engineer)
	1030.05(f)	(Acceptance by the Engineer)
	1030.06(a), 3 rd paragraph	(Before start-up...)
	1030.06(a), 7 th paragraph	(After an acceptable...)
	1030.06(a), 8 th paragraph	(If a mixture...)
	1030.06(a), 9 th paragraph	(A nuclear/core...)

Definitions:

- (a) Quality Control (QC): All production and construction activities by the Contractor required to achieve the required level of quality.
- (b) Quality Assurance (QA): All monitoring and testing activities by the Engineer required to assess product quality, level of payment, and acceptability of the product.

- (c) Percent Within Limits (PWL): The percentage of material within the quality limits for a given quality characteristic.
- (d) Quality Characteristic: The characteristics that are evaluated by the Department for payment using PWL. The quality characteristics for this project are field Voids in the Mineral Aggregate (VMA), voids, and density. Field VMA will be calculated using the combined Aggregates Bulk Specific Gravity (G_{sb}) from the mix design
- (e) Quality Level Analysis (QLA): QLA is a statistical procedure for estimating the amount of product within specification limits.
- (f) Sublot: A sublot for field VMA, and voids, will be 1000 tons (910 metric tons), or adjusted to achieve a minimum of 10 tests. If a sublot consists of less than 200 tons (180 metric tons), it shall be combined with the previous sublot.
- (g) Density Testing Interval: The interval for density testing will be 0.2 mile (320 m) for lift thickness equal to or less than 3 in. (75 mm) and 0.1 mile (160 m) for lift thickness greater than 3 in. (75 mm). If a density testing interval is less than 200 ft (60 m), it will be combined with the previous test interval.
- (h) Lot: A lot consists of 10 sublots or 30 density intervals. If seven or less sublots or 19 or less density intervals remain at the end of production of a mixture, the test results for these sublots will be combined with the previous lot for evaluation of percent within limits and pay factors. Lots for mixture testing are independent of lots for density testing.
- (i) Density Test: A density test consists of a core taken at a random longitudinal and transverse offset within each density testing interval. The HMA maximum theoretical gravity (G_{mm}) will be based on the running average of four including the current day of production. Initial G_{mm} will be based on the average of the first four test results. The random transverse offset excludes the outer 1.0 ft (300 mm) from an unconfined edge. For confined edges, the random transverse offset excludes a distance from the outer edge equal to the lift thickness or a minimum of 4 in. (100 mm).

Pre-production Meeting:

The Engineer will schedule a pre-production meeting a minimum of seven calendar days prior to the start of production. The HMA QC Plan, test frequencies, random test locations, and responsibilities of all parties involved in testing and determining the PWL will be addressed. Personnel attending the meetings will include the following:

- (a) Resident Engineer
- (b) District Mixture Control Representative
- (c) QC Manager
- (d) Contractor Paving Superintendent
- (e) Any consultant involved in any part of the HMA sampling or testing on this project

Quality Control (QC) by the Contractor:

The Contractor's quality control plan shall include the schedule of testing for both quality characteristics and non-quality characteristics required to control the product such as binder content and mixture gradation. The schedule shall include sample location. The minimum test frequency shall not be less than outlined in the Minimum Quality Control Sampling and Testing Requirements table below.

Minimum Quality Control Sampling and Testing Requirements

Quality Characteristic	Minimum Test Frequency	Sampling Location
Mixture Gradation	1/day	per QC Plan
Binder Content		
G_{mm}		
G_{mb}		
Density	per QC plan	per QC Plan

The Contractor shall submit QC test results to the Engineer within 24 hours of the time of sampling.

Initial Production Testing: The Contractor shall split and test the first two samples with the Department for comparison purposes regardless of whether a test strip is used. The Contractor shall complete all tests and report all results to the Engineer within two working days of sampling. The Engineer will make Department test results of the initial production testing available to the Contractor within two working days from the receipt of the samples. PFP will begin after an acceptable test strip, if one is used.

Quality Assurance (QA) by the Engineer: The Engineer will test each subplot for field VMA, voids, dust/ac ratio and density interval for density to determine payment for each lot. A subplot shall begin once an acceptable test-strip has been completed and the AJMF has been determined. If the test strip is waived, a subplot shall begin with the start of production. All Department testing will be performed in a qualified laboratory by personnel who have successfully completed the Department HMA Level I training.

Voids, field VMA, and Dust/AC ratio: The mixture subplot size is 1000 tons (910 metric tons). The Engineer will determine the random tonnage and the Contractor shall be responsible for obtaining the sample according to the "PFP Hot-Mix Asphalt Random Jobsite Sampling" procedure.

Density: The Engineer will identify the random locations for each density testing interval. The Contractor shall be responsible for obtaining the four inch cores within the same day and prior to opening to traffic unless otherwise approved by the Engineer according to the "PFP Random Density Procedure". The locations will be identified after final rolling and cores shall be obtained under the supervision of the Engineer. All core holes shall be filled immediately upon completion of coring. All water shall be removed from the core holes prior to filling. All core holes shall be filled with a rapid hardening mortar or concrete which shall be mixed in a separate container prior to placement in the hole. Any depressions in the surface of the filled core holes greater than 1/4 inch at the time of final inspection will require removal of the fill material to the depth of the lift thickness and replacement.

Test Results: The Department test results for the first subplot, or density testing interval, of every lot will be available to the Contractor within three working days from the time the secured sample from the subplot or density testing interval has been delivered, by the Contractor, to a Department's Testing Facility or a location designated by the Engineer. Test results for the completed lot will be available to the Contractor within 10 working days from the time the last subplot or density testing interval has been delivered to a Department testing facility or a location designated by the Engineer.

The Engineer will maintain a complete record of all Department test results. Copies will be furnished upon request. The records will contain, as a minimum, the originals of all Department test results and raw data, random numbers used and resulting calculations for sampling locations, and quality level analysis calculations.

Dispute Resolution: Dispute resolution testing will only be permitted when; 1) the Contractor submits their split sample test results prior to receiving Department split sample test results and 2) the difference between the Contractor and Department split test results exceed the precision limits listed below or are outside acceptable limits. For density disputes, the Contractor shall use the Department's running average for G_{mm} when determining compliance with the Limits of Precision.

Test Parameter	Limits of Precision
Voids	1.0 %
VMA	1.0%
Ratio - Dust / Asphalt Binder	0.2
Core Density	1.0 %

If dispute resolution is necessary, the Contractor shall submit a request in writing within four working days of receipt of the results of the quality index analysis for the lot. The Engineer will document receipt of the request. The Bureau of Materials and Physical Research (BMPR) laboratory will be used for dispute resolution testing.

Density cores for dispute resolution testing shall be taken at the same time as the random density core. The density core for dispute resolution testing shall be taken within 1 ft. (300 mm) longitudinally of the random density core and at the same transverse offset.

If three or more consecutive mix sublots are contested, corresponding density results will be recalculated with the new G_{mm} .

All dispute resolution results will replace original quality assurance test results for pay factor recalculation. Test results from the dispute resolution testing will replace voids, VMA and Dust/AC results from the original quality assurance testing. The lot pay factor for the lot under dispute resolution will be recalculated. If the recalculated lot pay factor is less than or equal to the original lot pay factor, laboratory costs listed below will be borne by the Contractor. The effect on the lot pay factor will be determined for each individually disputed sample in the order of increasing subplot/density interval.

Test	Cost
Mix Testing	\$1000.00 / subplot
Core Density	\$300.00 / core

Acceptance by the Engineer and Basis of Payment: The Engineer may cease production if the Contractor is not following the approved QC plan. The Engineer may reject material produced under the following circumstances:

- (a) If PWL for any quality characteristic is below 50 percent for any lot
- (b) If visible pavement distress is present such as, but not limited to, segregation, excessive visible coarse aggregate fracturing in cores or flushing

(c) If any test exceeds the acceptable limits listed below:

Parameter	Acceptable Range
Field VMA	-1.0 – +3.0% ^{1/}
Voids	2.0 – 6.0% ^{2/}
Density: IL-19.0, IL-25.0, IL-9.5, IL-12.5 IL-4.75, SMA	90.0 – 98.0% 92.0 – 98.0%
Dust / AC Ratio	0.4 – 1.6 ^{3/}

1/ Based on minimum required VMA from mix design

2/ The acceptable range for SMA mixtures shall be 2.0% - 5.0%

3/ Does not apply to SMA

Payment will be based on the calculation of the Composite Pay Factor for each mix according to the "PFP Quality Level Analysis" document. Payment for full depth pavement will be based on the calculation of the Full Depth Pay Factor according to the "PFP Quality Level Analysis" document.

Dust / AC Ratio. In addition to the PWL on VMA, voids, and density, a monetary deduction will be made using the pay adjustment table below for dust/AC ratios that deviate from the 0.6 to 1.2 range.

Dust / AC Pay Adjustment Table^{1/}

Range	Deduct / subplot
$0.6 \leq X \leq 1.2$	\$0
$0.5 \leq X < 0.6$ or $1.2 < X \leq 1.4$	\$1000
$0.4 \leq X < 0.5$ or $1.4 < X \leq 1.6$	\$3000
$X < 0.4$ or $X > 1.6$	Shall be removed and replaced

1/ Does not apply to SMA

MATERIAL TRANSFER DEVICE (BDE)

Effective Date: June 15, 1999

Revised Date: January 1, 2009

Description. This work shall consist of placing Leveling Binder (Machine Method), IL-9.5FG, N50, and Hot-Mix Asphalt Surface Course, Mix "D", except that these materials shall be placed using a material transfer device.

Materials and Equipment. The material transfer device shall have a minimum surge capacity of 15 tons (13.5 metric tons), shall be self-propelled and capable of moving independent of the paver, and shall be equipped with the following:

- (a) Front-Dump Hopper and Conveyor. The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage. Material Transfer devices having paver style hoppers shall have a horizontal bar restraint placed across the foldable wings which prevents the wings from being folded.
- (b) Paver Hopper Insert. The paver hopper insert shall have a minimum capacity of 14 tons (12.7 metric tons).

- (c) Mixer/Agitator Mechanism. This re-mixing mechanism shall consist of a segmented, anti-segregation, re-mixing auger or two full-length longitudinal paddle mixers designed for the purpose of re-mixing the hot-mix asphalt (HMA). The longitudinal paddle mixers shall be located in the paver hopper insert.

CONSTRUCTION REQUIREMENTS

General. The material transfer device shall be used for the placement of Leveling Binder (Machine Method), IL-9.5 FG, N50, Hot-Mix Asphalt Surface Course, Mix "D", N50. The material transfer device speed shall be adjusted to the speed of the paver to maintain a continuous, non-stop paving operation.

Use of a material transfer device with a roadway contact pressure exceeding 20 psi (138 kPa) will be limited to partially completed segments of full-depth HMA pavement where the thickness of binder in place is 10 in. (250 mm) or greater.

Structures. The material transfer device may be allowed to travel over structures under the following conditions:

- (a) Approval will be given by the Engineer.
- (b) The vehicle shall be emptied of HMA material prior to crossing the structure and shall travel at crawl speed across the structure.
- (c) The tires of the vehicle shall travel on or in close proximity and parallel to the beam and/or girder lines of the structure.

Method of Measurement. This work will be measured for payment in Tons (Metric Tons) for Leveling Binder (Machine Method), IL-9.5FG, N50 materials placed with a material transfer device.

Basis of Payment. This work will be paid for at the contract unit price per Ton (Metric Ton) for Leveling Binder (Machine Method), IL-9.5 FG, N50 and Hot-Mix Asphalt Surface Course, Mix "D".

The various HMA mixtures placed with the material transfer device will be paid for as specified in their respective specifications. The Contractor may choose to use the material transfer device for other applications on this project; however, no additional compensation will be allowed.

GEOTECHNICAL REINFORCEMENT

Effective: November 30, 2010

Biaxial Geogrid Flat Installation

This work consists of furnishing and installing an integrally-formed polypropylene geotechnical grid reinforcement material. The geogrid shall have an aperture, rib and junction cross section sufficient to permit significant mechanical interlock with the material being reinforced. There shall be a high continuity of tensile strength through all ribs and junctions of the grid material to reinforce the subbase or subgrade as shown on the plans and specifications.

MATERIAL CHARACTERISTICS	TEST METHOD	DATA
polymer type		polypropylene
carbon black content	ASTM D 4218	0.50% (min.)

DIMENSIONAL CHARACTERISTICS	TEST METHOD	UNIT	DATA
open area	CW 02215	%	75 (max.)
unit weight	ASTM D 5261	oz/yd ²	5.0 (min.)

TECHNICAL CHARACTERISTICS	TEST METHOD	UNIT	DATA
junction efficiency	GRI-GG2	%	90 (min.)

The supplier should provide a certification that their product meets the above requirements.

The geotechnical reinforcement shall be placed as described herein or as shown on the cross sections.

Geogrid shall be delivered to the jobsite in such a manner as to facilitate handling and incorporation into the work without damage. Material shall be stored in such a manner as to prevent exposure to direct sunlight and damage by other construction activities.

Prior to the installation of the geogrid, the application surface shall be cleared of debris, sharp objects and trees. Tree stumps shall be cut to the level of the ground surface. If the stumps cannot be cut to the ground level, they shall be completely removed. In the case of subgrades, all wheel tracks or ruts in excess of 3 inches in depth shall be graded smooth or otherwise filled with soil to provide a reasonably smooth surface.

The geotechnical reinforcement shall be placed with the "roll length" parallel to the pavement. Fabric of insufficient width or length to fully cover the specified area shall be lapped a minimum of 24 inches. The geogrid should be secured in place.

Installation:

The granular blanket shall be constructed to the width and depth required on the plans. Unless otherwise specified, the material shall be back-dumped on the Geogrid in a sequence of operations beginning at the outer edges of the treatment area with subsequent placement towards the middle.

Placement of material on the Geogrid shall be accomplished by spreading dumped material off of previously placed material with a bulldozer blade or endloader, in such a manner as to prevent tearing or shoving of the Geogrid. Dumping of material directly on the Geogrid will only be permitted to establish an initial working platform. No construction equipment shall be allowed on the Geogrid prior to placement of the granular blanket. If the geogrid develops wrinkles or moves significantly, an alternative method of securing it shall be used.

Unless otherwise specified in the plans or Special Provisions, the granular material, shall be placed to the full required thickness and compacted to the satisfaction of the Engineer.

Geogrid which is damaged during installation or subsequent placement of granular material, due to failure of the Contractor to comply with these provisions, shall be repaired or replaced at his expense, including costs of removal and replacement of the granular material.

Torn Geogrid may be patched in-place by cutting and placing a piece of the same Geogrid over the tear. The dimensions of the patch shall be at least 2 feet larger than the largest dimension of the tear and it shall be weighted or otherwise secured to prevent the granular material from causing lap separation.

Method of Measurement: Geotechnical Reinforcement will be measured in square yards for the surface area placed. The excavation, replacement and compaction of the granular layer shall be paid for separately.

Basis of Payment: This work will be measured in place and the area computed in square yards. The work will be paid for at the contract unit price per Square Yard for GEOTECHNICAL REINFORCEMENT.

GROOVING FOR RECESSED PAVEMENT MARKING

Effective: July 31, 2009

Description. This work shall consist of the grooving of an existing pavement surface in preparation for the application recessed pavement marking lines.

Equipment. The grooving equipment shall be equipped with a free-floating cutting or grinding head. The grinding or cutting head shall be equipped with diamond saw blades, steel star cutters and/or carbide tipped star cutters. A grinder head configuration may be used on hot-mix asphalt (HMA) surfaces to achieve a rough surface texture in the bottom of the groove. Diamond saw blades shall be used on the cutting head when a smooth surface in the bottom of the groove is required by the Engineer, or contract specifications, or pavement marking material manufacturer's recommendations.

CONSTRUCTION REQUIREMENTS

Pavement Grooving Methods. The grooves for recessed pavement markings shall be constructed using the following methods.

- a) Wet Saw Blade Operation. When water is required or used to cool the saw blades, such as during a continuous edge line grooving operation, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for 24 hours prior to the application of the pavement markings following a wet saw blade operation.
- b) Dry Saw Blade Operation. If the grooving is done with dry saw blades, the groove shall be flushed with high-pressure air to remove debris and dust generated during the cutting operation.

Pavement Grooving. Grooves shall be cut into the pavement prior to the application of the pavement marking. The grooves shall be cut such that the width is 1 in. (25 mm) wider than that of the line to be placed. Grooves for letters and symbols shall be cut in a shape so that the entire marking will fit. The position of the edge of the grooves shall be a minimum of 2 in. (50 mm) from the edge of concrete joints or HMA paving seams along edge or centerlines. The depth of the groove shall not be less than the manufacturer's recommendations for the marking material specified, but shall be installed to a minimum depth of 100 mils (2.54 mm) +/- 10 mils for pavement marking tapes and 40 mils (1.02 mm) +/- 10 mils for liquid markings.

On new HMA surfaces the Engineer shall determine if the new HMA has achieved the necessary strength and hardness to support grooving prior to the start of a grooving operation. Some HMA mixes may require 14 or more days to achieve adequate hardness to support a grooving operation. On existing HMA surfaces some existing HMA pavements may not be strong enough to support a grooving operation. For existing HMA pavements the Engineer shall determine if the existing HMA has the necessary strength and hardness to support grooving prior to the start of a grooving operation.

Cleaning. Immediately prior to the application of the pavement markings the groove shall be cleaned with high-pressure air blast.

Method of Measurement. This work will be measured for payment in place, in linear feet (meter) of the pavement marking lines applied and accepted, for the groove width specified.

Grooving for letters, numbers and symbols will be measured in square feet (square meters) as specified in the plans.

Basis of Payment. This work will be paid for at the contract unit price per Foot (Meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per Square Foot (Square Meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS, of the type specified.

GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS

The grooving for letters and symbols shall be as close to the shape of the letter or symbol as possible, being a minimum of ½ inch wider on all sides. The grooving area shall be a maximum of 25% larger than the letter or symbol itself. Excessive boxing out for the letter or symbol shall not be allowed. Allowable pay area of grooving for a letter or symbol shall be a maximum of 25% more than the square footage of the letter or symbol (i.e.: turn arrow of 15.6 sq. ft. maximum allowable pay area would be 19.5 sq. ft.).

This work shall be paid for at the contract unit price per Square Yard for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS.

TRAFFIC CONTROL SURVEILLANCE

Effective: January 1, 2011

Revise the first sentence of the first paragraph of Article 701.10 of the Standard Specifications to read:

“When open holes, broken pavement, trenches over 3 in. deep and 4 in. wide or other hazards are present within 8 ft of the edge of an open lane, the Contractor shall furnish traffic control surveillance at all times, whether or not the Contractor is engaged in construction operations.”

HOT-MIX ASPHALT SURFACE REMOVAL, 2”

This work shall be in accordance with Section 440 of the Standard Specifications and as specified herein.

This work shall consist of milling the existing road down to concrete eastbound lane from Station 170+19 outside lane Station 170+50 inside lane & shoulders to Station 8+00. The depth is anywhere from 2.8" to 1¼". For the remainder of the project where Hot-Mix Asphalt Surface Removal, 2" is specified at the plan scheduled regions, a 2" thickness of Hot- Mix Asphalt Surface Removal matching the existing slopes is required, unless the above-mentioned circumstance is encountered. No traffic shall be allowed on milled surface until level binder is in place.

This work shall be paid for at the contract unit price per Square Yard for HOT-MIX ASPHALT SURFACE REMOVAL, 2".

BREAKER-RUN CRUSHED STONE

Effective: May 1, 1995

Revised: April 30, 1998

This work shall consist of placing Breaker-Run Crushed Stone at locations shown in the plans. Except for the top 3 inches, all Breaker-Run Crushed Stone shall consist of crushed stone with the top size 6 inch and 15% to 40% passing through the 2 inch sieve by weight. Breaker-Run Crushed Stone shall be reasonably uniformly graded from coarse to fine aggregate and shall be taken from a source capable of producing Class D quality aggregate. The top 3 inches shall be gradation CA-7.

This work shall be paid for at the contract unit price per Ton for BREAKER-RUN CRUSHED STONE.

AGREEMENT TO PLAN QUANTITY (BDE)

Effective: January 1, 2012

Revise the second paragraph of Article 202.07(a) of the Standard Specifications to read:

"When the plans or work have been altered, or when disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities, either party shall, before any work is started which would affect the measurement, have the right to request in writing and thereby cause the quantities involved to be measured. When plan quantities are revised by the issuance of revised plan sheets that are made part of the contract, and the Contractor and the Engineer have agreed in writing that the revised quantities are accurate, no further measurement will be required and payment will be made for the revised quantities shown."

CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)

Effective: January 1, 2012

For the "Portland Cement Concrete (BDE)" special provision included in this project, specifically Article 1020.05(a), the Contractor has the option to request the Engineer determine mix design material proportions for Class PV, PP, RR, BS, DS, SC, and SI concrete. A single mix design for each class of concrete will be provided. Acceptance by the Contractor to use the mix design developed by the Engineer shall not relieve the Contractor from meeting specification requirements.

CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009

Revised: January 2, 2012

Diesel Vehicle Emissions Control. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall certify that only ULSD will be used in all jobsite equipment. The certification shall be presented to the Department prior to the commencement of the work.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

DIGITAL TERRAIN MODELING FOR EARTHWORK CALCULATIONS (BDE)

Effective: April 1, 2007

Revise the first and second paragraphs of Article 202.07(b) of the Standard Specifications to read:

“(b) Measured Quantities. Earth and rock excavation will be measured in cubic yards (cubic meters) in their original positions. The volumes will be computed by the method of average end areas using before and after cross sections; or by the method of digital terrain modeling using before and after total station surveys. The volume of any unstable or unsuitable material removed will be measured for payment in cubic yards (cubic meters).

In rock excavation, the Contractor shall strip ledge rock of overburden so that necessary survey shots for measurement may be taken. Vertical measurements shall extend from the surface of the rock to an elevation not more than 6 in. (150 mm) below the subgrade of the proposed pavement structure, as shown on the plans, or to the bottom of the rock where that point is above the subgrade of the proposed pavement structure. Horizontal measurements shall extend not more than 6 in. (150 mm) beyond the slope lines fixed by the Engineer for the work. Boulders and rocks 1/2 cu yd (0.5 cu m) or more in volume will be measured individually and the volume computed from average dimensions taken in three directions.”

Revise the first paragraph of Article 204.07 of the Standard Specifications to read.

“**204.07 Method of Measurement.** Borrow excavation will be measured in cubic yards (cubic meters) in its original position. The volume will be computed by the method of average end areas using before and after cross sections; or by the method of digital terrain modeling using before and after total station surveys.”

Revise the embankment definition of Article 204.07(b) of the Standard Specifications to read:

“Embankment = the volume of fill in its final position computed by the method of average end areas or digital terrain modeling. Both methods will be based upon the existing ground line as shown on the plans, except as noted in (1) and (2) below;”

Revise Article 207.04 of the Standard Specifications to read:

“**207.04 Method of Measurement.** This work will be measured for payment in tons (metric tons) according to Article 311.08(b), or in cubic yards (cubic meters) compacted in place and the volume computed by the method of average end areas or digital terrain modeling by total station measurement.”

Revise the second sentence of the second paragraph of Article 211.07(b) of the Standard Specifications to read:

“The volume will be computed by the method of average end areas or digital terrain modeling by total station measurement.”

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (DBE)

Effective: September 1, 2000

Revised: August 2, 2011

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department’s annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor.

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department’s overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies.

The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform **6.00%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents that enough DBE participation has been obtained to meet the goal: or
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's website at www.dot.il.gov.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The names and addresses of DBE firms that will participate in the contract;
 - (2) A description, including pay item numbers, of the work each DBE will perform;
 - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE.

- If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
 - (5) if the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
 - (6) If the contract goal is not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
 - (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
 - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
 - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.

- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

- (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

(e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement.

- (a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217)785-4611. Telefax number (217)785-1524.
- (b) TERMINATION OR REPLACEMENT. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in the Special Provision.
- (c) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.

Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award;
or
- (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;

- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed.

If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the BDE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

- (g) **ENFORCEMENT**. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) **RECONSIDERATION**. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

FRICITION 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				
HMA High ESAL Low ESAL	Binder IL-25.0, IL-19.0, or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination:</u> Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}				
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-12.5,IL-9.5, or IL-9.5L SMA Ndesign 50 Surface	<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/}				
HMA High ESAL	D Surface and Leveling Binder IL-12.5 or IL-9.5 SMA Ndesign 50 Surface	<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/}				
		<u>Other Combinations Allowed:</u>				
		<table border="1"> <tr> <td><i>Up to...</i></td> <td><i>With...</i></td> </tr> <tr> <td>25% Limestone</td> <td>Dolomite</td> </tr> </table>	<i>Up to...</i>	<i>With...</i>	25% Limestone	Dolomite
<i>Up to...</i>	<i>With...</i>					
25% Limestone	Dolomite					

		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) ^{5/} or Crushed Sandstone
HMA High ESAL	E Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface	<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.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Dolomite ^{2/}	Any Mixture E aggregate
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF) ^{5/} , Crushed Steel Slag ^{5/} , or Crystalline Crushed Stone
75% Crushed Gravel or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF) ^{5/} , or Crushed Steel Slag ^{5/}		
HMA High ESAL	F Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination:</u> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) ^{5/} Crushed Steel Slag ^{5/} No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		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."

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

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 2 in. (50 mm), from each pavement edge. (i.e. for a 4 in. (100 mm) lift the near edge of the density gauge or core barrel shall be within 4 in. (100 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-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%”

METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008

Revised: January 1, 2012

Add the following to Article 503.02 of the Standard Specifications:

“(h) Metal Hardware Cast into Concrete 1006.13”

Add the following to Article 504.02 of the Standard Specifications:

“(j) Metal Hardware Cast into Concrete 1006.13”

Revise Article 1006.13 of the Standard Specifications to read:

“**1006.13 Metal Hardware Cast into Concrete.** Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

When stainless steel junction boxes or other stainless steel appurtenances are specified, Type 304 stainless steel hardware shall be used when cast into concrete.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load
5/8 in. (16 mm)	6600 lb (29.4 kN)
3/4 in. (19 mm)	6600 lb (29.4 kN)
1 in. (25 mm)	9240 lb (41.1 kN)”

PAVEMENT PATCHING (BDE)

Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

“In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area.”

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause.

The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

PORTLAND CEMENT CONCRETE (BDE)

Effective: January 1, 2012

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).

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 ENCASUREMENT, 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 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) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 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). 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		Water / Cement Ratio lb/lb	S l u m p in. (4)	Mix Design Compressive Strength (Flexural Strength)			Air Content %	Coarse Aggregate Gradations (14)
			cwt/cu yd (3)				psi, minimum				
			Min.	Max			Days				
		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	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.				
	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	CA 7, CA 11, CA 13, CA 14, or CA 16
	PP-2		7.35	7.35	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	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 Precast Prestressed Piles and Extensions Precast Prestressed Sight Screen	504 512 639	5.65 5.65 (TY III)	7.05 7.05 (TY III)	0.32 - 0.44	1 - 4		Plans 5000 3500	5.0 - 8.0

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA

Class of Conc.	Use	Specification Section Reference	Cement Factor		Water / Cement Ratio lb/lb	S l u m p in. (4)	Mix Design Compressive Strength (Flexural Strength)			Air Content %	Coarse Aggregate Gradations (14)
			cwt/cu yd (3)				psi, minimum				
			Min.	Max			Days				
		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 7 & CA 11, CA 7, or CA 11
SI	Structures (except Superstructure)	503									
	Sidewalk	424									
	Slope Wall	511									
	Encasement	512									
	Box Culverts	540									
	End Section and Collar Curb, Gutter, Curb & Gutter, Median, and Paved Ditch	542	5.65 (1) 6.05 (2)	7.05	0.32 - 0.44	2 - 4 (5)	3500 (650)			5.0 - 8.0	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)
	Concrete Barrier	606									
	Sign Structures	637									
	Spread Footing Concrete Foundation	734									
	Pole Foundation (12)	836									
Traffic Signal Foundation Drilled Shaft (12) Square or Rectangular	878										

- Notes:
- (1) Central-mixed.
 - (2) Truck-mixed or shrink-mixed. Shrink-mixed concrete will not be permitted for Class PV concrete.
 - (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 1 1/2 in.
 - (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 °F, 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 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 gradations 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		Water / Cement Ratio kg/kg	S l u m p mm (4)	Mix Design Compressive Strength (Flexural Strength) kPa, minimum			Air Content %	Coarse Aggregate Gradations (14)
			kg/cu m (3)				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	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	435	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	
BS	Bridge Superstructure Bridge Approach Slab	503	360	418	0.32 - 0.44	50 - 100 (5)	27,500 (4650)			5.0 - 8.0	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							Plans	5.0 - 8.0	CA 11 (11), CA 13, CA 14 (11), or CA 16
	Precast Prestressed Piles and Extensions	512	335 335 (TY III)	418 418 (TY III)	0.32 - 0.44	25 - 100			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		Water / Cement Ratio kg/kg	S l u m p mm (4)	Mix Design Compressive Strength (Flexural Strength) kPa, minimum			Air Content %	Coarse Aggregate Gradations (14)
			kg/cu m (3)				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	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 7 & 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	CA 3 & CA 7, CA 3 & CA 11, CA 5 & CA 7, CA 5 7 CA 11, CA 7, CA 11, CA 13, CA 14, or CA 16 (13)

- Notes:
- (1) Central-mixed.
 - (2) Truck-mixed or shrink-mixed. Shrink-mixed concrete will not be permitted for Class PV concrete.
 - (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 40 mm.
 - (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 °C, 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 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.

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 Contractors 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 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 concrete mixtures, for 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 (only truck-mixed permitted), 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 735 lbs/cu yd (435 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), 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	Fine Aggregate Or Fine Aggregate Blend		
	ASTM C 1260 Expansion		
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.

Group I – Mixture options are not applicable. Use any cement or finely divided mineral.

Group II – Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III – Mixture options 1, combine 2 with 3, 4 or 5 shall be used.

Group IV – Mixture options 1, combine 2 with 4, or 5 shall be used.

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 for fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$

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.

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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$) 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 ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$), 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, additional cement or 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 an 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, with the Engineer's approval, may add to the truck mixer non air-entraining cement in the proportion necessary to bring the air content within the specified limits, or the concrete may be 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 water storage tank for curing.

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 slag or lightweight aggregate shall be according to Article 1004.01(e).

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. Additional mixing beyond 100 revolutions shall be at agitating speed unless additions of water, admixtures, cement, 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. Additional mixing beyond 100 revolutions shall be at agitating speed, unless additions of water, admixtures, cement, 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, admixtures, and cement 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 or truck-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) ^{11/ 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) ^{11/ 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 the concrete has been finished and the water sheen has disappeared from the surface, the concrete shall be immediately sealed with membrane curing compound of the type specified. The seal shall be maintained for the specified curing period. The edges of the concrete shall, likewise, be sealed immediately 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 as placed in the forms 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 as placed in the forms shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C).

When insulated forms are used, 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 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 shall be uniformly graded and preference for larger size aggregate shall be used in the mix design.

Article 1004.02(d)(2) and information in the "Portland Cement Concrete Level III Technician Course – Manual of Instructions for Design of Concrete Mixtures" shall 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 if the time frame will be more than seven days.

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.

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 (10 °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 (10 °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. A copy of the ACI document shall be provided to the Engineer at the construction site. 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. A copy of the ACI document shall be provided to the Engineer at the construction site.

- (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 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

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.

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 beam strength specimens may be cured in the same tank.
 - (2) Comparing Test Results. Differences between the Engineer's and the Contractor's split sample test results will not be considered extreme 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)
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, 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, or aggregate gradation split sample retest result is a failure; or if either the Engineer's or Contractor's strength 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, and jobsite air content; 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 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, and jobsite air content; 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 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/final revolution counter reading, at the jobsite, if the mixture is truck-mixed; time discharged at the jobsite; total amount of each admixture added at the jobsite; total amount of water added at the jobsite; and total amount of cement added at the jobsite if the air content needed adjustment.

(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	T 2, T 11, T 27, and T 248
Aggregates (Stored at Plant in Stockpiles or Bins)	Gradation ^{2/}	2,500 cu yd (1,900 cu m) for each gradation number ^{3/}	T 2, T 11, T 27, and T 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, Pycnometer Jar, or T 255
	Moisture ^{4/} : Coarse Aggregate	As needed to control production for each gradation number	Dunagan, Pycnometer Jar, or T 255
Mixture ^{5/}	Slump, Air Content, Unit Weight / Yield, and Temperature	As needed to control production	T 141 and T 119 T 141 and T 152 or T 196 T 141 and T 121 T 141 and T 309

- 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, using the Dunagan or Illinois Modified AASHTO T 255 test method. 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; or other tests at the plant to control mixture production.

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/ 6/}	As needed to control production	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
All	Temperature ^{3/}	As needed to control production	T 141 and T 309
Controlled Low-Strength Material (CLSM)	Flow, Air Content and Compressive Strength	As needed to control production	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.

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. 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. 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 conveyed. 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 or more, 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.

If the Contractor's or Engineer's air content or slump test result is not within the specification limits, all subsequent truck loads delivered shall be tested by the Contractor until the problem is corrected.

- 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, an air test, slump test, and temperature test shall be performed on the same sample. For mixtures pumped or conveyed, 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.

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 and Strength	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/} and Air Content ^{2/ 3/}	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.
	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.

- 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.”

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007

Revised: January 1, 2012

Revise Section 1031 of the Standard Specifications to read:

“SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is from the material produced by cold milling or crushing of an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. “Homogeneous Surface”).

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.

(a) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP shall pass the sieve size specified below for the mix the FRAP will be used in.

Mixture FRAP will be used in:	Sieve Size that 100% of FRAP Shall Pass
IL-25.0	2 in. (50 mm)
IL-19.0	1 1/2 in. (40 mm)
IL-12.5	1 in. (25 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

(b) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered “homogenous” with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.

- (c) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or "All Other" (as defined by Article 1030.04(a)(3)) mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

1031.03 Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous/Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % ^{1/}	± 0.5 %
G _{mm}	± 0.03	

1/ The tolerance for FRAP shall be ± 0.3 %.

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

1031.04 Quality Designation of Aggregate in RAP/FRAP.

(a) The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (1) RAP from Class I, Superpave (High ESAL)/HMA (High ESAL), or HMA (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
- (2) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
- (3) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
- (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

(b) The aggregate quality of FRAP shall be determined as follows.

- (1) If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer. If the quality is not known, the quality shall be determined according to Article 1031.04(b)(2).
- (2) Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer.

The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications.”

1031.05 Use of RAP/FRAP in HMA. The use of RAP/FRAP shall be a Contractor’s option when constructing HMA in all contracts. The use of RAP/FRAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 in. (10 mm).
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
- (f) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table below for a given N Design.

Max RAP Percentage

HMA Mixtures ^{1/, 3/}	Maximum % RAP		
	Binder/Leveling Binder	Surface	Polymer Modified
Ndesign 30	30	30	10
50	25	15	10
70	15 / 25 ^{2/}	10 / 15 ^{2/}	10
90	10	10	10
105	10	10	10

1/ For HMA “All Other” (shoulder and stabilized subbase) N-30, the amount of RAP shall not exceed 50% of the mixture.

2/ Value of Max % RAP if homogeneous RAP stockpile of IL-9.5 RAP is utilized.

3/ When RAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP exceeds 25 percent (i.e. 26 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

- (g) When the Contractor chooses the FRAP option, the percentage of FRAP shall not exceed the amounts indicated in the table below for a given N Design.

(1) Level 1 Maximum FRAP Percentage.

HMA Mixtures ^{1/, 2/}	Level 1 - Maximum % FRAP		
	Ndesign	Binder/Leveling Binder	Surface
30	35	35	10
50	30	25	10
70	25	20	10
90	20	15	10
105	10	10	10

- 1/ For HMA “All Other” (shoulder and stabilized subbase) N30, the amount of FRAP shall not exceed 50 percent of the mixture.
- 2/ When FRAP exceeds 20 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP exceeds 25 percent (i.e. 26 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the maximum FRAP shall be 20 percent. When the FRAP usage in SMA exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to a PG70-28).
- 4/ For IL-4.75 mix the amount of minus #4 fine fraction FRAP shall not exceed 20 percent. When the FRAP usage in IL-4.75 exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to a PG70-28).

(2) Level 2 Maximum FRAP percentage.

HMA Mixtures ^{1/, 2/}	Level 1 - Maximum % FRAP		
	Ndesign	Binder/Leveling Binder	Surface
30	40	40	10
50	40	30	10
70	30	20	10
90	30	20	10
105	30	15	10

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the amount of FRAP shall not exceed 50 percent of the mixture.
- 2/ When FRAP exceeds 20 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP exceeds 25 percent (i.e. 26 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the maximum FRAP shall be 20 percent. When the FRAP usage in SMA exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to a PG70-28).
- 4/ For IL-4.75 mix the amount of minus #4 fine fraction FRAP shall not exceed 30 percent. When the FRAP usage in IL-4.75 exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to a PG70-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP material meeting the above detailed requirements.

FRAP mix designs exceeding the Level 1 FRAP percentages shall be tested prior to submittal for verification, according to Illinois Modified AASHTO T324 (Hamburg Wheel) and shall meet the following requirements.

Asphalt Binder Grade	# Repetitions	Max. Rut Depth in. (mm)
PG76-XX	20,000	1/2 (12.5)
PG70-XX	15,000	1/2 (12.5)
PG64-XX	10,000	1/2 (12.5)
PG58-XX	10,000	1/2 (12.5)

RAP/FRAP designs shall be submitted for volumetric verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.

1031.07 HMA Production. Mixture production where the FRAP percentage exceeds the Level 1 limits shall be sampled within the first 500 tons (450 metric tons) on the first day of production with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T324 and shall meet the requirements specified herein. FRAP mix production shall not exceed 1500 tons (1350 metric tons) or one days production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced FRAP mixture conformance is demonstrated prior to start of mix production for the contract.

The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

HMA plants utilizing RAP/FRAP shall be capable of automatically recording and printing the following information.

(a) Dryer Drum Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (4) Accumulated dry weight of RAP/FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(b) Batch Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- (4) Mineral filler weight to the nearest pound (kilogram).
- (5) RAP/FRAP weight to the nearest pound (kilogram).
- (6) Virgin asphalt binder weight to the nearest pound (kilogram).
- (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply.
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

RECLAIMED ASPHALT SHINGLES (RAS) (BDE)

Effective: January 1, 2012

Description. Reclaimed asphalt shingles (RAS) meeting the requirements herein will be permitted in all HMA mixtures used for overlay applications only. RAS shall not be used in full-depth HMA pavement. When RAS is used in conjunction with Reclaimed Asphalt Pavement (RAP), the RAP shall be according to the special provision, "Reclaimed Asphalt Pavement (RAP)"

Definitions. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable materials, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.

- (a) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
- (b) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise approved by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type and lot number shall be maintained by project contract number and kept for a minimum of 3 years.

Testing. RAS shall be sampled and tested during stockpiling.

For testing during stockpiling, washed extraction, and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five tests are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-test stockpile has been established it shall be sealed. Additional incoming RAS shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

Before testing, each field sample shall be split to obtain two samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

Evaluation of Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	$\pm 5\%$
No. 16 (1.18 mm)	$\pm 5\%$
No. 30 (600 μm)	$\pm 4\%$
No. 200 (75 μm)	$\pm 2.0\%$
Asphalt Binder Content	$\pm 1.5\%$

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content, or if the percent unacceptable materials exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

Use of RAS in HMA. Type 1 or Type 2 RAS may be used alone or in conjunction with Reclaimed Asphalt Pavement (RAP) in all HMA mixtures up to a maximum of 5.0 percent by weight of total mix.

- (a) Level 1 asphalt binder replacement. The maximum Level 1 RAS or RAS/RAP blend usage will be dictated by the Level 1 – Maximum Asphalt Binder Replacement (MABR) table listed below.

HMA Mixtures ^{17, 21}	Level 1 – Maximum Asphalt Binder Replacement, %		
	Binder/Leveling Binder	Surface	Polymer Modified ^{31, 41}
30	35	35	10
50	30	25	10
70	25	20	10
90	20	15	10
105	10	10	10

- 1/ For HMA shoulder and stabilized subbase (HMA “All Other”) N-30, the maximum binder replacement shall be 50 percent.
- 2/ When the asphalt binder replacement exceeds 20 percent for all mixtures, except for SMA and IL-4.75, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 25 percent asphalt binder replacement would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the maximum asphalt binder replacement shall be 20 percent. When the binder replacement exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to PG70-28).
- 4/ For IL-4.75 mix the maximum asphalt binder replacement shall not exceed 20 percent. When the asphalt binder replacement exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to a PG70-28).

(b) Level 2 asphalt binder replacement. The maximum Level 2 RAS or RAS/RAP blend usage will be dictated by the Level 2 – MABR table listed below.

HMA Mixtures ^{1/, 2/}	Level 2 – Maximum Asphalt Binder Replacement, %		
	Ndesign	Binder/Leveling Binder	Surface
30	40	40	10
50	40	30	10
70	30	20	10
90	30	20	10
105	30	15	10

- 1/ For HMA shoulder and stabilized subbase (HMA “All Other”) N-30, the maximum binder replacement shall be 50 percent.
- 2/ When the asphalt binder replacement exceeds 20 percent for all mixtures, except for SMA and IL-4.75, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 25 percent asphalt binder replacement would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the maximum asphalt binder replacement shall be 20 percent. When the binder replacement exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to PG70-28).
- 4/ For IL-4.75 mix the maximum asphalt binder replacement shall not exceed 30 percent. When the asphalt binder replacement exceeds 10 percent, the high and low virgin asphalt binder grade shall each be reduced by one grade (i.e. 15 percent asphalt binder replacement would require a virgin asphalt binder grade of PG76-22 to be reduced to a PG70-28).

HMA Mix Designs. RAS and RAS/RAP designs shall be submitted for volumetric verification. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.500 shall be used for mix design purposes.

RAS and RAS/RAP mix designs with asphalt binder replacements exceeding the Level 1 – MABR limits specified herein, shall be tested prior to submittal for verification, according to Illinois Modified AASHTO T324 (Hamburg Wheel). RAS and RAS/RAP mixtures exceeding the Level 1 MABR limits shall meet the following requirements.

Asphalt Binder Grade	# Repetitions	Maximum Rut Depth in. (mm)
PG76-XX	20,000	1/2 (12.5)
PG70-XX	15,000	1/2 (12.5)
PG64-XX	10,000	1/2 (12.5)
PG58-XX	10,000	1/2 (12.5)

HMA Production. Mixture production, where the RAS and RAS/RAP asphalt binder replacement exceeds the Level 1 MABR, shall be sampled within the first 500 tons (450 metric tons) on the first day of production with a split reserved for the Department. The mix sample shall be tested according to Illinois Modified AASHTO T324 and shall meet the requirements specified herein. RAS and RAS/RAP mix production shall not exceed 1500 tons (1350 metric tons) or one day’s production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the RAS and RAS/RAP plant produced mixture conformance is demonstrated prior to start of mix production for a State contract.

RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

When producing HMA containing RAS, a positive duct control system shall be utilized.

HMA plants utilizing RAS shall be capable of automatically recording and printing the following information.

- (a) Dryer Drum Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (4) Accumulated dry weight of RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

- (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- (7) Residual asphalt binder in the RAS material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAS moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS are printed in wet condition.)

(b) Batch Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- (4) Mineral Filler weight to the nearest pound (kilogram).
- (5) RAS weight to the nearest pound (kilogram).
- (6) Virgin asphalt binder weight to the nearest pound (kilogram).
- (7) Residual asphalt binder in the RAS material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

SHOULDER RUMBLE STRIPS (BDE)

Effective: January 1, 2012

Revise Article 642.05 of the Standard Specifications to read:

“642.05 Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for SHOULDER RUMBLE STRIPS, 8 INCH (200 MM) or SHOULDER RUMBLE STRIPS, 16 INCH, (400 MM).’

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

Revised: April 1, 2011

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting according to Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work.

The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

The mobilization payment to the subcontractor is an advance payment of the reported amount of the subcontract and is not a payment in addition to the amount of the subcontract; therefore, the amount of the advance payment will be deducted from future progress payments.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

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.

TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: August 1, 2011

Revise the third sentence of the third paragraph of Article 105.03(b) of the Standard Specifications to read:

“The daily monetary deduction will be \$2,500.”

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 Article 107.31 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 non-execution 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."

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012

Description. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) for N30, N50, and N70 mixtures at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein.

In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Materials.

Add the following to Article 1030.02 of the Standard Specifications.

“(h) Warm Mix Asphalt (WMA) Technologies (Note 3)”

Add the following note to Article 1030.02 of the Standard Specifications.

“Note 3. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, “Warm-Mix Asphalt Technologies”.”

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

“**1102.01 Hot-Mix Asphalt Plant.** The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, “Approval of Hot-Mix Asphalt Plants and Equipment”. Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements.”

Add the following to Article 1102.01(a) of the Standard Specifications.

“(13) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.
- b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer.

The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes.”

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

“(d) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification. Additional mixture verification requirements include Hamburg Wheel testing according to Illinois Modified AASHTO T324 and tensile strength testing according to Illinois Modified AASHTO T283 which shall meet the criteria in Tables 1 and 2 respectively herein. The Contractor shall provide the additional material as follows:
 - a. Four gyratory specimens to be prepared in the Contractor’s lab according to Illinois Modified AASHTO T324.
 - b. Sufficient mixture to conduct tensile strength testing according to Illinois Modified AASHTO T283.

Table 1. Illinois Modified AASHTO T324 Requirements ^{1/}

Asphalt Binder Grade	# Wheel Passes	Max Rut Depth in. (mm)
PG 76-XX	20,000	1/2 in. (12.5 mm)
PG 70-XX	15,000	1/2 in. (12.5 mm)
PG 64-XX	10,000	1/2 in. (12.5 mm)
PG 58-XX		

1/ Loose WMA shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Table 2. Tensile Strength Requirements

Asphalt Binder Grade	Tensile Strength psi (kPa)	
	Minimum	Maximum
PG 76-XX	80 (552)	200 (1379)
PG 70-XX		
PG 64-XX	60 (414)	200 (1379)”
PG 58-XX		

Production.

Revise the second paragraph of Article 1030.06(a) of the Standard Specifications to read:

“At the start of mix production for HMA, WMA, and HMA using WMA technologies, QC/QA mixture start-up will be required for the following situations; at the beginning of production of a new mix of a new mixture design, at the beginning of each production season, and at every plant utilized to produce mixtures, regardless of the mix.”

Insert the following after the sixth paragraph of Article 1030.06(a) of the Standard Specifications:

“Warm mix technologies shall be as follows.

- (1) Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 and tensile strength testing according to Illinois Modified AASHTO T283 (approximately 110 lb (50 kg) total).
- (2) Upon completion of the start-up, WMA production shall cease. The Contractor may revert to HMA production provided a start-up has been previously completed for the current construction season for the mix design. WMA may resume once all the test results, including Hamburg Wheel results are completed and found acceptable by the Engineer.”

Add the following after the first paragraph of Article 1030.05(d)(2)c. of the Standard Specifications:

“During production of each WMA mixture or HMA utilizing WMA technologies, the Engineer will request a minimum of one randomly located sample, identified by the Engineer, for Hamburg Wheel testing to determine compliance with the requirements specified in Table 1 herein.”

Quality Control/Quality Assurance Testing.

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

Parameter	Frequency of Tests	Frequency of Tests	Test Method See Manual of Test Procedures for Materials
	High ESAL Mixture Low ESAL Mixture	All Other Mixtures	
Aggregate Gradation % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm) Note 1.	1 washed ignition oven test on the mix per half day of production Note 4.	1 washed ignition oven test on the mix per day of production Note 4.	Illinois Procedure
Asphalt Binder Content by Ignition Oven Note 2.	1 per half day of production	1 per day	Illinois-Modified AASHTO T 308
VMA Note 3.	Day's production ≥ 1200 tons: 1 per half day of production	N/A	Illinois-Modified AASHTO R 35

	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		
Air Voids Bulk Specific Gravity of Gyratory Sample Note 5.	Day's production ≥ 1200 tons: 1 per half day of production Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	1 per day	Illinois-Modified AASHTO T 312
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	1 per day	Illinois-Modified AASHTO T 209

Note 1. The No. 8 (2.36 mm) and No. 30 (600 μm) sieves are not required for All Other Mixtures.

Note 2. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

Note 3. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.

Note 4. The Engineer reserves the right to require additional hot bin gradations for batch

Note 5. The WMA compaction temperature for mixture volumetric testing shall be 270 ± 5 °F (132 ± 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 ± 5 °F (132 ± 3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature it shall be reheated to standard HMA compaction temperatures.”

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

“The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C).
WMA shall be delivered at a minimum temperature of 215 °F (102 °C).”

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING (BDE)

Effective: January 1, 2012

Description. This work shall consist of furnishing and applying thermoplastic pavement markings with a wet reflective media. Work shall be according to Section 780 of the Standard Specifications, except as modified herein.

Revise the seventh paragraph of Article 780.05 of the Standard Specifications to read:

“Thermoplastic marking shall be placed with drop on glass beads and wet reflective media uniformly applied to ensure adequate dry and wet retroreflectivity. The combination of thermoplastic material, glass beads, and wet reflective media used shall preclude the surface beads and wet reflective media from sinking deeply into the thermoplastic.”

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) of applied line width, as specified, for WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING – LINE; and/or per square foot (square meter) for WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING – LETTERS AND SYMBOLS.

Delete the last sentence of Article 1095.01(f) of the Standard Specifications.

Add the following to Article 1095.01 of the Standard Specifications.

“(g) Wet Reflective Media. The wet reflective media shall be according to the manufacturer’s specifications. Once applied, the wet reflective thermoplastic pavement markings shall meet the following retroreflectivity requirements when tested according to ASTM E2177 and ASTM E2176. The readings shall be obtained with a portable retroreflectometer meeting ASTM E1710.

Wet Retroreflectivity Requirements R_L (mcc/lx/m ²)		
	White	Yellow
Wet Recovery (ASTM E2177)	350	275
Wet Continuous (ASTM E2176)	100	75”

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **60** working days.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: January 1, 2012

Description. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

$$CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$$

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).

%AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 24.99) / 1000$. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and $\% AC_V$.

For bituminous materials measured in gallons: $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$

For bituminous materials measured in liters: $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

Where: A = Area of the HMA mixture, sq yd (sq m).
D = Depth of the HMA mixture, in. (mm).
 G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.
V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
BITUMINOUS MATERIALS COST ADJUSTMENTS**

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract?

Yes No

Signature: _____ **Date:** _____

FUEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 1, 2009

Revised: July 1, 2009

Description. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name and sign and date the form shall make this contract exempt of fuel cost adjustments for all categories of work. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and work added by adjusted unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Added work paid for by time and materials will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

- (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C – HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / \$1000

Metric Units		
Category	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
E – Structures	30.28	liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
B	sq yd to ton	0.057 ton / sq yd / in depth
	sq m to metric ton	0.00243 metric ton / sq m / mm depth
C	sq yd to ton	0.056 ton / sq yd / in depth
	sq m to metric ton	0.00239 m ton / sq m / mm depth
D	sq yd to cu yd	0.028 cu yd / sq yd / in depth
	sq m to cu m	0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

$$CA = (FPI_P - FPI_L) \times FUF \times Q$$

Where: CA = Cost Adjustment, \$
FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting, \$/gal (\$/liter)
FUF = Fuel Usage Factor in the pay item(s) being adjusted
Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Progress Payments. Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Final Quantities. Upon completion of the work and determination of final pay quantities, an adjustment will be prepared to reconcile any differences between estimated quantities previously paid and the final quantities. The value for the balancing adjustment will be based on a weighted average of FPI_P and Q only for those months requiring the cost adjustment. The cost adjustment will be applicable to the final measured quantities of all applicable pay items.

Basis of Payment. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the FPI_L and FPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(FPI_L - FPI_P) \div FPI_L\} \times 100$$

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
FUEL COST ADJUSTMENT**

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of fuel cost adjustments in all categories. Failure to indicate "Yes" for any category of work at the time of bid will make that category of work exempt from fuel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following categories of work?

- | | | |
|--|-----|--------------------------|
| Category A Earthwork. | Yes | <input type="checkbox"/> |
| Category B Subbases and Aggregate Base Courses | Yes | <input type="checkbox"/> |
| Category C HMA Bases, Pavements and Shoulders | Yes | <input type="checkbox"/> |
| Category D PCC Bases, Pavements and Shoulders | Yes | <input type="checkbox"/> |
| Category E Structures | Yes | <input type="checkbox"/> |

Signature: _____ **Date:** _____

SQUAD LEADER: CHRIS CONDERMAN

SENIOR SQUAD LEADER: CHAD SPREEMAN

PROJECT ENGINEER: REBECCA MARRUFFO

(815)284-5955

FOR INDEX OF SHEETS & STATE STANDARDS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAP 561 (IL 2)

SECTION (31, 32) RS

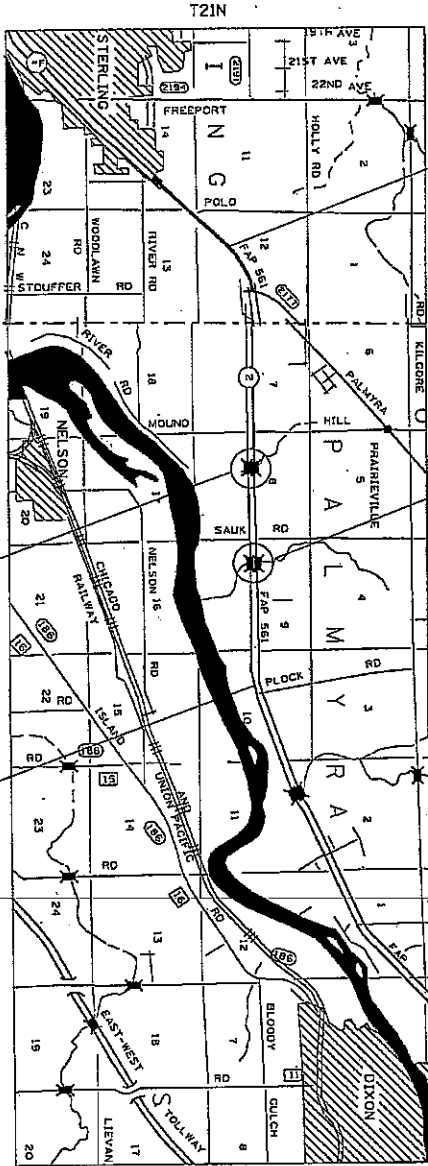
PROJECT : ACF-056(030)

WHITESIDE & LEE COUNTY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SECTION & IMPROVEMENT BEGINS
STA. 197+00
BRIDGE OMISSION:
STA 115+09 TO 116+21 E.B.
STA 114+50 TO 115+82 W.B.

692-092-12



STERLING TOWNSHIP SECTIONS 12
PALMIRA TOWNSHIP SECTIONS 7, 8, 9, & 10

JOULE
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-992-0123

CONTRACT NO. 64540

FAP 561 (IL 2) SECTION (31, 32) RS WHITESIDE & LEE COUNTY

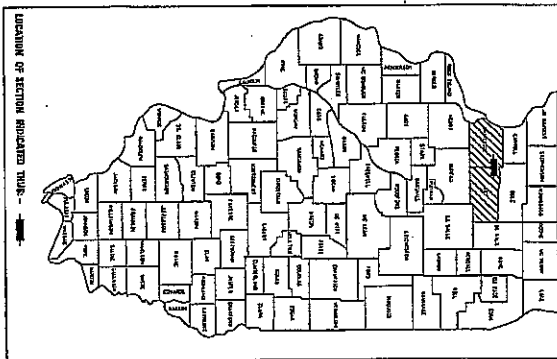
BRIDGE OMISSION
STA 66+51 TO 67+53 E.B. STA. 166+55
STA 65+91 TO 67+13 W.B.

NET LENGTH OF PROJECT = 19402 LIN FEET = 3.68 MILES
GROSS LENGTH OF PROJECT = 19634 LIN FEET = 3.72 MILES

F.A.P. FILE NO.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
561	(31,32)RS		1

* WHITESIDE & LEE

D-92-091-00



LOCATION OF SECTION INDICATED THIS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED **DEC 9 11**
Rebecca Marruffo CONTRACT ENGINEER

ENGINEER OF DESIGN AND ENVIRONMENT
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY
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642201	Shoulder Rumble Strips
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701101	Off-Road Operations, Multilane 15' (4.5 m) to 24" (600 mm) From Pavement Edge
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701311	Lane Closure, 2L, 2W, Moving Operations - Day Only
701400	Approach to Lane Closure, Freeway/Expressway
701401	Lane Closure, Freeway/Expressway
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729001	Applications for Types A and B Metal Posts (For Signs & Markers)
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781001	Typical Applications Raised Reflective Pavement Markers
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886006	Typical Layout for Detection Loops

SUMMARY OF QUANTITIES

FAP 581 (IL 2)
SECTION (81,29)RS
WHITESIDE & LEE COUNTIES
CONTRACT B4540
SHEET 3 OF 195

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	RURAL	
				0005 80% FEDERAL 20% STATE WHITESIDE	0005 80% FEDERAL 20% STATE LEE
20200100	EARTH EXCAVATION	CU YD	215		215
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	20		20
25100630	EROSION CONTROL BLANKET	SQ YD	1,396		1,396
29000305	TEMPORARY DITCH CHECKS	FOOT	117		117
29000400	PERIMETER EROSION BARRIER	FOOT	426		426
28100107	STONE RIPRAP CLASS A4	SQ YD	68		68
28200200	FILTER FABRIC	SQ YD	68		68
31100500	SUB-BASE GRANULAR MATERIAL TYPE A 6"	SQ YD	1,309	488	811
40800200	BITUMINOUS MATERIALS (PRIME COAT)	TON	123	22	101
40800300	AGGREGATE (PRIME COAT)	TON	323	66	257
40800525	LEVELING BINDER (HAND METHOD) N50	TON	102	58	44
40800622	LEVELING BINDER (MACHINE METHOD) IL-9-SFG, N50	TON	8,020	2,355	5,665
4080085	CONSTRUCTING TEST STAMP	EACH	1		1
4080092	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	SQ YD	647	246	302
40800930	TEMPORARY RAMP	SQ YD	664	249	416
40801005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	410	151	259
40803310	HOT-MIX ASPHALT SURFACE COURSE MIX 'C', N50	TON	10,188	1,379	8,784
40803335	HOT-MIX ASPHALT SURFACE COURSE MIX 'D', N50	TON	10,901	2,589	8,312
40800850	INCIDENTAL HOT MIX ASPHALT SURFACING	TON	1,220	166	1,054
44000157	HOT-MIX ASPHALT SURFACE REMOVAL 2"	SQ YD	137,576	26,326	111,250
44000600	COMBINATION CURB AND GUTTER REMOVAL	FOOT	333	333	
44002224	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 6"	SQ YD	1,257	448	789
440024260	PAVED SHOULDER REMOVAL	SQ YD	1,309	498	811
44200108	PAVEMENT PATCHING, TYPE II, 9 INCH	SQ YD	291	178	112
44200112	PAVEMENT PATCHING, TYPE III, 9 INCH	SQ YD	103	46	57
44200114	PAVEMENT PATCHING, TYPE IV, 9 INCH	SQ YD	149	145	4
44201299	DOVEL BARS 1 1/2"	EACH	940	580	360
44213100	PAVEMENT FABRIC	SQ YD	309	191	118

SUMMARY OF QUANTITIES

FAP 661 (1L 2)
SECTION (31.30)RS
WHITESIDE & LEE COUNTIES
CONTRACT 64540
SHEET 4 OF 135

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	RURAL	
				0005 80% FEDERAL 20% STATE WHITESIDE	0006 80% FEDERAL 20% STATE LEE
44213200	SAW CUTS	FOOT	2,698	1,542	1,156
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	5,000	1,000	4,000
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	298	107	189
48203028	HOT-MIX ASPHALT SHOULDERS, 8"	SQ. YD	1,309	498	811
51600100	NAME PLATES	EACH	1		1
54001081	GRADED BOX CULVERT END SECTIONS, CULVERT NO. 01	EACH	1		1
57300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	24.1		24.1
60100089	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	1		1
60100090	FRENCH DRAINS	CU YD	8	6	3
60108100	PIPE UNDERDRAINS # (SPECIAL)	FOOT	20		20
60260100	INLETS TO BE ADJUSTED	EACH	1	1	0
60365000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-5-24	FOOT	148	148	
60609900	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9-12	FOOT	185	185	
63200310	GUARDRAIL REMOVAL	FOOT	318		318
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	32,842	4,913	27,929
66700306	PERMANENT SURVEY MARKERS, TYPE II	EACH	1		1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	2	4
67100100	MOBILIZATION	L SUM	1	0.2	0.8
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	0.2	0.8
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.2	0.8
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	0.2	0.8
70102835	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.2	0.8
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	10	10
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	30,388	5,032	25,356

SUMMARY OF QUANTITIES

FAP 561 (11.2)
SECTION 01432PRS
WHITESIDE & LEE COUNTIES
CONTRACT 64540
SHEET 6 OF 136

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	RURAL 0005 80% FEDERAL 20% STATE WHITESIDE	RURAL 0005 80% FEDERAL 20% STATE LEE
70300269	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1,107	139	968
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ. FT.	4,050	711	3,339
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	846	157	682
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	724	83	641
88600400	DETECTOR LOOP, SPECIAL	FOOT	1,680		1,680
X0322778	RODENT SHIELDS	EACH	1		1
X6024503	INLETS TO BE ADJUSTED WITH NEW FRAME AND GRATE (SPECIAL)	EACH	2	2	
X6026600	MANHOLES TO BE ADJUSTED (SPECIAL)	EACH	3	1	2
X7801000	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ. FT.	1,008	104	904
X7801004	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	91,621	18,959	72,732
X7801006	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	9,680	1,450	8,200
X7801008	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	5,947	1,150	4,797
X7801012	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	3,734	585	3,148
X7801024	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	389	46	323
X7830089	GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS	SQ. FT.	1,254	130	1,124
X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	87,030	17,201	70,029
X7830074	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	9,650	1,450	8,200
X7830076	GROOVING FOR RECESSED PAVEMENT MARKING 6"	FOOT	5,947	1,150	4,797
X7830078	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	3,834	585	3,148
X7830090	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	389	46	323
Z0006400	BREAKER-RUN CRUSHED STONE	TON	40		40
Z0008788	AERIAL SPEED CHECK MARKING	FOOT	109		109
Z0013798	CONSTRUCTION LAYOUT	L. SUM	1	0.2	0.8
Z0028415	GEO TECHNICAL REINFORCEMENT	SQ. YD.	1,368	542	824
Z0028700	GRANULAR SUBGRADE REPLACEMENT	CU YD.	10	7	3
Z0034105	MATERIAL TRANSFER DEVICE	TON	16,531	6,776	9,755

*Specialty Items

GENERAL NOTES

The final top 4 inches of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Yard for EARTH EXCAVATION.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of EARTH EXCAVATION.

Previously pugmilled stockpiles of "Type A" older than 1 month will not be approved for use until a moisture check is run to verify moisture content. Material shipped to projects without being tested will not be accepted.

Class C Patches shall be tied to the adjacent lane when the patches are more than 20 feet. The cost of the tie bars shall be included in the cost of the patch.

When laying out for patching, the minimum distance between new patches (saw cut to saw cut) shall be 15 feet. When patch spacing is less than 15 feet, the pavement between patches shall also be removed and replaced.

The existing hot-mix asphalt on private and commercial entrances shall be bladed off or milled and disposed of outside the project limits. This could be the entire entrance or tapered at the end depending on if the mainline is resurfaced or milled and resurfaced. The cost of the blading, milling, rolling, and disposal is included in the contract unit price for INCIDENTAL HOT-MIX ASPHALT SURFACING.

The drop off that occurs at entrance edges as a result of resurfacing of the entrance shall be corrected using aggregate shoulder material. This work shall be paid for by the TON for Aggregate Shoulders of the type specified in the plans.

Milling machines on this project shall be capable of removing a layer of bituminous a minimum 6' wide and 1½ inches in depth in a single pass.

Any additional excavation required to construct the shoulder and/or place the Sub-base Granular Material shall be included in the cost of SUB-BASE GRANULAR MATERIAL, TYPE A.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Surface	Level Binder	Top Shoulder	Bottom Shoulder
PG:	PG 64-22	PG 64-22	PG 58-22	PG 58-22
Design Air Voids	4.0 @ N50	4.0 @ N50	3 @ N50	2 @ N50
Mixture Composition (Gradation Mixture)	IL 9.5 or 12.5	IL 9.5FG	IL 9.5, 12.5, 9.5 FG, 12.5FG	BAM or IL 19.0
Friction Aggregate	D	N/A	C	N/A
20 Year ESAL	0.9	0.9	N/A	N/A
Mix Unit Weight	112 lbs/sy/in		112 lbs/sy/in	

The Contractor will be required to furnish 5 1/2" high brass stencils as approved by the Engineer and install stationing at 250' intervals. Stationing shall be placed on both lanes of 2-lane highways and on the outside lanes in both directions on 4-lane highways. The stations shall be placed 6" inside the pavement marking edge so they can be read from the shoulder. This work will be included in the cost of the final pavement surface.

The area to be primed shall be limited to that which can be covered with HMA on the next days productivity, but no more than five days in advance of the placement of the HMA, unless approved by the Engineer.

The variable depth removal in the taper area will be paid for as HOT-MIX ASPHALT SURFACE REMOVAL, 2".

Install rumble strips in all shoulders in accordance with State Standard 642001. Rumble Strips shall be placed on shoulders on both sides of the pavement.

Connecting bands for corrugated metal pipes shall be metal and shall be coated with the same material as the pipe sections. The connecting bands shall be a minimum of 18" wide.

The underdrain system scheduled on this project is to be constructed in accordance with Section 601 of the Standard Specifications for Road and Bridge Construction, except CA 16 shall be used in lieu of FA 1 or FA 2 for trench backfill. The CA 16 shall be according to Article 1004.05 and Article 1004.01 of the Standard Specifications, except in the table, Course Aggregate Gradation, the percent passing the No. 16 sieve shall be $4 \pm 4\%$. The trench shall be wrapped using a fabric envelope meeting the requirements of Article 1080.05 of the Standard Specifications. Fabric encasing the pipe shall be eliminated.

If, during the grinding or resurfacing operations, the existing mailboxes become a hindrance, the Contractor shall be required to carefully remove and reinstall the mailboxes as directed by the Engineer. This work shall be included in the contract unit price for the INCIDENTAL HOT-MIX ASPHALT SURFACING.

The Contractor shall be responsible for collecting and maintaining an electronic log of all stakeout survey that is performed on the job, either by him/her or any sub-contractor performing the stakeout. Upon request, all logs shall be submitted to the Department. No additional compensation will be allowed for this work, but shall be considered included in the cost for CONSTRUCTION LAYOUT.

Pavement Marking shall be done according to Standard 780001, except as follows:

1. All words, such as ONLY, shall be 8' high.
2. All non-freeway arrows shall be the large size.
3. The distance between yellow no-passing lines shall be 8", not 7" as shown in the detail of Typical Lane and Edge Lines.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

CenturyTel (309/345-5240)
AT&T (309/686-3317)
IL American Water Co. (815/625-3196)
Kentucky Data Link (414/313-9032)

Commonwealth Edison Co. (815/490-2869)
NICOR Gas Co. (630/983-8676)
Comcast Cable (815/395-8977)
City of Sterling/Rick Powers (815/716-0454)

Permanent Survey Markers, Type II shall be cast-in-place as shown on District Standard 66.2. Option 2 would be to install a vaulted style, monumented as described by NGS as a 3D monument (Top Security Sleeve Rod Monument), with installation instructions provided by the District Chief of Surveys. If poured in place, the bottom of the marker shall be 5'-0" below the ground surface.

The Permanent Survey Markers, if possible, shall be installed at the beginning of the job and protected throughout.

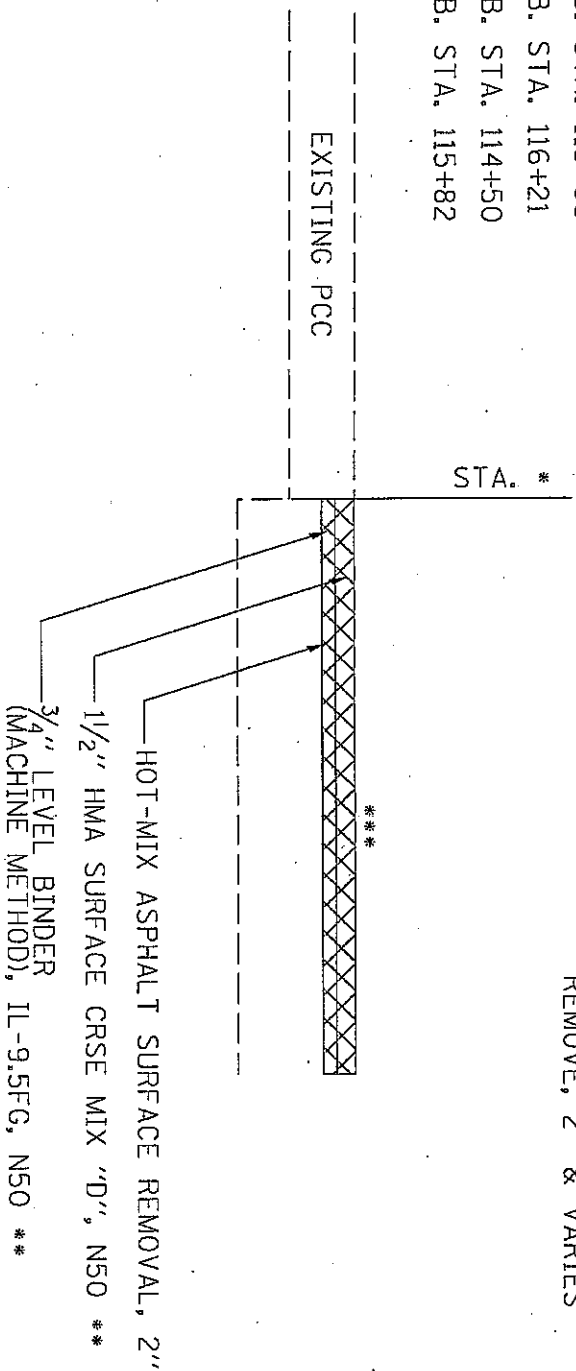
The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The horizontal coordinates must be derived by GPS and the elevation derived using an electronic level. The meta data, such as the Geoid used, (NGS adjustment i.e.: 97 HARN, 03, 07), and the base point(s) name or number shall be submitted along with a complete collection log. If collected using RTK method, it will require either 3 collections (averaged) from 2 different bases, or a minimum of 3 collections (averaged), at least 2 hours apart, from the same base. If using a CORS type network, the collection procedure shall include localizing with check shots on at least 2 different HARN monuments both before and after collection. The level circuit shall be run from furnished mark to furnished mark and then adjusted. The error of closure shall be submitted with the electronic level notes in a recognized format approved by the Engineer and/or the Chief of Surveys. The Engineer shall submit this information to the District Chief of Surveys.

All earthwork and sodding done for curb and gutter shall be included in the cost of COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24.

TYPICAL SECTIONS

BUTT JOINT TYPICAL --MAINLINE

W.B. STA. 197+00
 E.B. STA. 197+19 (OUTSIDE LANE) ****
 E.B. STA. 197+50 (INSIDE LANE) ****
 E.B. STA. 66+51
 E.B. STA. 67+53
 W.B. STA. 65+91
 W.B. STA. 67+13
 E.B. STA. 115+09
 E.B. STA. 116+21
 W.B. STA. 114+50
 W.B. STA. 115+82



- NOTES:
- * WHITESIDE & LEE
 - ** RATE OF APPLICATION
112 LB/SQ YD/IN
 - XXX PAVEMENT REMOVAL
 - XXX EXISTING PAVEMENT
 - *** MAINTAIN EXISTING CROSS SLOPE
 - **** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31,32)RS	*	136	9

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

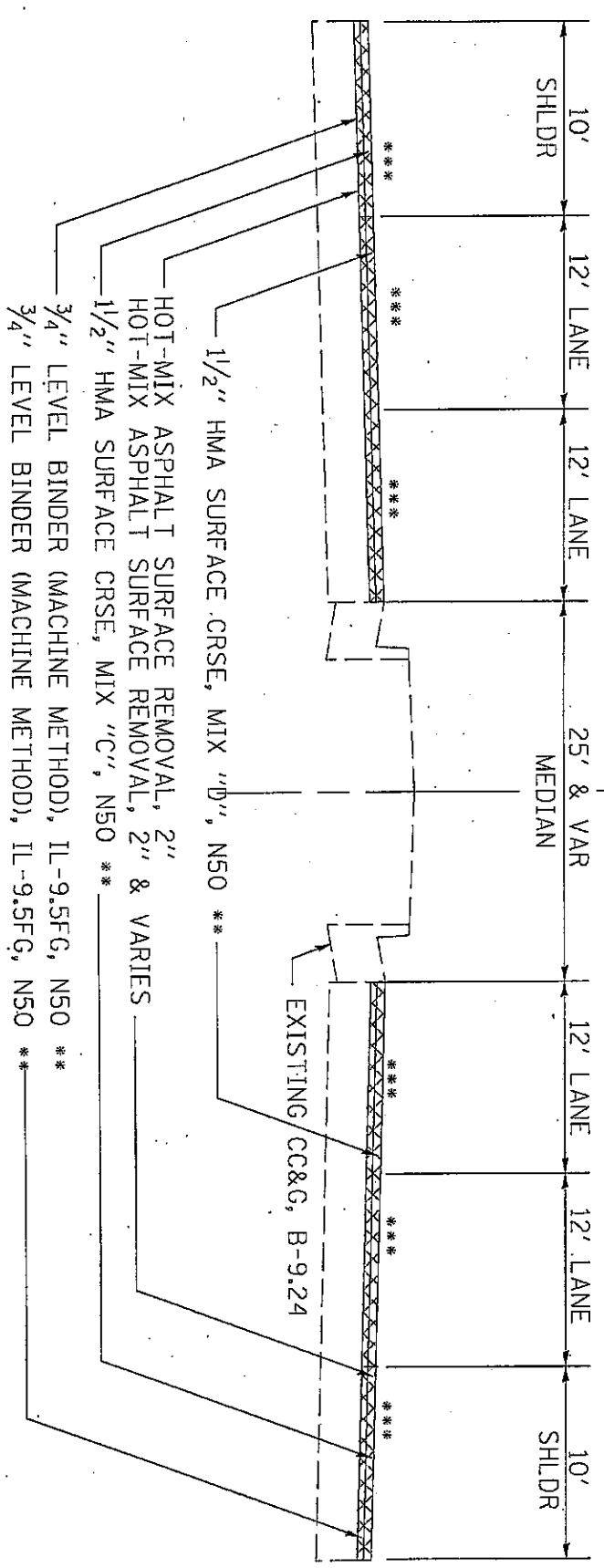
NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- XXX PAVEMENT REMOVAL
- XXX PAVEMENT REMOVAL
- XXX EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- **** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

W.B. STA. 197+00 - 201+50
 E.B. STA. 197+19 - 201+50 (OUTSIDE LANE) *****
 E.B. STA. 197+50 - 201+50 (INSIDE LANE) *****
 W.B./E.B. STA. 208+37 - 217+20

(WESTBOUND TRAFFIC)

(EASTBOUND TRAFFIC)



IL 2

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31.32)HS	*	136	10

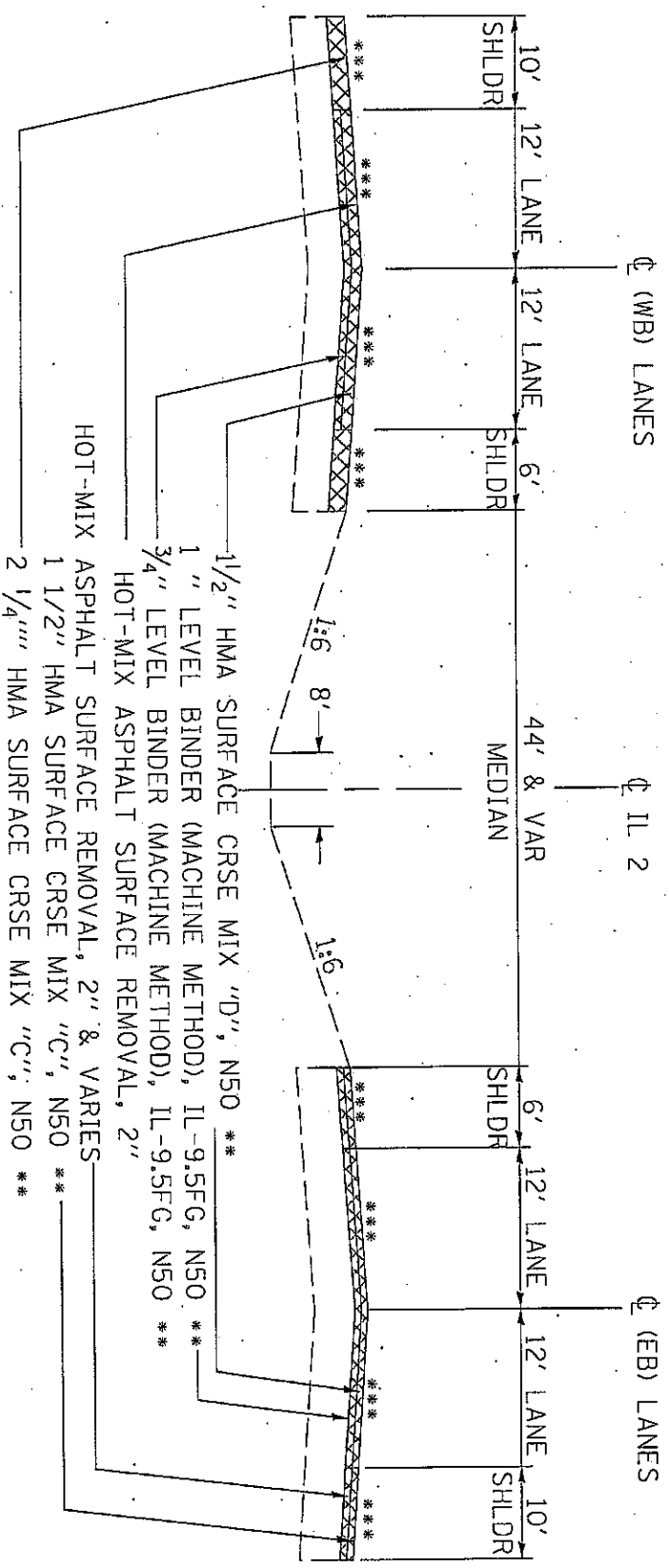
FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

CONTRACT NO. 64540

TYPICAL SECTIONS

W.B. STA. 217+20 - 226+79.81
 E.B. STA. 218+50 - 226+79.81 *****
 E.B. STA. 0+00 - 8+00 *****

- NOTES:
- * WHITESIDE & LEE
 - ** RATE OF APPLICATION
112 LB/SQ YD/IN
 - XXX PAVEMENT REMOVAL
 - XXX EXISTING PAVEMENT
 - **** MAINTAIN EXISTING CROSS SLOPE
 - **** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

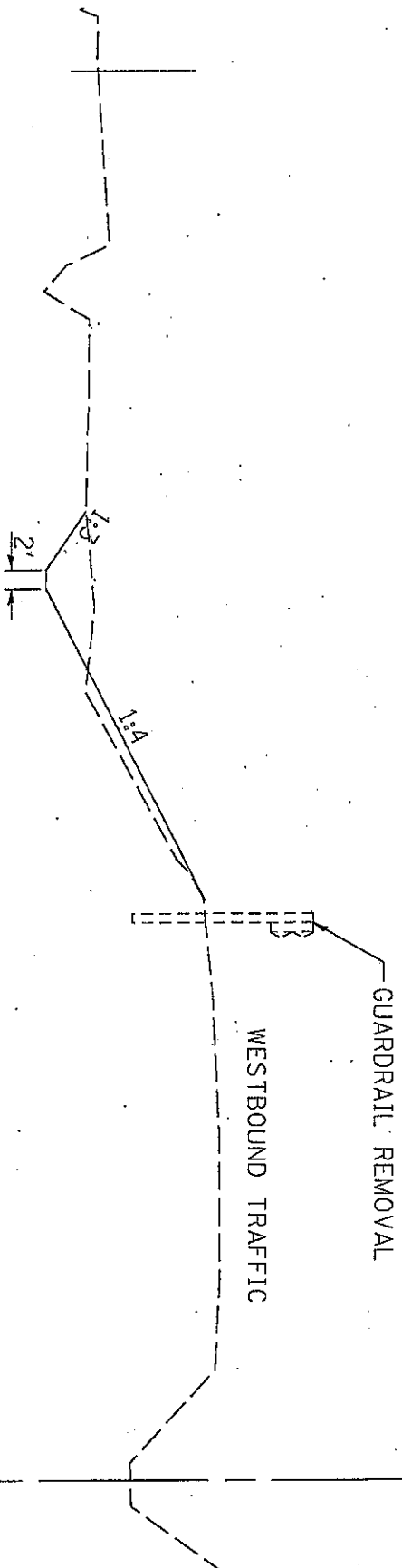
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561	(31,32)RS	*	136	12

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

E.B. STA. 3+25 - STA. 7+25

Q IL 2



* WHITESIDE & LEE

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31,32)BS	*	136	13

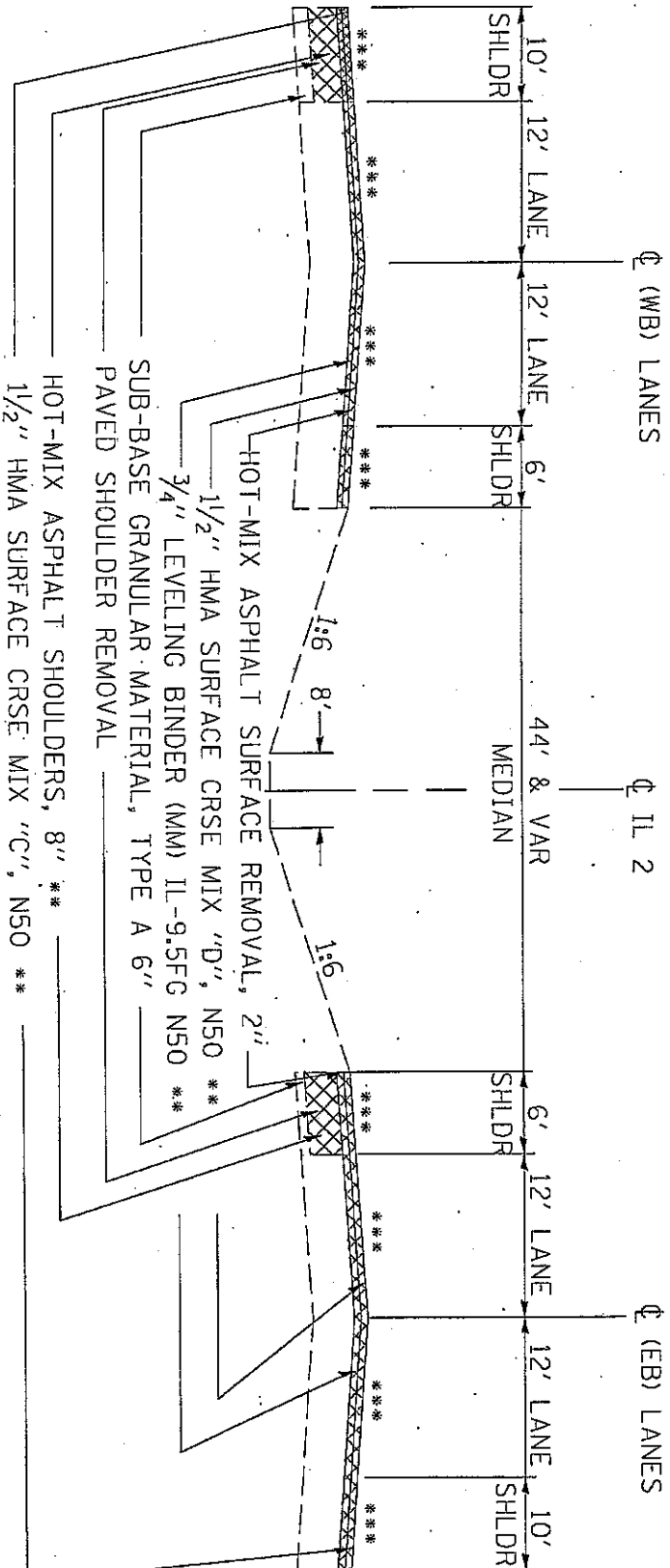
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

W.B./E.B. STA. 224+80 - 226+79.81
 W.B. STA. 0+00 - 2+50
 E.B. STA. 0+00 - 8+00

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- XXXX PAVEMENT REMOVAL
- XXXX PAVEMENT REMOVAL
- XXXX EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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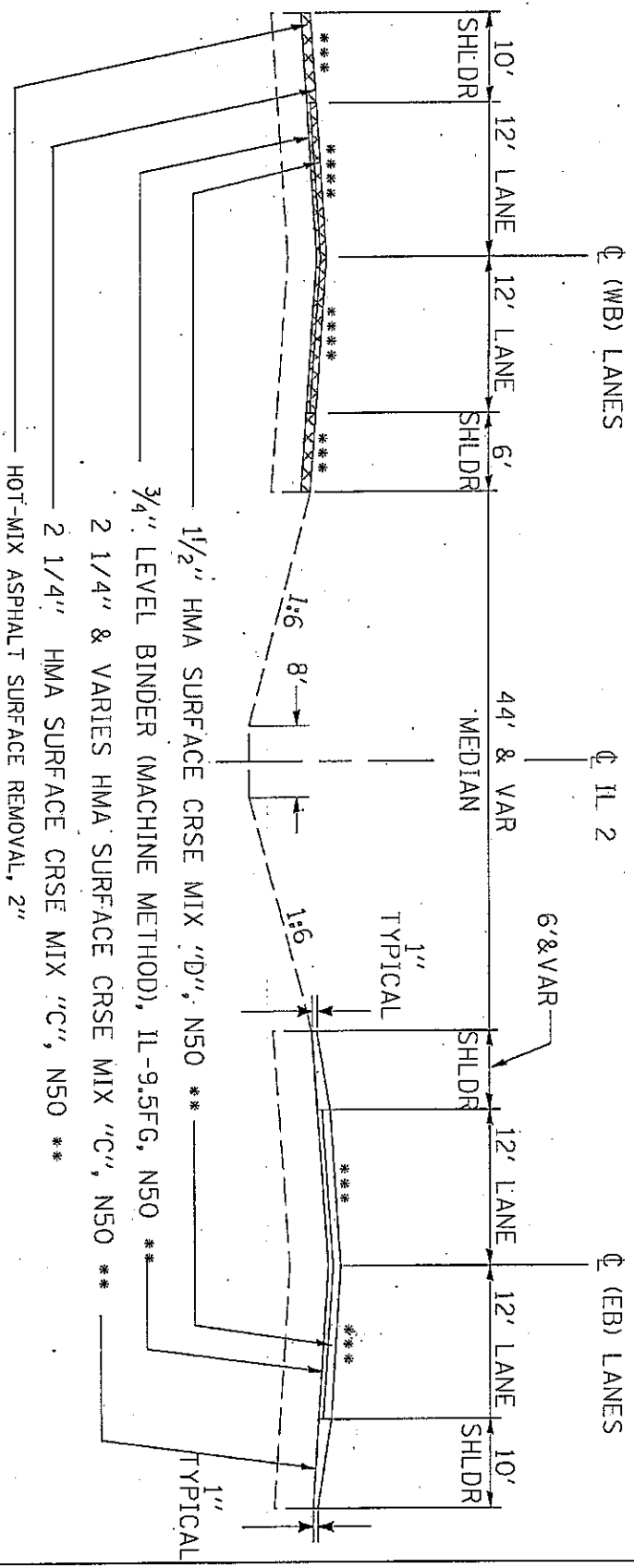
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- *** PAVEMENT REMOVAL
- **** EXISTING PAVEMENT
- ***** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

E.B. STA. 9+30 - 43+28
W.B. STA 0+00 - 44+58
W.B. STA. 67+13 - 97+24
E.B. STA. 68+83 - 95+94
E.B. STA. 117+51 - 135+67
W.B. STA. 115+82 - 136+97
E.B. STA. 151+22 - 165+25
W.B. STA. 149+92 - 166+55



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31,32)RS	*	136	15

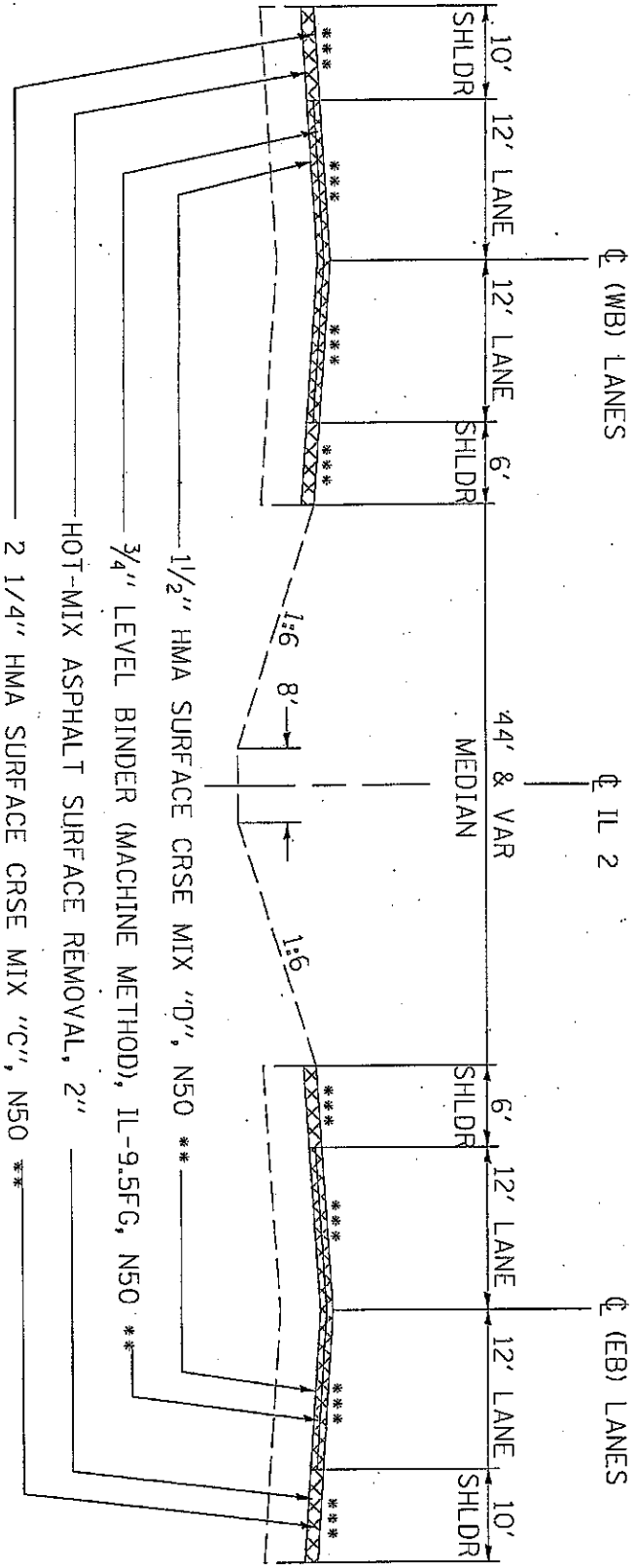
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- XXX PAVEMENT REMOVAL
- XXX EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

- W.B. STA. 44+58 - 57+78
- E.B. STA. 57+78 - 66+51 @ BRIDGE APPR. PAVEMENT
- W.B. STA. 57+78 - 65+91 @ BRIDGE APPR. PAVEMENT
- E.B. STA. 110+41 - 115+09 @ BRIDGE APPR. PAVEMENT
- W.B. STA. 110+41 - 114+50 @ BRIDGE APPR. PAVEMENT
- E.B. STA. 97+24 - 110+41
- W.B. STA. 97+24 - 110+41



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

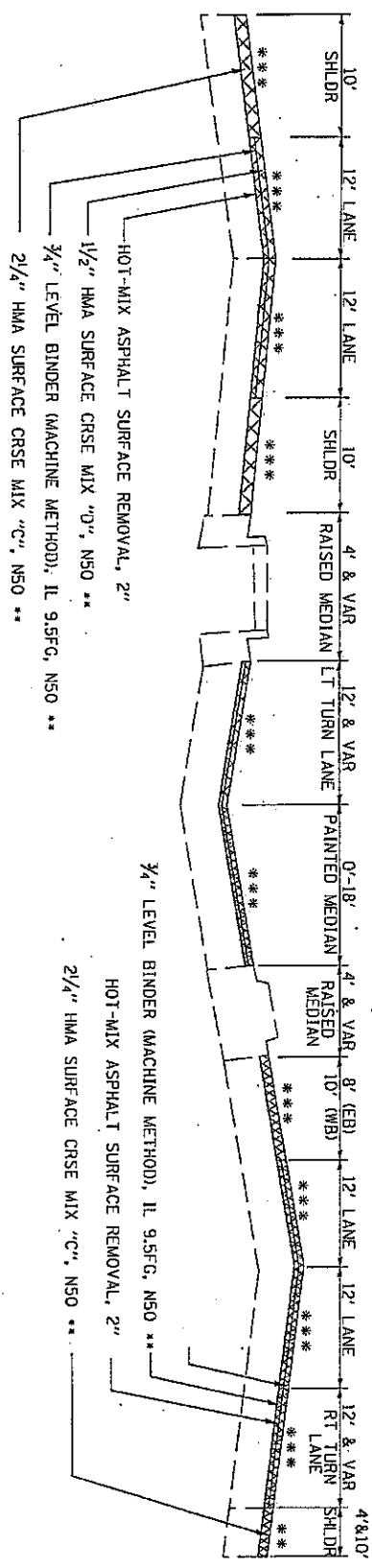
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561	(31,32)RS	*	136
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 64540

TYPICAL SECTIONS

LT. TURN BAY TYPICAL

- ⊙ MOUND HILL RD STA. 44+58 - 57+78
- ⊙ SAUK RD STA. 97+24 + 110+41
- ⊙ HILL DRIVE STA. 136+97 - 149+92

- NOTES:
- * WHITESIDE & LEE
 - ** RATE OF APPLICATION
112 LB/SQ YD/IN
 - ▣ PAVEMENT REMOVAL
 - ▨ EXISTING PAVEMENT
 - *** MAINTAIN EXISTING CROSS SLOPE
 - ***** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES



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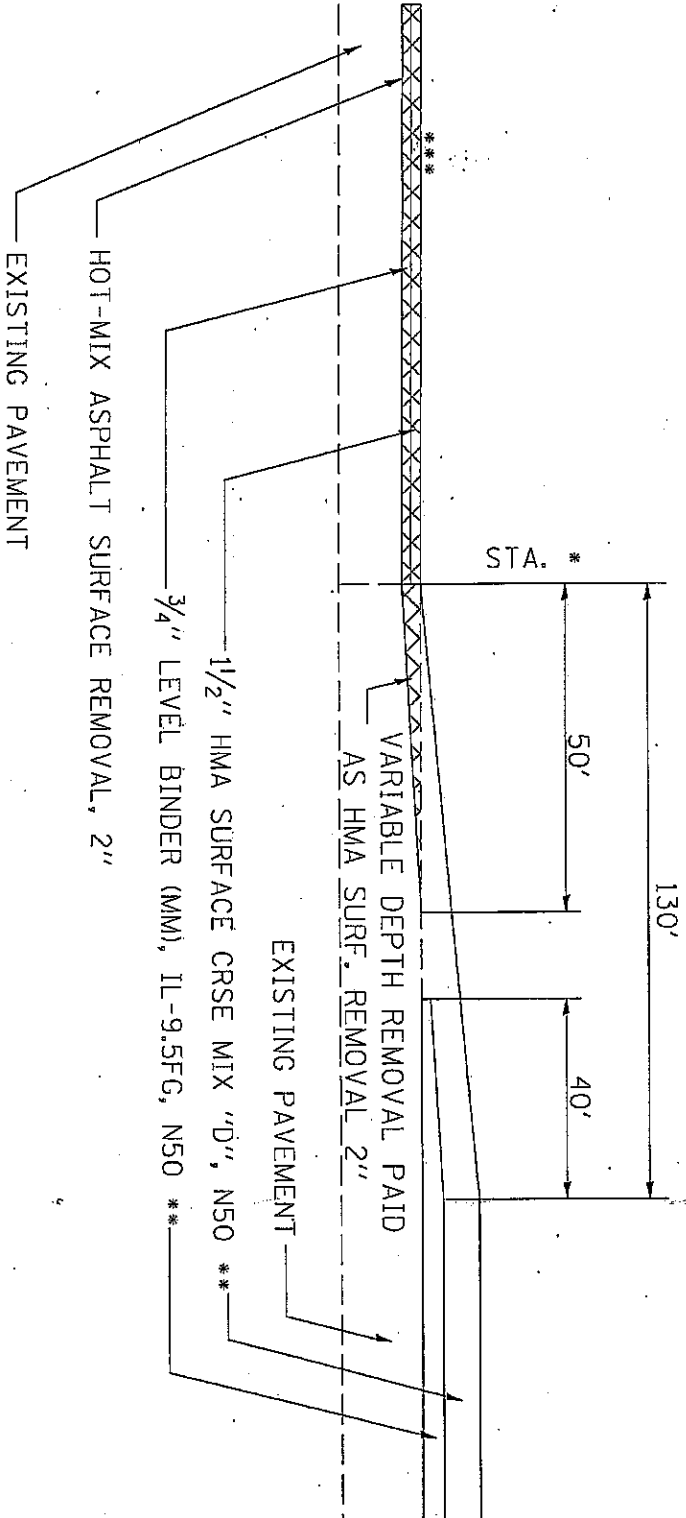
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
58B1	(31,32)RS	Whiteside	136	17
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 64540		

TYPICAL SECTIONS

E.B. STA. 8+00 - 9+30
 E.B. STA. 43+28 - 44+58
 E.B. STA. 67+53 - 68+83
 E.B. STA. 95+94 - 97+24
 E.B. STA. 116+21 - 117+51
 E.B. STA. 135+67 - 136+97
 E.B. STA. 149+92 - 151+22
 E.B. STA. 165+25 - 166+55



- NOTES:
- * WHITESIDE & LEE
 - ** RATE OF APPLICATION
112 LB/SQ YD/IN
 - *** PAVEMENT REMOVAL
 - **** EXISTING PAVEMENT
 - ***** MAINTAIN EXISTING CROSS SLOPE
 - ***** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31,32)RS	*	136	18

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

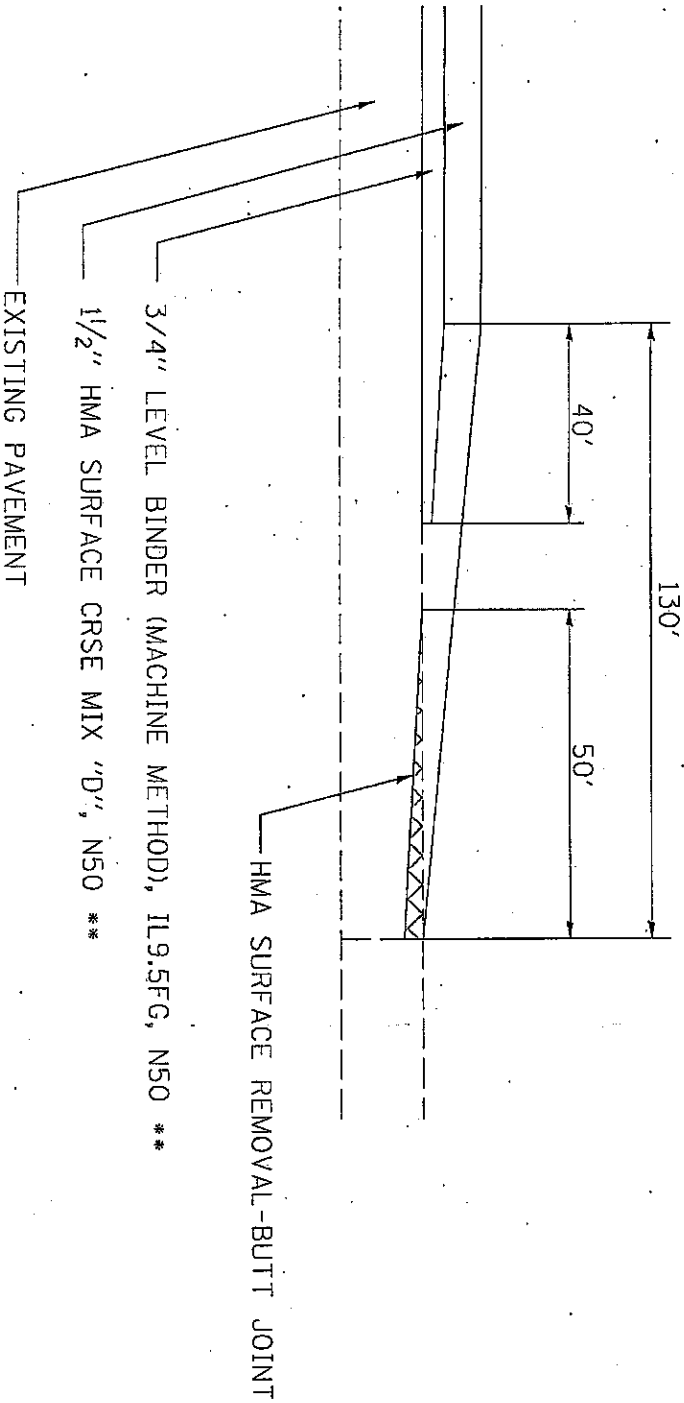
TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN.
- XXX PAVEMENT REMOVAL
- XXX PAVEMENT REMOVAL
- EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS-SLOPE
- **** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

TYPICAL TAPER

E.B. 165+25 to 166+55



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	31,32RS	*	136	19

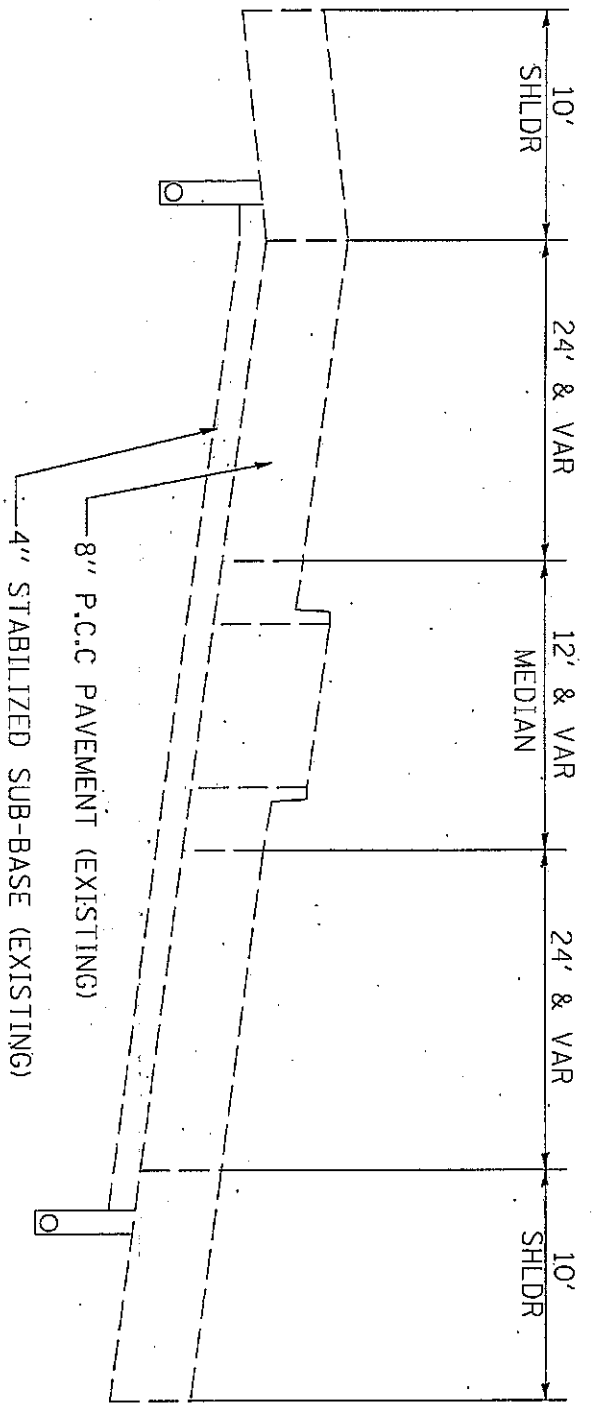
CONTRACT NO. 64540
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- ▨ PAVEMENT REMOVAL
- ▧ EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

PRAIRIEVILLE ROAD



*** SHOWN FOR INFORMATION ONLY ***

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS

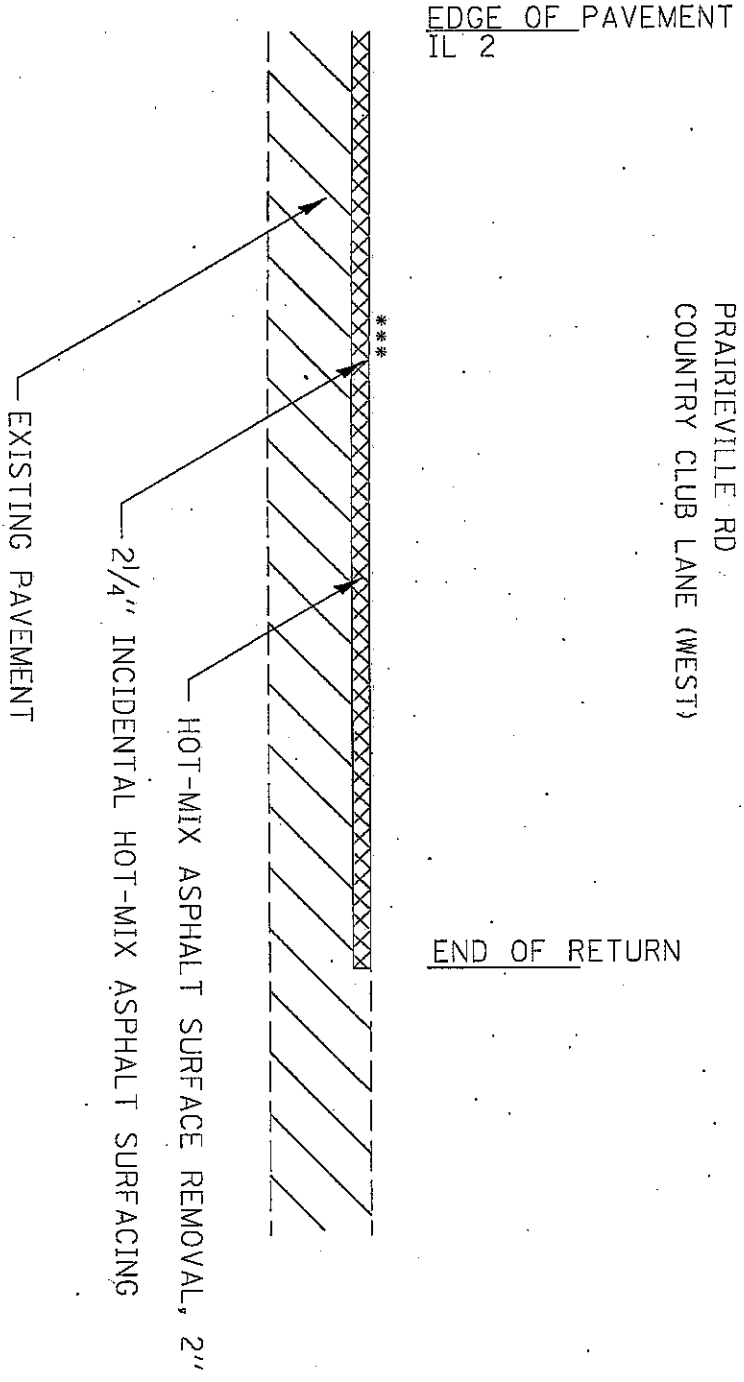
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561	(31,32)RS	*	136	20
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 64540		

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- XXX PAVEMENT REMOVAL
- XXX EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES

PRAIRIEVILLE RD
COUNTRY CLUB LANE (WEST)



EDGE OF PAVEMENT
IL 2

END OF RETURN

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS

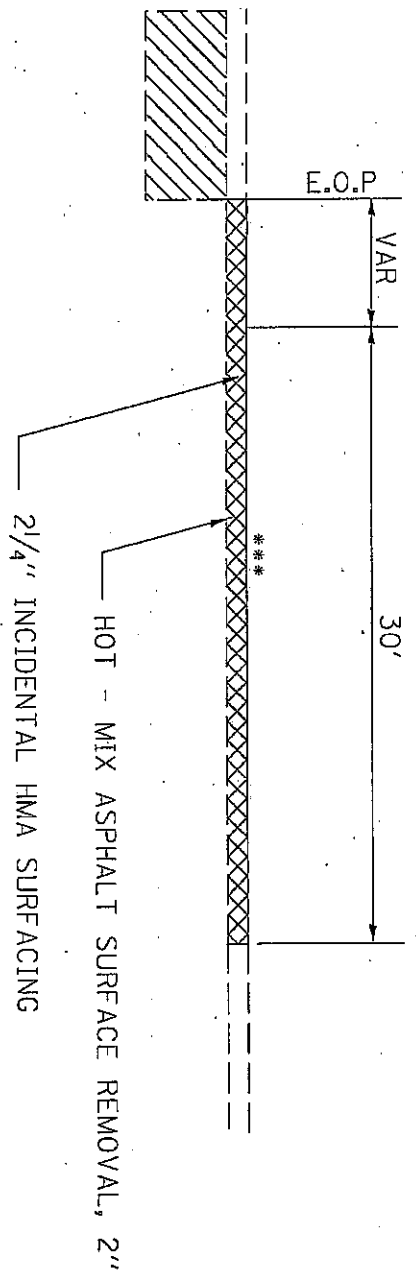
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561	(31,32)RS	*	136	21

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

- NOTES:
- * WHITESIDE & LEE
 - ** RATE OF APPLICATION
112 LB/SQ YD/IN
 - ▣ PAVEMENT REMOVAL
 - ▤ EXISTING PAVEMENT
 - *** MAINTAIN EXISTING CROSS SLOPE
 - **** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES

COUNTRY CLUB LANE (EAST)



FILE NAME =
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 USER NAME = ankrmgda
 PLOT DATE = Fri Dec 09 06:15:28 2011

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31,32)RS	*	136	22

CONTRACT NO. 64540

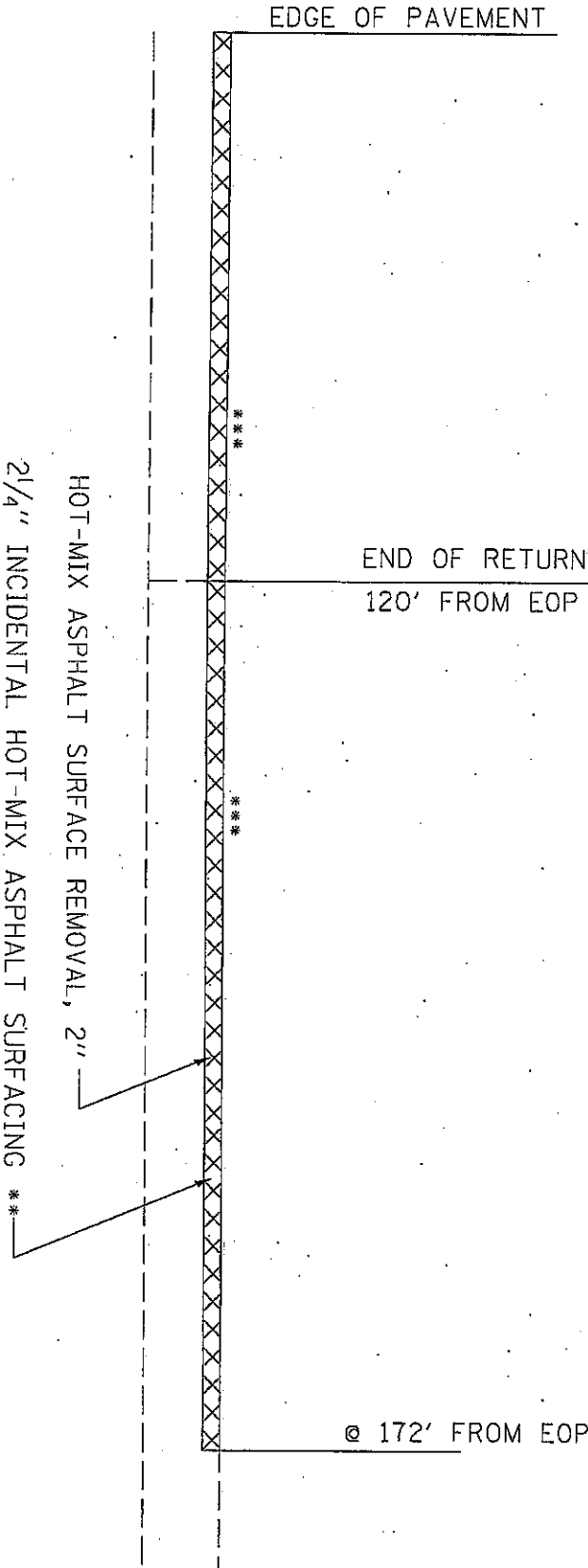
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- ☒ PAVEMENT REMOVAL
- ☒ EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- **** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES

MOUND HILL RD (NORTH)



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 PLOT DATE = Fri Dec 09 08:17:45 2011

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. R/E.	SECTION	COUNTY	TOTAL SHEET NO.
561	(31,32)RS	*	136 23

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- ▣ PAVEMENT REMOVAL
- ▤ EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES

MOUND HILL RD (SOUTH)
SAUK RD (NORTH & SOUTH)

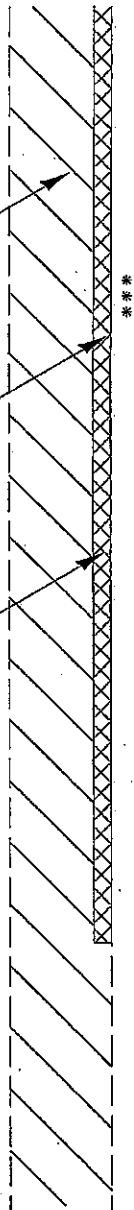
EDGE OF PAVEMENT
IT 2

END OF RETURN

** MOUND HILL RD = 12" THICKNESS
** SAUK RD = 14.5" THICKNESS

EXISTING PAVEMENT**

HOT-MIX ASPHALT SURFACE REMOVAL, 2"
2 1/4" INCIDENTAL HOT-MIX ASPHALT SURFACING



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PLOT DATE = Fri Dec 09 08:14:25 2011

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F&P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	131,32RS	*	136	24

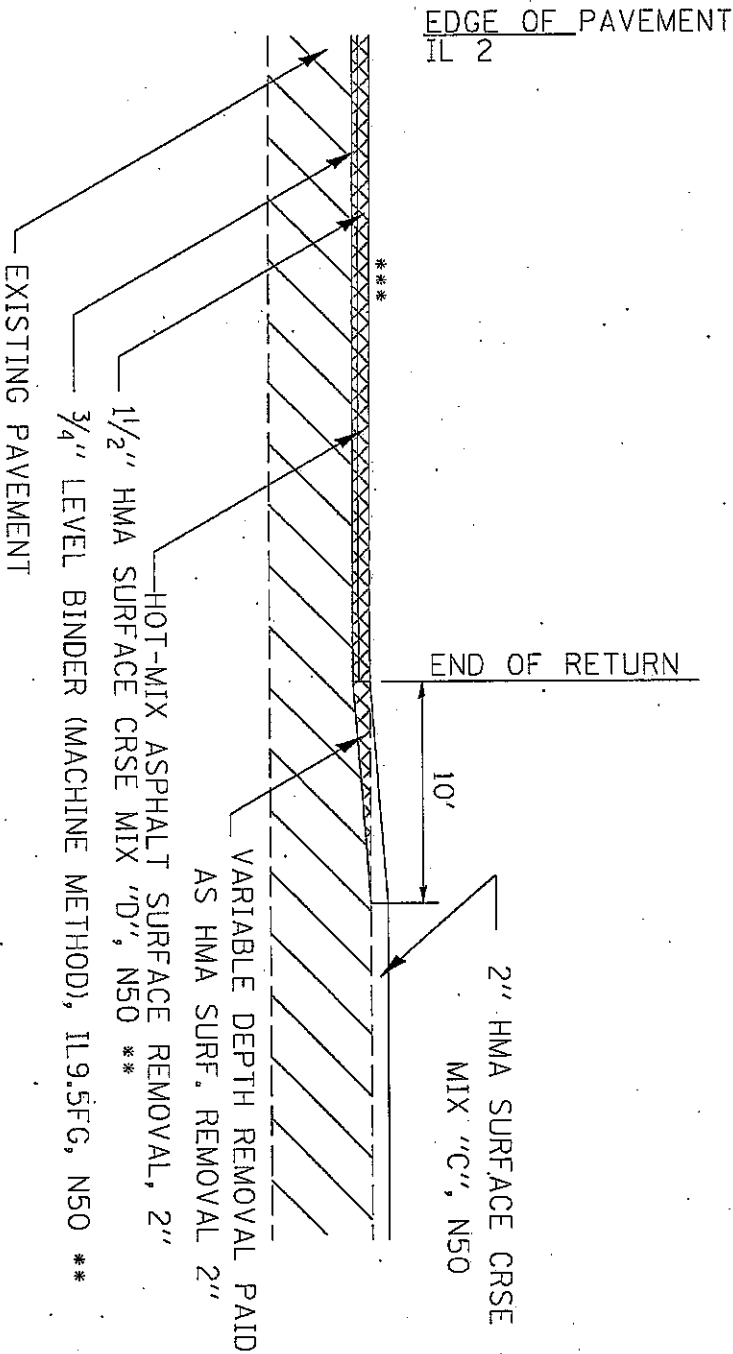
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64540

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- XXX PAVEMENT REMOVAL
- XXX EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- ***** HOT MIX ASPHALT SURFACE
REMOVE, 2" & VARIES

HILL DRIVE
ROCK RIVER DRIVE



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PLOT DATE = Fri, Dec 09 08:44:52 2011

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	(31.32)RS	*	136	25

FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

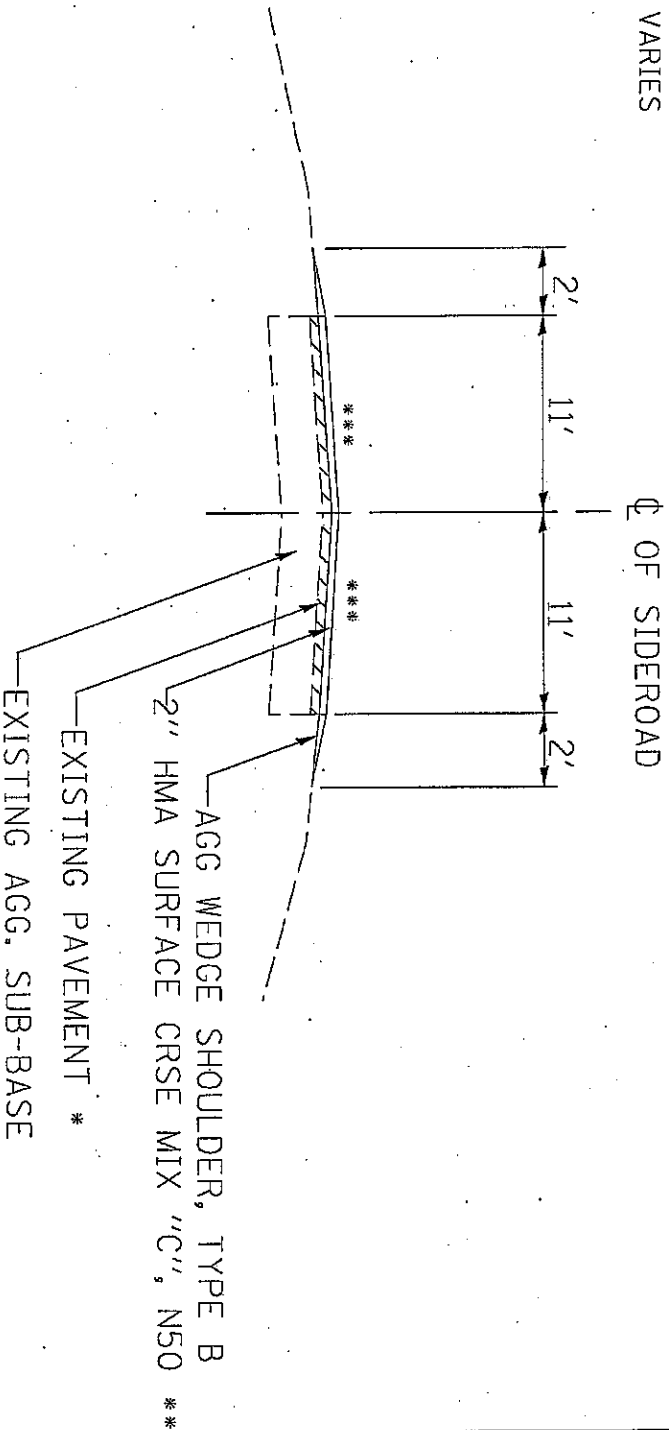
CONTRACT NO. 64540

TYPICAL SECTIONS

NOTES:

- * WHITESIDE & LEE
- ** RATE OF APPLICATION
112 LB/SQ YD/IN
- XXX PAVEMENT REMOVAL
- ZZZ EXISTING PAVEMENT
- *** MAINTAIN EXISTING CROSS SLOPE
- **** HOT MIX ASPHALT SURFACE REMOVE, 2" & VARIES

HILL DRIVE
ROCK RIVER DRIVE



- * HILL DRIVE = 2 7/8" THICKNESS
- * ROCK RIVER DRIVE = 2 1/4" THICKNESS

FILE NAME =
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	31.321RS	*	136	26

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
 SECTION (31.32)RS
 WHITESIDE/LEE COUNTIES
 CONTRACT 64540
 SHEET 27 OF 136

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

COMMENT	CU YD	LOCATION
	20	6 + 10
	20	TOTAL LEE COUNTY
	20	TOTAL

EROSION CONTROL BLANKET

COMMENT	SQ YD	LOCATION
	1,396	3 + 50
	1,396	TOTAL LEE COUNTY
	1,396	TOTAL

TEMPORARY DITCH CHECKS

COMMENT	FOOT	LOCATION
	117	3 + 25
	117	TOTAL LEE COUNTY
	117	TOTAL

W.B. LT SIDE (50' Spacings - 13' Long/EA @ 9 EA)

PERIMETER EROSION BARRIER

COMMENT	FOOT	LOCATION
	426	3 + 25
	426	TOTAL LEE COUNTY
	426	TOTAL

STONE RIPRAP, CLASS A4

COMMENT	SQ YD	LOCATION
	68	3 + 51
	68	TOTAL LEE COUNTY
	68	TOTAL

FILTER FABRIC

COMMENT	SQ YD	LOCATION
	68	3 + 51
	68	TOTAL LEE COUNTY
	68	TOTAL

SUB-BASE GRANULAR MATERIAL, TYPE A, 6"

COMMENT	SQ YD	LOCATION
	311	224 + 00
	187	224 + 00
	311	TOTAL WHITESIDE COUNTY
	498	TOTAL

COMMENT	SQ YD	LOCATION
	278	0 + 00
	533	0 + 00
	811	TOTAL LEE COUNTY
	1,309	TOTAL

LEVELING BINDER (HAND METHOD), NS0

TON	LOCATION
8	IL 2 Whiteside County
50	Prairieville Rd
44	IL 2 Lee County
102	TOTAL

Application Rate Used: 10 Ton/Mile

40600525

31100500

28200200

28100107

28000400

28000305

28100630

20201200

SCHEDULE OF QUANTITIES

40600990

TEMPORARY RAMP

SO YD	LOCATION	COMMENTS
22	WB, Lanes	197 + 00
11	E.B, Outside Lane	197 + 19
11	E.B, Inside Lane	197 + 50
20	N PRAIRIEVILLE RD S.B.	11 + 89
20	N PRAIRIEVILLE RD N.B.	11 + 89
67	PRAIRIEVILLE RD	27 + 58
56	PRAIRIEVILLE RD	27 + 58
22	Country Club Lane (West)	11 + 89
22	Country Club Lane (West)	11 + 89
22	Country Club Lane (West)	226 + 50
249	TOTAL WHITESIDE COUNTY	

SO YD	LOCATION	COMMENTS
22	E.B, Lanes	66 + 51
22	WB, Lanes	65 + 91
22	E.B, Lanes	67 + 53
22	WB, Lanes	67 + 13
22	WB, Lanes	114 + 50
22	WB, Lanes	115 + 9
22	E.B, Lanes	115 + 82
22	WB, Lanes	116 + 21
22	E.B, Lanes	166 + 55
22	WB, Lanes	166 + 55
32	N Mound Hill Rd	17 + 34
32	S Mound Hill Rd	21 + 49
20	N Sauk Rd	18 + 44
27	S Sauk Rd S.B.	21 + 23
23	S Sauk Rd N.B.	21 + 25
22	LT Sideroad	133 + 46
22	LT Sideroad	140 + 8
22	RT Sideroad	152 + 75
415	TOTAL LEE COUNTY	
664	TOTAL	

44000500

COMBINATION CURB AND GUTTER REMOVAL

FOOT	LOCATION	COMMENTS
57	197 + 00	E.B./W.B. Lanes West of prairieville rd
91	208 + 7	E.B./W.B. Lanes East of prairieville rd
185	10 + 50	ON Prairieville Rd E./W. side on median
333	TOTAL WHITESIDE COUNTY	
333	TOTAL	

44004250

PAVED SHOULDER REMOVAL

SO YD	LOCATION	COMMENTS
311	224 + 00	WB, LT SIDE
187	224 + 00	WB, LT SIDE
498	TOTAL WHITESIDE COUNTY	
278	0 + 00	WB, LT SIDE
533	0 + 00	E.B, LT SIDE
811	TOTAL LEE COUNTY	
1,309	TOTAL	

44201299

DOWEL BARS 1 1/2"

EACH	LOCATION	COMMENTS
120	197 + 00	WB, Lanes
120	226 + 80	WB, Lanes
120	TOTAL WHITESIDE COUNTY	
260	0 + 00	WB, Lanes
260	166 + 55	WB, Lanes
380	TOTAL LEE COUNTY	
380	TOTAL	

This item is a contingency to be used as directed by the Engineer. A quantity of 380 is estimated. See patching schedule for rest.

SCHEDULE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	PRICE	TOTAL	COMMENTS
44213100	PAVEMENT FABRIC	SQ YD	102		102	This item is a contingency to be used as directed by the Engineer. A quantity of 102 SQ YD is estimated. See patching schedule for rest.
			44		44	WHITESIDE COUNTY
			58		58	LEE COUNTY
			0 + 00		0 + 00	
			166 + 55		166 + 55	WB.
44213200	SAW CUTS	FOOT	336		336	This item is a contingency to be used as directed by the Engineer. A quantity of 1194' is estimated. See patching schedule for rest.
			197 + 00		197 + 00	WHITESIDE COUNTY
			226 + 80		226 + 80	WB.
44302000	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	1,194		1,194	This item is a contingency to be used as directed by the Engineer. A quantity of 5000' is estimated.
			1,000		1,000	WHITESIDE COUNTY
			4,000		4,000	LEE COUNTY
			0 + 00		0 + 00	
			2 + 50		2 + 50	WB, LT SIDE
			8 + 00		8 + 00	EB, LT SIDE
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	311		311	
			224 + 00		224 + 00	WHITESIDE COUNTY
			226 + 80		226 + 80	WB, LT SIDE
			224 + 00		224 + 00	WHITESIDE COUNTY
			226 + 80		226 + 80	EB, LT SIDE
			0 + 00		0 + 00	
			2 + 50		2 + 50	WB, LT SIDE
			8 + 00		8 + 00	EB, LT SIDE
61500100	NAME PLATES	EACH	1		1	
			5 + 99.5		5 + 99.5	LEE COUNTY
			1		1	WB, Lane LT side
64001061	GRADED BOX CULVERT END SECTIONS, CULVERT NO. 01	EACH	1		1	
			6 + 25		6 + 25	LEE COUNTY
			1		1	WB, Lane LT side

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
 SECTION (31,32)RS
 WHITESIDE/LEE COUNTIES
 CONTRACT 64640
 SHEET 30 OF 136

	CU YD	LOCATION	COMMENT	TOTAL	TOTAL LEE COUNTY	TOTAL WHITESIDE COUNTY
59300100	24.1			24.1	6 + 25	6 + 25
			W.B. Lane LT side			
			COMMENT			
60100060	1			1	7 + 32	7 + 32
			E.B. Shoulder RT side			
			COMMENT			
60100080	2.8			2.8	224 + 00	226 + 65
			W.B. LT (ESTIMATED 25' LENGTH)			
			COMMENTS			
			W.B. LT (ESTIMATED 25' LENGTH)			
			COMMENTS			
60108100	2.8			2.8	2 + 50	2 + 50
			W.B. LT (ESTIMATED 25' LENGTH)			
			COMMENT			
60260100	20			20	7 + 32	7 + 32
			E.B. Shoulder RT side			
			COMMENT			
60605000	1			1	1	1
			On Prairieville Rd West side			
			COMMENT			
60605900	186			186	10 + 50	10 + 50
			ON Prairieville Rd E/W, side on median			
			COMMENT			
63200310	318			318	6 + 25	6 + 25
			W.B. Lane LT side			
			COMMENT			

CONTROLLED LOW-STRENGTH MATERIAL

CONCRETE HEADWALLS FOR PIPE DRAINS

FRENCH DRAINS

PIPE UNDERDRAINS 4" (SPECIAL)

INLETS TO BE ADJUSTED

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-8, 24

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9, 12

GUARDRAIL REMOVAL

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
SECTION (31.32)RS
WHITESIDE/LEE COUNTIES
CONTRACT 64540
SHEET 32 OF 136

SHORT-TERM PAVEMENT MARKING (CONTINUED)

70300100

COMMENTS	FOOT	LOCATION	FOOT	LOCATION	FOOT	LOCATION	FOOT	LOCATION	COMMENTS
LEE EASTBOUND MILLED AREA	92	White	92	0 + 00	0 + 00	Center Line	8 + 50	RT & LEFT SHOULDER STRIPES	8 + 50
	40	Yellow	40	0 + 00	8 + 50	Center Line	8 + 50	RT & LEFT SHOULDER STRIPES	8 + 50
	228		228	44 + 8	44 + 8	Center Line	66 + 51	RT & LEFT SHOULDER STRIPES	66 + 51
	100		100	44 + 8	44 + 8	Center Line	50 + 83	TURN LANE RT & LEFT SHOULDER STRIPES	50 + 83
	28		28	56	56	Center Line	66 + 3	RT & LEFT SHOULDER STRIPES	66 + 3
	184		184	67 + 53	67 + 53	Center Line	68 + 3	RT & LEFT SHOULDER STRIPES	68 + 3
	76		76	96 + 74	96 + 74	Center Line	115 + 9	RT & LEFT SHOULDER STRIPES	115 + 9
	28		28	152	152	Center Line	115 + 9	TURN LANE RT & LEFT SHOULDER STRIPES	115 + 9
	8		8	56	56	Center Line	116 + 71	RT & LEFT SHOULDER STRIPES	116 + 71
	8		8	116 + 21	116 + 21	Center Line	116 + 71	TURN LANE RT & LEFT SHOULDER STRIPES	116 + 71
	8		8	116 + 21	116 + 21	Center Line	116 + 71	RT & LEFT SHOULDER STRIPES	116 + 71
	140		140	136 + 47	136 + 47	Center Line	150 + 42	RT & LEFT SHOULDER STRIPES	150 + 42
	56		56	136 + 47	136 + 47	Center Line	150 + 42	TURN LANE RT & LEFT SHOULDER STRIPES	150 + 42
	28		28	56	56	Center Line	143 + 00	RT & LEFT SHOULDER STRIPES	143 + 00
	8		8	8	8	Center Line	166 + 55	TURN LANE RT & LEFT SHOULDER STRIPES	166 + 55
	8		8	8	8	Center Line	166 + 55	RT & LEFT SHOULDER STRIPES	166 + 55
	1,052		1,052	166 + 55	166 + 55	TOTAL FOR MILLED AREA NEED 3 APPS	166 + 55	TOTAL	1,432
LEE EASTBOUND OVERLAY AREA	3,156		3,156	1,140	4,296	TOTAL			4,296
LEE EASTBOUND MILLED AREA	352	White	352	8 + 50	8 + 50	Center Line	44 + 8	RT & LEFT SHOULDER STRIPES	44 + 8
	144	Yellow	144	8 + 50	8 + 50	Center Line	44 + 8	RT & LEFT SHOULDER STRIPES	44 + 8
	288		288	68 + 3	68 + 3	Center Line	96 + 74	RT & LEFT SHOULDER STRIPES	96 + 74
	116		116	68 + 3	68 + 3	Center Line	96 + 74	TURN LANE RT & LEFT SHOULDER STRIPES	96 + 74
	200		200	116 + 71	116 + 71	Center Line	136 + 47	RT & LEFT SHOULDER STRIPES	136 + 47
	80		80	116 + 71	116 + 71	Center Line	136 + 47	TURN LANE RT & LEFT SHOULDER STRIPES	136 + 47
	160		160	116 + 71	116 + 71	Center Line	136 + 47	RT & LEFT SHOULDER STRIPES	136 + 47
	64		64	150 + 42	150 + 42	Center Line	166 + 5	TURN LANE RT & LEFT SHOULDER STRIPES	166 + 5
	1,404		1,404	150 + 42	150 + 42	TOTAL FOR OVERLAY AREA NEED 2 APPS	166 + 5	TOTAL	1,808
EB TURN LANE @ MOUND HILL RD	88	White	88	46 + 66	46 + 66	(LTL GORE AREA) SKIP DASHES 10' Apart	47 + 71	(LTL GORE AREA) SKIP DASHES 10' Apart	47 + 71
	36	Yellow	36	47 + 71	47 + 71	(LTL GORE AREA) SKIP DASHES 10' Apart	47 + 71	(LTL GORE AREA) SKIP DASHES 10' Apart	47 + 71
	40		40	47 + 71	47 + 71	(LTL GORE AREA) SKIP DASHES 10' Apart	50 + 83	(LTL GORE AREA) SKIP DASHES 10' Apart	50 + 83
	32		32	47 + 71	47 + 71	(LTL GORE AREA) SKIP DASHES 10' Apart	50 + 96	(LTL GORE AREA) SKIP DASHES 10' Apart	50 + 96
EB TURN LANE @ Sauk RD	88		88	99 + 20	99 + 20	(LTL GORE AREA) SKIP DASHES 10' Apart	100 + 37	(LTL GORE AREA) SKIP DASHES 10' Apart	100 + 37
	40		40	99 + 20	99 + 20	(LTL GORE AREA) SKIP DASHES 10' Apart	100 + 37	(LTL GORE AREA) SKIP DASHES 10' Apart	100 + 37
	40		40	99 + 94	99 + 94	(LTL GORE AREA) SKIP DASHES 10' Apart	103 + 67	(LTL GORE AREA) SKIP DASHES 10' Apart	103 + 67
	32		32	99 + 94	99 + 94	(LTL GORE AREA) SKIP DASHES 10' Apart	103 + 67	(LTL GORE AREA) SKIP DASHES 10' Apart	103 + 67
EB TURN LANE @ ROCK RIVER RD	88		88	138 + 93	138 + 93	(LTL GORE AREA) SKIP DASHES 10' Apart	140 + 9	(LTL GORE AREA) SKIP DASHES 10' Apart	140 + 9
	36		36	139 + 67	139 + 67	(LTL GORE AREA) SKIP DASHES 10' Apart	143 + 21	(LTL GORE AREA) SKIP DASHES 10' Apart	143 + 21
	36		36	139 + 67	139 + 67	(LTL GORE AREA) SKIP DASHES 10' Apart	143 + 14	(LTL GORE AREA) SKIP DASHES 10' Apart	143 + 14
	32		32	139 + 67	139 + 67	(LTL GORE AREA) SKIP DASHES 10' Apart	143 + 14	(LTL GORE AREA) SKIP DASHES 10' Apart	143 + 14
Mound Hill RD	20		20	17 + 34	17 + 34	Center Line	18 + 75	Center Line	18 + 75
	32		32	17 + 34	17 + 34	Center Line	18 + 75	Center Line	18 + 75
	64		64	17 + 34	17 + 34	Center Line	18 + 75	Center Line	18 + 75
	40		40	20 + 38	20 + 38	Center Line	21 + 58	Center Line	21 + 58
	20		20	20 + 38	20 + 38	Center Line	21 + 58	Center Line	21 + 58
	16		16	20 + 38	20 + 38	Center Line	21 + 58	Center Line	21 + 58
	32		32	20 + 38	20 + 38	Center Line	21 + 58	Center Line	21 + 58

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
SECTION (31.32)RS
WHITESIDE/LEE COUNTIES
CONTRACT 64540
SHEET 34 OF 136

TEMPORARY PAVEMENT MARKING - LINE 12"

70300260

COMMENTS	LOCATION	TOTAL	FOOT	FOOT	White
N PRAIRIEVILLE RD SB (RTL)		20		20	
N PRAIRIEVILLE RD SB (S & LTL)		26		26	
(EB LTL)		14		14	
(EB ML)		26		26	
(EB RTL)		18		18	
(WB ML)		26		26	
(WB RTL)		20		20	
(WB LTL)		14		14	
N Mound Hill Rd		25		25	
N Mound Hill Rd (RTL)		20		20	
S Mound Hill Rd (RTL)		20		20	
S Mound Hill Rd		25		25	
N Sauk Rd		25		25	
S Sauk Rd		12		12	
S Sauk Rd (RTL)		18		18	
N Hill Drive		30		30	
S Rock River DR		30		30	
TOTAL LEE COUNTY		323		323	
TOTAL WHITESIDE COUNTY		46		46	
TOTAL 3 applications milled area		1,107		969	

70301000
White/EASTBOUND
SQ FT

WORK ZONE PAVEMENT MARKING REMOVAL

COMMENTS	LOCATION	TOTAL	Yellow	White
Center Line		197 + 19	33	33
RT SHOULDER STRIPES		197 + 9	13	13
Center Line		207 + 9	16	16
RT SHOULDER STRIPES		197 + 00	35	35
Center Line		207 + 9	35	35
RT SHOULDER STRIPES		207 + 8	15	15
Center Line		208 + 7	33	33
RT SHOULDER STRIPES		208 + 7	13	13
Center Line		217 + 70	31	31
RT SHOULDER STRIPES		217 + 70	13	13
Center Line		217 + 70	27	27
RT & LEFT SHOULDER STRIPES		217 + 70	13	13
(ML) LEFT TURN LANE		207 + 9	5	5
(ML) 2 LEFT TURN ARROWS		207 + 9	11	11
WB TURN LANE @ PRAIRIEVILLE RD		203 + 89	11	11
(ML) 2 RIGHT TURN LANE		208 + 7	5	5
(ML) 2 RIGHT TURN ARROWS		208 + 7	11	11
NB (SR) CENTER LINE STRIPES		10 + 42	7	7
SB (SR) CENTER LINE STRIPES		10 + 42	7	7
LEFT SHOULDER STRIPES		11 + 89	53	53
LEFT SHOULDER STRIPES		11 + 89	53	53
NB (SR) CENTER LINE STRIPES West Side		11 + 89	8	8
NB (SR) Median STRIPES West Side (10' apart)		13 + 55	67	67
NB (SR) Median STRIPES East Side (10' apart)		13 + 55	67	67
NB (SR) CENTER LINE STRIPES		18 + 36	67	67
NB (SR) CENTER LINE STRIPES		27 + 58	67	67
TOTAL Whiteside County		665	228	437

White
Lee

SCHEDULE OF QUANTITIES

WORK ZONE PAVEMENT MARKING REMOVAL (CONTINUED)

70301000

COMMENTS	TOTAL		SQ FT	
	LOCATION	LOCATION	White	Yellow
LEE EASTBOUND MILLED AREA	Center Line	0 + 00	30.67	0
	RT & LEFT SHOULDER STRIPES	8 + 50	26.67	13.33
	Center Line	8 + 50	76.00	0
	RT & LEFT SHOULDER STRIPES	66 + 51	66.67	33.33
	Center Line	66 + 51	44 + 8	0
	RT & LEFT SHOULDER STRIPES	50 + 83	44 + 8	9.33
	Center Line	50 + 83	4.00	0
	RT & LEFT SHOULDER STRIPES	67 + 53	67 + 53	2.67
	Center Line	68 + 3	61.33	61.33
	RT & LEFT SHOULDER STRIPES	115 + 9	50.67	25.33
LEE EASTBOUND OVERLAY AREA	Center Line	115 + 9	19	9.32
	RT & LEFT SHOULDER STRIPES	103 + 26	19	2.67
	Center Line	116 + 21	2.67	2.67
	RT & LEFT SHOULDER STRIPES	116 + 71	5.33	2.67
	Center Line	116 + 71	46.67	46.67
	RT & LEFT SHOULDER STRIPES	136 + 47	37.33	18.67
	Center Line	136 + 47	19	9.33
	RT & LEFT SHOULDER STRIPES	150 + 42	2.67	2.67
	Center Line	150 + 42	2.67	2.67
	RT & LEFT SHOULDER STRIPES	166 + 5	5.33	2.67
LEE EASTBOUND OVERLAY AREA	Center Line	166 + 5	477	127
	RT & LEFT SHOULDER STRIPES	150 + 42	42.67	21.33
	Center Line	150 + 42	53.33	53.33
	RT & LEFT SHOULDER STRIPES	116 + 71	53.33	26.67
	Center Line	116 + 71	66.67	66.67
	RT & LEFT SHOULDER STRIPES	68 + 3	77.33	38.67
	Center Line	68 + 3	96.00	96.00
	RT & LEFT SHOULDER STRIPES	44 + 8	96.00	48.00
	Center Line	44 + 8	117.33	117.33
	RT & LEFT SHOULDER STRIPES	8 + 50	8 + 50	48.00
EB TURN LANE @ SAUK RD	Center Line	99 + 20	29.33	10.67
	RT & LEFT SHOULDER STRIPES	99 + 94	13.33	13.33
	Center Line	99 + 94	10.67	10.67
	RT & LEFT SHOULDER STRIPES	99 + 94	10.67	10.67
	Center Line	100 + 37	29.33	10.67
	RT & LEFT SHOULDER STRIPES	103 + 67	13.33	13.33
	Center Line	103 + 67	13.33	13.33
	RT & LEFT SHOULDER STRIPES	103 + 67	10.67	10.67
	Center Line	103 + 67	10.67	10.67
	RT & LEFT SHOULDER STRIPES	140 + 9	29.33	10.67
EB TURN LANE @ ROCK RIVER RD	Center Line	291 + 41	12.00	12.00
	RT & LEFT SHOULDER STRIPES	291 + 41	12.00	12.00
	Center Line	291 + 41	12.00	12.00
	RT & LEFT SHOULDER STRIPES	291 + 41	12.00	12.00
	Center Line	140 + 9	29.33	10.67
	RT & LEFT SHOULDER STRIPES	143 + 21	12.00	12.00
	Center Line	143 + 21	12.00	12.00
	RT & LEFT SHOULDER STRIPES	143 + 21	12.00	12.00
	Center Line	143 + 14	10.67	10.67
	RT & LEFT SHOULDER STRIPES	17 + 34	13.33	13.33
EB TURN LANE @ MOUND HILL RD	Center Line	17 + 34	10.67	10.67
	RT & LEFT SHOULDER STRIPES	17 + 34	6.67	6.67
	Center Line	17 + 34	21.33	21.33
	RT & LEFT SHOULDER STRIPES	20 + 38	13.33	13.33
	Center Line	20 + 38	6.67	6.67
	RT & LEFT SHOULDER STRIPES	20 + 38	5.33	5.33
	Center Line	20 + 38	10.67	10.67
	RT & LEFT SHOULDER STRIPES	21 + 58	6.67	6.67
	Center Line	21 + 58	5.33	5.33
	RT & LEFT SHOULDER STRIPES	21 + 58	10.67	10.67
MOUND HILL RD	Center Line	17 + 34	13.33	13.33
	RT & LEFT SHOULDER STRIPES	17 + 34	6.67	6.67
	Center Line	17 + 34	10.67	10.67
	RT & LEFT SHOULDER STRIPES	17 + 34	6.67	6.67
	Center Line	18 + 75	13.33	13.33
	RT & LEFT SHOULDER STRIPES	18 + 75	6.67	6.67
	Center Line	18 + 75	21.33	21.33
	RT & LEFT SHOULDER STRIPES	20 + 38	13.33	13.33
	Center Line	20 + 38	6.67	6.67
	RT & LEFT SHOULDER STRIPES	20 + 38	5.33	5.33

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
SECTION (31.32)RS
WHITESIDE/LEE COUNTIES
CONTRACT 64540
SHEET 36 OF 136

70301000 LEE WESTBOUND MILLED AREA
WORK ZONE PAVEMENT MARKING REMOVAL (CONTINUED)

COMMENTS	LOCATION	TOTAL	SQ FT	
			White	Yellow
SB ON SB (SR) LEFT TURN LANE		6.67	6.67	
NB ON SB (SR) LEFT TURN LANE		6.67		6.67
(SD) RIGHT TURN ARROW		21 + 00	5.33	5.33
(SD) COMB LEFT AND THROUGH ARROW		21 + 00	10.67	10.67
(SD) THROUGH ARROW		21 + 00	5.33	5.33
(SD) THROUGH ARROW		21 + 00	5.33	5.33
(SD) THROUGH ARROW		21 + 00	5.33	5.33
(SR) MAINLINE CL SKIP DASHES		66.67	66.67	66.67
HILL DRIVE			66.67	66.67
(SD) THROUGH ARROW		5.33	5.33	5.33
(SD) RIGHT TURN ARROW		5.33	5.33	5.33
(SD) COMB LEFT AND THROUGH ARROW		10.67	10.67	10.67
NB (SR) CENTER LINE STRIPE DOUBLE YELLOW		13.33	13.33	13.33
NB (SR) RIGHT TURN LANE		6.67	6.67	6.67
ROCK RIVER DRIVE			109.33	109.33
(SR) MAINLINE CL SKIP DASHES		109.33	109.33	109.33
(SD) THROUGH ARROW		5.33	5.33	5.33
(SD) THROUGH ARROW		5.33	5.33	5.33
(SD) LEFT TURN ARROW		5.33	5.33	5.33
(SD) COMB RIGHT AND THROUGH ARROW		10.67	10.67	10.67
SB (SR) CENTER LINE STRIPE DOUBLE YELLOW		13.33	13.33	13.33
SB (SR) LEFT TURN LANE		6.67	6.67	6.67
TOTAL LEE COUNTY		635	249	386
Center Line		65 + 91	0 + 00	220.00
RT & LEFT SHOULDER STRIPES		65 + 91	176.00	88.00
Center Line		67 + 13	160.00	160.00
RT & LEFT SHOULDER STRIPES		67 + 13	133.34	66.67
Center Line		114 + 50	160.00	160.00
RT & LEFT SHOULDER STRIPES		114 + 50	133.34	66.67
Center Line		110 + 41	21.34	10.67
RT & LEFT SHOULDER STRIPES		110 + 41	21.34	10.67
Bridge Omission		115 + 82	0.00	0.00
Center Line		115 + 82	170.67	170.67
RT & LEFT SHOULDER STRIPES		115 + 82	139.66	69.33
Center Line		143 + 89	34.66	17.33
TOTAL LEE COUNTY		1073	261	812
WB TURN LANE @ SAUK RD			10.67	10.67
(ML) 2 RIGHT TURN ARROWS		10.67	10.67	10.67
(LTL GORE AREA) SKIP DASHES 10' Apart		100 + 37	29.33	29.33
(LTL RT SIDE EDGE LINE)		103 + 67	13.33	13.33
(RTL) TURN LANE		103 + 67	13.33	13.33
(ML) 2 LEFT TURN ARROWS		103 + 67	10.67	10.67
(ML) 2 RIGHT TURN ARROWS		103 + 67	10.67	10.67
WB TURN LANE @ MOUND HILL RD			12.00	12.00
(LTL GORE AREA) SKIP DASHES 10' Apart		47 + 71	29.33	29.33
(LTL RT SIDE EDGE LINE)		50 + 61	12.00	12.00
(RTL) TURN LANE		50 + 61	13.33	13.33
(ML) 2 LEFT TURN ARROWS		50 + 96	10.67	10.67
(ML) 2 RIGHT TURN ARROWS		50 + 96	10.67	10.67
WB TURN LANE @ ROCK RIVER RD			12.00	12.00
(LTL GORE AREA) SKIP DASHES 10' Apart		140 + 9	29.33	29.33
(LTL RT SIDE EDGE LINE)		143 + 21	12.00	12.00
(RTL) TURN LANE		143 + 21	12.00	12.00
(ML) 2 LEFT TURN ARROWS		143 + 14	10.67	10.67
(ML) 2 RIGHT TURN ARROWS		143 + 14	10.67	10.67
TOTAL LEE COUNTY		228	228	228

SCHEDULE OF QUANTITIES

ITEM NO.	DESCRIPTION	LOCATION	FOOT	COMMENTS
88600400	DETECTOR LOOP, SPECIAL	(EB LANE)	48	RT 100 + 22
		RT 100 + 22	48	Advance Detector Loops
		RT 100 + 94	48	Advance Detector Loops
		RT 103 + 20	48	Advance Detector Loops
		LT 104 + 49	104	LT, Turn lane (NB) Sauk Rd.
		RT 104 + 98	104	Lane Detection Loops
		RT 105 + 26	104	Lane Detection Loops
		RT 105 + 41	104	S. Leg of Sauk Rd Detector's
		RT 106 + 39	104	S. E. Quadrant of Sauk Rd (EB)
		RT 106 + 39	257	(ESTIMATED QUANTITY)
		(WB LANE)	921	
		LT 105 + 44	104	N. Leg of Sauk Rd Detector's
		LT 105 + 24	104	Lane Detection Loops
		LT 106 + 64	104	Lane Detection Loops
		RT 106 + 74	104	LT, Turn lane (SB) Sauk Rd.
		RT 111 + 51	48	Advance Detector Loops
		LT 112 + 28	48	Advance Detector Loops
		LT 105 + 00	257	(ESTIMATED QUANTITY)
		SUB-TOTAL	789	
		TOTAL	1,690	
X0322278	RODENT SHIELDS			
		EACH	1	
		TOTAL WHITESIDE COUNTY	1	
		RT. STA. 7+32	1	Existing Pipe Underdrain Manhole (30" Dia CMP Structure)
		TOTAL	1	
X6024503	INLETS TO BE ADJUSTED WITH NEW FRAME AND GRATE (SPECIAL)			
		EACH	2	
		TOTAL WHITESIDE COUNTY	2	
		208 + 7	2	
		217 + 20	2	W.B. East of Prairieville Rd (See Dist. Std. 13.2c)
		TOTAL	2	
		TOTAL	2	
X6025600	MANHOLES TO BE ADJUSTED (SPECIAL)			
		EACH	1	
		TOTAL WHITESIDE COUNTY	1	
		RT. STA. 2+23	1	Existing Pipe Underdrain Manhole (30" Dia CMP Structure)
		RT. STA. 7+32	1	Existing Pipe Underdrain Manhole (30" Dia CMP Structure)
		TOTAL LEE COUNTY	2	
		TOTAL	3	

SCHEDULE OF QUANTITIES

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS

COMMENTS	LOCATION	SQ FT	WhiteSide	TOTAL
(LTL) LEFT TURN ARROW	EB TURN LANE @ PRAIRIEVILLE RD	15.6	15.6	
(LTL) "ONLY"		20.8	20.8	
(LTL) LEFT TURN ARROW	WB TURN LANE @ PRAIRIEVILLE RD	15.6	15.6	
(RTL) "ONLY"		20.8	20.8	
(RTL) RIGHT TURN ARROW		209 + 52	209 + 52	
(RTL) RIGHT TURN ARROW		210 + 69	210 + 69	
(RTL) "ONLY"		15.6	15.6	
(LTL) LEFT TURN ARROW	EB TURN LANE @ MOUND HILL RD	15.6	15.6	
(LTL) "ONLY"		20.8	20.8	
(LTL) LEFT TURN ARROW	WB TURN LANE @ MOUND HILL RD	15.6	15.6	
(LTL) "ONLY"		20.8	20.8	
(LTL) LEFT TURN ARROW		55 + 4	55 + 4	
(LTL) "ONLY"		55 + 82	55 + 82	
(LTL) LEFT TURN ARROW		56 + 62	56 + 62	
(LTL) "ONLY"		53 + 56	53 + 56	
(RTL) RIGHT TURN ARROW		54 + 34	54 + 34	
(RTL) "ONLY"		55 + 4	55 + 4	
(SD) "ONLY"	N MOUND HILL RD	26	26	
(SD) LEFT TURN ARROW		15.6	15.6	
(SD) LEFT TURN ARROW	S MOUND HILL RD	26	26	
(SD) COMB RIGHT AND THROUGH ARROW		15.6	15.6	
(SD) COMB RIGHT AND THROUGH ARROW		20 + 65	20 + 65	
(LTL) LEFT TURN ARROW	EB TURN LANE @ SAUK RD	15.6	15.6	
(LTL) "ONLY"		20.8	20.8	
(LTL) LEFT TURN ARROW		99 + 27	99 + 27	
(LTL) "ONLY"		100 + 5	100 + 5	
(LTL) LEFT TURN ARROW		100 + 5	100 + 5	
(RTL) RIGHT TURN ARROW		100 + 75	100 + 75	
(RTL) "ONLY"		101 + 53	101 + 53	
(LTL) LEFT TURN ARROW	WB TURN LANE @ SAUK RD	15.6	15.6	
(LTL) "ONLY"		20.8	20.8	
(LTL) LEFT TURN ARROW		107 + 68	107 + 68	
(LTL) "ONLY"		108 + 46	108 + 46	
(LTL) LEFT TURN ARROW		109 + 26	109 + 26	
(LTL) "ONLY"		109 + 26	109 + 26	
(RTL) RIGHT TURN ARROW		109 + 26	109 + 26	
(RTL) "ONLY"		110 + 6	110 + 6	
(RTL) RIGHT TURN ARROW		110 + 84	110 + 84	
(SD) RIGHT TURN ARROW	S SAUK RD	15.6	15.6	
(SD) COMB LEFT AND THROUGH ARROW		26	26	
(SD) RIGHT TURN ARROW		21 + 00	21 + 00	
(SD) THROUGH ARROW		11.5	11.5	
(SD) THROUGH ARROW		21 + 00	21 + 00	
(SD) THROUGH ARROW		11.5	11.5	

SCHEDULE OF QUANTITIES

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS (CONTINUED)

COMMENTS	LOCATION	TOTAL	SO FT	
			Whiteside	LEE
(LTL) LEFT TURN ARROW	138 + 20	15.6	20.8	15.6
(LTL) "ONLY"	139 + 00	20.8	20.8	15.6
(LTL) LEFT TURN ARROW	139 + 78	15.6	15.6	15.6
(RTL) RIGHT TURN ARROW	139 + 78	15.6	15.6	15.6
(RTL) "ONLY"	140 + 58	20.8	20.8	15.6
(RTL) RIGHT TURN ARROW	141 + 36	15.6	15.6	15.6
(LTL) LEFT TURN ARROW	147 + 19	15.6	15.6	15.6
(LTL) "ONLY"	147 + 97	20.8	20.8	15.6
(LTL) LEFT TURN ARROW	148 + 77	15.6	15.6	15.6
(RTL) RIGHT TURN ARROW	148 + 77	15.6	15.6	15.6
(RTL) "ONLY"	149 + 61	15.6	15.6	15.6
(RTL) RIGHT TURN ARROW	149 + 39	20.8	20.8	15.6
(RTL) "ONLY"	149 + 39	20.8	20.8	15.6
(RTL) RIGHT TURN ARROW	147 + 19	15.6	15.6	15.6
(SD) THROUGH ARROW	11.5	11.5	11.5	11.5
(SD) RIGHT TURN ARROW	15.6	15.6	15.6	15.6
(SD) LEFT TURN ARROW	15.6	15.6	15.6	15.6
(SD) COMB LEFT AND THROUGH ARROW	26	26	26	26
(SD) THROUGH ARROW	11.5	11.5	11.5	11.5
(SD) RIGHT TURN ARROW	15.6	15.6	15.6	15.6
(SD) LEFT TURN ARROW	15.6	15.6	15.6	15.6
(SD) COMB RIGHT AND THROUGH ARROW	26	26	26	26
TOTAL WHITESIDE COUNTY		104		
TOTAL LEE COUNTY		904		
TOTAL		1,008		

X7801004 WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 4"

COMMENTS	LOCATION	Total	FOOT	
			Whiteside Eastbound	Westbound
(LTL) LEFT EDGE LINE	206 + 78	959	197 + 50	197 + 50
(ML) LEFT EDGE LINE	207 + 9	959	197 + 50	197 + 50
(ML & SR) RIGHT EDGE LINE	8 + 84	58	208 + 78	208 + 78
(SR & ML) RIGHT EDGE LINE	207 + 66	84	8 + 84	8 + 84
(ML) LEFT EDGE LINE	226 + 80	1914	207 + 66	207 + 66
(ML) RIGHT EDGE LINE	226 + 80	1914	207 + 66	207 + 66
(ML) LEFT EDGE LINE	208 + 7	1873	208 + 7	208 + 7
(ML) RIGHT EDGE LINE	208 + 7	1873	208 + 7	208 + 7
(ML) LEFT EDGE LINE	209 + 45	1735	209 + 45	209 + 45
(ML) RIGHT EDGE LINE	209 + 45	1735	209 + 45	209 + 45
(SR) MEDIAN EDGE LINE	11 + 89	316	10 + 42	10 + 42
(SR) CENTER LINE STRIPE	11 + 89	316	10 + 42	10 + 42
(SB ON N (SR) CENTER LINE STRIPE	11 + 89	316	10 + 42	10 + 42
(NB ON N (SR) CENTER LINE STRIPE	11 + 89	316	10 + 42	10 + 42
EDGE LINE WEST SIDE OF PRAIRIEVILLE RD	27 + 58	1569	11 + 89	11 + 89
EDGE LINE EAST SIDE OF PRAIRIEVILLE RD	27 + 58	1569	11 + 89	11 + 89
ALL OF median & median STRIPE	13 + 55	60	11 + 89	11 + 89
SB ON N (SR) CENTER LINE STRIPE	18 + 36	2210	10 + 42	10 + 42
Solid Yellow with skip dash	27 + 58	1162	18 + 36	18 + 36
Total Whiteside county		18,859		
			9,402	9,457

SCHEDULE OF QUANTITIES

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE #1 (CONTINUED)

COMMENTS	FOOT	LOCATION	FOOT	LOCATION	COMMENTS
(ML) LEFT EDGE LINE	44 + 71	-	0 + 00	4471	White
(ML) RIGHT EDGE LINE	44 + 68	-	0 + 00	4458	Yellow
(LTL) (Left side) (N)	50 + 56	-	44 + 71	585	
(LTL) (Right side) (S)	50 + 61	-	47 + 71	290	
(ML) LEFT EDGE LINE	50 + 83	-	47 + 71	312	312
(ML) RIGHT EDGE LINE	50 + 00	-	44 + 58	542	
(ML & SR) RIGHT EDGE LINE	21 + 49	-	50 + 00	190	
(SR & ML) RIGHT EDGE LINE	52 + 73	-	21 + 49	222	
(ML) RIGHT EDGE LINE	66 + 51	-	52 + 73	1378	
Bridge Omission	67 + 53	-	66 + 51	0	
(ML) RIGHT EDGE LINE	97 + 24	-	67 + 53	2971	2971
(ML) LEFT EDGE LINE	66 + 51	-	51 + 79	1472	1472
Bridge Omission	67 + 53	-	66 + 51	0	
(ML) LEFT EDGE LINE	97 + 37	-	67 + 53	2984	2984
(ML) RIGHT EDGE LINE	102 + 60	-	97 + 24	536	
(ML & SR) RIGHT EDGE LINE	21 + 23	-	102 + 60	157	
(SR & ML) RIGHT EDGE LINE	105 + 67	-	21 + 25	207	
(ML) RIGHT EDGE LINE	115 + 9	-	105 + 67	842	
Bridge Omission	116 + 21	-	115 + 9	0	
(ML) RIGHT EDGE LINE	136 + 97	-	116 + 21	2076	2076
(LTL) (Left side) (N)	103 + 26	-	97 + 37	589	589
(LTL) (Right side) (S)	103 + 28	-	100 + 37	291	291
(ML) LEFT EDGE LINE	103 + 64	-	100 + 37	327	327
(ML) LEFT EDGE LINE	115 + 9	-	104 + 43	1066	1066
Bridge Omission	116 + 21	-	115 + 9	0	
(ML) RIGHT EDGE LINE	137 + 10	-	116 + 21	2089	2089
(RTL) RT EDGE LINE	142 + 75	-	136 + 97	578	578
(ML & SR) RIGHT EDGE LINE end of return	0 + 00	-	142 + 75	80	80
(ML & SR) RIGHT EDGE LINE end of return	144 + 21	-	0 + 00	95	95
(ML) RIGHT EDGE LINE	166 + 55	-	144 + 21	2234	2234
(LTL) (Left side) (N)	142 + 96	-	137 + 10	586	586
(LTL) (Right side) (S)	143 + 00	-	140 + 36	264	264
(ML) LEFT EDGE LINE	143 + 17	-	140 + 36	281	281
(ML) LEFT EDGE LINE	166 + 55	-	143 + 86	2269	2269

X7801004

SCHEDULE OF QUANTITIES

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 4th (CONTINUED)

Lee Westbound FOOT Total LOCATION COMMENTS

Lee Westbound	FOOT	Total	LOCATION	COMMENTS
4959	4959	0 + 00	(ML) LEFT EDGE LINE	49 + 59
224	224	49 + 59	(ML) RIGHT EDGE LINE	50 + 60
185	185	17 + 34	(SD) West Side of Mound Hill Road	17 + 34
546	546	17 + 34	(SD) East Side of Mound Hill Road	51 + 29
311	311	54 + 65	(ML) LEFT EDGE LINE	51 + 54
289	289	54 + 65	(ML) RIGHT EDGE LINE	51 + 76
599	599	57 + 78	(LTL) (Left side)	51 + 79
3735	3735	103 + 26	(ML) LEFT EDGE LINE	65 + 91
0	0	65 + 91	Bridge Omission	67 + 13
935	935	67 + 13	(ML) LEFT EDGE LINE	67 + 78
3735	3735	103 + 26	(ML) RIGHT EDGE LINE	65 + 91
0	0	65 + 91	Bridge Omission	67 + 53
975	975	67 + 53	(ML) RIGHT EDGE LINE	57 + 78
96	96	103 + 66	(SD) West Side of Sauk Road	18 + 45
83	83	18 + 44	(SD) East Side of Sauk Road	103 + 93
330	330	107 + 74	(ML) LEFT EDGE LINE	104 + 44
290	290	107 + 29	(ML) RIGHT EDGE LINE	104 + 13
316	316	107 + 29	(LTL) (Right side)	104 + 39
598	598	110 + 41	(LTL) (Left side)	104 + 43
2815	2815	142 + 65	(ML) LEFT EDGE LINE	114 + 50
132	132	114 + 50	Bridge Omission	115 + 82
808	808	115 + 82	(ML) LEFT EDGE LINE	107 + 74
2845	2845	142 + 95	(ML) RIGHT EDGE LINE	114 + 50
132	132	114 + 50	Bridge Omission	115 + 82
541	541	115 + 82	(ML) RIGHT EDGE LINE	110 + 41
188	188	142 + 65	(SD) West Side of Hill Drive	142 + 70
176	176	144 + 11	(SD) East Side of Hill Drive	144 + 11
581	581	149 + 92	(ML) LEFT EDGE LINE	144 + 11
27	27	146 + 54	(ML) RIGHT EDGE LINE	146 + 81
291	291	146 + 79	(LTL) (Right side)	143 + 88
598	598	149 + 92	(LTL) (Left side)	143 + 94
1669	1669	166 + 55	(ML) Two Edge Lines	149 + 85
282	282	17 + 34	(SR) center line double yellow	18 + 75
230	230	20 + 34	(SR) center line double yellow	21 + 49
630	630	630	(SR) MAINLINE CL SKIP DASHES	
300	300	300	ENTERANCE (SR) center line double yellow	
630	630	630	(SR) MAINLINE CL SKIP DASHES	
820	820	820	ENTERANCE (SR) center line double yellow	
32,108	40,854	72,762	TOTAL LEE COUNTY	
9,457	9,402	18,859	TOTAL WHITESIDE COUNTY	
		91,621	TOTAL	

SCHEDULE OF QUANTITIES

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 6*

COMMENTS	LOCATION	FOOT	Total	White		Lee
				White	Side	
Center Line	197 + 19	207 + 9	250	197	53	250
Center Line	208 + 7	226 + 80	470	208	262	470
Center Line	197 + 00	207 + 9	260	197	63	260
Center Line	208 + 7	226 + 80	470	208	262	470
Center Line	0 + 00	50 + 83	1280	0	1280	1280
Center Line	51 + 51	65 + 91	360	51	309	360
Center Line	65 + 91	67 + 13	0	65	0	65
Center Line	67 + 13	67 + 13	920	67	853	920
Center Line	104 + 13	115 + 9	280	104	176	280
Center Line	115 + 9	115 + 9	0	115	0	115
Center Line	143 + 17	143 + 17	680	143	537	680
Center Line	143 + 17	143 + 17	580	143	437	580
Center Line	143 + 69	143 + 69	580	143	437	580
Center Line	0 + 00	50 + 83	1280	0	1280	1280
Center Line	51 + 51	65 + 91	380	51	329	380
Center Line	65 + 91	67 + 13	0	65	0	65
Center Line	67 + 13	67 + 13	910	67	843	910
Center Line	104 + 13	115 + 9	270	104	166	270
Center Line	115 + 9	115 + 9	0	115	0	115
Center Line	143 + 17	143 + 17	680	143	537	680
Center Line	143 + 17	143 + 17	580	143	437	580
Center Line	143 + 69	143 + 69	580	143	437	580
Center Line	0 + 00	50 + 83	1280	0	1280	1280
Center Line	51 + 51	65 + 91	380	51	329	380
Center Line	65 + 91	67 + 13	0	65	0	65
Center Line	67 + 13	67 + 13	910	67	843	910
Center Line	104 + 13	115 + 9	270	104	166	270
Center Line	115 + 9	115 + 9	0	115	0	115
Center Line	143 + 17	143 + 17	680	143	537	680
Center Line	143 + 17	143 + 17	580	143	437	580
Center Line	143 + 69	143 + 69	580	143	437	580
TOTAL			9,650			
TOTAL LEE COUNTY			8200			
TOTAL WHITESIDE COUNTY			1450			

X7801006

SCHEDULE OF QUANTITIES

FAP 561 (L-2)
 SECTION (31.32)RS
 WHITESIDE/LEE COUNTIES
 CONTRACT 64540
 SHEET 45 OF 136

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 8"

COMMENTS	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT	WHITE FOOT
(SR) LEFT TURN LANE										
(SR) RIGHT TURN LANE										
SB ON S (SR) CENTER LINE										
SE Island										
SW Island										
SE Island										
SW Island										
SE Island										
NW Island										
NE Island										
S (SR) LEFT TURN LANE	21 + 49									
N (SR) RIGHT TURN LANE	18 + 75									
(LTL GORE AREA)										
(RTL) TURN LANE	148 + 10									
(LTL GORE AREA)										
(RTL) TURN LANE	147 + 26									
(LTL GORE AREA)										
(RTL) TURN LANE	108 + 59									
(LTL GORE AREA)										
(RTL) TURN LANE	105 + 45									
(LTL GORE AREA)										
(RTL) TURN LANE	55 + 26									
(LTL GORE AREA)										
(RTL) TURN LANE	55 + 95									
(LTL GORE AREA)										
(RTL) TURN LANE	51 + 37									
(LTL GORE AREA)										
(RTL) TURN LANE	139 + 67									
(LTL GORE AREA)										
(RTL) TURN LANE	140 + 9									
(LTL GORE AREA)										
(RTL) TURN LANE	103 + 67									
(LTL GORE AREA)										
(RTL) TURN LANE	99 + 20									
(LTL GORE AREA)										
(RTL) TURN LANE	47 + 28									
(LTL GORE AREA)										
EB TURN LANE @ SAUK RD										
EB TURN LANE @ MOUND HILL RD										
WB TURN LANE @ ROCK RIVER RD										
WB TURN LANE @ SAUK RD										
WB TURN LANE @ ROCK RIVER RD										
WB TURN LANE @ MOUND HILL RD										
WB TURN LANE @ SAUK RD										
EB TURN LANE @ ROCK RIVER RD										
EB TURN LANE @ SAUK RD										
EB TURN LANE @ MOUND HILL RD										
(LTL GORE AREA)										
(RTL) TURN LANE	46 + 66									
(LTL GORE AREA)										
(RTL) TURN LANE	47 + 71									
(LTL GORE AREA)										
(RTL) TURN LANE	50 + 96									
(LTL GORE AREA)										
(RTL) TURN LANE	100 + 37									
(LTL GORE AREA)										
(RTL) TURN LANE	99 + 94									
(LTL GORE AREA)										
(RTL) TURN LANE	138 + 93									
(LTL GORE AREA)										
(RTL) TURN LANE	143 + 21									
(LTL GORE AREA)										
(RTL) TURN LANE	143 + 9									
(LTL GORE AREA)										
(RTL) TURN LANE	139 + 67									
(LTL GORE AREA)										
(RTL) TURN LANE	51 + 37									
(LTL GORE AREA)										
(RTL) TURN LANE	54 + 65									
(LTL GORE AREA)										
(RTL) TURN LANE	103 + 72									
(LTL GORE AREA)										
(RTL) TURN LANE	107 + 29									
(LTL GORE AREA)										
(RTL) TURN LANE	143 + 72									
(LTL GORE AREA)										
(RTL) TURN LANE	146 + 79									
(LTL GORE AREA)										
(RTL) TURN LANE	17 + 34									
(LTL GORE AREA)										
(RTL) TURN LANE	18 + 75									
(LTL GORE AREA)										
(RTL) TURN LANE	20 + 36									
(LTL GORE AREA)										
(RTL) TURN LANE	21 + 49									
(LTL GORE AREA)										
(RTL) TURN LANE	113									
(LTL GORE AREA)										
(RTL) TURN LANE	115									
(LTL GORE AREA)										
(RTL) TURN LANE	102									
(LTL GORE AREA)										
(RTL) TURN LANE	101									
(LTL GORE AREA)										
(RTL) TURN LANE	112									
(LTL GORE AREA)										
(RTL) TURN LANE	175									
(LTL GORE AREA)										
(RTL) TURN LANE	200									
(LTL GORE AREA)										
(RTL) TURN LANE	17									
(LTL GORE AREA)										
(RTL) TURN LANE	140									
(LTL GORE AREA)										
(RTL) TURN LANE	100									
(LTL GORE AREA)										
(RTL) TURN LANE	4797									
(LTL GORE AREA)										
TOTAL LEE COUNTY	4797									
TOTAL WHITESIDE COUNTY	1,150									
TOTAL	5,947									

X7801008

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
SECTION (31.32)RS
WHITESIDE/LEE COUNTIES
CONTRACT 64540
SHEET 46 OF 136

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 122

X7801012

WHITESIDE	Yellow	TOTAL	FOOT	FOOT	FOOT	FOOT	FOOT
PRAIRIEVILLE RD							
White							
Yellow							
TOTAL							
LEE							
EB TURN LANE @ MOUND HILL RD							
FOOT							
FOOT							
FOOT							
180							
NE ISLAND							
180							
NW ISLAND							
280							
125							
Prairieville Rd Median							
17 + 80							
14 + 75							
TOTAL WHITESIDE COUNTY							
585							
460							
125							
TOTAL							
280							
125							
125							
3,734							
2,229							
920							
3,149							
TOTAL LEE COUNTY							
585							
460							
125							
TOTAL							
235							
NE Island							
110							
NW Island							
110							
SE Island							
110							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							
235							
NE Island							
230							
SE Island							
110							
NW Island							
110							
SE Island							
230							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							
235							
NE Island							
230							
SE Island							
110							
NW Island							
110							
SE Island							
230							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							
235							
NE Island							
230							
SE Island							
110							
NW Island							
110							
SE Island							
230							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							
235							
NE Island							
230							
SE Island							
110							
NW Island							
110							
SE Island							
230							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							
235							
NE Island							
230							
SE Island							
110							
NW Island							
110							
SE Island							
230							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							
235							
NE Island							
230							
SE Island							
110							
NW Island							
110							
SE Island							
230							
SW Island							
230							
8							
12							
17 + 24							
20 + 34							
-							
18 + 75							
21 + 59							
S (SR) center line diagonals yellow							
S (SR) center line diagonals yellow							
0							
Sauk RD							
190							
370							
2,229							
TOTAL WHITESIDE COUNTY							
3,734							

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 122

X7801012

SCHEDULE OF QUANTITIES

WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 24"

X7801024

COMMENTS	LOCATION	FOOT	
		White	Lee
N PRAIRIEVILLE RD (RTL)		20	26
N PRAIRIEVILLE RD (S & LTL)			
(EB LTL)	103 + 21	14	
(EB ML)	103 + 60	26	
(EB RTL)	103 + 60	18	
(WB ML)	104 + 16	26	
(WB RTL)	104 + 16	20	
(WB LTL)	104 + 44	14	
N Mound Hill Rd	18 + 80	25	
N Mound Hill Rd (RTL)	18 + 95	20	
S Mound Hill Rd (RTL)	20 + 38	20	
S Mound Hill Rd	20 + 38	25	
N Sauk Rd	18 + 95	25	
S Sauk Rd	20 + 27	12	
S Sauk Rd (RTL)	20 + 27	18	
N Hill Drive		30	
S Rock River DR		30	
TOTAL LEE COUNTY		323	
TOTAL WHITE COUNTY			46
TOTAL		369	

GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS

X7830068

COMMENTS	LOCATION	SQ FT	
		White	Lee
(LTL) LEFT TURN ARROW	203 + 99	19.5	
(LTL) "ONLY"	204 + 77	26	
(LTL) LEFT TURN ARROW	206 + 55	19.5	
(RTL) RIGHT TURN ARROW	209 + 52	19.5	
(RTL) "ONLY"	210 + 69	26	
(RTL) RIGHT TURN ARROW	211 + 47	19.5	
(LTL) LEFT TURN ARROW	45 + 94	19.5	
(LTL) "ONLY"	46 + 74	26	
(LTL) LEFT TURN ARROW	47 + 52	19.5	
(LTL) RIGHT TURN ARROW	47 + 52	19.5	
(RTL) "ONLY"	48 + 22	26	
(RTL) RIGHT TURN ARROW	48 + 00	19.5	
(LTL) LEFT TURN ARROW	55 + 4	19.5	
(LTL) "ONLY"	55 + 82	26	
(LTL) LEFT TURN ARROW	56 + 62	19.5	
(RTL) RIGHT TURN ARROW	56 + 62	19.5	
(RTL) "ONLY"	53 + 66	19.5	
(RTL) RIGHT TURN ARROW	54 + 34	26	
(RTL) "ONLY"	55 + 4	19.5	
(SD) LEFT TURN ARROW	17 + 30	26	
(SD) "ONLY"	18 + 10	19.5	
(SD) LEFT TURN ARROW	18 + 10	32.5	
(SD) COMB RIGHT AND THROUGH ARROW	18 + 10	32.5	
(SD) LEFT TURN ARROW	20 + 65	19.5	
(SD) COMB RIGHT AND THROUGH ARROW	20 + 65	32.5	
(LTL) LEFT TURN ARROW	53 + 47	19.5	
(LTL) "ONLY"	99 + 27	26	
(LTL) LEFT TURN ARROW	100 + 5	19.5	
(LTL) RIGHT TURN ARROW	100 + 5	19.5	
(RTL) "ONLY"	100 + 75	26	
(RTL) RIGHT TURN ARROW	101 + 53	19.5	
EB TURN LANE @ PRAIRIEVILLE RD			
(LTL) LEFT TURN ARROW	203 + 99	19.5	
(LTL) "ONLY"	204 + 77	26	
(LTL) LEFT TURN ARROW	206 + 55	19.5	
(RTL) RIGHT TURN ARROW	209 + 52	19.5	
(RTL) "ONLY"	210 + 69	26	
(RTL) RIGHT TURN ARROW	211 + 47	19.5	
EB TURN LANE @ MOUND HILL RD			
(LTL) LEFT TURN ARROW	45 + 94	19.5	
(LTL) "ONLY"	46 + 74	26	
(LTL) LEFT TURN ARROW	47 + 52	19.5	
(LTL) RIGHT TURN ARROW	47 + 52	19.5	
(RTL) "ONLY"	48 + 22	26	
(RTL) RIGHT TURN ARROW	48 + 00	19.5	
(LTL) LEFT TURN ARROW	55 + 4	19.5	
(LTL) "ONLY"	55 + 82	26	
(LTL) LEFT TURN ARROW	56 + 62	19.5	
(RTL) RIGHT TURN ARROW	56 + 62	19.5	
(RTL) "ONLY"	53 + 66	19.5	
(RTL) RIGHT TURN ARROW	54 + 34	26	
(RTL) "ONLY"	55 + 4	19.5	
WB TURN LANE @ MOUND HILL RD			
(LTL) LEFT TURN ARROW	17 + 30	26	
(LTL) "ONLY"	18 + 10	19.5	
(LTL) LEFT TURN ARROW	18 + 10	32.5	
(SD) COMB RIGHT AND THROUGH ARROW	18 + 10	32.5	
(SD) LEFT TURN ARROW	20 + 65	19.5	
(SD) COMB RIGHT AND THROUGH ARROW	20 + 65	32.5	
(LTL) LEFT TURN ARROW	53 + 47	19.5	
(LTL) "ONLY"	99 + 27	26	
(LTL) LEFT TURN ARROW	100 + 5	19.5	
(LTL) RIGHT TURN ARROW	100 + 5	19.5	
(RTL) "ONLY"	100 + 75	26	
(RTL) RIGHT TURN ARROW	101 + 53	19.5	
S MOUND HILL RD			
(LTL) LEFT TURN ARROW	17 + 30	26	
(LTL) "ONLY"	18 + 10	19.5	
(LTL) LEFT TURN ARROW	18 + 10	32.5	
(SD) COMB RIGHT AND THROUGH ARROW	18 + 10	32.5	
(SD) LEFT TURN ARROW	20 + 65	19.5	
(SD) COMB RIGHT AND THROUGH ARROW	20 + 65	32.5	
(LTL) LEFT TURN ARROW	53 + 47	19.5	
(LTL) "ONLY"	99 + 27	26	
(LTL) LEFT TURN ARROW	100 + 5	19.5	
(LTL) RIGHT TURN ARROW	100 + 5	19.5	
(RTL) "ONLY"	100 + 75	26	
(RTL) RIGHT TURN ARROW	101 + 53	19.5	
EB TURN LANE @ SAUK RD			
(LTL) LEFT TURN ARROW	53 + 47	19.5	
(LTL) "ONLY"	99 + 27	26	
(LTL) LEFT TURN ARROW	100 + 5	19.5	
(LTL) RIGHT TURN ARROW	100 + 5	19.5	
(RTL) "ONLY"	100 + 75	26	
(RTL) RIGHT TURN ARROW	101 + 53	19.5	

SCHEDULE OF QUANTITIES

GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS (CONTINUED)

COMMENTS	LOCATION	TOTAL	SO FT	White	Yellow
(LTL) LEFT TURN ARROW	WB TURN LANE @ SAUK RD	107 + 68	19.5	19.5	19.5
(LTL) "ONLY"		108 + 46	26	26	26
(LTL) LEFT TURN ARROW		109 + 26	19.5	19.5	19.5
(RTL) RIGHT TURN ARROW		109 + 26	19.5	19.5	19.5
(RTL) "ONLY"		110 + 6	26	26	26
(RTL) RIGHT TURN ARROW		110 + 84	19.5	19.5	19.5
(SD) RIGHT TURN ARROW	S SAUK RD	21 + 00	19.5	19.5	19.5
(SD) COMB LEFT AND THROUGH ARROW		21 + 00	32.5	32.5	32.5
(SD) THROUGH ARROW		21 + 00	14.4	14.4	14.4
(LTL) LEFT TURN ARROW	EB TURN LANE @ ROCK RIVER RD	138 + 20	19.5	19.5	19.5
(LTL) "ONLY"		139 + 00	26	26	26
(LTL) LEFT TURN ARROW		139 + 78	19.5	19.5	19.5
(RTL) RIGHT TURN ARROW		139 + 78	19.5	19.5	19.5
(RTL) "ONLY"		140 + 58	26	26	26
(RTL) RIGHT TURN ARROW	ROCK RIVER RD @ ROCK RIVER RD	141 + 36	19.5	19.5	19.5
(LTL) LEFT TURN ARROW		147 + 19	19.5	19.5	19.5
(LTL) "ONLY"		147 + 97	26	26	26
(LTL) LEFT TURN ARROW		147 + 97	19.5	19.5	19.5
(LTL) "ONLY"		148 + 77	19.5	19.5	19.5
(LTL) LEFT TURN ARROW		148 + 61	19.5	19.5	19.5
(RTL) RIGHT TURN ARROW		146 + 39	26	26	26
(RTL) "ONLY"		147 + 19	19.5	19.5	19.5
(RTL) RIGHT TURN ARROW	HILL DRIVE	144	14.4	14.4	14.4
(SD) THROUGH ARROW		144	14.4	14.4	14.4
(SD) RIGHT TURN ARROW		19.5	19.5	19.5	19.5
(SD) COMB LEFT AND THROUGH ARROW		32.5	32.5	32.5	32.5
(SD) THROUGH ARROW	ROCK RIVER RD	14.4	14.4	14.4	14.4
(SD) LEFT TURN ARROW		19.5	19.5	19.5	19.5
(SD) COMB RIGHT AND THROUGH ARROW		32.5	32.5	32.5	32.5
TOTAL	TOTAL LEE COUNTY	1,124	130	130	130
TOTAL	TOTAL WHITE COUNTY	1,254	130	130	130
	White	959	959	959	959
(ML) RIGHT EDGE LINE		206 + 78	959	959	959
(ML) LEFT EDGE LINE		207 + 9	1914	1914	1914
(ML) RIGHT EDGE LINE		207 + 9	1914	1914	1914
(ML) LEFT EDGE LINE		207 + 9	1914	1914	1914
(ML) RIGHT EDGE LINE	Whiteside Westbound	197 + 00	1873	1873	1873
(ML) LEFT EDGE LINE		208 + 7	1873	1873	1873
(ML) RIGHT EDGE LINE		208 + 7	1873	1873	1873
(ML) LEFT EDGE LINE		207 + 9	1873	1873	1873
(ML) RIGHT EDGE LINE		207 + 9	1873	1873	1873
(ML) LEFT EDGE LINE		208 + 7	1873	1873	1873
(ML) RIGHT EDGE LINE		208 + 7	1873	1873	1873
(SR) MEDIAN EDGE LINE		11 + 89	316	316	316
SB ON N (SR) CENTER LINE STRIPE		11 + 89	50	50	50
SB ON N (SR) CENTER LINE STRIPE		11 + 89	50	50	50
EDG LINE WEST SIDE OF PRAIRIEVILLE RD		11 + 89	1589	1589	1589
EDG LINE WEST SIDE OF PRAIRIEVILLE RD		11 + 89	1589	1589	1589
EDG LINE EAST SIDE OF PRAIRIEVILLE RD		11 + 89	1589	1589	1589
EDG LINE EAST SIDE OF PRAIRIEVILLE RD		11 + 89	1589	1589	1589
ALL OF CL STRIPES		27 + 58	2210	2210	2210
	Total Whiteside county	17,001	8,240	8,761	8,761

GROOVING FOR RECESSED PAVEMENT MARKING 5"

COMMENTS

LOCATION

FOOT

FOOT

White

Yellow

X7830070

GROOVING FOR RECESSED PAVEMENT MARKING 5"

COMMENTS

LOCATION

FOOT

FOOT

White

Yellow

X7830068

SCHEDULE OF QUANTITIES

FAP 561 (L-2)
SECTION (31.32)RS
WHITESIDE/LEE COUNTIES
CONTRACT 64540
SHEET 46 OF 136

X7830070

GROOVING FOR RECESSED PAVEMENT MARKING 5" (CONTINUED)

COMMENTS	LOCATION	FOOT	Lee Eastbound	White	Yellow
(M.L) LEFT EDGE LINE	0 + 00	4471	4471		
(M.L) RIGHT EDGE LINE	0 + 00	4458		4458	
(M.L) LEFT EDGE LINE	44 + 71	0			4471
(M.L) RIGHT EDGE LINE	44 + 58	0			4458
(LTL) (Left side) (N)	44 + 56	44		585	
(LTL) (Right side) (S)	50 + 83	47		290	
(M.L) LEFT EDGE LINE	50 + 00	312	312		
(M.L) RIGHT EDGE LINE	542 + 58	542			542
(M.L) RIGHT EDGE LINE	52 + 73	1378			1378
Bridge Omission	66 + 51	0			0
(M.L) LEFT EDGE LINE	66 + 51	66			66
(M.L) RIGHT EDGE LINE	67 + 53	2971			2971
(M.L) LEFT EDGE LINE	67 + 24	1472	1472		
(M.L) RIGHT EDGE LINE	51 + 79	0			1472
Bridge Omission	66 + 51	0			0
(M.L) LEFT EDGE LINE	66 + 51	66			66
(M.L) RIGHT EDGE LINE	67 + 53	2984			2984
(M.L) LEFT EDGE LINE	67 + 53	2984			2984
Bridge Omission	97 + 37	0			0
(M.L) LEFT EDGE LINE	102 + 60	942			942
(M.L) RIGHT EDGE LINE	105 + 67	0			0
Bridge Omission	115 + 9	0			0
(M.L) LEFT EDGE LINE	116 + 21	2076			2076
(M.L) RIGHT EDGE LINE	116 + 21	2076			2076
(LTL) (Left side) (N)	103 + 25	689	589		
(LTL) (Right side) (S)	103 + 28	291		291	
(M.L) LEFT EDGE LINE	100 + 37	327			327
(M.L) RIGHT EDGE LINE	104 + 43	1086			1086
Bridge Omission	115 + 9	0			0
(M.L) LEFT EDGE LINE	116 + 21	2089			2089
(M.L) RIGHT EDGE LINE	116 + 21	2089			2089
(RTL) RT EDGE LINE	135 + 97	578			578
(M.L) LEFT EDGE LINE	142 + 75	2234			2234
(M.L) RIGHT EDGE LINE	144 + 21	586	586		
(LTL) (Left side) (N)	142 + 96	264		264	
(LTL) (Right side) (S)	143 + 00	281		281	
(M.L) LEFT EDGE LINE	143 + 17	2269			2269
(M.L) RIGHT EDGE LINE	143 + 86	0			0
(M.L) LEFT EDGE LINE	49 + 59	4959			4959
(M.L) RIGHT EDGE LINE	50 + 00	5060			5060
(M.L) RIGHT EDGE LINE	50 + 80	546			546
(M.L) LEFT EDGE LINE	52 + 32	311	311		
(M.L) RIGHT EDGE LINE	54 + 65	289			289
(LTL) (Left side)	51 + 79	599			599
(LTL) (Right side)	51 + 76	599			599
(M.L) LEFT EDGE LINE	57 + 78	813	813		
(M.L) RIGHT EDGE LINE	57 + 91	0			0
Bridge Omission	67 + 13	0			0
(M.L) LEFT EDGE LINE	103 + 10	3597			3597
(M.L) RIGHT EDGE LINE	65 + 91	813	813		
Bridge Omission	67 + 53	0			0
(M.L) LEFT EDGE LINE	103 + 26	3573			3573
(M.L) RIGHT EDGE LINE	107 + 74	330			330
(M.L) LEFT EDGE LINE	104 + 44	316	316		
(M.L) RIGHT EDGE LINE	104 + 13	290			290
(LTL) (Left side)	104 + 43	598			598
(LTL) (Right side)	107 + 41	676			676
(M.L) LEFT EDGE LINE	114 + 50	2683			2683
(M.L) RIGHT EDGE LINE	115 + 82	409			409
Bridge Omission	114 + 50	132			132
(M.L) LEFT EDGE LINE	114 + 82	2713			2713
(M.L) RIGHT EDGE LINE	115 + 82	132			132
Bridge Omission	114 + 82	409			409
(M.L) LEFT EDGE LINE	110 + 41	409			409
(M.L) RIGHT EDGE LINE	110 + 41	409			409
(M.L) LEFT EDGE LINE	114 + 50	132			132
(M.L) RIGHT EDGE LINE	114 + 82	2713			2713
Bridge Omission	114 + 50	132			132
(M.L) LEFT EDGE LINE	114 + 82	2713			2713
(M.L) RIGHT EDGE LINE	149 + 92	581			581
(M.L) LEFT EDGE LINE	143 + 72	309	309		
(M.L) RIGHT EDGE LINE	146 + 81	291			291
(LTL) (Left side)	143 + 88	598			598
(LTL) (Right side)	143 + 94	1669			1669
(M.L) Two Edge Lines	149 + 86	3338			3338
(M.L) LEFT EDGE LINE	17 + 34	282			282
(M.L) RIGHT EDGE LINE	17 + 34	230			230
(N (SR) center line double yellow	18 + 75	230			230
(S (SR) center line double yellow	21 + 49	230			230
(SR) MAINLINE CL SKIP DASHES	20 + 34	630			630
(SR) MAINLINE CL SKIP DASHES	20 + 34	300			300
ENTERANCE (SR) center line double yellow	220	820			820
ENTERANCE (SR) center line double yellow	220	220			220
TOTAL LEE COUNTY		70,029	37,426	32,603	32,603
TOTAL WHITESIDE COUNTY		17,001	8,240	8,761	8,761
TOTAL		87,030	45,666	41,364	41,364

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
 SECTION (31.32)RS
 WHITESIDE/LEE COUNTIES
 CONTRACT 64540
 SHEET 50 OF 136

X7830074		GROOVING FOR RECESSED PAVEMENT MARKING 7"		Whiteside		Lee	
FOOT	LOCATION	FOOT	LOCATION	TOTAL	FOOT	LOCATION	COMMENTS
250	197 + 19	250	197 + 00	250	250	197 + 00	Center Line
470	208 + 7	470	208 + 7	470	470	208 + 7	Center Line
260	197 + 00	260	197 + 00	260	260	197 + 00	Center Line
470	208 + 7	470	208 + 7	470	470	208 + 7	Center Line
1280	0 + 00	1280	0 + 00	1280	1280	0 + 00	Center Line
360	51 + 51	360	51 + 51	360	360	51 + 51	Center Line
0	65 + 91	0	65 + 91	0	0	65 + 91	Center Line
920	67 + 13	920	67 + 13	920	920	67 + 13	Center Line
280	104 + 13	280	104 + 13	280	280	104 + 13	Center Line
0	115 + 9	0	115 + 9	0	0	115 + 9	Center Line
680	116 + 21	680	116 + 21	680	680	116 + 21	Center Line
580	143 + 69	580	143 + 69	580	580	143 + 69	Center Line
1280	0 + 00	1280	0 + 00	1280	1280	0 + 00	Center Line
380	51 + 51	380	51 + 51	380	380	51 + 51	Center Line
0	66 + 51	0	66 + 51	0	0	66 + 51	Center Line
910	67 + 53	910	67 + 53	910	910	67 + 53	Center Line
270	104 + 48	270	104 + 48	270	270	104 + 48	Center Line
0	115 + 9	0	115 + 9	0	0	115 + 9	Center Line
680	116 + 21	680	116 + 21	680	680	116 + 21	Center Line
580	143 + 69	580	143 + 69	580	580	143 + 69	Center Line
8,200	0 + 00	8,200	0 + 00	8,200	8,200	0 + 00	Center Line
1,450	TOTAL LEE COUNTY	1,450	TOTAL LEE COUNTY	1,450	1,450	TOTAL LEE COUNTY	TOTAL
9,650	TOTAL WHITESIDE COUNTY	9,650	TOTAL WHITESIDE COUNTY	9,650	9,650	TOTAL WHITESIDE COUNTY	TOTAL
X7830076							
GROOVING FOR RECESSED PAVEMENT MARKING 9"							
FOOT	LOCATION	FOOT	LOCATION	FOOT	LOCATION	FOOT	COMMENTS
320	203 + 89	320	203 + 89	320	203 + 89	203 + 89	(ML) LEFT TURN LANE
350	208 + 7	350	208 + 7	350	208 + 7	208 + 7	(ML) RIGHT TURN LANE
280	207 + 9	280	207 + 9	280	207 + 9	207 + 9	(ML) LEFT TURN LANE
220	211 + 57	220	211 + 57	220	211 + 57	211 + 57	(ML) RIGHT TURN LANE
1,150	TOTAL WHITESIDE COUNTY	1,150	TOTAL WHITESIDE COUNTY	1,150	1,150	TOTAL WHITESIDE COUNTY	TOTAL

SCHEDULE OF QUANTITIES

FAP 561 (IL-2)
SECTION (31.32)RS
WHITESIDE/LEE COUNTIES
CONTRACT 64540
SHEET 52 OF 136

X7830078 GROOVING FOR RECESSED PAVEMENT MARKING 13" (CONTINUED)

LEESIDE	FOOT	FOOT	FOOT	LOCATION	COMMENTS
120	120	140 + 36	143 + 00	EB (LTL RT SIDE DIAGONALS)	
44	44	138 + 93	291 + 83	(LTL CHANNEL AREA)	(ML) LEFT SHOULDER AREA DIAGONALS
120	132	140 + 9	294 + 88	WB (LTL RT SIDE DIAGONALS)	
44	120	143 + 90	146 + 64	(LTL CHANNEL AREA)	(ML) LEFT SHOULDER AREA DIAGONALS
120	44	148 + 63	299 + 84	WB (LTL RT SIDE DIAGONALS)	
168	168	143 + 72	298 + 27	(LTL CHANNEL AREA)	(ML) LEFT SHOULDER AREA DIAGONALS
235	235			NE Island	
110	110			NW Island	
110	110			SE Island	
230	230			SW Island	
8	8	17 + 24	18 + 75	N (SR) center line diagonals yellow	
12	12	20 + 34	21 + 59	S (SR) center line diagonals yellow	
190	190			SE Island	
370	370			SW Island	
2,229	920	3,149		TOTAL LEE COUNTY	
460	225	3,834		TOTAL WHITESIDE COUNTY	

X7830090 GROOVING FOR RECESSED PAVEMENT MARKING 25"

Whiteside	Lee	FOOT	FOOT	LOCATION	COMMENTS
20	20	103 + 21	103 + 21	(EB LTL)	N PRAIRIEVILLE RD (RTL)
26	26	103 + 60	103 + 60	(EB ML)	N PRAIRIEVILLE RD (S & LTL)
18	18	103 + 60	103 + 60	(EB RTL)	
26	26	104 + 16	104 + 16	(WB ML)	
20	20	104 + 16	104 + 16	(WB RTL)	
14	14	104 + 44	104 + 44	(WB LTL)	
25	25	18 + 80	18 + 80	N Mound Hill Rd	
20	20	18 + 95	18 + 95	N Mound Hill Rd (RTL)	
25	25	20 + 38	20 + 38	S Mound Hill Rd (RTL)	
25	25	20 + 38	20 + 38	S Mound Hill Rd	
12	12	20 + 27	20 + 27	N Sauk Rd	
18	18	20 + 27	20 + 27	S Sauk Rd	
30	30			N Hill Drive	
30	30			S Rock River Dr	
46	46	323	323	TOTAL LEE COUNTY	
369	369			TOTAL WHITESIDE COUNTY	

Z0005400 BREAKER-RUN CRUSHED STONE

TONS	LOCATION	COMMENTS
40	40	W.B. LT SIDE
40	40	TOTAL LEE COUNTY
8	8	TOTAL

Z0008758 AERIAL SPEED CHECK MARKING

Whiteside	Lee	FOOT	FOOT	LOCATION	COMMENTS
0	0	19 + 60	19 + 60	EB LANE	
36	36	6 + 40	6 + 40	WB LANE	
36	36	19 + 60	19 + 60	WB LANE	
0	0	156 + 90	156 + 90	WB LANE	
108	108			TOTAL LEE COUNTY	
108	108			TOTAL WHITESIDE COUNTY	

SCHEDULE OF QUANTITIES

Z0028415

GEOTECHNICAL REINFORCEMENT

LOCATION	COMMENTS	QTY	UNIT	AMOUNT
W.B. LT SIDE		224	+ 00	311
E.B. LT SIDE		224	+ 00	187
W.B. LT SIDE		226	+ 80	13
E.B. LT SIDE		226	+ 80	511
W.B. LT SIDE		2	+ 50	278
E.B. LT SIDE		8	+ 00	533
W.B. LT SIDE		0	+ 00	7
E.B. LT SIDE		0	+ 00	818
W.B. contigency		166	+ 25	1,329
SUB-TOTAL WHITESIDE COUNTY				511
SUB-TOTAL LEE COUNTY				1,329
TOTAL				1,329

Z0028700

GRANULAR SUBGRADE REPLACEMENT

This item is a contingency to be used as directed by the Engineer.
 A quantity of 4 CU YD is estimated. See patching schedule for rest.

LOCATION	COMMENTS	QTY	UNIT	AMOUNT
W.B. LT SIDE		224	+ 00	311
E.B. LT SIDE		224	+ 00	187
W.B. LT SIDE		226	+ 80	13
E.B. LT SIDE		226	+ 80	511
W.B. LT SIDE		2	+ 50	278
E.B. LT SIDE		8	+ 00	533
W.B. LT SIDE		0	+ 00	7
E.B. LT SIDE		0	+ 00	818
W.B. contigency		166	+ 25	1,329
SUB-TOTAL WHITESIDE COUNTY				511
SUB-TOTAL LEE COUNTY				1,329
TOTAL				1,329

HMA MAINLINE SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 561 (IL 2)
 SECTION (31.32)RS
 WHITESIDE & LEE COUNTIES
 CONTRACT 64540
 SHEET 54 OF 138

STATIONING	REMARKS	Length	Proposed Surface Pavement			BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9.5FG N50 TON MAINLINE	HMA SURF. CSE. MIX "D", N50 TON
			Width (FT)	Thickness (IN)	SQ. YD.						
WB IL 2 - Mainline											
Whiteside County											
197+19 -	197+50	Outside Lane Only (Mill 2 & Varies)	31	12.0	41.3	0.02	0.06		41.33	3.47	3.47
197+50 -	201+50	Travel Lanes (Mill 2" & Varies)	400	24.0	1066.7	0.61	1.60		1066.67	89.60	89.60
201+50 -	208+37	Lt. Turn Lane (Mill 2" & Varies)	687	12 & Var	773.0	0.44	1.16		773.00	64.93	64.93
201+50 -	208+37	Travel Lanes (Mill 2" & Varies)	687	24.0	1632.0	1.05	2.75		1632.00	153.89	153.89
208+37 -	217+20	Travel Lanes (Mill 2" & Varies)	883	24.0	2354.7	1.35	3.53		2354.67	197.79	197.79
217+20 -	226+80	Travel Lanes (Mill 2" & Varies)	960	24.0	2560.0	1.46	3.84		2560.00	215.04	215.04
Whiteside County TOTAL											
197+00 -	226+80	1 1/2" Max CL Mill Inside/Outside Lane Provision for keeping traffic off of milled surface	2980	0.125	41.4				41.4	2.32	3.48
			WHITESIDE COUNTY TOTAL			10	26	0	15221	1232	1486

4090200 40900800 40600882 44000157 40600627 40603336

HMA MAINLINE SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAF 561 (IL 2)
 SECTION (31.32)RS
 WHITESIDE & LEE COUNTIES
 CONTRACT 64540
 SHEET 55 OF 136

STATIONING	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9.5FG NSD TON MAINLINE	HMA SURF CSE MIX "D" NSD TON	
			Pavement	SQ. YD.							
226+80=0+00 (Sta equation)											
0+00	8+00	Travel Lanes (Mill 2" & Varies)	800	24.0	2133.3	1.22	3.20		2133.33	149.33	179.20
8+00	9+30	Taper from Grind 2" to 2" Resurf	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
9+30	43+28	2" Resurface	3399	24.0	9061.3	5.18	13.59		507.43	507.43	791.15
43+28	44+58	Taper from 2" to Grind 2"	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
44+58	50+60	Left Turn Lane (Mill 2")	589	14 & Var	792.9	0.45	1.19		66.44	44.40	66.80
50+60	50+83	Left Turn Lane (Mill 2")	23	26.0	66.4	0.04	0.10		3.72	3.72	5.58
50+83	51+54	Travel Lanes (Mill 2")	1320	24.0	3520.0	2.01	5.28		3520.00	197.12	295.68
51+54	52+73	ML Between Median (Mill 2")	71	61.7	486.7	0.28	0.73		486.74	27.26	40.89
52+73	57+78	Rt Turn Lane To PG (Mill 2")	815	12 & Var	846.1	0.48	1.27		846.10	47.38	71.07
57+78	66+51	Travel Lanes to Bridge Appr. (Mill 2")	873	24.0	2328.0	1.33	3.49		2328.00	130.37	195.55
66+51	67+53	Bridge Omission	102	24.0							
67+53	68+83	Taper from Grind 2" to 2" Resurf	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
68+83	95+94	2" Resurface	2711	24.0	7229.3	4.14	10.84		404.84	404.84	607.26
95+94	97+24	Taper from 2" to Grind 2"	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
97+24	103+24	Left Turn Lane (Mill 2")	587	14 & Var	791.1	0.45	1.19		791.11	44.30	65.45
103+24	103+64	Left Turn Lane (Mill 2")	40	26.0	115.6	0.07	0.17		115.56	6.47	9.71
103+64	104+13	Travel Lanes (Mill 2")	1317	24.0	3512.0	2.01	5.27		3512.00	196.67	295.01
104+13	105+67	ML Between Median (Mill 2")	49	60.0	326.7	0.19	0.49		326.67	18.29	27.44
105+67	110+41	Rt Turn Lane To PT (Mill 2")	843	12 & Var	883.8	0.51	1.33		883.82	49.49	74.24
110+41	115+09	Travel Lanes to Bridge Appr. (Mill 2")	468	24.0	1248.0	0.71	1.87		1248.00	69.89	104.83
115+09	116+21	Bridge Omission	112	24.0							
116+21	117+51	Taper from Grind 2" to 2" Resurf	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
117+51	135+67	2" Resurface	1816	24.0	4842.7	2.77	7.26		271.19	271.19	406.78
135+67	136+97	Taper from 2" to Grind 2"	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
136+97	137+10	Left Turn Lane (Mill 2")	586	14 & Var	789.6	0.45	1.18		789.56	44.22	66.32
137+10	142+96	Left Turn Lane (Mill 2")	21	26.0	60.7	0.03	0.09		60.67	3.40	5.10
142+96	143+17	Travel Lanes (Mill 2")	1295	24.0	3453.3	1.98	5.18		3453.33	193.39	290.08
143+17	143+69	ML Between Median (Mill 2")	52	60.0	346.7	0.20	0.52		346.67	19.41	29.12
143+69	144+21	Rt Turn Lane To PT (Mill 2")	724	12 & Var	770.7	0.44	1.16		770.67	43.16	64.74
144+21	151+22	Taper from Grind 2" to 2"	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
151+22	165+25	Travel Lanes (Resurface 2")	1403	24.0	3741.3	2.14	5.61		133.33	209.51	314.27
165+25	166+55	Taper from 2" to Grind 2"	130	24.0	346.7	0.20	0.52		133.33	19.41	29.12
166+55		1 1/2" Max CL Mill Inside/Outside Lane Provision for keeping traffic off of milled surface	16401	0.125	227.8				227.8	12.76	19.13
0+00											
LEE COUNTY PAGE TOTAL			29	75	133	23633	2849	4229			

40600200 40600300 40600982 44000157 40600627 40603335

HMA MAINLINE SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 561 (IL 2)
 SECTION (31, 32)RS
 WHITESIDE & LEE COUNTIES
 CONTRACT-64540
 SHEET 56 OF 136

STATIONING	REMARKS	Length	Proposed Surface Pavement		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9.5FG N50 TON MAINLINE	HMA SURF. CSE. MIX "D", N50 TON
			Width (FT)	SG. YD.						
226+80=0+00 (sta equation)										
0+00	44+58	4458	24.0	11888.0	6.80	17.83		11888.00	665.73	998.59
44+58	57+78	1320	24.0	3520.0	2.01	5.28		3520.00	197.12	295.68
49+59	57+78	819	12 & Var	889.2	0.50	1.30		889.16	48.67	73.01
51+79	57+78	599	12 & Var	830.1	0.47	1.25		830.11	46.49	69.73
51+54	51+79	25	24.0	66.7	0.04	0.10		66.67	3.73	5.60
57+78	65+91	813	24.0	2168.0	1.24	3.25		2168.00	121.41	182.11
65+91	67+13	122	24.0							
67+13	72+68	555	24.0	1480.0	0.85	2.22		1480.00	82.88	124.32
72+68	101+60	2892	24.0	7712.0	4.41	11.57		7712.00	431.87	647.81
101+60	110+41	881	24.0	2349.3	1.34	3.52		2349.33	131.56	197.34
103+10	107+74	464	12 & Var	326.4	0.19	0.49		326.40	18.28	27.42
104+43	110+41	598	14 & Var	808.9	0.46	1.21		808.89	45.30	67.95
104+13	104+43	30	24.0	80.0	0.05	0.12		80.00	4.48	6.72
110+41	114+50	409	24.0	1090.7	0.62	1.64		1090.67	61.08	91.82
114+50	115+82	132	24.0							
115+82	136+97	2115	24.0	5640.0	3.23	8.46		5640.00	315.84	473.76
142+65	149+92	727	VAR	770.4	0.44	1.16		770.39	43.14	64.71
136+97	149+92	1295	24.0	3453.3	1.98	5.18		3453.33	193.39	290.08
143+86	149+92	606	14 & Var	841.6	0.48	1.26		841.56	47.13	70.69
143+86	143+86	17	24.0	45.3	0.03	0.07		45.33	2.54	3.81
149+92	166+55	1663	24.0	4434.7	2.54	6.65		4434.67	248.34	372.51
0+00	166+55	16401	0.125	227.8				227.8	12.76	19.13
		LEE COUNTY PAGE TOTAL		28	73	0	483.75	2722	4083	
		LEE COUNTY TOTAL		56	148	133	7200.7	5571	8312	
		GRAND TOTALS		66	174	133	87228	6803	9798	

40600200 40600300 40600982 44400157 40600827 40600335

HMA Shoulder SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 561 (IL 2)
SECTION (31.32)RS
WHITESIDE & LEE COUNTIES
CONTRACT 64540
SHEET 57 OF 136

STATIONING	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9-FG N50 TON SHOULDER	HMA SURF. CSE. MIX "C", N50 TON		
			Shoulder	SQ. YD.								
MAINLINE PAVEMENT												
EB IL 2 - Mainline												
Whiteside County												
197+19 -	206+78		RT SHLD (Mill 2" & Varies)	969	10.0	1065.6	0.61	1.60		1065.66	104.42	89.51
206+78 -	8+84		PC RT SHLD TO END RETURN	58	10 - 5	62.1	0.04	0.09		62.14	6.09	5.22
8+84 -	207+66		RETURN TO PT OF RT SHLD	84	5 - 10	70.0	0.04	0.11		70.00	6.86	5.88
207+66 -	226+80		RT SHLD (Mill 2" & Varies)	1914	10.0	2126.7	1.22	3.19		2126.67	208.41	178.84
217+20 -	226+80		LT SHLD (MILL 2" & Varies)	960	6.0	640.0	0.37	0.96		640.00	62.72	53.76
WB IL 2 - Mainline												
Whiteside County												
197+00 -	205+88		LT SHLD (MILL 2")	888	10.0	886.7	0.56	1.48		886.67		138.13
205+88 -	12+00		PC RT SHLD TO END RETURN	306	10.0	338.9	0.19	0.61		338.89		47.44
12+00 -	209+45		RETURN TO PT OF RT SHLD	184	10.0	204.4	0.12	0.31		204.44		28.62
209+45 -	217+20		LT SHLD (MILL 2")	776	10.0	861.1	0.49	1.28		861.11		120.56
217+20 -	226+80		RT SHLD (MILL 2")	960	10.0	1066.7	0.61	1.60		1066.67		149.33
217+20 -	226+80		RT SHLD (MILL 2")	960	6.0	640.0	0.37	0.96		640.00		89.60
							5	12	0	8062	389	907

40650200 406500300 406500982 44000157 40890627 406503310

HMA Shoulder SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 561 (IL 2)
 SECTION (31,32)RS
 WHITESIDE & LEE COUNTIES
 CONTRACT 64540
 SHEET 58 OF 136

STATIONING	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9.5FG N50 TON SHOULDER	HMA SURF. CSE. MIX "C", N50 TON
			Shoulder	SQ. YD.						
226+80=0+00 (sta equation)										
0+00 - 8+00	RT SHLD (Mill 2" & Varies)	800	10.0	888.9	0.51	1.33		888.89	82.22	124.44
8+00 - 9+30	Taper Area RT SHLD Mill 2" to Resurf 2"	130	10.0	144.4	0.08	0.22		55.56	12.13	20.22
9+30 - 43+28	RT SHLD 2" Resurf	3398	10.0	3775.6	2.16	5.66		55.56		359.43
43+28 - 44+58	Taper Area RT SHLD Resurf 2" to Mill 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
44+58 - 45+87	Taper Area RT SHLD Mill 2"	129	9-4	93.2	0.05	0.14		93.17		13.04
45+87 - 50+00	RT SHLD TURN LANE (Mill 2")	413	4.0	183.6	0.10	0.28		183.56		25.70
50+00 - 21+49	RT SHLD TO END RETURN	180	4.0	80.0	0.05	0.12		80.00		11.20
21+49 - 52+28	END RETURN TO PC	170	4.0	75.6	0.04	0.11		75.60		10.58
52+28 - 52+73	Shld transition Mill 2"	45	4-10	35.0	0.02	0.05		35.00		4.90
52+73 - 66+51	RT SHLD (Mill 2")	1378	10.0	1531.1	0.88	2.30		1531.11		214.36.
66+51 - 67+53	Bridge Omission	102	10.0							
67+53 - 68+83	Taper Area RT SHLD Mill 2" to Resurf 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
68+83 - 95+94	RT SHLD 2" Resurf	2711	10.0	3012.2	1.72	4.52		55.56		286.76
95+94 - 97+24	Taper Area RT SHLD Resurf 2" to Mill 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
97+24 - 98+53	RT SHLD TAPER (Mill 2")	129	9-4	93.2	0.05	0.14		93.20		13.05
98+53 - 102+60	RT SHLD (Mill 2")	407	4.0	180.9	0.10	0.27		180.89		25.92
102+60 - 102+75	RT SHLD PC TO CURB Mill 2"	15	4.0	5.5	0.003	0.01		5.45		0.76
105+15 - 105+67	Shld transition Mill 2"	52	4-10	40.4	0.02	0.06		40.40		5.66
105+67 - 115+04	RT SHLD (Mill 2")	937	10.0	1041.1	0.60	1.56		1041.1		145.76
115+04 - 116+01	Bridge Omission	102	10.0							
116+01 - 117+31	Taper from Mill 2" to 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
117+31 - 136+87	RT SHLD 2" Resurf	1836	10.0	2040.0	1.17	3.06		194.21		194.21
136+87 - 136+97	Taper from 2" to Mill 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
136+97 - 138+20	RT SHOULDER TAPER	123	9-4	88.8	0.05	0.13		88.83		12.44
138+20 - 142+75	RT SHOULDER	455	4.0	202.2	0.12	0.30		202.22		28.31
142+75 - 0+00	RT SHLD TO END RETURN	95	4.0	35.6	0.02	0.05		35.56		4.98
0+00 - 143+96	END RETURN TO PC	80	4.0	42.2	0.02	0.06		42.22		5.91
143+96 - 144+21	Shld transition Mill 2"	25	4-10	19.4	0.01	0.03		19.40		2.72
144+21 - 149+92	RT SHOULDER	571	10.0	634.4	0.36	0.95		634.44		88.82
149+92 - 151+22	Taper from Mill 2" to 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
151+22 - 165+25	RT SHOULDER	1403	10.0	1558.9	0.89	2.34				148.41
165+25 - 166+55	RT SHLD Taper from 2" to Mill 2"	130	10.0	144.4	0.08	0.22		55.56		20.22
	PAGE TOTAL				10	25	56	5650	74	1889

40600200 40600300 40800882 44000157 40600627 40600310

HMA Shoulder SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 561 (IL 2)
SECTION (31,32)RS
WHITESIDE & LEE COUNTIES
CONTRACT 64540
SHEET 59 OF 138

STATIONING E.B.L. 2 - Mainline	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUIT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (M/M)IL-9.5FG N80 TON SHOULDER	HMA SURF. C&E, MIX "C", N80 TON
			Shoulder	SQ. YD.						
226+80=0+00 (sta equation)										
0+00 - 8+00	LT SHLD (Mill 2" & Varies)	800	6.0	533.3	0.31	0.80		533.33	37.33	44.80
8+00 - 9+30	Taper Area LT SHLD Mill 2" to Resurf 2"	130	6.0	86.7	0.05	0.13		33.33	7.28	7.28
9+30 - 43+28	LT SHLD 2" Resurface	3398	6.0	2265.3	1.30	3.40				215.66
43+28 - 44+58	Taper Area LT SHLD Resurf 2" to Mill 2"	130	6.0	86.7	0.05	0.13		33.33		12.13
44+58 - 44+71	LT SHLD (Mill 2")	13	6.0	8.7	0.00	0.01		8.67		1.21
44+71 - 44+86	LT SHLD TAPER (Mill 2")	15	6-4	7.6	0.00	0.01		7.55		1.06
44+86 - 48+96	LT SHLD (Mill 2") (LTL)	410	4.0	182.2	0.10	0.27		182.22		26.51
48+96 - 47+71	LT SHLD TURN LANE (Mill 2") Gore	105	2-10	75.8	0.04	0.11		75.83		10.62
47+71 - 50+83	LT SHLD (ML) TURN LANE (Mill 2")	312	8.0	277.3	0.16	0.42		277.33		38.83
50+83 - 53+41	LT SHLD (ML) TURN LANE (Mill 2")	162	8.0	144.0	0.08	0.22		144.00		20.16
47+97 - 50+60	MED NEXT TO TURN LANE (Mill 2")	263	0-17	248.4	0.14	0.37		248.43		34.78
53+41 - 54+00	LT SHLD TAPER (MILL 2")	59	8-6	45.9	0.03	0.07		45.89		6.42
54+00 - 66+42	LT SHLD (Mill 2")	1242	6.0	828.0	0.47	1.24		828.00		115.92
66+42 - 67+33	Bridge Omission	91	6.0							
67+33 - 68+63	Taper Area LT SHLD Mill 2" to Resurf 2"	130	6.0	86.7	0.05	0.13		33.33		12.13
68+63 - 95+94	LT SHLD 2" Resurface	2731	6.0	1820.7	1.04	2.73				173.33
95+94 - 97+24	LT SHLD TAPER (MILL 2")	130	6.0	86.7	0.05	0.13		33.33		12.13
97+24 - 97+37	LT SHLD (Mill 2") (LTL)	13	6.0	8.7	0.00	0.01		8.67		1.21
97+37 - 97+62	LT SHLD TAPER (Mill 2")	15	5-4	7.5	0.00	0.01		7.50		1.05
97+62 - 101+67	LT SHLD (Mill 2") (LTL)	415	4.0	184.4	0.11	0.28		184.44		25.82
101+67 - 100+37	LT SHLD TURN LANE (Mill 2") Gore	117	2-10	84.5	0.05	0.13		84.50		11.83
100+37 - 103+64	LT SHLD (ML) TURN LANE (Mill 2")	327	8.0	290.7	0.166	0.44		290.67		40.69
103+64 - 105+99	LT SHLD (ML) TURN LANE (Mill 2")	156	8.0	138.7	0.079	0.21		138.67		19.41
100+63 - 103+26	MED NEXT TO TURN LANE (Mill 2")	263	0-17	248.4	0.14	0.37		248.43		34.78
105+99 - 106+59	LT SHLD TAPER (MILL 2")	60	8-6	46.7	0.03	0.07		46.67		6.53
106+59 - 115+09	LT SHLD (Mill 2")	850	6.0	666.7	0.32	0.85		666.7		79.33
115+09 - 116+21	Bridge Omission	112	6.0							
116+21 - 117+51	Taper Area LT SHLD Mill 2" to Resurf 2"	130	6.0	86.7	0.05	0.13		33.33		12.13
117+51 - 135+67	LT SHLD 2" Resurface	1816	6.0	1210.7	0.69	1.82				115.26
135+67 - 136+97	Taper from 2" to Mill 2"	130	6.0	86.7	0.05	0.13		33.33		12.13
136+97 - 137+10	LT SHLD (Mill 2")	13	6.0	8.7	0.00	0.01		8.67		1.21
137+10 - 137+25	Taper Area LT SHLD Mill 2" (LTL)	15	6.0	10.0	0.01	0.02		10.00		1.40
137+25 - 141+40	LT SHLD (Mill 2") (LTL)	415	4.0	184.4	0.11	0.28		184.44		25.82
138+93 - 140+09	LT SHLD TURN LANE (Mill 2") Gore Area	116	2-10	78.0	0.04	0.12		78.00		10.92
140+09 - 143+17	LT SHLD (ML) TURN LANE (Mill 2")	308	10.0	342.2	0.20	0.51		342.22		47.91
143+17 - 145+54	LT SHLD (ML) TURN LANE (Mill 2")	168	10.0	186.7	0.11	0.28		186.67		26.13
140+36 - 143+00	MED NEXT TO TURN LANE (Mill 2")	264	0-17	249.3	0.14	0.37		249.33		34.91
145+54 - 148+13	LT SHLD TAPER (MILL 2")	59	10-6	52.4	0.03	0.08		52.44		7.34
148+13 - 149+92	LT SHLD (Mill 2")	379	6.0	147.8	0.08	0.22		147.78		20.69
149+92 - 151+22	Taper from Mill 2" to 2"	130	6.0	86.7	0.05	0.13		33.33		12.13
151+22 - 155+25	LT SHLD 2" Resurface	1403	6.0	936.3	0.54	1.40				89.04
155+25 - 166+55	LT SHLD Taper from 2" to Mill 2"	130	6.0	86.7	0.05	0.13		33.33		12.13
PAGE TOTAL					7	18	33	5420	45	1382

40600200 40600300 40600982 44000157 40600627 4060310

HMA Shoulder SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 561 (IL 2)
 SECTION (31,32)RS
 WHITESIDE & LEE COUNTIES
 CONTRACT 64540
 SHEET 60 OF 136

STATIONING	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9.5FG N50 TON SHOULDER	HMA SURE. CSE. MIX "C", N50 TON
			Shoulder	SQ. YD.						
226+80=0+00 (sta equation)										
0+00 - 47+56	RT SHLD (Mill 2")	4756	6.0	3170.7	1.81	4.76		3170.67		443.89
47+56 - 48+96	RT SHLD taper 6' to 10' (Mill 2")	140	6-10	124.4	0.07	0.19		124.40		17.42
48+96 - 50+60	RT SHLD (Mill 2")	184	10.0	182.2	0.10	0.27		182.22		26.51
51+64 - 54+65	RT SHLD (Mill 2")	311	10.0	345.6	0.20	0.52		345.56		48.38
54+65 - 55+95	RT SHLD TURN LANE (Mill 2") Gore Area	130	2-12	101.9	0.06	0.15		101.89		14.26
51+76 - 54+41	MED NEXT TO TURN LANE (Mill 2")	265	0-17	250.3	0.14	0.38		250.28		36.04
53+41 - 57+78	RT SHLD TURN LANE (LTL) (Mill 2")	437	4.0	194.2	0.11	0.29		194.22		27.19
57+78 - 65+91	RT SHLD (Mill 2")	813	6.0	542.0	0.31	0.81		542.00		75.88
65+91 - 67+13	Bridge Omission	122	6.0							
67+13 - 100+46	RT SHLD (Mill 2")	3333	6.0	2222.0	1.27	3.33		2222.00		311.08
100+46 - 101+67	RT SHLD taper 6' to 10' (Mill 2")	121	6-10	107.6	0.06	0.16		35.60		16.06
101+67 - 103+24	RT SHLD (Mill 2")	157	10.0	174.4	0.10	0.26		174.44		24.42
104+13 - 107+28	RT SHLD (Mill 2")	315	10.0	350.0	0.200	0.53		350.00		49.00
107+28 - 108+59	RT SHLD TURN LANE (Mill 2") Gore Area	131	2-12	101.9	0.06	0.15		101.89		14.26
104+39 - 107+03	MED NEXT TO TURN LANE (Mill 2")	264	0-17	249.3	0.14	0.37		249.33		34.91
105+99 - 110+41	RT SHLD (Mill 2")	442	4.0	196.4	0.11	0.29		196.4		27.50
110+41 - 114+50	RT SHLD (Mill 2")	409	6.0	272.7	0.16	0.41		272.7		38.17
114+50 - 115+82	Bridge Omission	132								
115+82 - 140+20	RT SHLD (Mill 2")	2438	6.0	1625.3	0.93	2.44		1625.3		227.55
140+20 - 141+40	RT SHLD Taper 6' to 10' (Mill 2")	120	6-10	106.7	0.06	0.16		35.60		14.94
141+40 - 142+95	RT SHLD (Mill 2")	156	10.0	173.3	0.10	0.26		173.33		24.27
143+69 - 146+81	RT SHLD (Mill 2")	312	10.0	346.7	0.20	0.52		346.67		48.53
143+92 - 146+56	MED NEXT TO TURN LANE (Mill 2")	264	0-17	249.3	0.14	0.37		249.33		34.91
145+64 - 149+92	RT SHLD (Mill 2")	438	4.0	194.7	0.11	0.29		194.67		27.25
149+92 - 166+55	RT SHLD (Mill 2")	1663	6.0	1108.7	0.63	1.66		1108.67		155.21
	PAGE TOTAL				7	19	0	12247	0	1735

40600200 40600300 40600982 44000157 40600627 40600310

HMA Shoulder SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

FAP 581 (IL 2)
SECTION (31.32)RS
WHITESIDE & LEE COUNTIES
CONTRACT 64540
SHEET 61 OF 136

STATIONING	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF REM BUTT JOINT SQ. YD.	HMA SURF REM 2" SQ. YD.	LEVEL BINDER (MM)IL-9-FRG N50 TON SHOULDER	HMA SURF. CSE. MIX "C", N50 TON
			Shoulder	Width (ft)						
Lee County										
226+80=0+00 (Sta equalon)										
0+00 - 49+59	LT SHLD (Mill 2")	4956	10.0	5510.0	3.15	8.27				771.40
49+59 - 50+05	Shld transition (Mill 2")	46	10 - 4	35.8	0.02	0.05		35.78		5.01
50+05 - 17+34	LT SHLD TO END RETURN (Mill 2")	224	4.0	99.6	0.06	0.15		99.56		13.94
17+34 - 52+32	END RETURN TO LT SHLD PT (Mill 2")	185	4.0	82.2	0.05	0.12		82.22		11.51
52+32 - 56+49	LT SHLD (Mill 2")	417	4.0	185.3	0.11	0.28		185.33		28.95
56+49 - 57+78	LT SHLD TRANSITION (Mill 2")	129	4 - 9	93.2	0.05	0.14		93.17		13.04
57+78 - 65+91	LT SHLD (Mill 2")	813	10.0	903.3	0.52	1.36		903.33		126.47
65+91 - 67+13	Bridge Omission	122	10.0							
67+13 - 103+10	LT SHLD (Mill 2")	3597	10.0	3996.7	2.29	6.00		3996.67		559.53
103+10 - 103+32	LT SHLD TRANSITION (Mill 2")	22	9 - 4	15.9	0.01	0.02		15.89		2.22
103+32 - 18+45	LT SHLD TO END RETURN (Mill 2")	96	4.0	42.7	0.02	0.06		42.67		5.97
18+44 - 104+44	END RETURN TO LT SHLD PT (Mill 2")	83	4.0	36.9	0.02	0.06		36.89		5.16
104+44 - 106+64	LT SHLD (Mill 2")	220	4.0	87.8	0.06	0.15		87.78		13.69
106+64 - 107+67	LT SHLD TRANSITION (Mill 2")	103	4 - 9	74.4	0.04	0.11		74.39		10.41
107+67 - 114+50	LT SHLD (Mill 2")	683	10.0	758.9	0.434	1.14		758.89		106.24
114+50 - 115+82	Bridge Omission	132	10.0							
115+82 - 142+85	LT SHLD (Mill 2")	2683	10.0	2981.1	1.71	4.47		2981.11		417.36
142+85 - 142+88	LT SHLD TRANSITION (Mill 2")	23	9 - 4	17.9	0.01	0.03		17.89		2.50
142+88 - 143+26	LT SHLD TO END RETURN (Mill 2")	70	4.0	31.1	0.02	0.05		31.11		4.36
143+26 - 144+11	END RETURN TO LT SHLD PT (Mill 2")	79	4.0	35.1	0.02	0.05		35.11		4.92
144+11 - 148+57	LT SHLD (Mill 2")	448	4.0	198.2	0.11	0.30		198.22		27.75
148+57 - 149+92	LT SHLD TRANSITION (Mill 2")	135	4 - 9	97.5	0.06	0.15		97.50		13.65
149+92 - 166+55	LT SHLD (Mill 2")	1663	10.0	1847.8	1.06	2.77		1847.78		258.69
PAGE TOTAL										
					10	26	0	11631	0	2400
LEE COUNTY TOTAL										
					33	88	89	34959	119	7405
GRAND TOTALS					38	100	89	43021	507	8311

40600200 40600300 40600982 44000157 40600627 40600310

SIDE ROAD/ FRONTAGE ROAD SCHEDULE - IL 2 (E. of 45th Ave to Plock Rd.)

SIDE ROAD/ FRONTAGE RD.	REMARKS	Length	Proposed Surface		BIT PRIME TON	AGG PRIME TON	HMA SURF. REM. JOINT SQ. YD.	HMA SURF. REM. 2" SQ. YD.	INCIDENTAL SURFACING TON	LEVEL BINDER (MIX. 3-5% MS) TON	HMA SURF. CSE. MIX. "C" N60 TON	HMA SURF. CSE. MIX. "D" N50 TON	AGG WEDGE SHLDR TYPE B TON
			Pavement	SQ. YD.									
Whiteside County													
207+27	Country Club Lane (West)	59.5	Var	284.6	0.16	0.43		284.63	43.83				
207+59	Prairieville Rd. Int.	1697	Var	7886.1	4.48	11.75		2544.3		438.82			
207+59	Prairieville Rd. Shoulders	1887	10.0	3373.3	1.93	5.05	55.56		44.04				472.26
17+98	Sideroad Lt	44	85-32	285.0					46.58				
17+95	FE	71	25-50	295.0					82.89				
228+14	Country Club Lane (East)	48	Var	213.6	0.12	0.32		213.60	82.89				
	Subtotal Whiteside County =				7	18	122	3043	168	439	472	658	107
Lee County													
S Mount Hill Rd.	Mainline	128	Var	1063.42	0.61	1.60		1063.42	163.77				
N Mount Hill Rd.	Mainline	172	Var	1296.1	0.71	1.85		1296.05	190.35				
S Sauk Rd.	Mainline	102.1	Var	1028.4	0.59	1.54		1028.38	158.37				
N Sauk Rd.	Mainline	49	Var	241.2	0.14	0.36		241.20	37.14				
Rock River Drive	Mainline EOP TO END	51	Var	313.6	0.18	0.47		313.58	48.29				
Hill Drive	Mainline EOP TO END	51	Var	320.9	0.18	0.48		320.87	48.41				
RT 123+60	PE	40	Var	161.1	0.08	0.24			24.81				
RT 131+80	CE	40	Var	86.7	0.05	0.13			13.65				
LT 133+46	SIDEROAD	40	Var	192.1	0.11	0.29	26.70		28.59				
RT 136+62	PE	40	Var	88.9	0.05	0.13			13.84				
LT 140+08	SIDEROAD	40	Var	153.1	0.08	0.23	26.70		23.58				
RT 140+16	CE	40	Var	345.7	0.20	0.52			53.24				
RT 142+42	CE	40	Var	197.5	0.11	0.30			30.42				
LT 143+42	END RETURN TO SIDEROAD	57	Var	320.3	0.18	0.48		40.00	48.32				2.85
RT 143+42	END RETURN TO SIDEROAD	84	Var	594.0	0.34	0.89		40.00	91.48				4.14
RT 151+22	CE	40	Var	140.4	0.08	0.21			21.62				
RT 152+76	SIDEROAD	40	Var	178.3	0.10	0.27	26.70		27.46				
LT 154+75	PE	40	Var	178.3	0.10	0.27			27.46				
Hill Drive	Mainline	2485	22.0	6074.4	3.47	9.11				2.16			79.61
Rock River Drive	Mainline	3270	22.0	7993.3	4.57	11.99				2.16			103.46
	Subtotal Lee County =				12	31	80	4284	1054	4	1379	0	189
	GRAND TOTALS	19	49	202	7326	1220	443	1881	658	296			

40600200 40900300 40900952 44000167 40900950 40600927 40600910 40900910 48102100

FAP 561 (IL 2)
SECTION (31.32)RS
WHITESIDE & LEE COUNTIES
CONTRACT 64540
SHEET 62 OF 136

CLASS B PATCHING

FAP Route 591 (IL 2)
SECTION (31.23) RS
WHITESIDE & LEE
CONTRACT 66560
SHEETS OF 138

STATION	REMARKS	LENGTH OF PATCH		TYPE 2		TYPE 3		TYPE 4		SAW CUTS (3M+7L) (foot)	DOWEL BARS (each)	TIE BARS (each)	Granular Subgrade Repl. 10% Cu Yd	Geotext Rein 10% Sq Yd	PAVEMENT FABRIC (yd ²)
		LT LANE (foot)	RT LANE (foot)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)						
197 + 50	E.B. Inside Lane	8		10.7							20		0.2	1.1	
198 + 54	E.B. Outside Lane		10		13.3					52	20		0.2	1.3	
199 + 30	E.B. Outside Lane		6		8.0					58	20		0.1	0.8	
199 + 31	E.B. Inside Lane	30						40.0		48	20	14	0.7	4.0	40.0
199 + 80	E.B. Outside Lane		15							96	20		0.3	2.0	20.0
202 + 80	E.B. Outside Lane		6		10.7					66	20		0.2	1.1	
202 + 88	E.B. Inside Lane	6		8.0						82	20		0.1	0.8	
207 + 22	E.B. Inside Lane	6		8.0						48	20		0.1	0.8	
207 + 22	E.B. Inside Lane	6		8.0						48	20		0.1	0.8	
210 + 49	E.B. Outside Lane	8		10.7						48	20		0.2	1.1	
211 + 84	E.B. Both Lane	6	25	8.0				33.3		52	40	12	0.7	4.1	33.3
213 + 16	E.B. Outside Lane	8		10.7						128	20		0.1	0.8	
215 + 98	E.B. Both Lane	8	8	10.7	10.7					48	40		0.4	2.1	
217 + 67	E.B. Both Lane	8	8	8.0	8.0					96	40		0.3	1.6	
220 + 80	E.B. Outside Lane		10		13.3					90	20		0.2	1.3	
222 + 8	E.B. Both Lane	6	6	8.0	8.0					56	40	9	0.3	1.6	
223 + 32	E.B. Both Lane	20	20					26.7		132	40		0.9	5.3	53.3
LANE TOTAL				69.3	90.7			20.0	20.0	66.7	80.0				
TOTAL				160.0		20.0	20.0		127	1206	440	35	5	31	146.7

12 FOOT LANE WIDTH ON IL 2

44200970

44200974

44200976

44213200

Z0017100

Z0076300

Z0028700

Z0028415

44213100

CLASS B PATCHING

FAP Route 584 (L. 2)
 SECTION (31.23) RS
 WHITESIDE & LEE
 CONTRACT 04540
 SHEET 84 OF 135

STATION	REMARKS	LENGTH OF PATCH		AREA OF PATCHES				SAW CUTS (3W+7L) (foot)	DOWEL BARS (each)	TIE BARS (each)	Granular SubGrade Repl 10% Cu Yd	Geotech Reinf 10% Sq Yd	PAVEMENT FABRIC (Yd ²)
		LT LANE (foot)	RT LANE (foot)	TYPE 2 LT LANE (Yd ²)	TYPE 2 RT LANE (Yd ²)	TYPE 3 LT LANE (Yd ²)	TYPE 3 RT LANE (Yd ²)						
IL 78													
4 + 75	E.B. Inside Lane	12				16.0		60	20	0	0.3	1.6	16.0
5 + 21	E.B. Both Lane	8		10.7	10.7		96	40	0	0.4	2.1		
7 + 32	E.B. Inside Lane	8		10.7			52	20	0	0.2	1.1		
24 + 17	E.B. Both Lane	6		8.0	8.0		90	40		0.3	1.6		
											0.0		
											0.0		
LANE TOTAL				29.3	16.7	16.0	0.0	298	120	0	1	6	16.0
TOTAL				48.0		16.0	0.0	298	120	0	1	6	16.0

12 FOOT LANE WIDTH ON IL 2

442200970

442200974

442200876

442132200

Z0017100

Z0075300

Z0028700

Z0028415

44213100

PARTIAL DEPTH PAVEMENT PATCHING

PAP Scale 5:1 (R. 2)
 SECTION 3132 RS
 WHITESIDE & LEE
 CONTRACT #450
 SHEET 05 OF 10

STATION	REMARKS	LENGTH OF PATCH		TYPE 2		TYPE 3		TYPE 4		HMA REMOVAL OVER PATCHES (CY)		HMA REPLACEMENT OVER PATCHES (TON)	
		LT LANE (foot)	RT LANE (foot)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (Ton)	RT LANE (Ton)
12 FOOT LANE WIDTH													
199 + 00	LL 2 WB LANE WHITESIDE CO.	6	6	8.0	8.0					9.3	9.3	3.14	3.14
201 + 86			12					18.0			17.3	3.14	5.82
202 + 90		6		8.0						9.3	17.3	5.82	5.82
203 + 97		12	12			18.0		18.0		17.3	21.3	4.93	7.17
205 + 80		10	15	13.3				20.0		9.3	9.3	3.14	3.14
206 + 55		6	6	8.0	8.0					17.3	9.3	5.82	3.14
207 + 45		12				18.0				9.3	9.3	3.14	3.14
209 + 10		20	20					28.7	28.7	28.0	28.0	9.41	9.41
209 + 10	RT. TURN LANE	20						28.7	28.7	28.0	28.0	9.41	9.41
213 + 38			6			8.0				9.3	9.3	3.14	3.14
213 + 44		12				16.0				17.3	17.3	5.82	5.82
214 + 5		12				18.0				17.3	14.7	4.93	4.93
215 + 50		10	10	13.3	13.3					14.7	21.3	7.17	7.17
219 + 21		15	15			20.0		20.0		12.0	12.0	4.03	4.03
221 + 78		8	8	10.7	10.7					12.0	17.3	5.82	5.82
223 + 91		30	12					40.0		4.03	4.03	4.03	4.03
226 + 2		8	8	10.7	10.7					12.0	12.0	4.03	4.03
	SUB TOTAL WHITESIDE CO. =			64.0	58.7	84.0	88.0	93.3	28.7	280.0	189.3	87.4	83.6
	TOTAL OF (WB) LANES =			64.0	58.7	84.0	88.0	93.3	28.7	280.0	189.3	87.4	83.6
	EST. PATCHES 15% +/- OF TOTAL			9.6	8.8	12.6	13.2	14.0	4.0				
	PAVEMENT PATCHING TOTAL (YD ²) =					62.2				449.3		151.0	

PARTIAL DEPTH PAVEMENT PATCHING

Pap Route 591 (L-2)
 SECTION 131.32) RS
 WHITEBIDE & LEE
 CONTRACT 64540
 SHEET 66 OF 138

STATION	REMARKS	LENGTH OF PATCH		POSSIBLE AREA OF PATCHES								44002224		40801005	
		LT LANE (ft)	RT LANE (ft)	TYPE 2		TYPE 3		TYPE 4		HMA REMOVAL OVER PATCHES (ft ²)	HMA REPLACEMENT OVER PATCHES (ton)	HMA REMOVAL OVER PATCHES (ft ²)	HMA REPLACEMENT OVER PATCHES (ton)		
				LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)	LT LANE (yd ²)	RT LANE (yd ²)						
12 + 37	LEE CO.	12	12			16.0	16.0			17.3	17.3	5.82	5.82		
13 + 30		12	12			16.0	16.0			17.3	17.3	5.82	5.82		
14 + 40		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
20 + 93		12	12			16.0	16.0			17.3	17.3	5.82	5.82		
25 + 11-		12	12			16.0	16.0			17.3	17.3	5.82	5.82		
25 + 49		22	22					28.3		30.7	30.7	10.30	10.30		
32 + 6		10	10	13.3	13.3					14.7	14.7	4.93	4.93		
31 + 2		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
71 + 94		12	12			16.0	16.0			17.3	17.3	5.82	5.82		
80 + 29		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
103 + 84		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
106 + 79		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
109 + 75		12	12			16.0	16.0			17.3	17.3	5.82	5.82		
115 + 25		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
128 + 36		10	10	13.3	13.3					14.7	14.7	4.93	4.93		
135 + 46		8	8	10.7	10.7			16.0		12.0	12.0	4.03	4.03		
136 + 49		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
137 + 60		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
138 + 53		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
139 + 52		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
140 + 77		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
141 + 56		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
142 + 67		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
143 + 70		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
144 + 70		10	10	13.3	13.3					14.7	14.7	4.93	4.93		
145 + 72		10	10	13.3	13.3					14.7	14.7	4.93	4.93		
146 + 75		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
146 + 79		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
149 + 3		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
149 + 86		12	12	16.0	16.0					17.3	17.3	5.82	5.82		
150 + 83		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
151 + 86		8	8	10.7	10.7					12.0	12.0	4.03	4.03		
152 + 87		12	12	16.0	16.0					17.3	17.3	5.82	5.82		
153 + 1		6	6	8.0	8.0					9.3	9.3	3.14	3.14		
SUB TOTAL LEE CO. =				237.3	186.7	128.0	144.0	29.3	0.0	446.7	341.3	146.9	111.6		
TOTAL OF (WB) LANES =				237.3	186.7	128.0	144.0	29.3	0.0	446.7	341.3	146.9	111.6		
EST. PATCHES 15% +/- OF TOTAL				35.6	28.0	18.2	21.6	4.4	0.0	78.0	61.3	25.5	19.6		
PAVEMENT PATCHING TOTAL (yd ²) =						108.8									

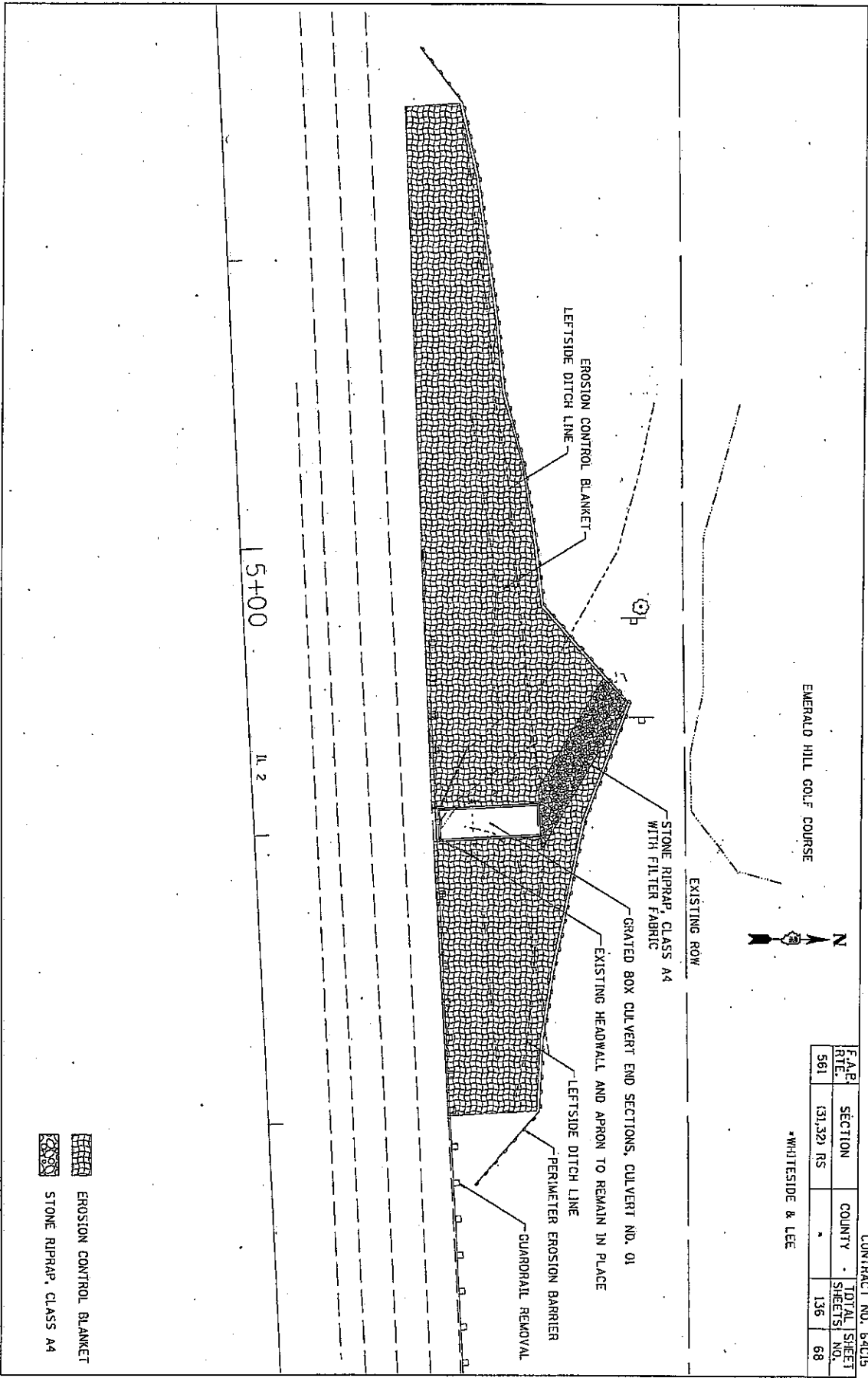
EARTH WORK SCHEDULE
ESN 052-1090

FAP 561 (IL 2)
 SECTION (31, 32)RS
 WHITESIDE & LEE COUN
 CONTRACT 64540
 SHEET 67 OF 136

STATION NO.	END AREA		DISTANCE (STA)	SECTION TOTALS		SECTION TOTALS		ACCUMUL. TOTALS		SHRINK FACTOR %	BALANCE PER SECTION CU. YD.	BALANCE WASTE (+) SHORT (-) CU. YDS.
	SQ. FT.	FILL		SQ. FT.	FILL	CU. YD.	FILL	CU. YD.	FILL			
IL 2 WB												
3 + 25	0.00	0.00	0.00									
3 + 50	0.00	8.35	0.25	0.0	4.2	0.0	3.9	0.0	3.9	25	-3.9	-3.9
3 + 75	1.21	8.00	0.25	0.6	4.0	0.6	3.7	0.6	3.7	25	-3.3	-3.3
4 + 00	2.51	6.75	0.25	1.9	7.4	1.7	6.8	2.3	10.5	25	-5.5	-8.8
4 + 25	2.01	11.76	0.25	2.3	9.3	2.1	8.6	4.4	19.1	25	-7.0	-15.8
4 + 50	4.01	6.59	0.25	3.0	9.2	2.8	8.5	7.2	27.6	25	-6.4	-22.2
4 + 75	11.56	2.16	0.25	7.8	4.4	7.2	4.1	14.4	31.6	25	1.4	-20.9
5 + 00	20.47	0.00	0.25	16.0	1.1	14.8	1.0	29.2	32.6	25	10.1	-10.7
5 + 25	23.62	0.00	0.25	22.0	0.0	20.4	0.0	49.6	32.6	25	15.3	4.6
5 + 50	23.81	11.57	0.25	23.7	5.8	22.0	5.4	71.6	38.0	25	11.1	15.7
5 + 75	0.00	79.76	0.25	11.9	45.7	11.0	42.3	82.6	80.3	25	-34.0	-18.3
6 + 00	86.66	0.00	0.25	43.3	39.9	40.1	36.9	122.7	117.2	25	-6.8	-25.2
6 + 25	20.44	17.95	0.25	53.6	9.0	49.6	8.3	172.3	125.5	25	28.9	3.7
6 + 50	13.31	11.62	0.25	16.9	14.8	15.6	13.7	187.9	139.2	25	-2.0	1.7
6 + 75	7.12	7.52	0.25	10.2	9.6	9.5	8.9	197.4	148.1	25	-1.8	0.0
7 + 00	14.37	0.00	0.25	10.7	3.8	9.9	3.5	207.3	151.6	25	4.0	3.9
7 + 25	0.00	0.00	0.25	7.2	0.0	6.7	0.0	214.0	151.6	25	5.0	8.9



EARTH EXCAVATION (20200100) =215 CU YD

PLOT DATE: 11/14/00
 PLOT NAME: 11/14/00
 PLOT SCALE: 1" = 20'
 PLOT SHEET: 1



F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
561	131.321 RS	"	136

CONTRACT NO. 64Q15
*WHITESIDE & LEE

 EROSION CONTROL BLANKET
 STONE RIPRAP, CLASS A4

PLAN SHEET FOR GRAATED BOX CULVERT END SECTIONS, CULVERT NO. 1

DESIGNED BY	DATE	REVISIONS
BY	NO.	DESCRIPTION

APPROVED BY	DATE

STATE OF ILLINOIS	DEPARTMENT OF TRANSPORTATION
-------------------	------------------------------

SHEET NO. 1 OF 3 SHEETS

DATE: 12-6-2011
 LICENSE NUMBER: 11-30-2012

SIGNATURE: *Thomas E. W...*

CHICAGO, ILLINOIS
 LICENSE NO. 081-006218

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

The work shall be done according to the applicable portion of SDI, SD3, SD5, SD8, SD9, SD4 and SD5 of the Standard Specifications.

See roadway plans for embankment slope (with grading and 10'-top details).

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60.

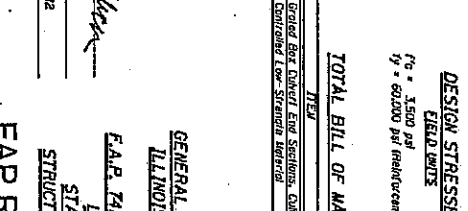
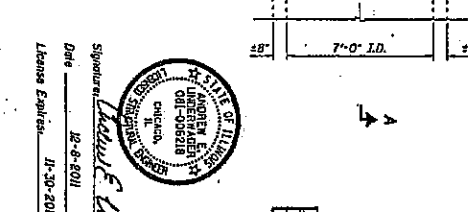
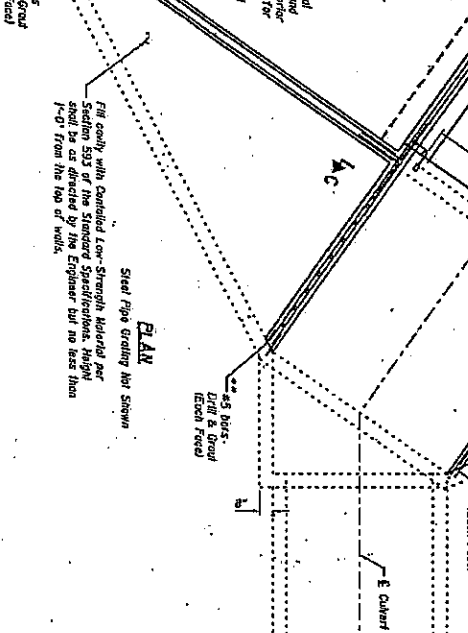
All exposed concrete edges shall be chamfered 3/4" unless otherwise noted.

All construction joints shall be bonded.

Plan dimensions and details relative to the existing plans are subject to removal and modification. The Contractor shall first verify existing dimensions and details of the structure and then proceed with construction. Such verifications shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit prices bid for the work.

The contract unit price "EACH" for Grouted Box Culvert End Sections, Culvert No. 01 shall include the Expansion Bars, Grouted Pipes, Concrete Structures, Reinforcement Bars, Steel Plates, Grout, Mortar, Washers, earth and/or structure excavation where required, and necessary grading to fit the structure on abutment, or to the slope.

Expansion bolts for culvert and section shall be 3/4" x 4" headed bolts and shall extend a minimum of 2' into new concrete.



DESIGN STRESSES

FIELD JOISTS

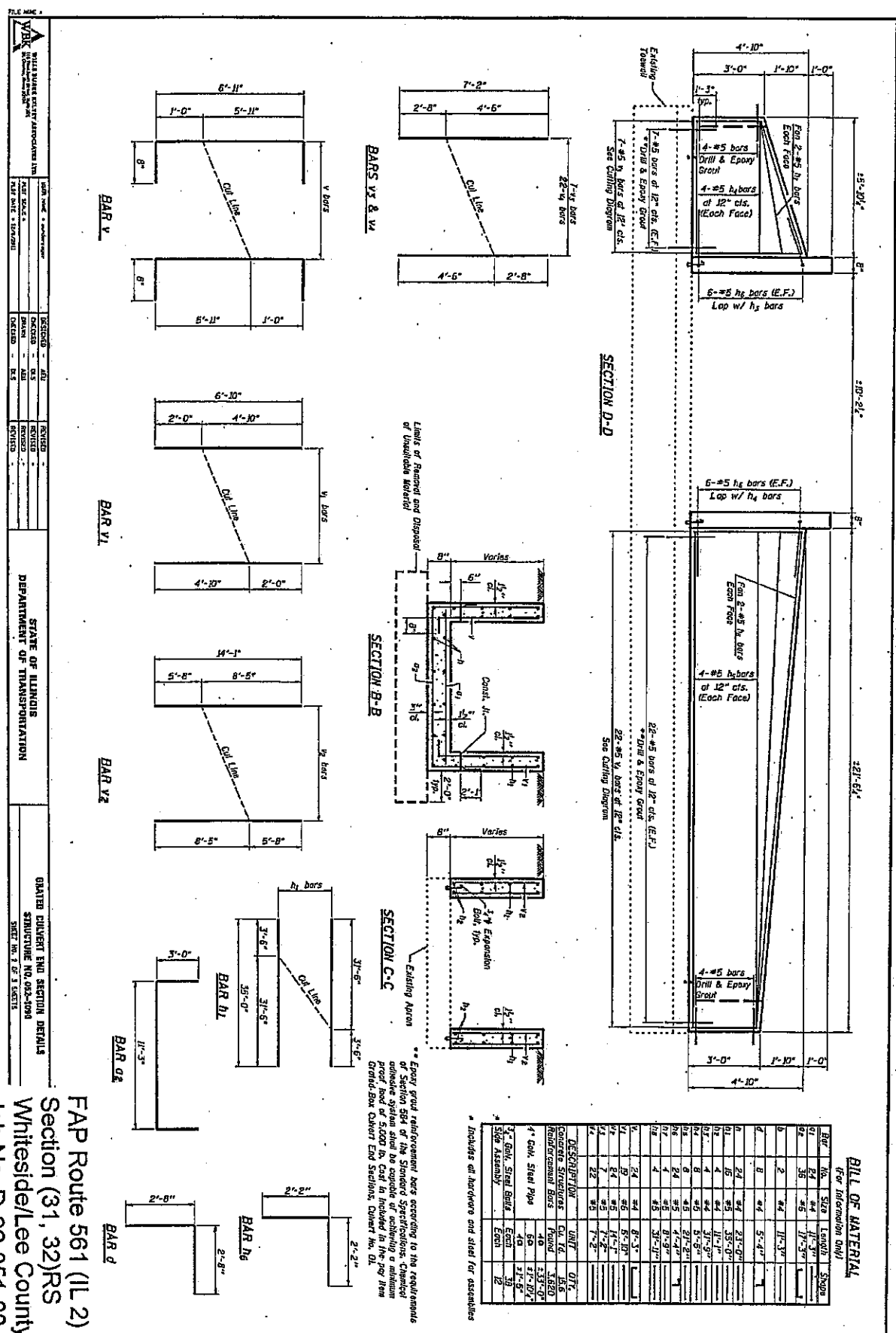
$f_c = 4,500 \text{ psi}$
 $f_y = 60,000 \text{ psi (reinforcement)}$

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
GRATED BOX CULVERT END SECTIONS: CULVERT NO. 01	EA	2
CONCRETE LOW-STRENGTH MATERIAL	CU. YD.	24.1

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 31 & OVER
RCPB 84*
FAP 722 - SEG. (A132) RS
LEE COUNTY
STATION 5+93.50
STRUCTURE NO. 052-1090

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 69 of 136



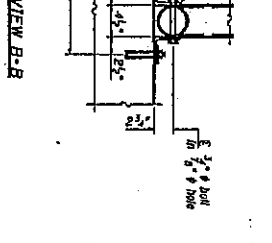
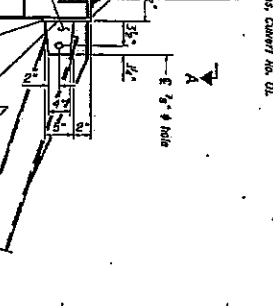
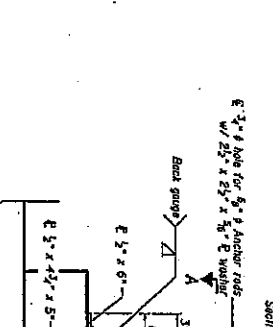
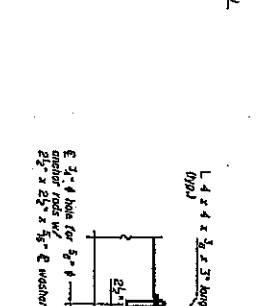
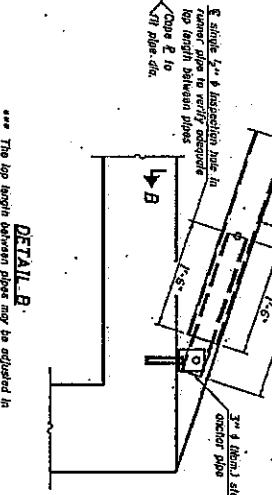
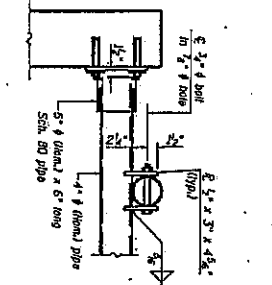
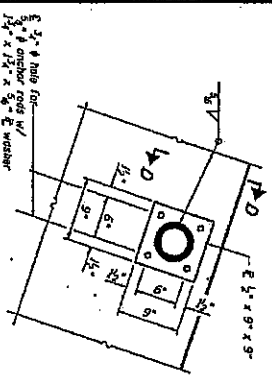
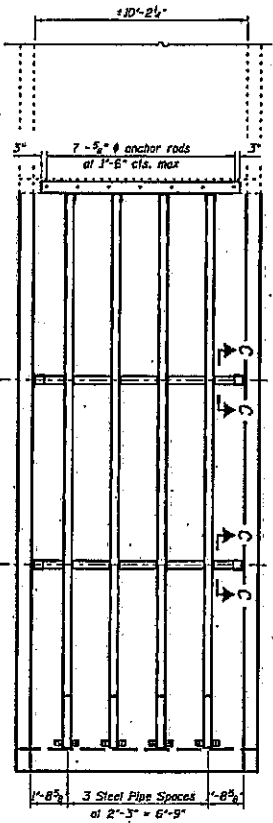
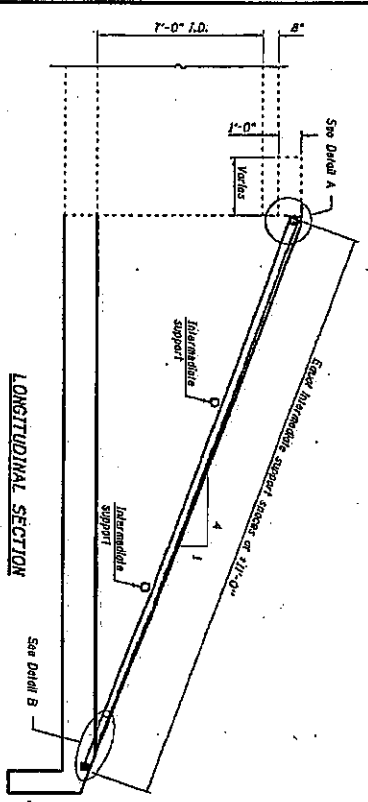
BILL OF MATERIAL

Bar No.	Size	Length	Splice
B1	#5	11'-3"	1
B2	#5	11'-3"	1
B3	#5	11'-3"	1
B4	#5	11'-3"	1
B5	#5	11'-3"	1
B6	#5	11'-3"	1
B7	#5	11'-3"	1
B8	#5	11'-3"	1
B9	#5	11'-3"	1
B10	#5	11'-3"	1
B11	#5	11'-3"	1
B12	#5	11'-3"	1
B13	#5	11'-3"	1
B14	#5	11'-3"	1
B15	#5	11'-3"	1
B16	#5	11'-3"	1
B17	#5	11'-3"	1
B18	#5	11'-3"	1
B19	#5	11'-3"	1
B20	#5	11'-3"	1
B21	#5	11'-3"	1
B22	#5	11'-3"	1
B23	#5	11'-3"	1
B24	#5	11'-3"	1
B25	#5	11'-3"	1
B26	#5	11'-3"	1
B27	#5	11'-3"	1
B28	#5	11'-3"	1
B29	#5	11'-3"	1
B30	#5	11'-3"	1
B31	#5	11'-3"	1
B32	#5	11'-3"	1
B33	#5	11'-3"	1
B34	#5	11'-3"	1
B35	#5	11'-3"	1
B36	#5	11'-3"	1
B37	#5	11'-3"	1
B38	#5	11'-3"	1
B39	#5	11'-3"	1
B40	#5	11'-3"	1
B41	#5	11'-3"	1
B42	#5	11'-3"	1
B43	#5	11'-3"	1
B44	#5	11'-3"	1
B45	#5	11'-3"	1
B46	#5	11'-3"	1
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B92	#5	11'-3"	1
B93	#5	11'-3"	1
B94	#5	11'-3"	1
B95	#5	11'-3"	1
B96	#5	11'-3"	1
B97	#5	11'-3"	1
B98	#5	11'-3"	1
B99	#5	11'-3"	1
B100	#5	11'-3"	1

* Includes all hardware and steel for assemblies
 ** Epoxy grid reinforcement bars according to the requirements of the design. Epoxy grid reinforcement bars shall be installed in a grid pattern with a grid spacing of 12 inches. Epoxy grid reinforcement bars shall be installed in a grid pattern with a grid spacing of 12 inches. Epoxy grid reinforcement bars shall be installed in a grid pattern with a grid spacing of 12 inches.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
 GRATED CURB END SECTION DETAILS
 STRUCTURE NO. 092-098
 SHEET NO. 1 OF 3 SHEETS

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 70 of 136



NOTES

Length and number of steel pipes shall be verified by the Contractor prior to ordering any material.

All steel pipes shall be a minimum weight 15# 409 unless otherwise noted.

Anchor rods shall be ASTM A307 Grade 30, unless otherwise noted.

Fabrication of the Steel Pipe Gate System shall conform to the requirements in Section 305 of the Standard Specifications unless noted otherwise.

Structural steel shapes and plates shall conform to the requirements of Article 305.4 of the Standard Specifications. Steel pipes shall conform to the requirements of Article 305.4 of the Standard Specifications.

Anchor rods shall conform to the requirements of Article 305.4 of the Standard Specifications.

Another rods shall be welded according to the requirements of Section 544 of the Standard Specifications. The chemical analysis shall be capable of achieving a minimum proof load of 5000 pounds and an ultimate shear capacity of 4000 pounds per anchor.

Bolts and nuts shall conform to the requirements of Article 305.4 of the Standard Specifications.

The minimum edge distance from the center of a hole to the free edge of a structural shape or plate shall be 1 1/2" unless noted otherwise.

Bolts and anchor rods shall be snug tightened by a few impacts of an impact wrench on the full faces of a washer using an ordinary spanner wrench.

Grill, cast-in-place concrete, formwork, and framing for the Steel Pipe Gate System shall be shown on drawings, including, but not limited to, the following: Section, Elevation, and Plan for the Steel Pipe Gate System.

Steel Pipe Gate System shall be included in the contract unit price for the Steel Pipe Gate System, Chapter No. 01.

 ILLINOIS STATE WATER SURVEY	DESIGNED BY	ADD	REVISED	DEPARTMENT OF TRANSPORTATION STEEL PIPE GATE SYSTEM STRUCTURE NO. 062-1098 SHEET NO. 3 OF 3 SHEETS
	CHECKED BY	DATE	REVISION	
DATE PLOT: 1/19/01 NAME: J. J. JONES	DATE: 1/19/01 NAME: J. J. JONES	DATE: 1/19/01 NAME: J. J. JONES	DATE: 1/19/01 NAME: J. J. JONES	

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 71 of 136

PLAN DATE: 11/19/01
 DATE: 11/19/01
 PLAN SCALE: 1" = 10'-0"
 SHEET NO.: 136

MANHOLES TO BE ADJUSTED(SPECIAL)

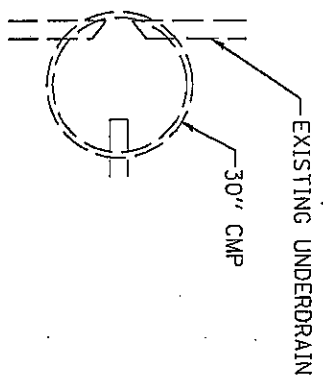
RT STA 7+32 LEE

F.A.P. RITE	SECTION	COUNTY	TOTAL SHEET NO.	SHEET NO.
581	131.32, R.S.	*	136	72

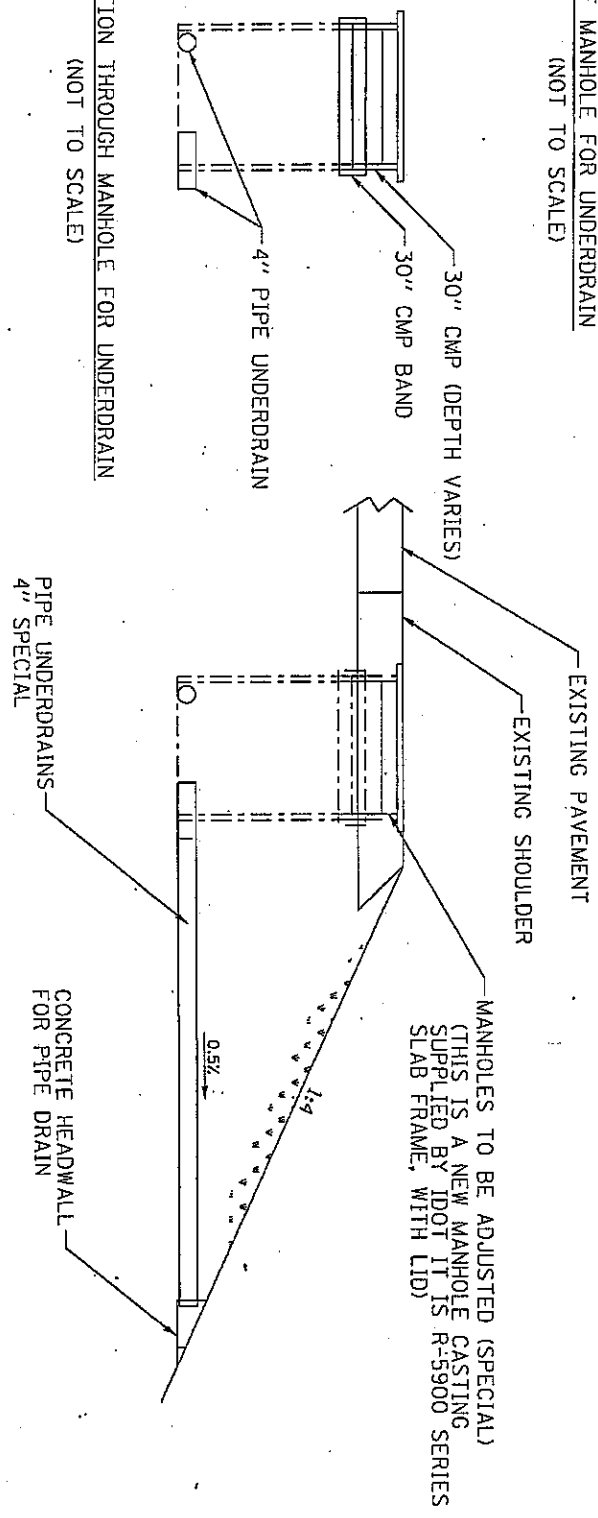
* WHITESIDE & LEE

CONTRACT NO. 6AC15

PLAN VIEW OF MANHOLE FOR UNDERDRAIN
(NOT TO SCALE)



TYPICAL SECTION THROUGH MANHOLE FOR UNDERDRAIN
(NOT TO SCALE)



MANHOLE TO BE ADJUSTED (SPECIAL)

MANHOLES TO BE ADJUSTED(SPECIAL)

FA.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	131,321, RS	*	136	73

* WHITESIDE & LEE

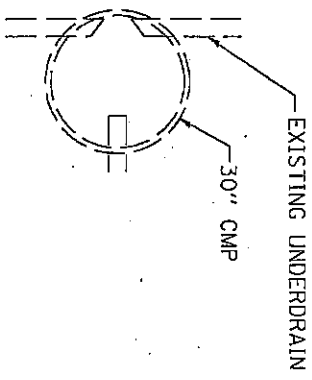
CONTRACT NO. 64CIS

RT STA ** WHITESIDE

RT STA 2+23 LEE

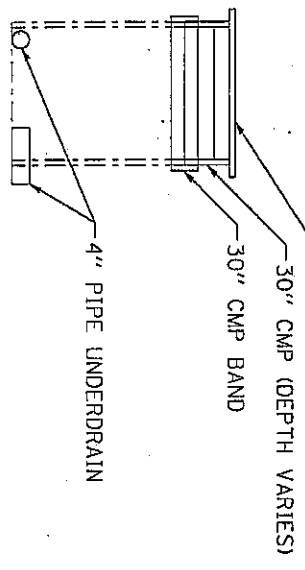
** JUST WEST OF COUNTRY CLUB LANE
EAST E.B. LANE

PLAN VIEW OF MANHOLE FOR UNDERDRAIN
(NOT TO SCALE)



MANHOLES TO BE ADJUSTED (SPECIAL)
(THIS IS A NEW MANHOLE CASTING
SUPPLIED BY IDOT IT IS R-5900 SERIES
SLAB FRAME, WITH LID)

TYPICAL SECTION THROUGH MANHOLE FOR UNDERDRAIN
(NOT TO SCALE)

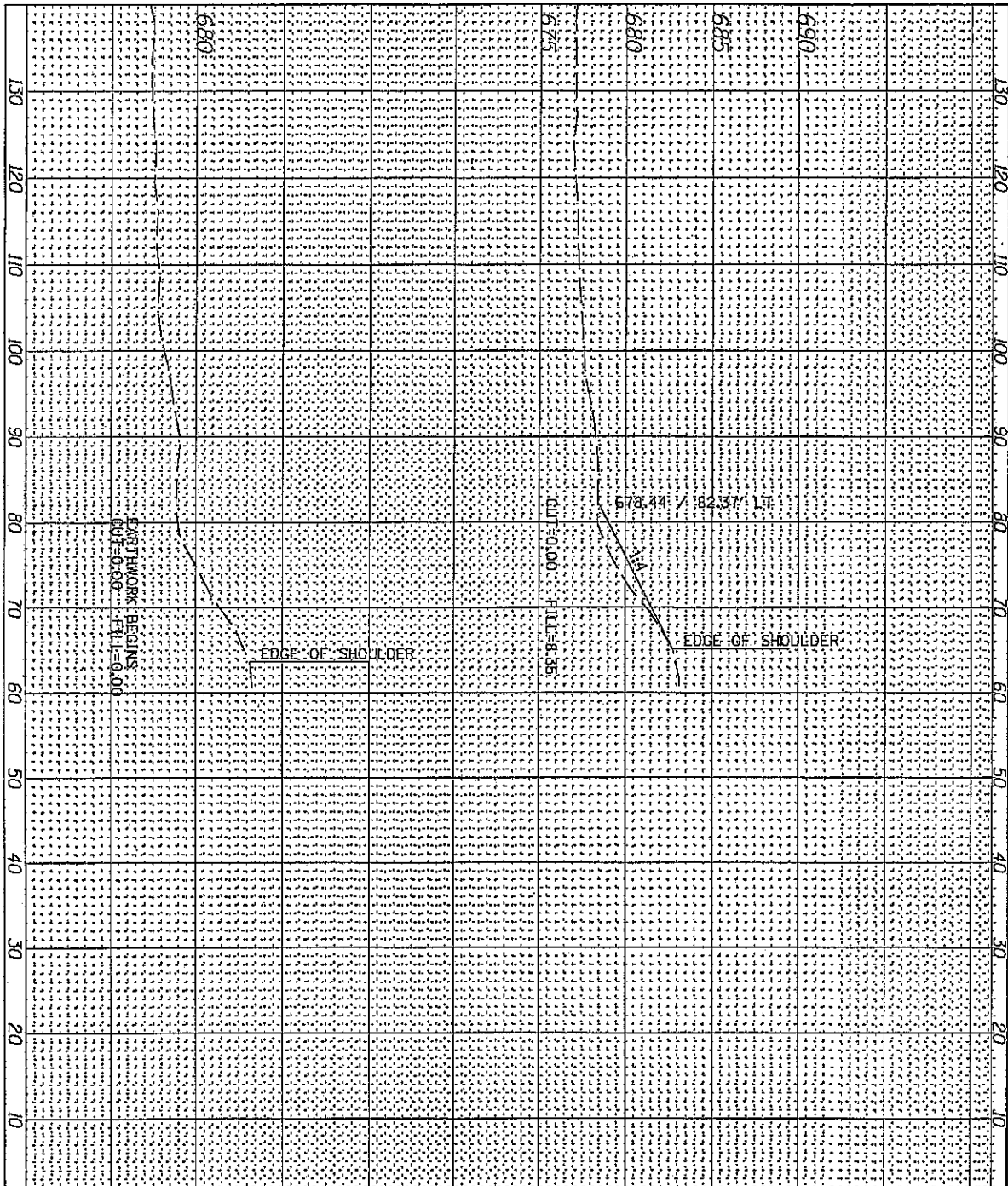


MANHOLE TO BE ADJUSTED (SPECIAL)

APP. DATE = Feb. 2008
APP. SCALE = 1/4" = 1'-0"
APP. SCALE = 1/8" = 1'-0"
APP. SCALE = 1/16" = 1'-0"

DESIGN	DATE
SURVEY	BY
FIELD BOOK	NO.
DATE	
BY	
DATE	

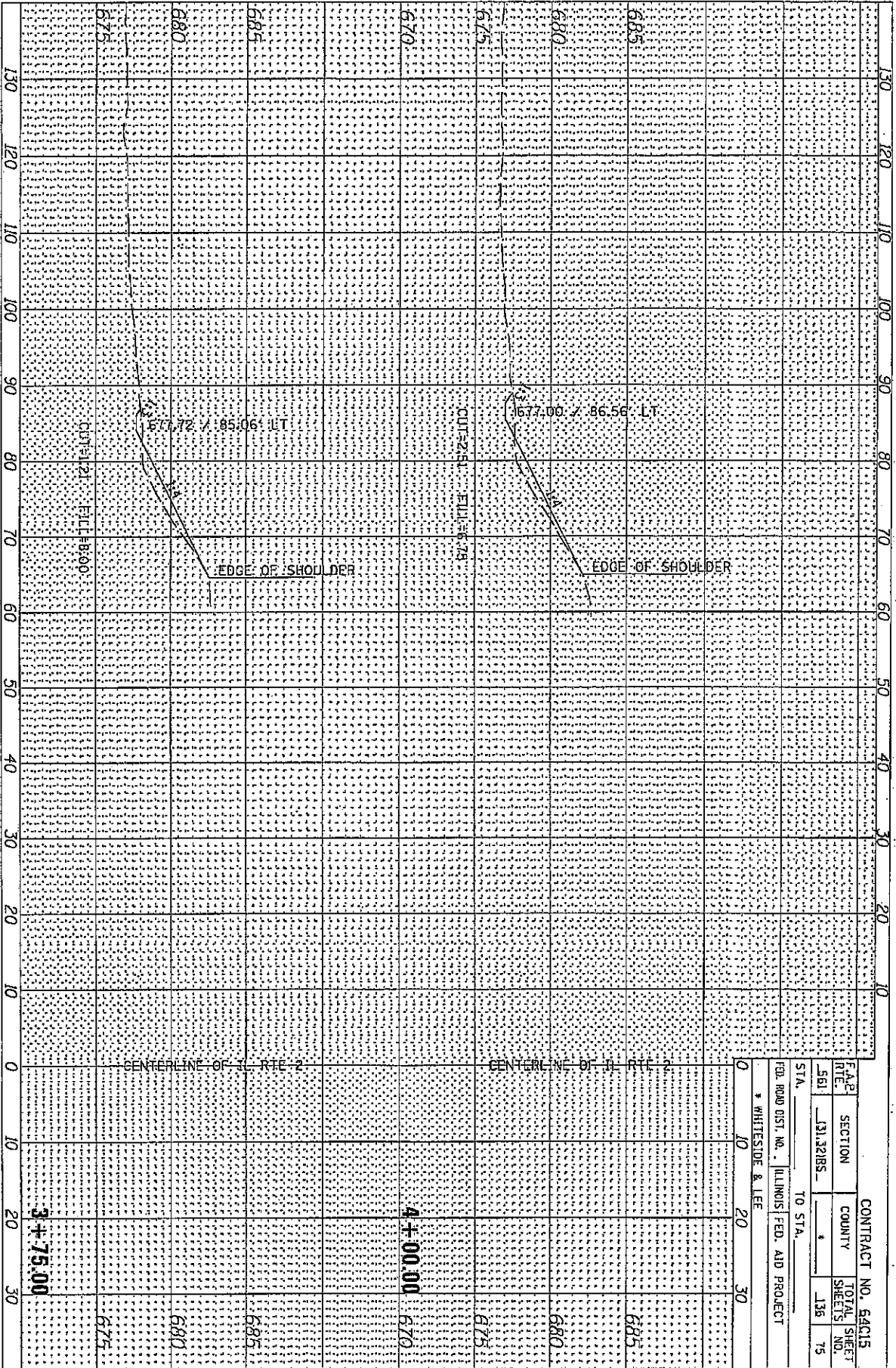
FUEL	DATE
LINE	NO.
NO. BOOK	
DATE	
BY	
DATE	



CONTRACT NO. 64C15	
F.A.P. SECTION	COUNTY
561 131.32185	4
TOTAL SHEET NO.	136
SHEET NO.	74
STA. _____ TO STA. _____	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
* WHITESIDE & LEE	
0	20
10	30

DESIGN	DATE	BY	CHK
SHEET	NO.		
DATE			
BY			
CHK			

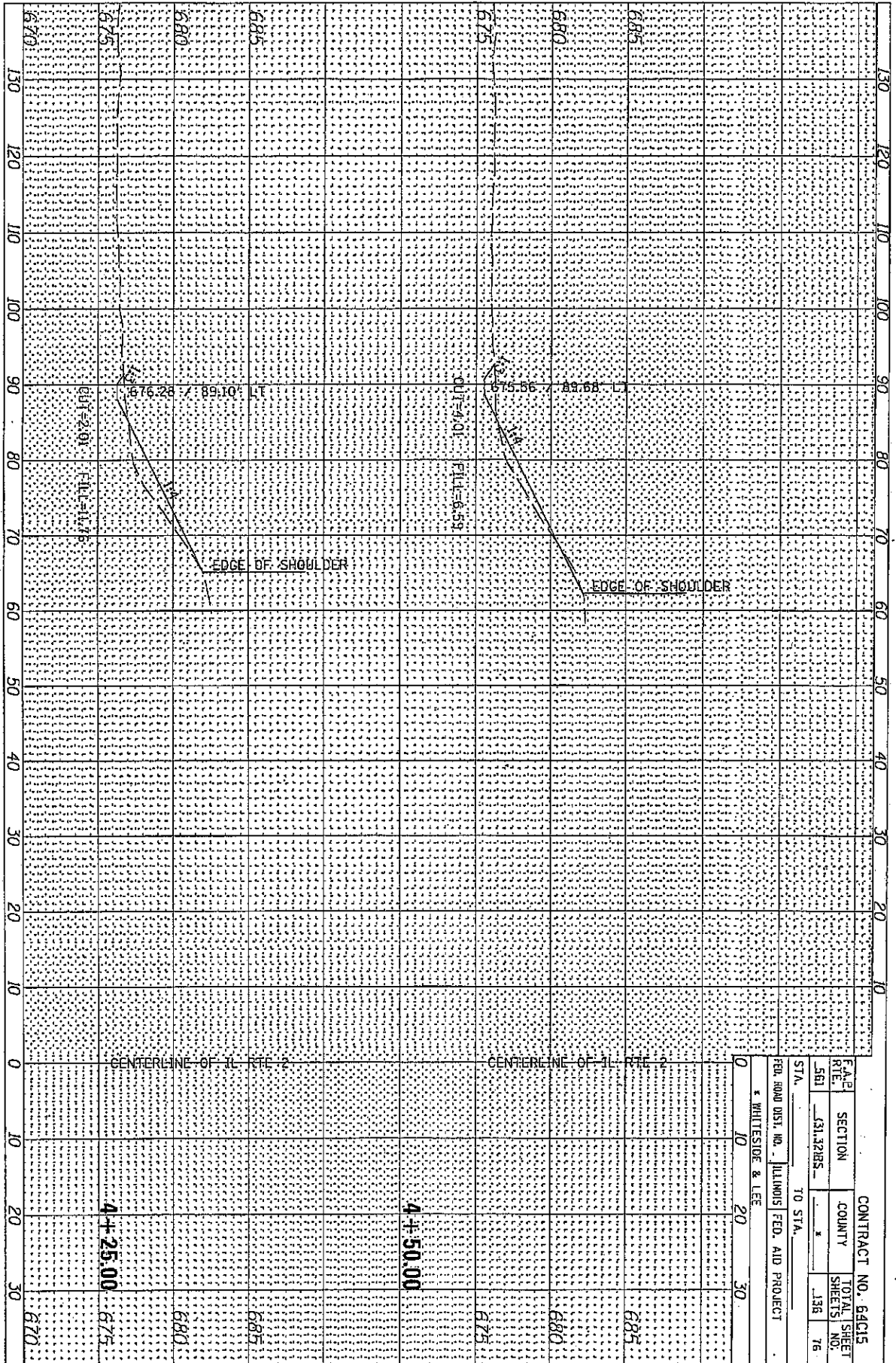
FINAL	DATE	BY	CHK
SHEET	NO.		
DATE			
BY			
CHK			



CONTRACT NO. 54C15	
F&P	SECTION
1581	131,32B5
COUNTY	
4	
TOTAL SHEET	
136	
SHEETS NO.	
75	
STA. TO STA.	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
* WHITESIDE & LEE	
0	30
10	20

DATE	BY
APPROVED	DATE
DESIGNED	DATE
CHECKED	DATE

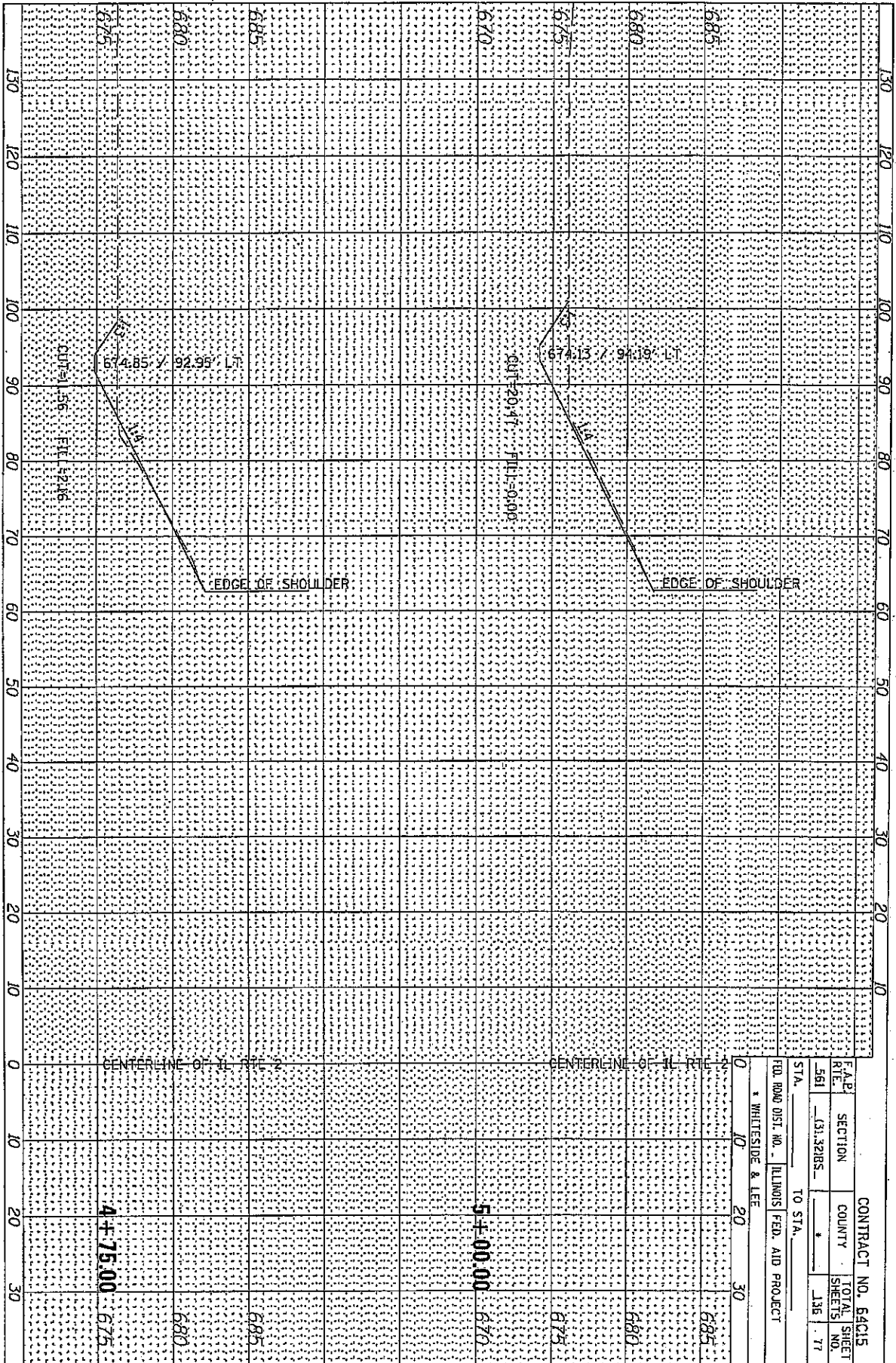
DATE	BY
APPROVED	DATE
DESIGNED	DATE
CHECKED	DATE



CONTRACT NO. 66215			
F&P	SECTION	COUNTY	TOTAL SHEETS
561	131, 2285	*	138
STA.	TO STA.	76	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
* WHITESIDE & LEE			
0	10	20	30

ORIGINAL	BY	DATE
SURVEY		
FIELD BOOK		
FIELD NOTES		
FIELD SKETCH		

FIELD	BY	DATE
BOOK		
NO.		
DATE		
NO.		



CONTRACT NO. 54C15			
F&E	SECTION	COUNTY	TOTAL SHEETS
561	(31,32)RS	*	136 77
STA.	TO STA.		
FED. ROAD DIST. NO. 10		ILLINOIS FED. AID PROJECT	
* WHITESIDE & LEE			
0	10	20	30

CENTERLINE OF R.F. 2

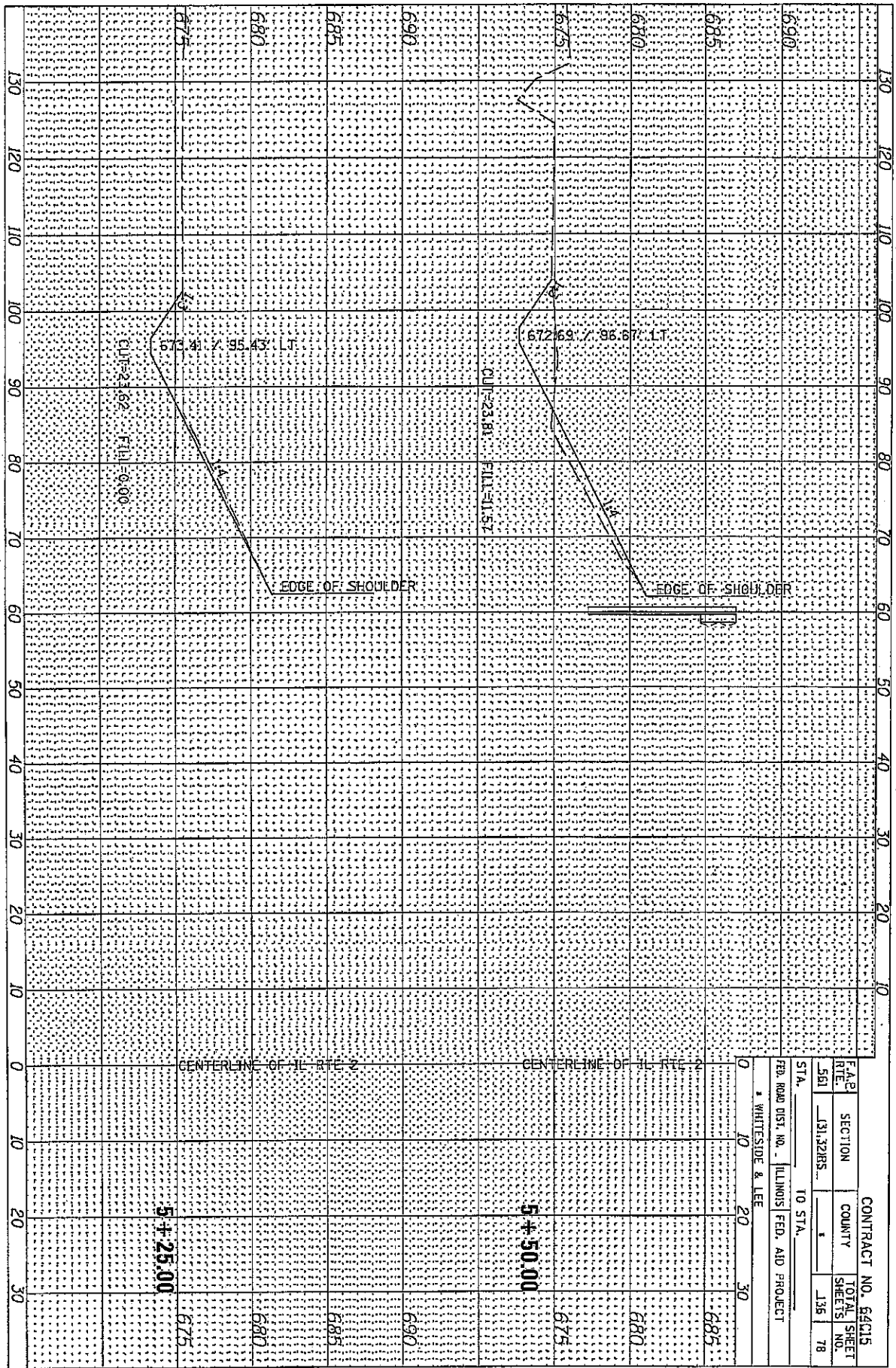
CENTERLINE OF R.F. 1

4+75.00 675

5+00.00 670

ORIGINAL	BY	DATE
SHEET		
NOTICE BOARD		
DATE		
BY		

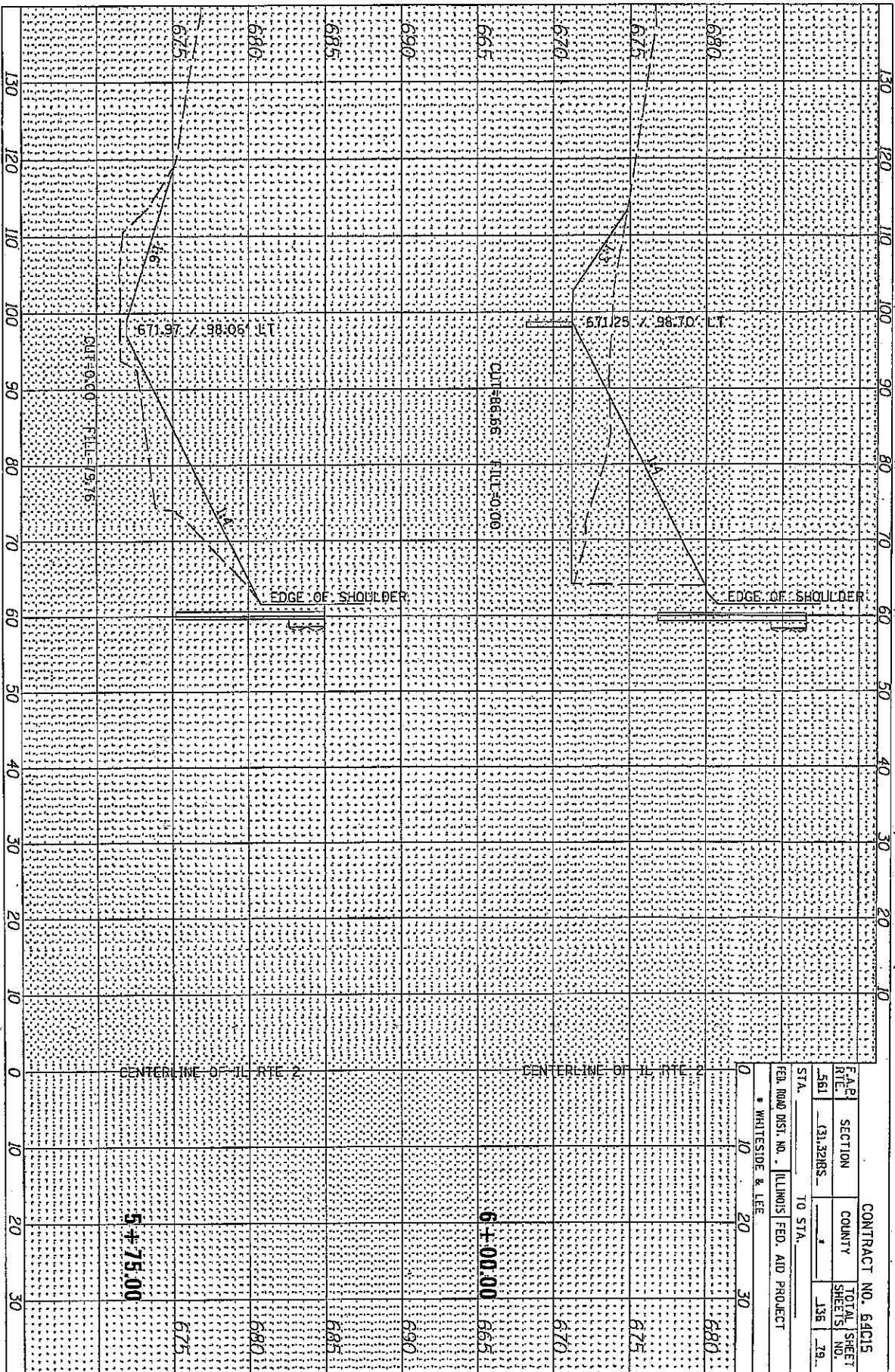
FINAL	BY	DATE
SHEET		
NOTICE BOARD		
DATE		
BY		



CONTRACT NO. 64C15	
F&E SECTION	COUNTY TOTAL SHEET NO.
561 131.32/RS	1 135 78
STA. TO STA.	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
* WHITESIDE & LEE	
0 10 20 30	

ORIGINAL SURVEY	BY	DATE
REVISED		
PLATTED		
PROF. DRAWN		
DATE MADE		
AREA		
SCALE		

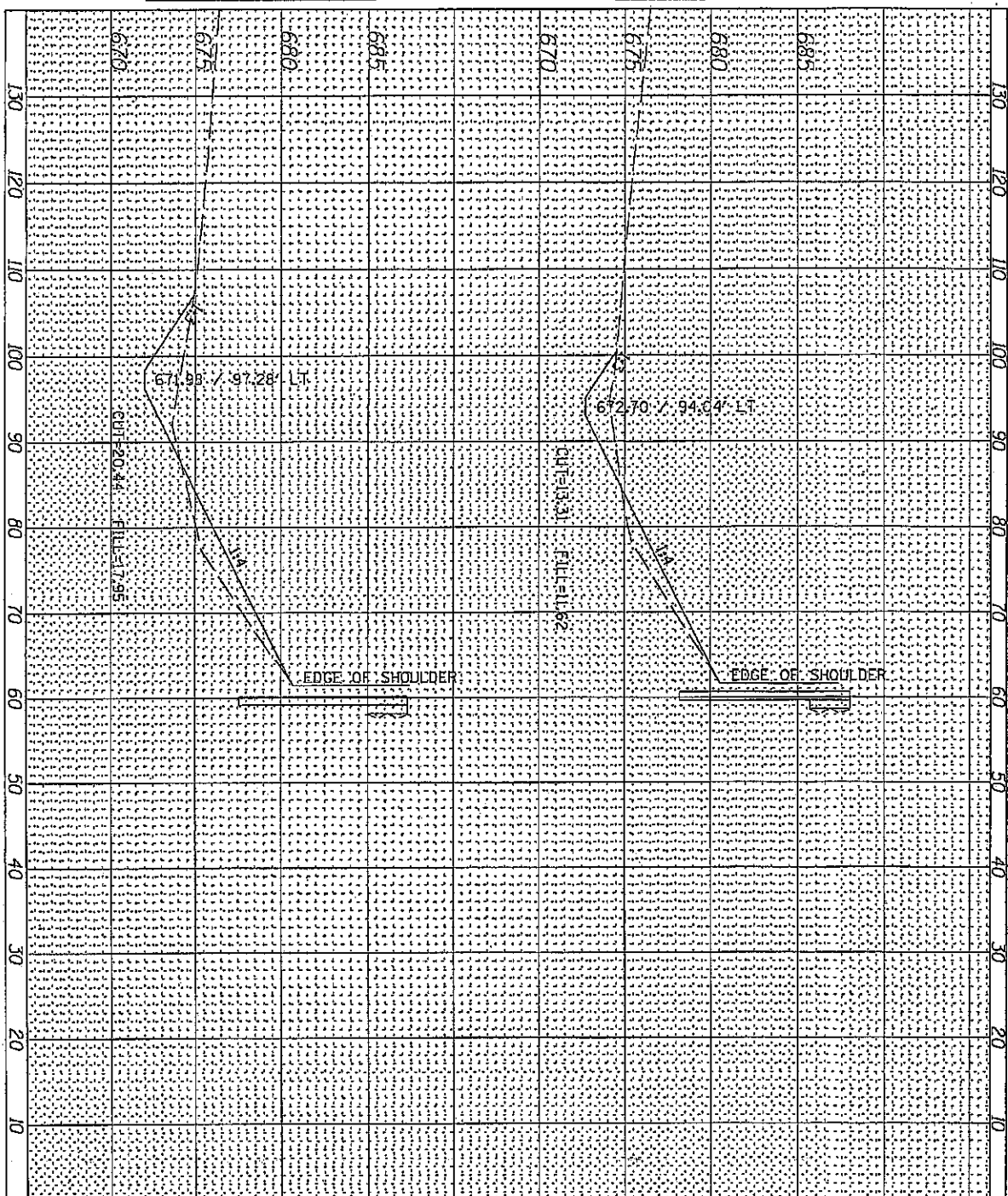
FINAL SURVEY	DATE MADE	BY	DATE
COMPUTED			
PLATTED			
PROF. DRAWN			
DATE MADE			
AREA			
SCALE			



CONTRACT NO. 64C15	
F&P SECTION	COUNTY
RTE. 561	ILLINOIS
(31.32)RS	FED. AID PROJECT
STA. _____	TO STA. _____
* WHITESIDE & LEE	
0	10
20	30
TOTAL SHEET NO.	135
SHEET NO.	79

ORIGINAL	DATE	BY
SUPPLEMENT		
DATE		
BY		
REVISIONS		

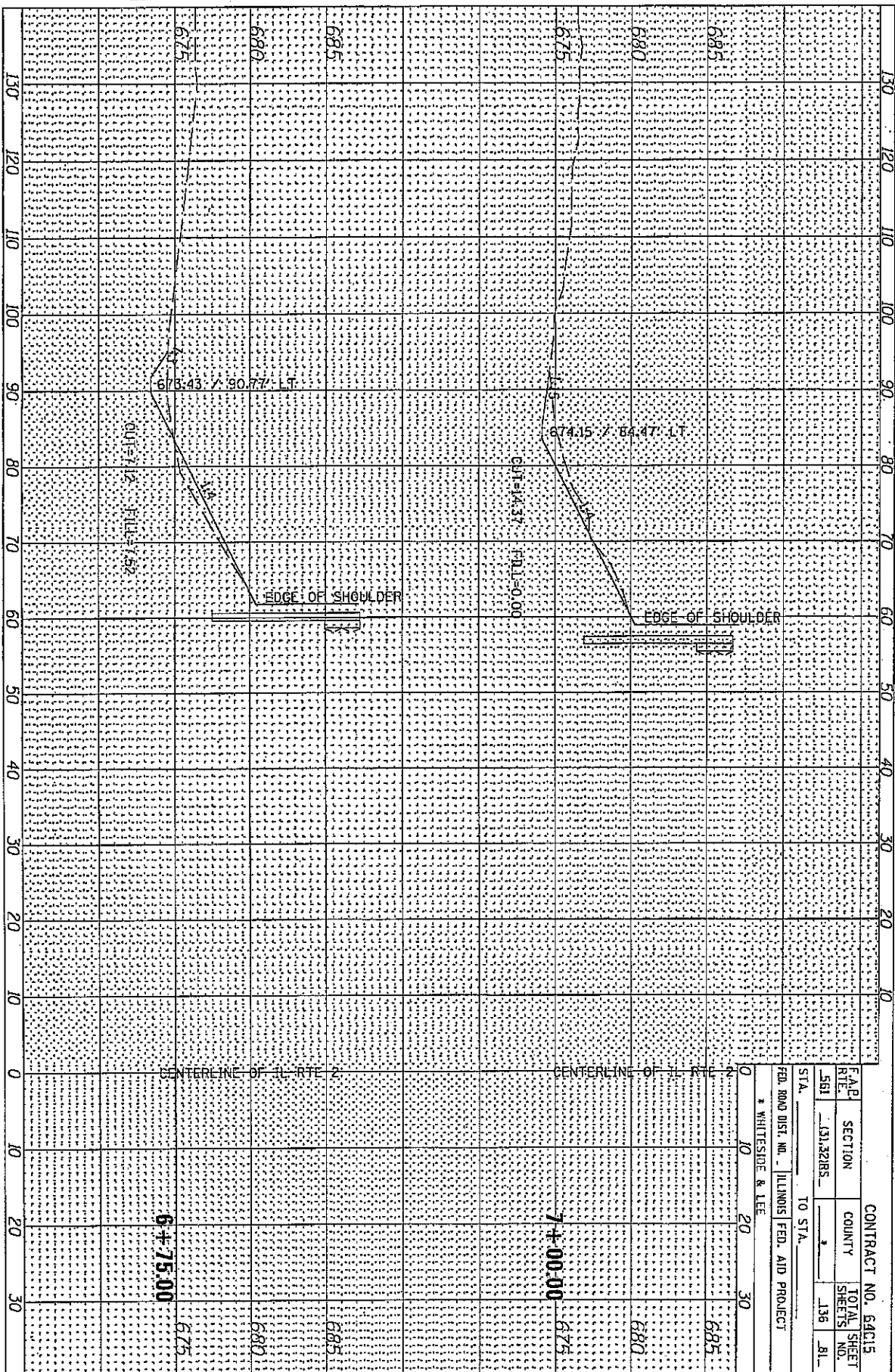
FINAL	DATE	BY
REVISIONS		
DATE		
BY		
REVISIONS		



CONTRACT NO. 64C15	
F.A.P. SECTION	COUNTY
5B1 131.122RS	1
TOTAL SHEETS NO.	135
NO.	135
TO STA.	
FROM STA.	
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
* WHITESIDE & LEE	
0	10
20	30

ORIGINAL SURVEY	DATE	BY
REVISIONS		
NO. 1		
NO. 2		
NO. 3		
NO. 4		
NO. 5		

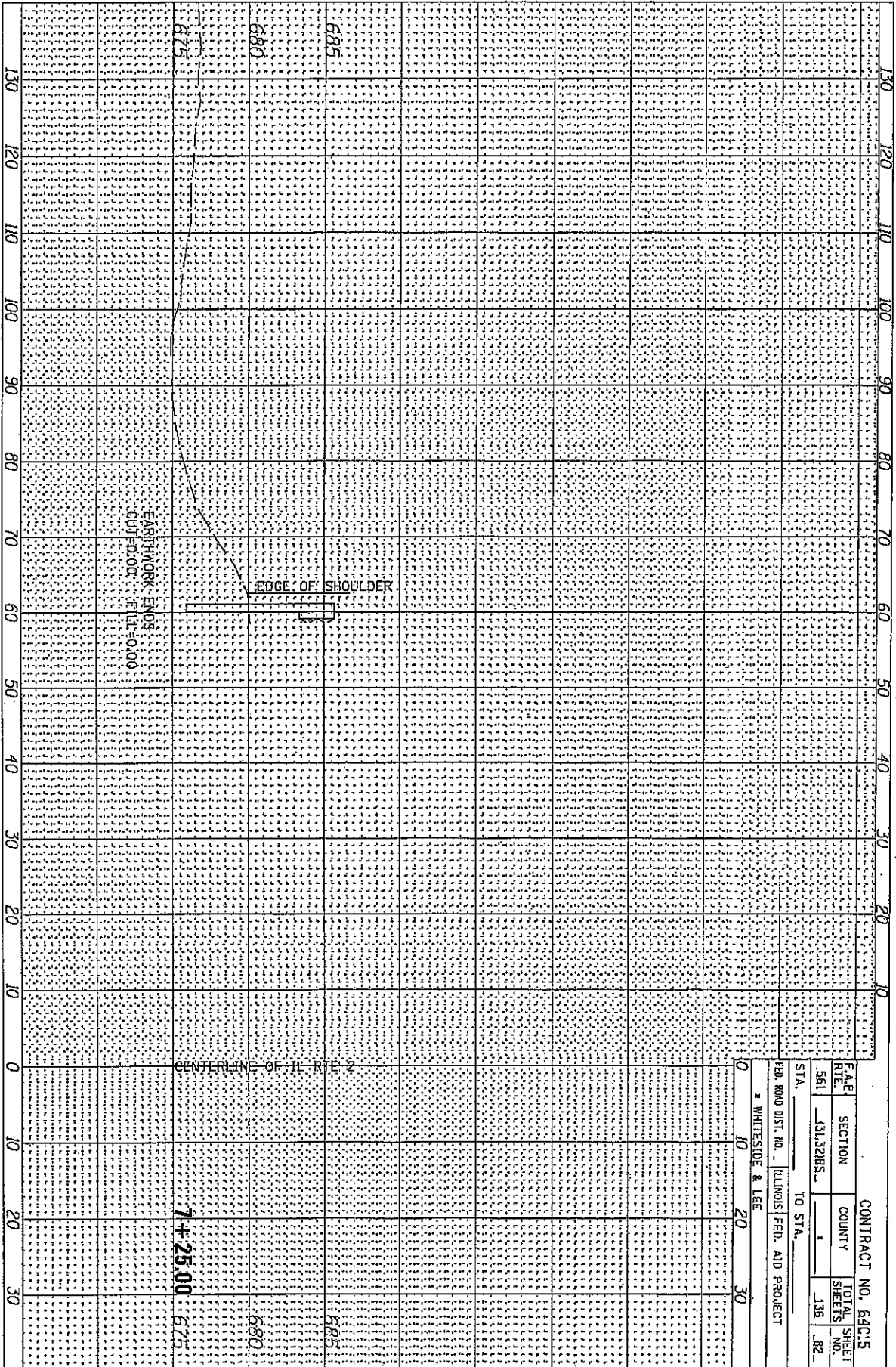
FINAL SURVEY	DATE	BY
REVISIONS		
NO. 1		
NO. 2		
NO. 3		
NO. 4		
NO. 5		



CONTRACT NO. 64C15			
F&P	SECTION	COUNTY	TOTAL SHEET
561	131,321B5	3	136
STA. TO STA.			BL.
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
* WHITESIDE & LEE			
0	10	20	30

ORIGINAL SURVEY	DATE
APPROVED	BY
NOTE BOOK	DATE
REVISIONS	
DATE	
BY	

TITLE	DATE
SURVEY	BY
NOTE BOOK	DATE
REVISIONS	
DATE	
BY	



CONTRACT NO. 54C15

F&P SECTION	COUNTY	TOTAL SHEET
561	1	136
ROUTE 131, 32BIS		82

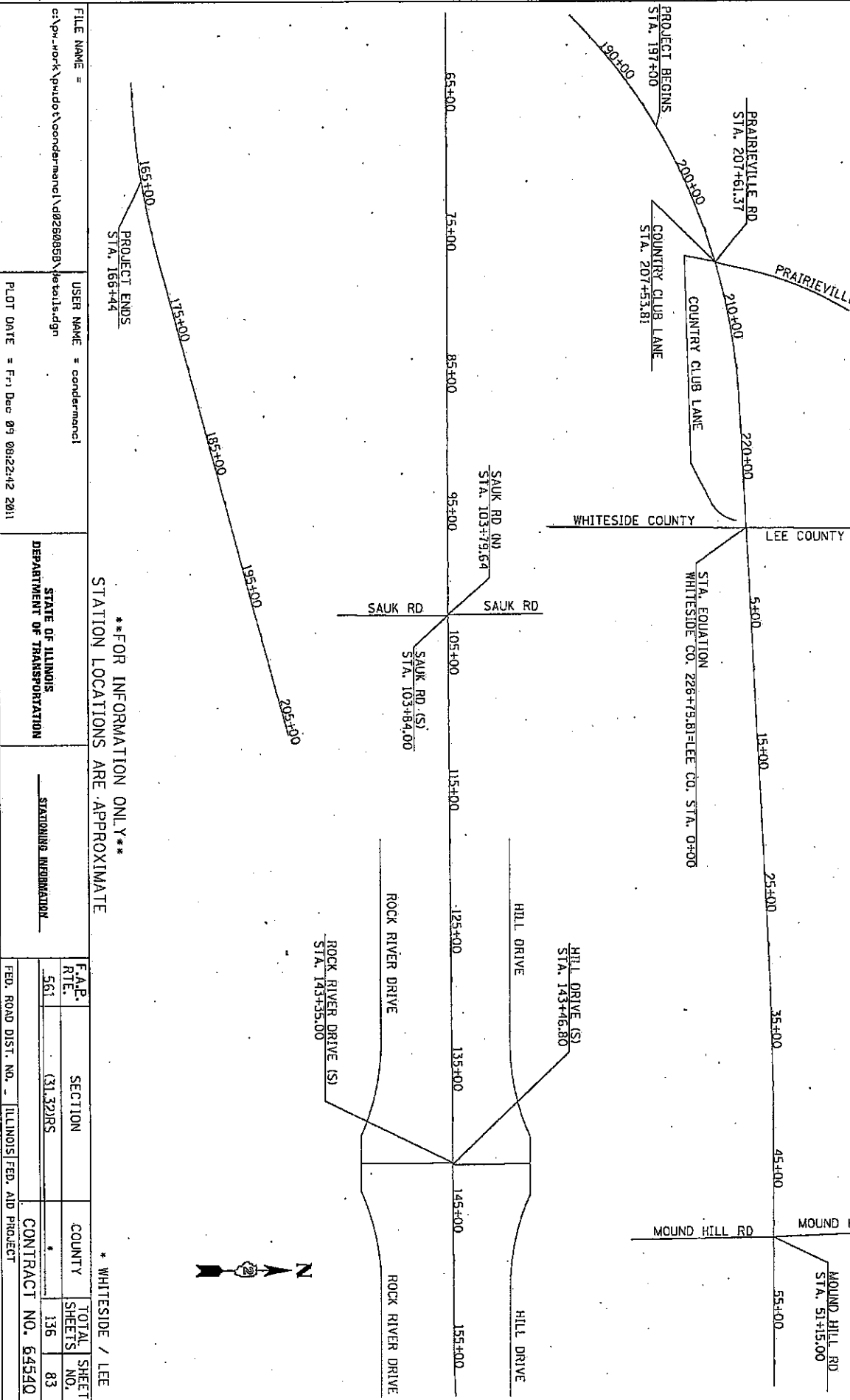
STA. _____ TO STA. _____

FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT

WHITESSIDE & LEE

0 10 20 30

STATIONING INFORMATION



FOR INFORMATION ONLY
STATION LOCATIONS ARE APPROXIMATE

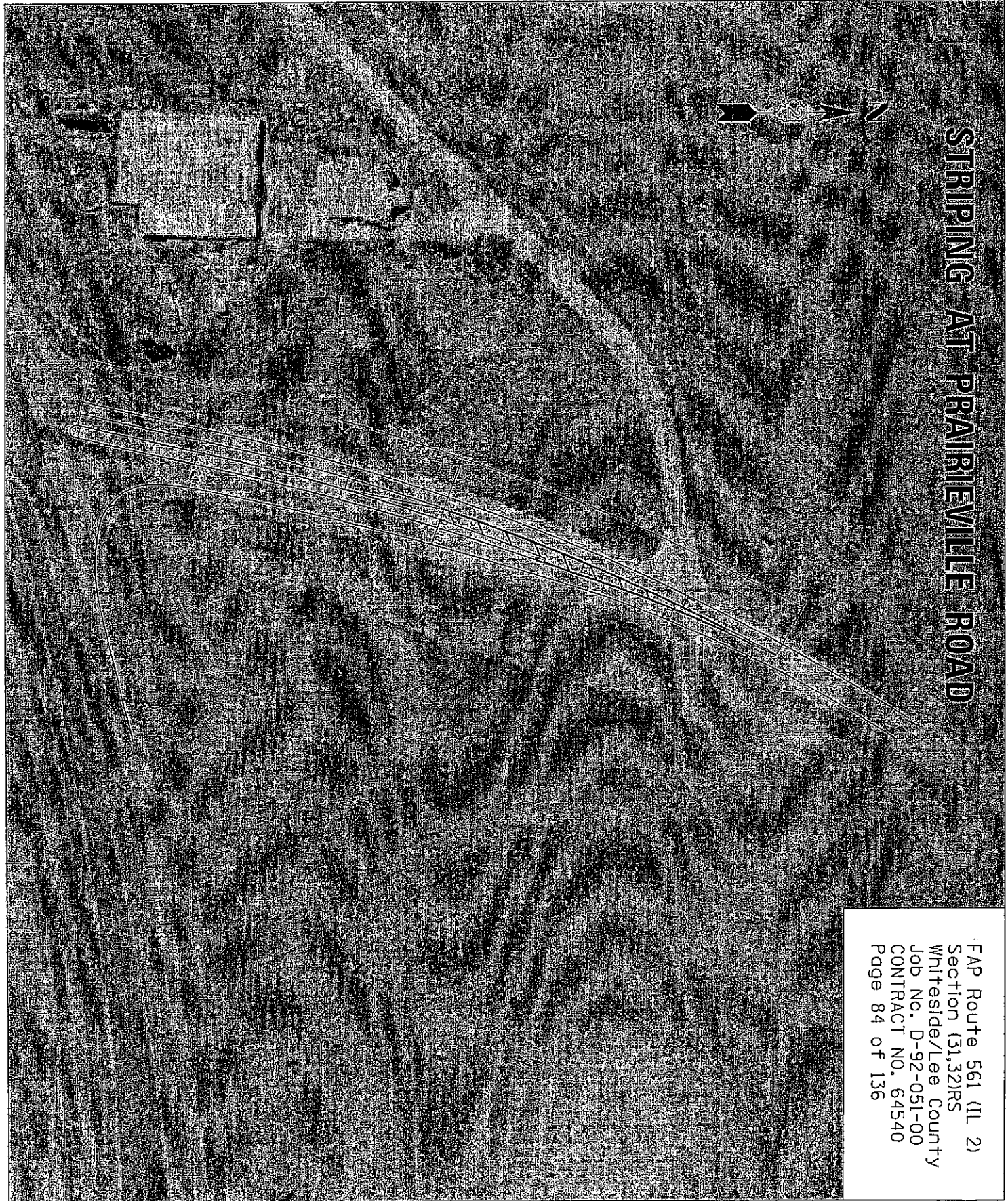
FILE NAME = c:\p\work\p\udo\condemnan\140260858\stetals.dgn	USER NAME = condemnancl	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STATIONING INFORMATION	F.A.P. RTE. 561	SECTION (31.32)RS	COUNTY *	TOTAL SHEET SHEETS NO. 136	SHEET NO. 83
PLOT DATE = Fri Dec 09 08:22:42 2011				FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		CONTRACT NO. 64540		

* WHITESIDE / LEE

STRIPING AT PRAIRIEVILLE ROAD



FAP Route 561 (IL 2)
Section 131,32RS
Whiteside/Lee County
Job No. D-92-051-00
CONTRACT NO. 64540
Page 84 of 136



U.S.G.S. DATUM
5TH, GA. (1929)

BUILT ON CORNER OF E. CORNER OF N. HEADWALL OF A.N. CULVERT
205' LT. SW. 25' 19.54
ELEV. 819.88

FOR INFORMATION ONLY

HUGH J. B.
MARY E. HENNES

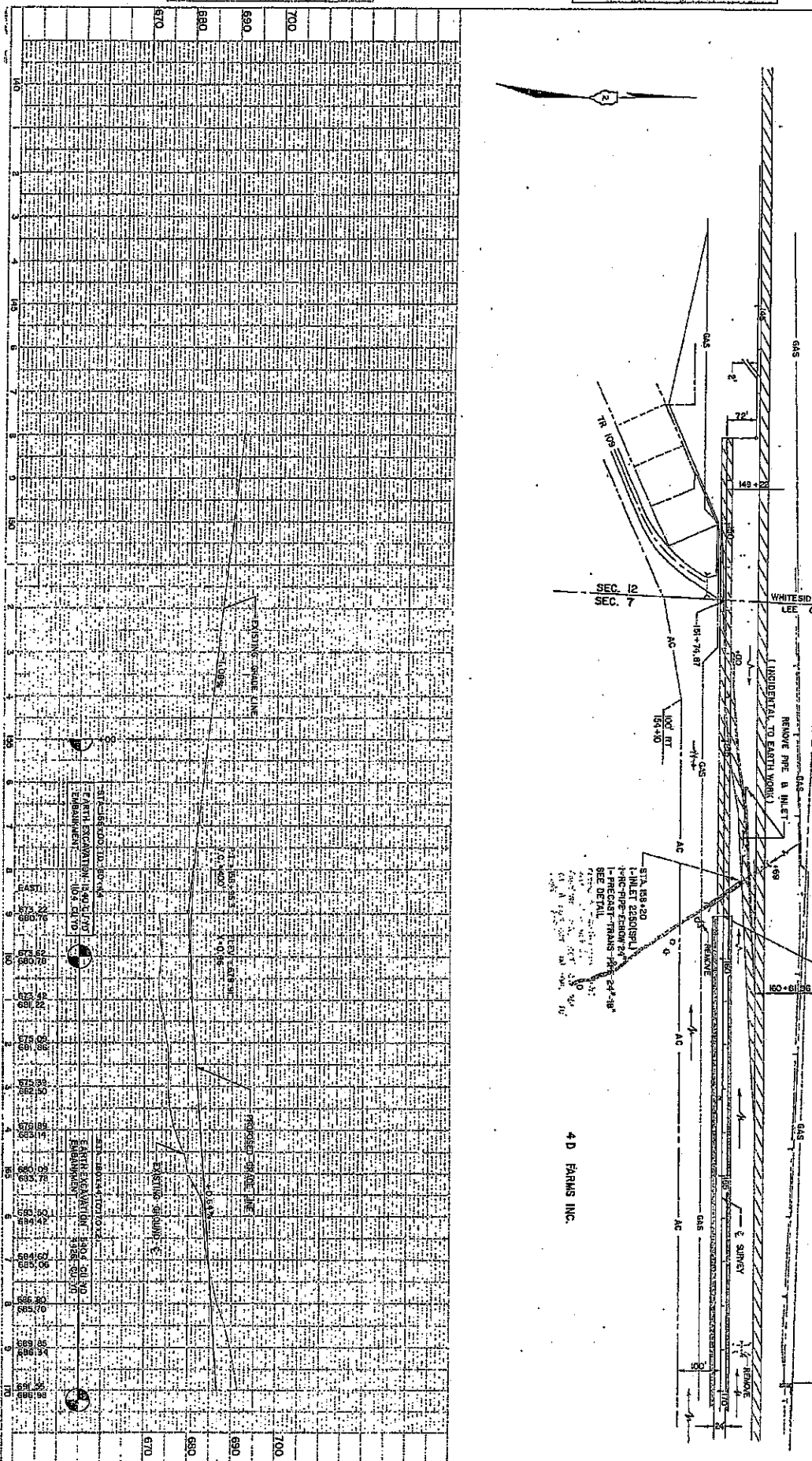
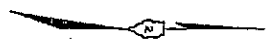
EMERALD HILL COUNTRY CLUB

SEC. 31-2 BEGINS
STATION 159+00

FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 85 of 136

DATE	REVISION	BY
NOV 2004	ISSUE	...

DATE	REVISION	BY
NOV 2004	ISSUE	...



STATION 159+00 TO 159+05

STATION	ELEVATION
159+00	819.88
159+01	819.88
159+02	819.88
159+03	819.88
159+04	819.88
159+05	819.88

STATION 159+05 TO 159+10

STATION	ELEVATION
159+05	819.88
159+06	819.88
159+07	819.88
159+08	819.88
159+09	819.88
159+10	819.88

STATION 159+10 TO 159+15

STATION	ELEVATION
159+10	819.88
159+11	819.88
159+12	819.88
159+13	819.88
159+14	819.88
159+15	819.88

STATION 159+15 TO 159+20

STATION	ELEVATION
159+15	819.88
159+16	819.88
159+17	819.88
159+18	819.88
159+19	819.88
159+20	819.88

STATION 159+20 TO 159+25

STATION	ELEVATION
159+20	819.88
159+21	819.88
159+22	819.88
159+23	819.88
159+24	819.88
159+25	819.88

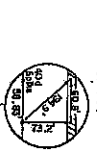
STATION 159+25 TO 159+30

STATION	ELEVATION
159+25	819.88
159+26	819.88
159+27	819.88
159+28	819.88
159+29	819.88
159+30	819.88

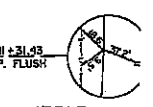
U.S.G.S. DATUM
5TH, GA (1929)

BEING CHAINED ON CTR. N. HEADWALL OF AN
111' LT. STR. 177+29

FOR INFORMATION ONLY



HUGH HERMES



CURVE DATA
EAST BOUND
R.I. 187+37.0
A = 2'-38" ± 4"
R = 28.6778
T = 68.8187
L = 153.111

CURVE DATA
WEST BOUND
R.I. 188+00
A = 2'-38" ± 4"
R = 28.6778
T = 700.0
L = 1325.00 ±



STATION DATA
WEST BOUND
R.I. 188+00
A = 2'-38" ± 4"
R = 28.6778
T = 700.0
L = 1325.00 ±



STATION DATA
WEST BOUND
R.I. 188+00
A = 2'-38" ± 4"
R = 28.6778
T = 700.0
L = 1325.00 ±

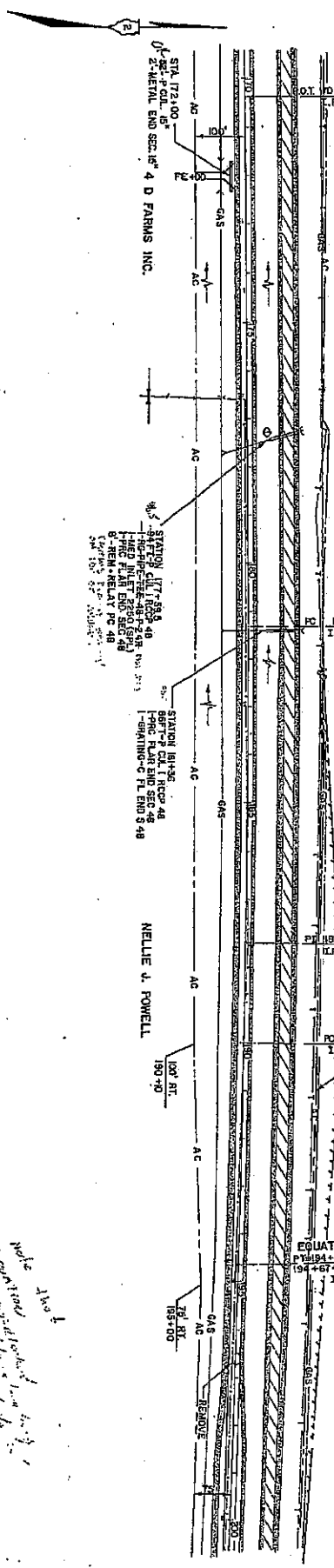


STATION DATA
WEST BOUND
R.I. 188+00
A = 2'-38" ± 4"
R = 28.6778
T = 700.0
L = 1325.00 ±

FAP Route 561 (1L 2)
Section (31, 32)RS
Whiteside/see County
Job No. D-92-051-00
Contract No. 64540
Sheet 88 of 136

DATE	DESCRIPTION	BY	CHKD.

DATE	DESCRIPTION	BY	CHKD.



STATION	ELEVATION	STATION	ELEVATION
170	691.25	180	697.17
171	691.88	181	697.80
172	692.51	182	698.43
173	693.14	183	699.06
174	693.77	184	699.69
175	694.40	185	700.32
176	695.03	186	700.95
177	695.66	187	701.58
178	696.29	188	702.21
179	696.92	189	702.84
180	697.55	190	703.47
181	698.18	191	704.10
182	698.81	192	704.73
183	699.44	193	705.36
184	700.07	194	705.99
185	700.70	195	706.62
186	701.33	196	707.25
187	701.96	197	707.88
188	702.59	198	708.51
189	703.22	199	709.14
190	703.85	200	709.77
191	704.48	201	710.40
192	705.11	202	711.03
193	705.74	203	711.66
194	706.37	204	712.29
195	707.00	205	712.92
196	707.63	206	713.55
197	708.26	207	714.18
198	708.89	208	714.81
199	709.52	209	715.44
200	710.15	210	716.07
201	710.78	211	716.70
202	711.41	212	717.33
203	712.04	213	717.96
204	712.67	214	718.59
205	713.30	215	719.22
206	713.93	216	719.85
207	714.56	217	720.48
208	715.19	218	721.11
209	715.82	219	721.74
210	716.45	220	722.37
211	717.08	221	723.00
212	717.71	222	723.63
213	718.34	223	724.26
214	718.97	224	724.89
215	719.60	225	725.52
216	720.23	226	726.15
217	720.86	227	726.78
218	721.49	228	727.41
219	722.12	229	728.04
220	722.75	230	728.67
221	723.38	231	729.30
222	724.01	232	729.93
223	724.64	233	730.56
224	725.27	234	731.19
225	725.90	235	731.82
226	726.53	236	732.45
227	727.16	237	733.08
228	727.79	238	733.71
229	728.42	239	734.34
230	729.05	240	734.97

Note: This
is a computer
generated
document
and should
not be
relied upon
without
proper
verification.

U.S.G.S. DATUM
5th 6A (1929)

BM TP CHISEL ON CTR N. HOWL
ELEV. 83.15
ST. N. 200+57
ELEV. 85.13

FOR INFORMATION ONLY

1071.87M. 218.87 FEET. 667.16

BM IN TREE AT NW COR CE
58R ST. N. 223+35 ELEV. 86.1

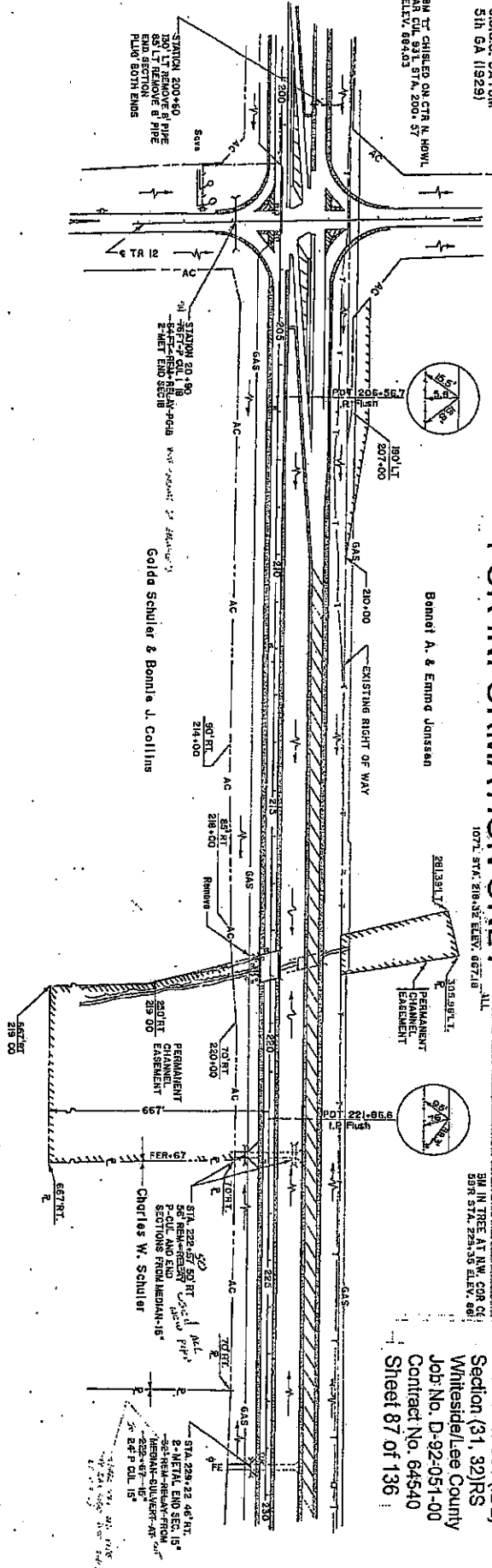
FAP Route 561 (1L 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 87 of 136

Bornet A. & Emma Jansson

Golda Schuler & Bonnie J. Collins

DATE	REVISION

DATE	REVISION



STATION	ELEVATION	REMARKS
660	660.00	
670	670.00	
680	680.00	
690	690.00	
700	700.00	
710	710.00	
720	720.00	
730	730.00	
740	740.00	
750	750.00	
760	760.00	
770	770.00	
780	780.00	
790	790.00	
800	800.00	
810	810.00	
820	820.00	
830	830.00	
840	840.00	
850	850.00	
860	860.00	
870	870.00	
880	880.00	
890	890.00	
900	900.00	
910	910.00	
920	920.00	
930	930.00	
940	940.00	
950	950.00	
960	960.00	
970	970.00	
980	980.00	
990	990.00	
1000	1000.00	

(FOR 2 APPROACHES)

CONCRETE BRIDGE APPROACH PAVEMENT
BRIDGE APPROACH PAVEMENT (STANDARD 2-382)
REINFORCEMENT - 4#6S
60.48 IN

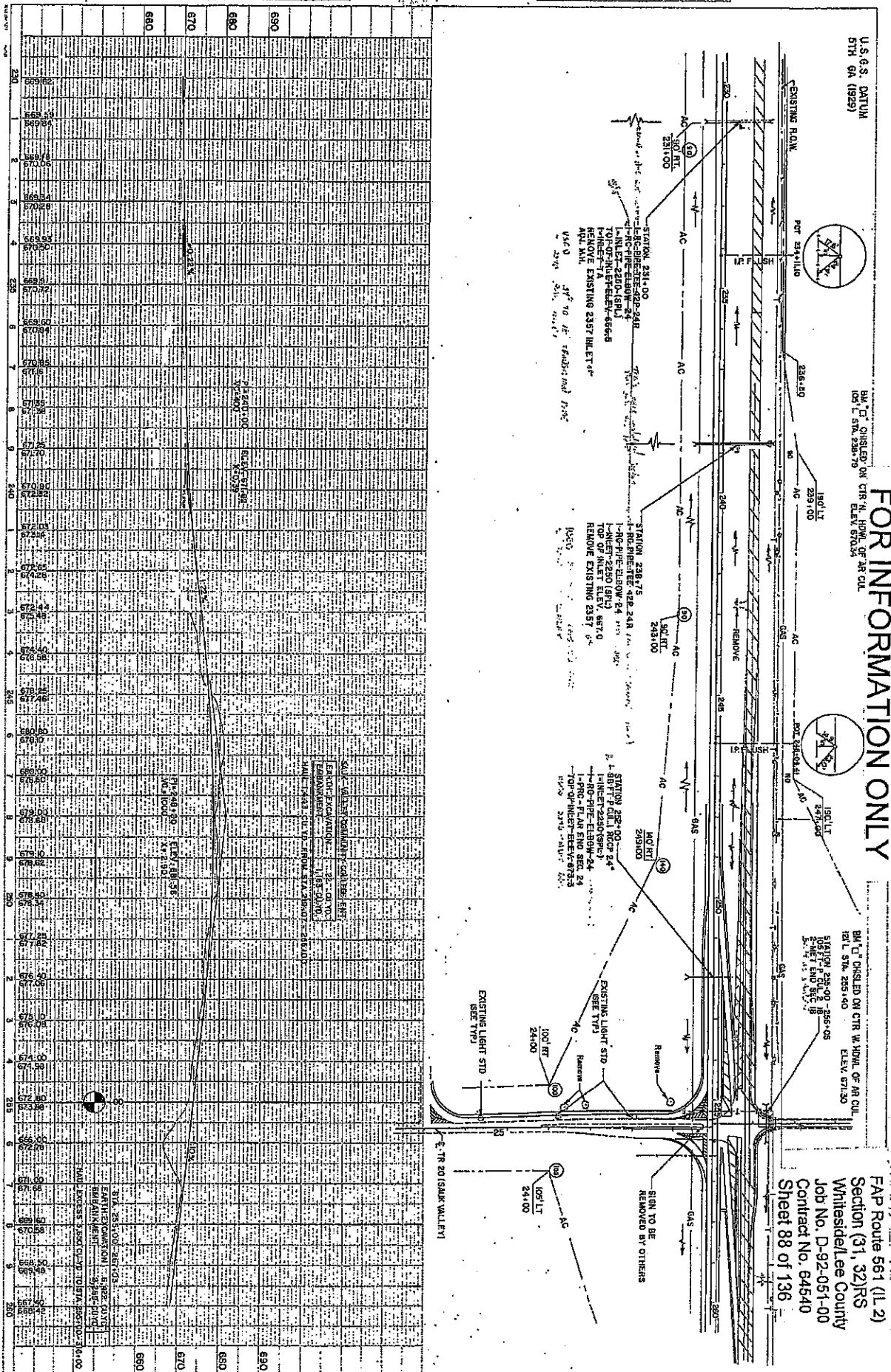
U.S.G.S. DATUM
5TH GN (1929)

BM "C" CHSLED ON CTR W. HDWL OF BR CUL.
ELEV. 575.30

BM "C" CHSLED ON CTR W. HDWL OF BR CUL.
ELEV. 575.30

FOR INFORMATION ONLY

FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 88 of 136



FOR INFORMATION ONLY

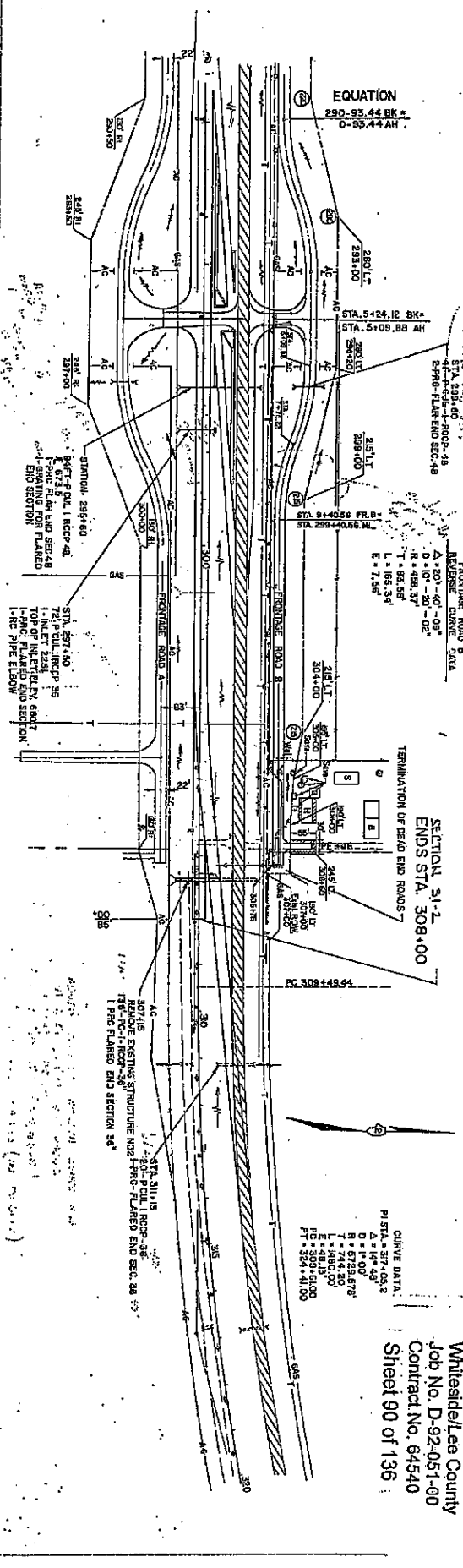
FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 90 of 136

CURVE DATA
PI STA = 297+03.2
D = 197.43
Δ = 1° 49' 58" E
T = 74.85
L = 148.00
E = 38.12
PT = 324+41.00

**SECTION 31-1
ENDS STA. 308+00**
TERMINATION OF DESIGN END ROADS

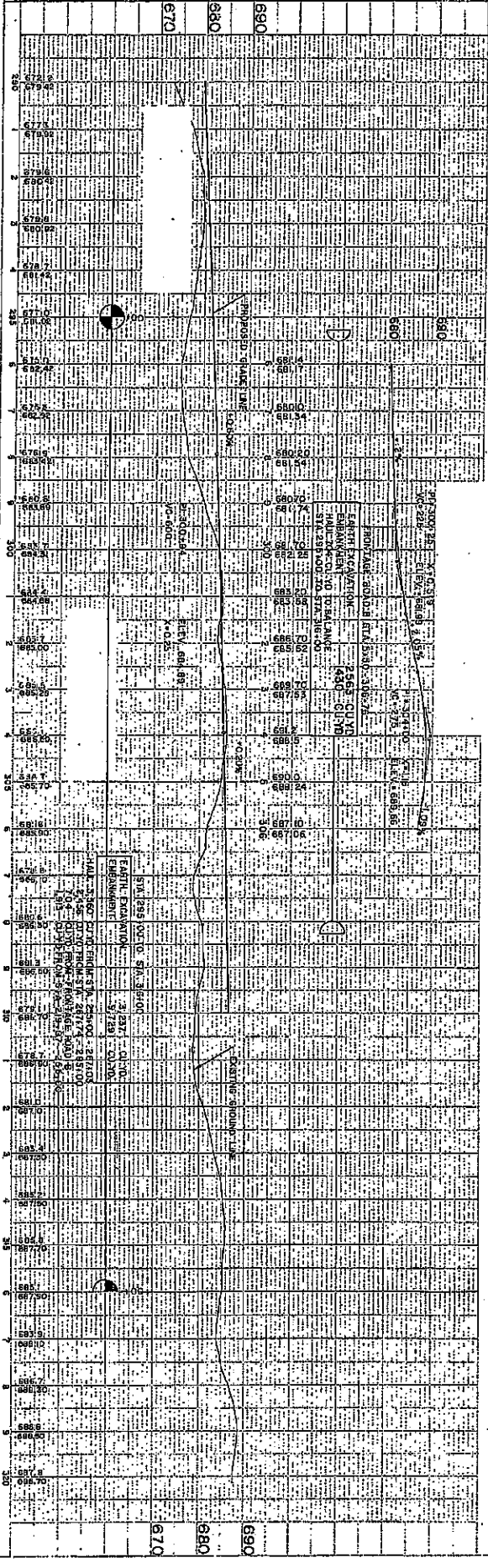
**FRONTAGE ROAD B
REVERSE CURVE DATA**
Δ = 20° 40' 08"
D = 107-20'-02"
R = 498.37'
T = 93.58'
L = 185.34'
E = 7.55'

EQUATION
290-95.44 BK ±
0-55.44 AH ±



PLAN	SECTION	DATE

PROJECT	DATE



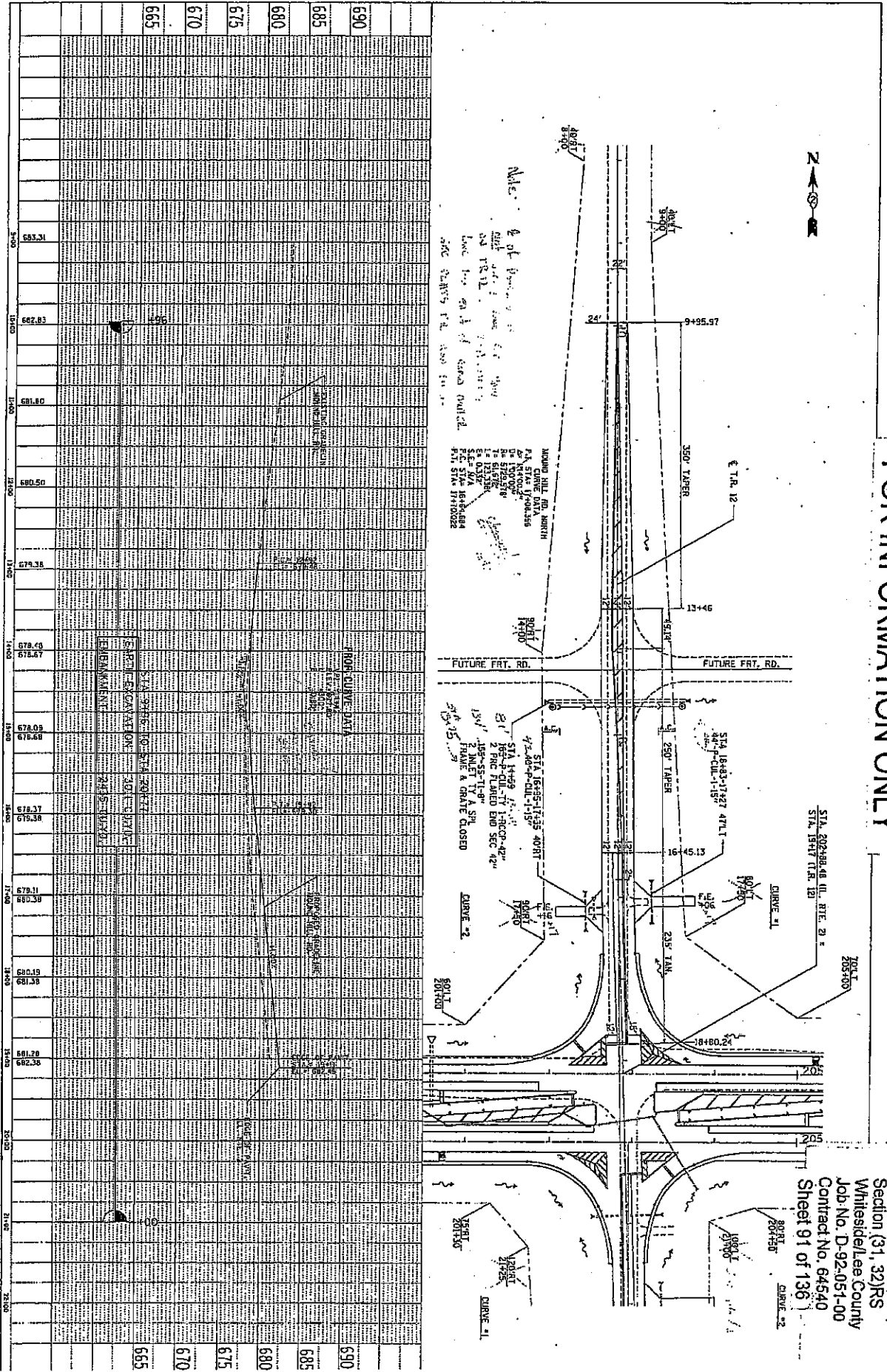
FOR INFORMATION ONLY

FAP Route 561 (IL-2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 91 of 136

PLAN	NO.	DATE	BY	CHKD.

PROFILE	NO.	DATE	BY	CHKD.

18-APR-90 10:58:10
 Z:\PL\11.003\FZ\203066A.DGN\1
 LEVELS = 1-63



GROUND HILL RD., T. R. 12 NORTH

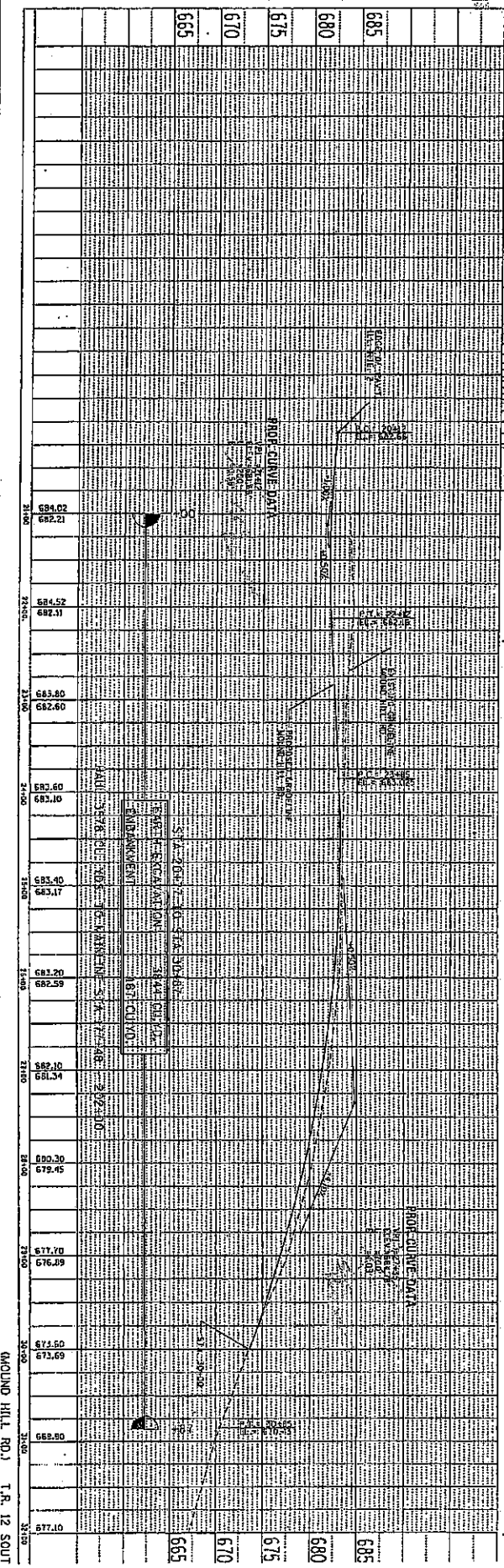
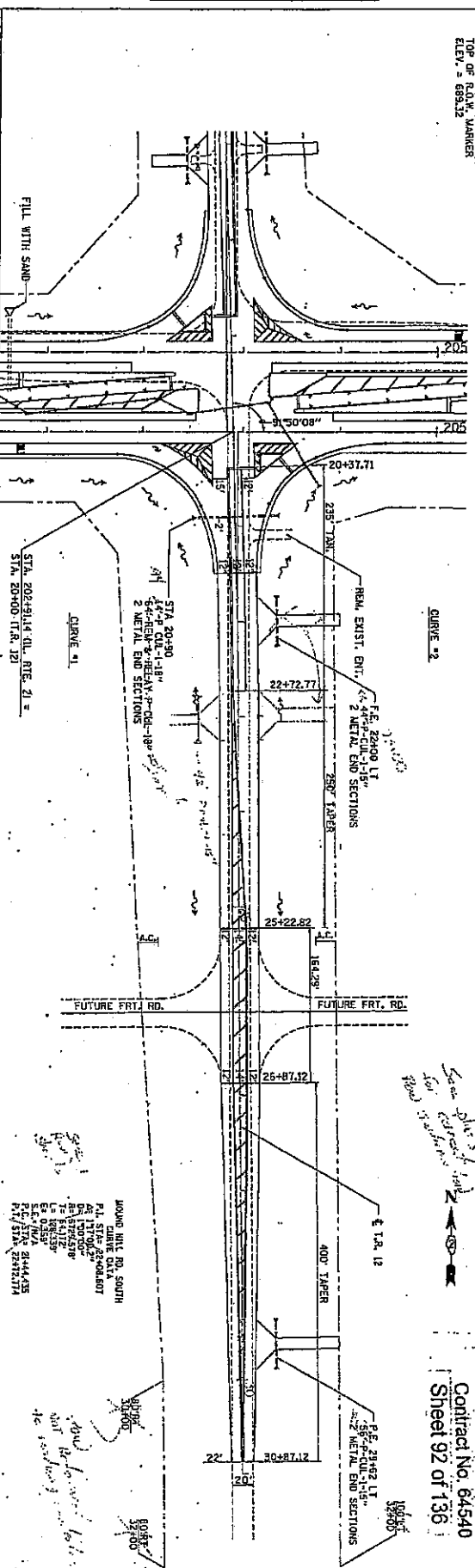
FOR INFORMATION ONLY

U.S.G.S. DATUM 5TH G.A. (1929)
 B.M. 627 LT STA 193+00
 M.P. 0.6 U.S.A. MARKER
 ELEV. = 669.12

FAP Route 561 (L 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-100
 Contract No. 64540
 Sheet 92 of 136

PLAN	DATE	BY	CHK
PLAN BOOK	DATE	BY	CHK
NO.			

PROFILE	DATE	BY	CHK
PROFILE BOOK	DATE	BY	CHK
NO.			



18-APR-80 10:58:10
 Z:\HILL\00312\F203066A.DGN\1
 LEVELS * 1-63

(ROUND HILL RD.) T.R. 12 SOUTH

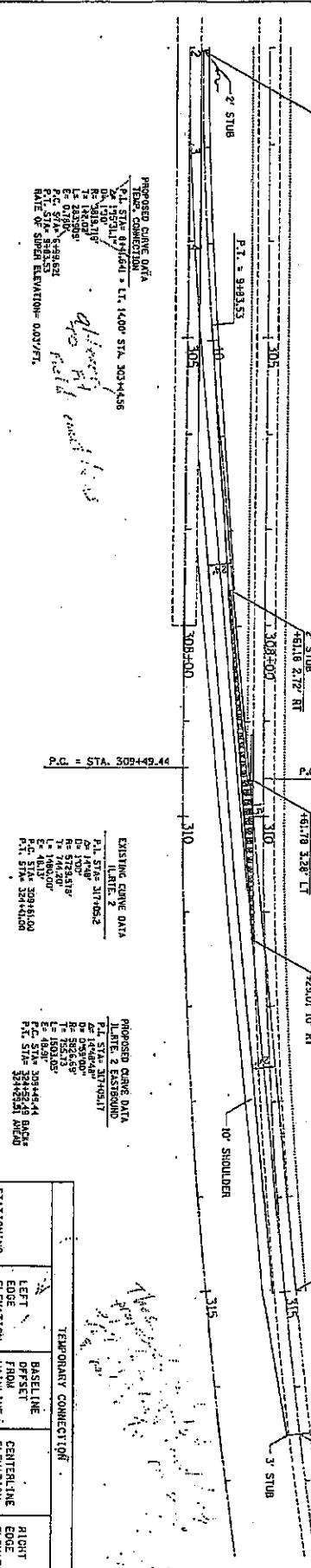
FOR INFORMATION ONLY

TEMPORARY CONNECTION

FAP Route 561 (L 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 93 of 136
 PROJECT ENDS
 STA. 316+49

P.C. = STA. 302+02.54 (L.R.T.E.2) = STA.
 S.T.A. 64995621 TEMP. CONNECTION EDUA.

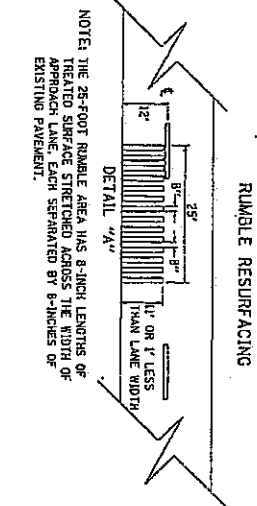
STA. 316+00 (L.R.T.E.2) =
 STA. 20+000 TEMP. CONNECTION
 STA. 316+49



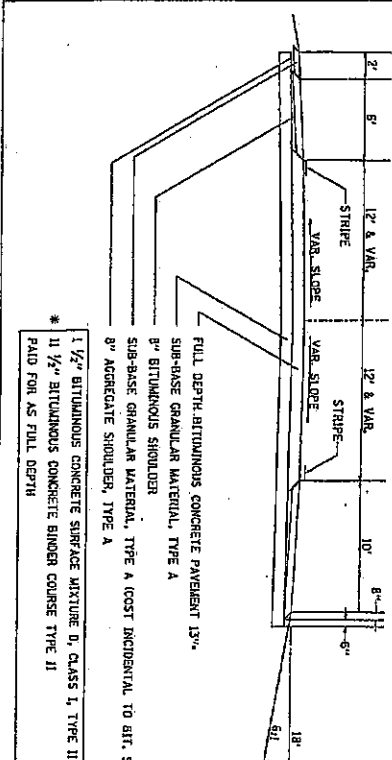
PROPOSED CURVE DATA
 TEMP. CONNECTION
 P.I. STA. 949353
 P.C. STA. 949353
 P.T. STA. 949353
 RADIUS = 1400'
 CHORD BEARING = 140.00°
 CHORD DISTANCE = 1400'
 CHORD BEARING = 140.00°
 CHORD DISTANCE = 1400'
 CHORD BEARING = 140.00°
 CHORD DISTANCE = 1400'

EXISTING CURVE DATA
 P.I. STA. 2170652
 P.C. STA. 2170652
 P.T. STA. 2170652
 RADIUS = 1400'
 CHORD BEARING = 140.00°
 CHORD DISTANCE = 1400'
 CHORD BEARING = 140.00°
 CHORD DISTANCE = 1400'

STATIONING	TEMPORARY CONNECTION		CENTERLINE ELEVATION	RIGHT EDGE ELEVATION
	LEFT EDGE ELEVATION	BASELINE OFFSET FROM MAINLINE		
302+00	684.12	12'	687.31	684.12
302+10	684.45	12'	687.64	684.45
302+20	684.78	12'	687.97	684.78
302+30	685.11	12'	688.30	685.11
302+40	685.44	12'	688.63	685.44
302+50	685.77	12'	688.96	685.77
302+60	686.10	12'	689.29	686.10
302+70	686.43	12'	689.62	686.43
302+80	686.76	12'	689.95	686.76
302+90	687.09	12'	690.28	687.09
303+00	687.42	12'	690.61	687.42
303+10	687.75	12'	690.94	687.75
303+20	688.08	12'	691.27	688.08
303+30	688.41	12'	691.60	688.41
303+40	688.74	12'	691.93	688.74
303+50	689.07	12'	692.26	689.07
303+60	689.40	12'	692.59	689.40
303+70	689.73	12'	692.92	689.73
303+80	690.06	12'	693.25	690.06
303+90	690.39	12'	693.58	690.39
304+00	690.72	12'	693.91	690.72



NOTE: THE 28-FOOT RUMBLE AREA HAS 8-INCH LENGTHS OF TREATED SURFACE STRETCHED ACROSS THE WIDTH OF APPROACH LANE, EACH SEPARATED BY 8-INCHES OF EXISTING PAVEMENT.



* 1 1/2\"/>

SCHEDULE OF QUANTITIES

LOCATION	TON	SO YD
SUB-BASE GRANULAR MATERIAL, TYPE A		
LOCATION STA. 6+93 - 20+00	2,472	9
12' RT. STA. 20+00 - 316+49	78	125
TOTAL	2,550	
AGGREGATE SHOULDERS, TYPE A, 8\"/>		

LOCATION	TON	SO YD
FULL-DEPTH BITUMINOUS CONCRETE PAVEMENT, 13\"/>		

Townsend & Associates

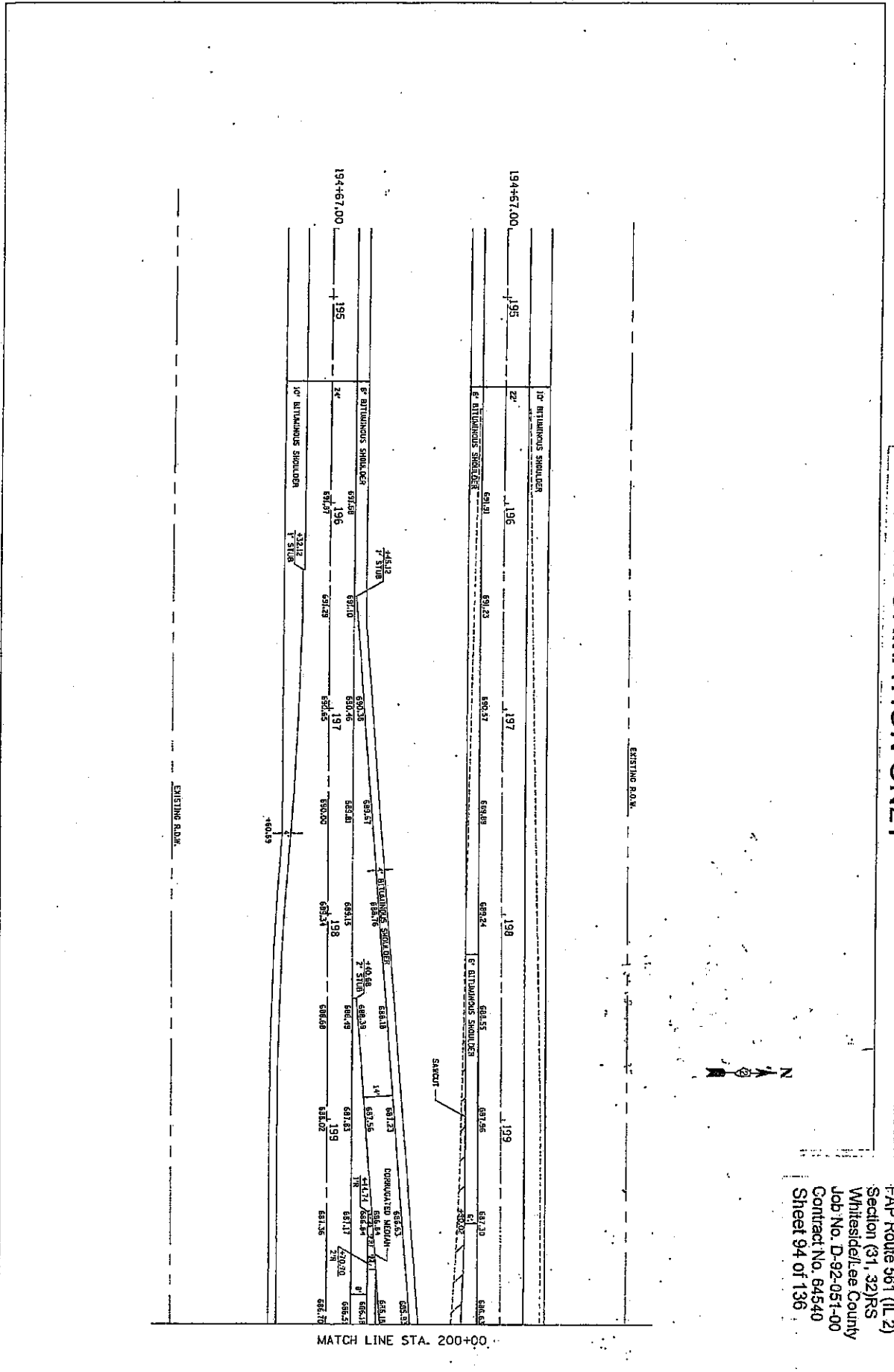
DESIGNED BY:

DRAWN BY:

CHECKED BY:

FOR INFORMATION ONLY

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 94 of 136

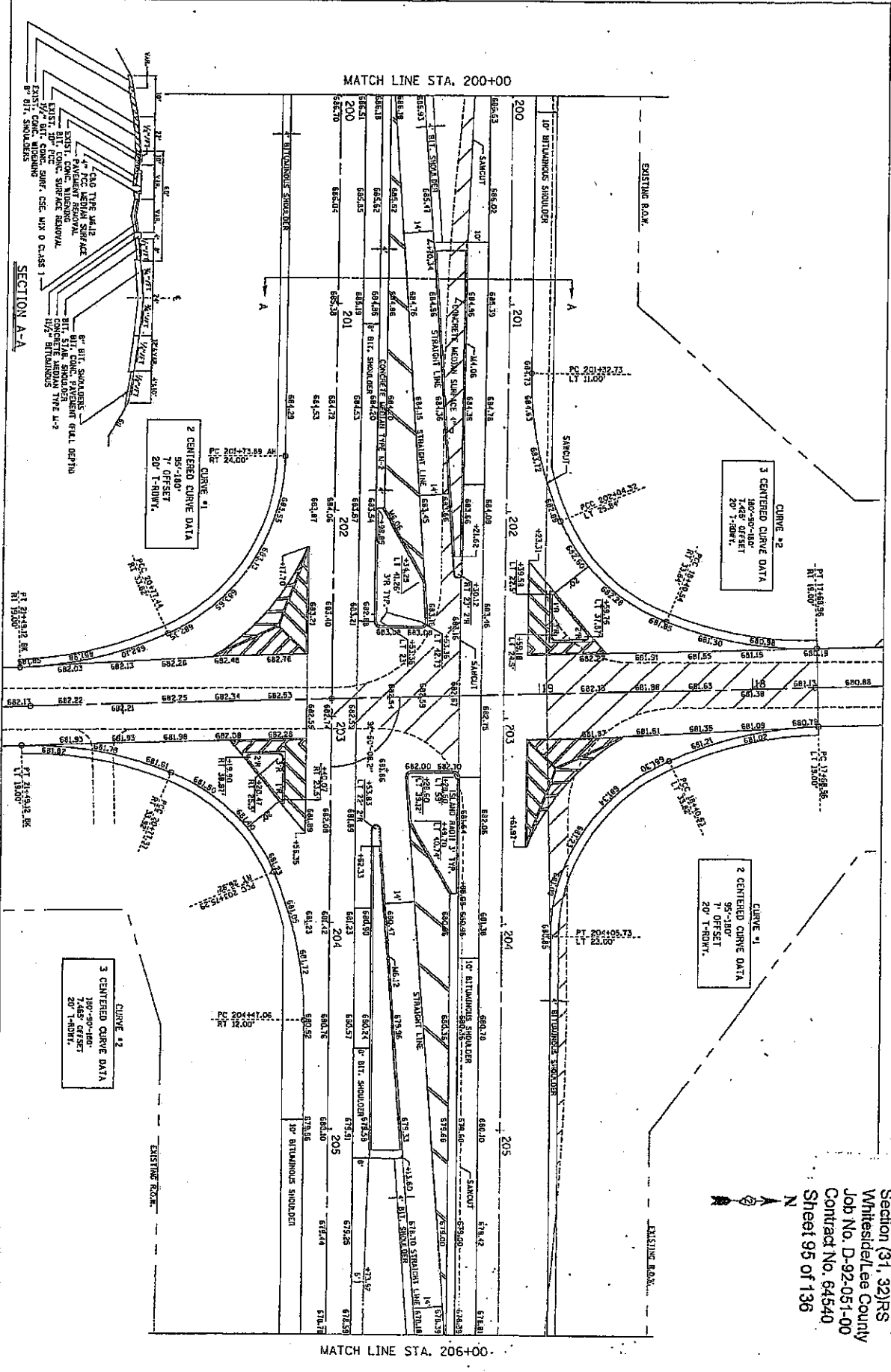


MATCH LINE STA. 200+00

DESIGNED BY:

DRAWN BY:

CHECKED BY:



FOR INFORMATION ONLY

FAP Route 561 (L 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 95 of 136

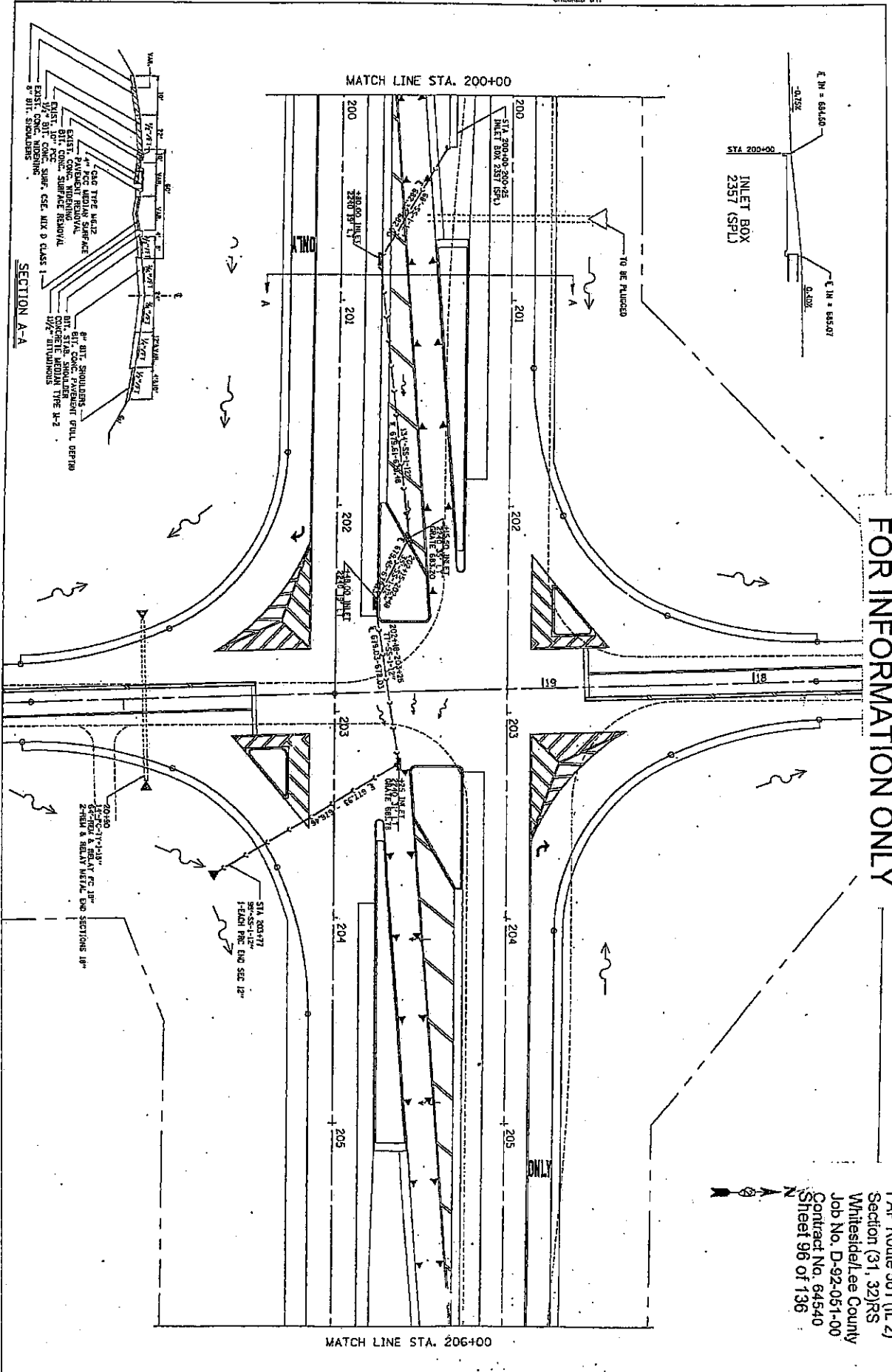


MATCH LINE STA. 206+00

DESIGNED BY:

DRAWN BY:

CHECKED BY:



FOR INFORMATION ONLY

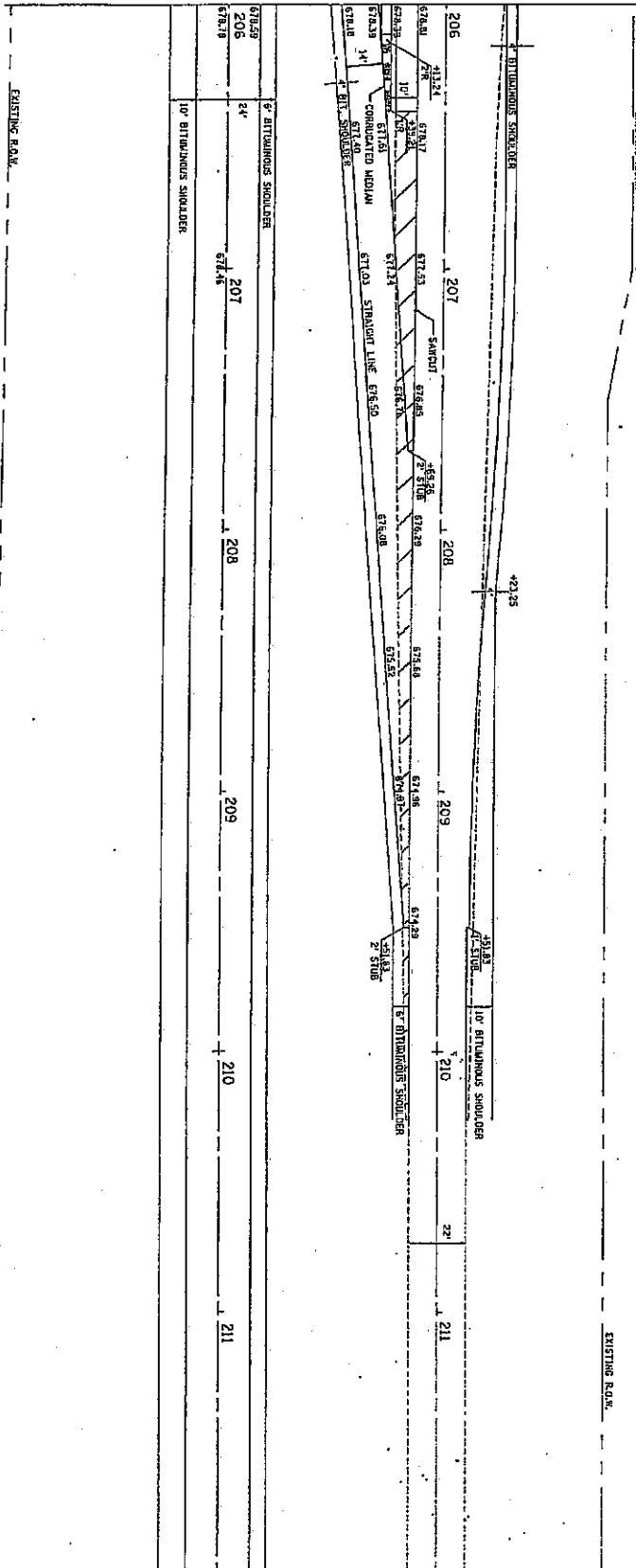
FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 96 of 136

DESIGNED BY:

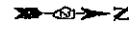
DRAWN BY:

CHECKED BY:

MATCH LINE STA. 206+00



FOR INFORMATION ONLY



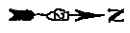
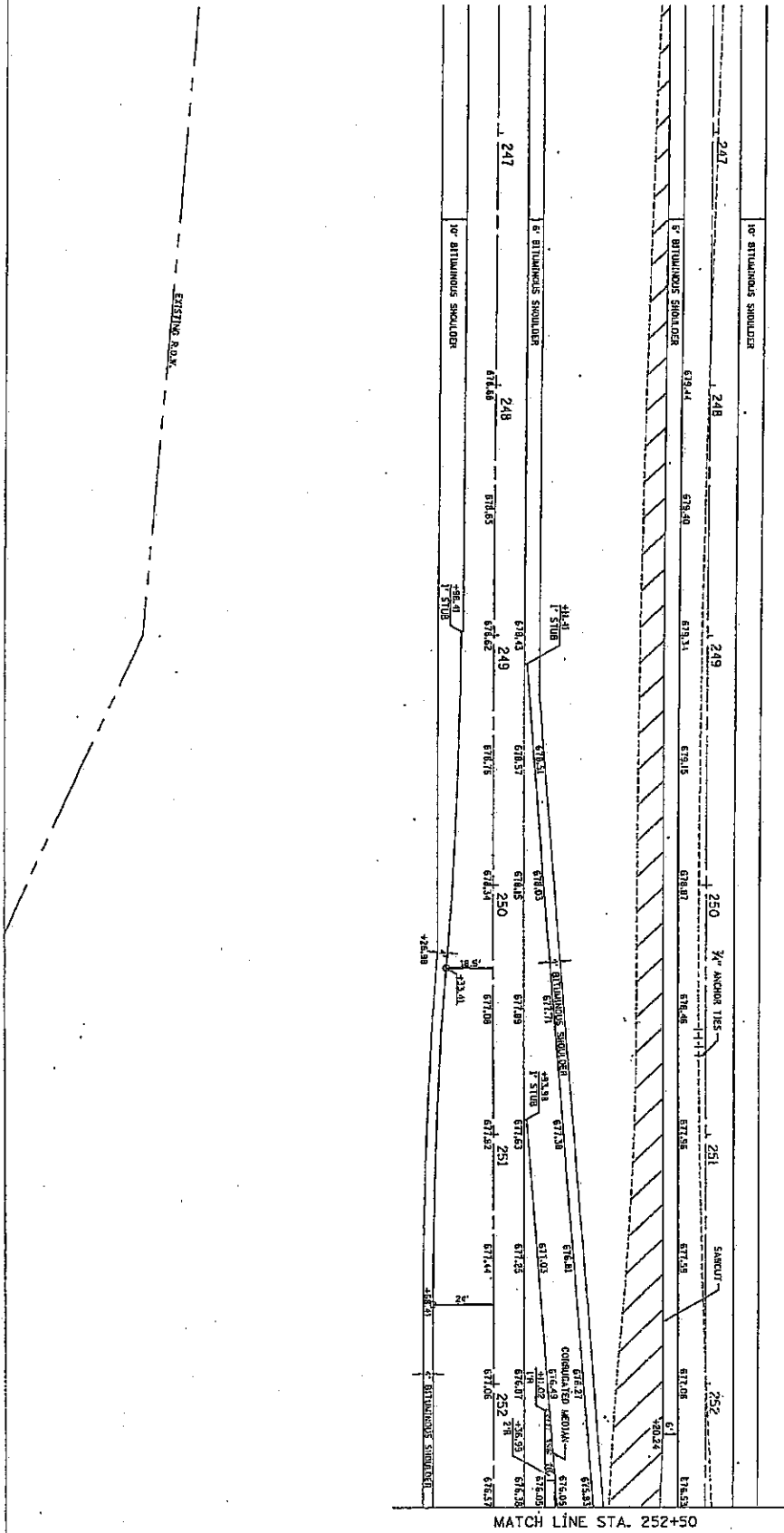
FAP Route 561 (1L 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 97 of 136

DESIGNED BY: W. STULTZ

DRAWN BY: D. CRIFFITH

CHECKED BY:

FOR INFORMATION ONLY



FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 98 of 136

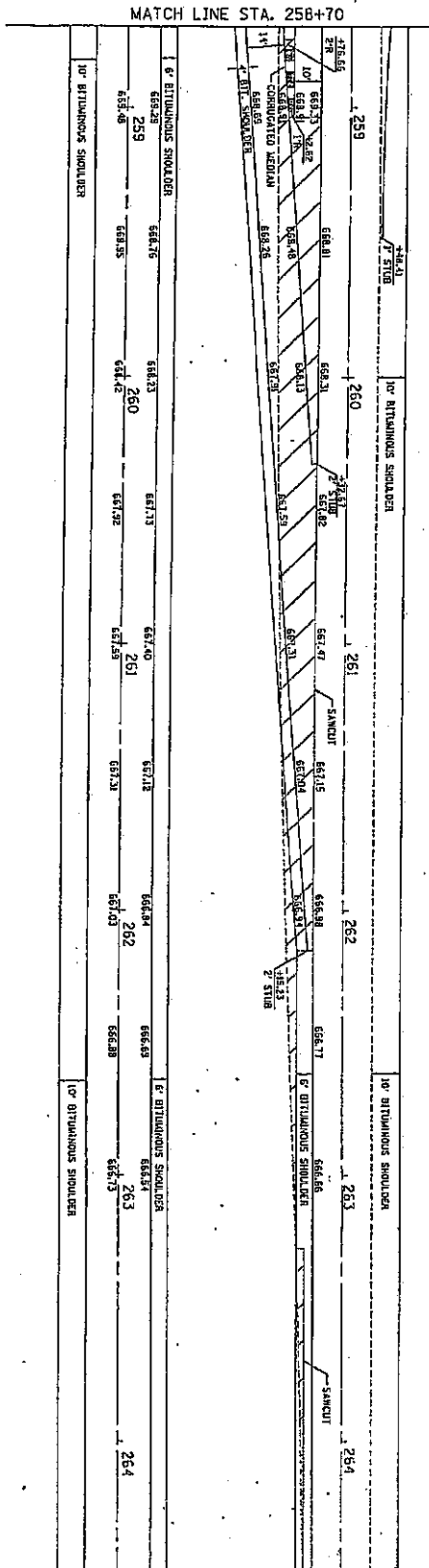
SAUK VALLEY ENT

DESIGNED BY:

DRAWN BY:

CHECKED BY:

FOR INFORMATION ONLY



FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 100 of 136

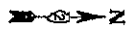
Scale 1/4" = 1'-0"

DESIGNED BY:

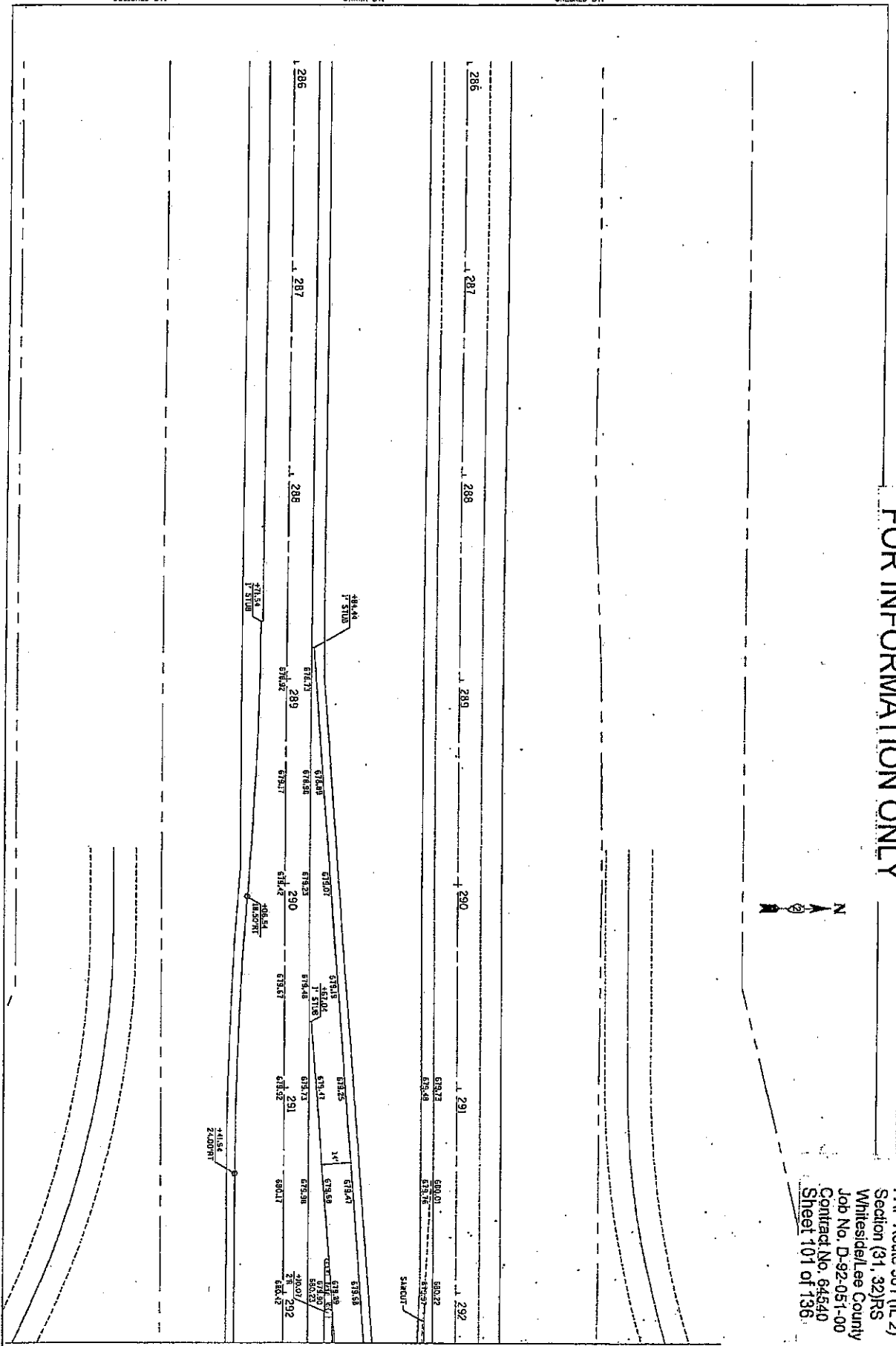
DRAWN BY:

CHECKED BY:

FOR INFORMATION ONLY



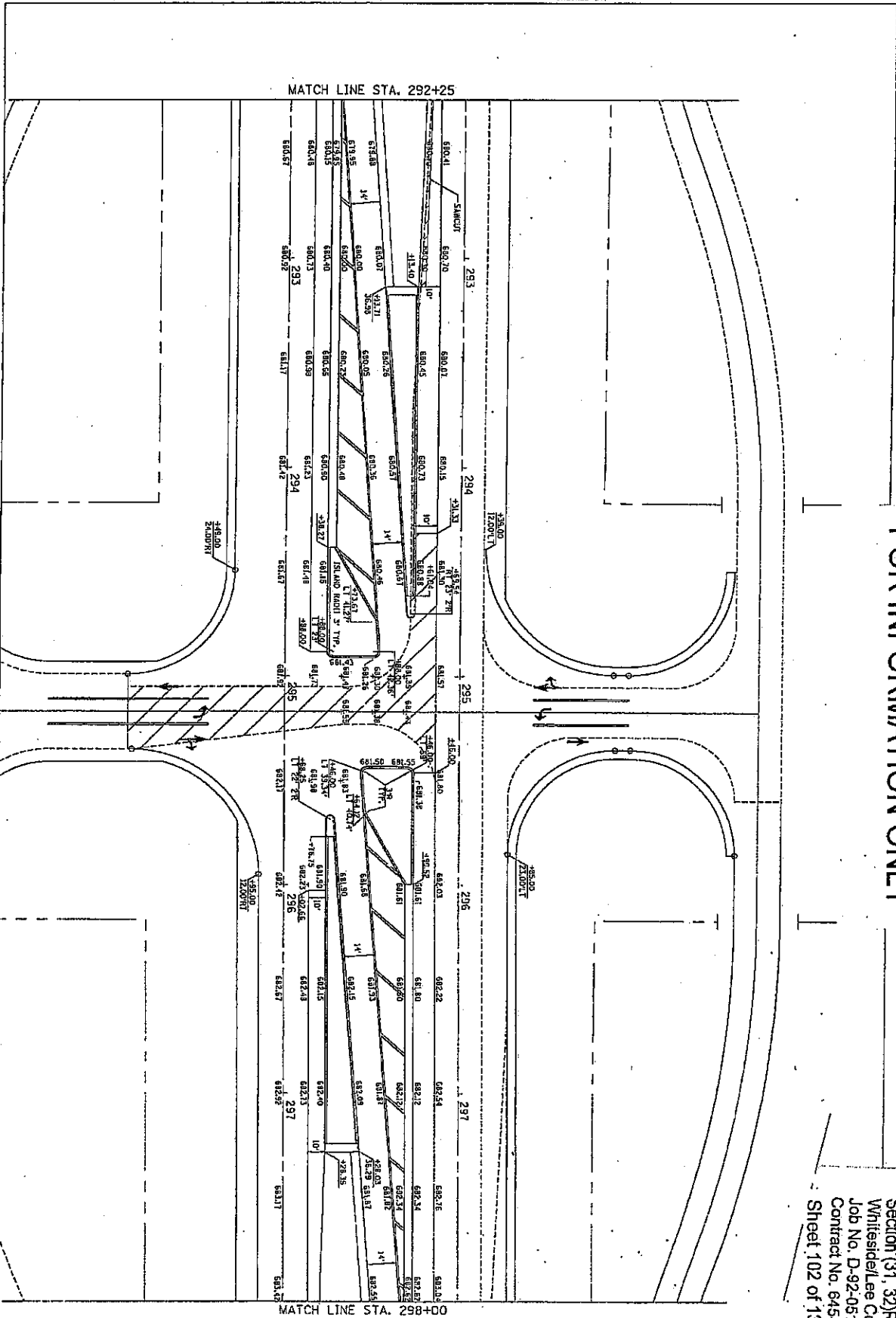
FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 84540
 Sheet 101 of 136.



MATCH LINE STA. 292+25

Franklin PA R

DESIGNED BY: DRAWN BY: CHECKED BY:



FOR INFORMATION ONLY

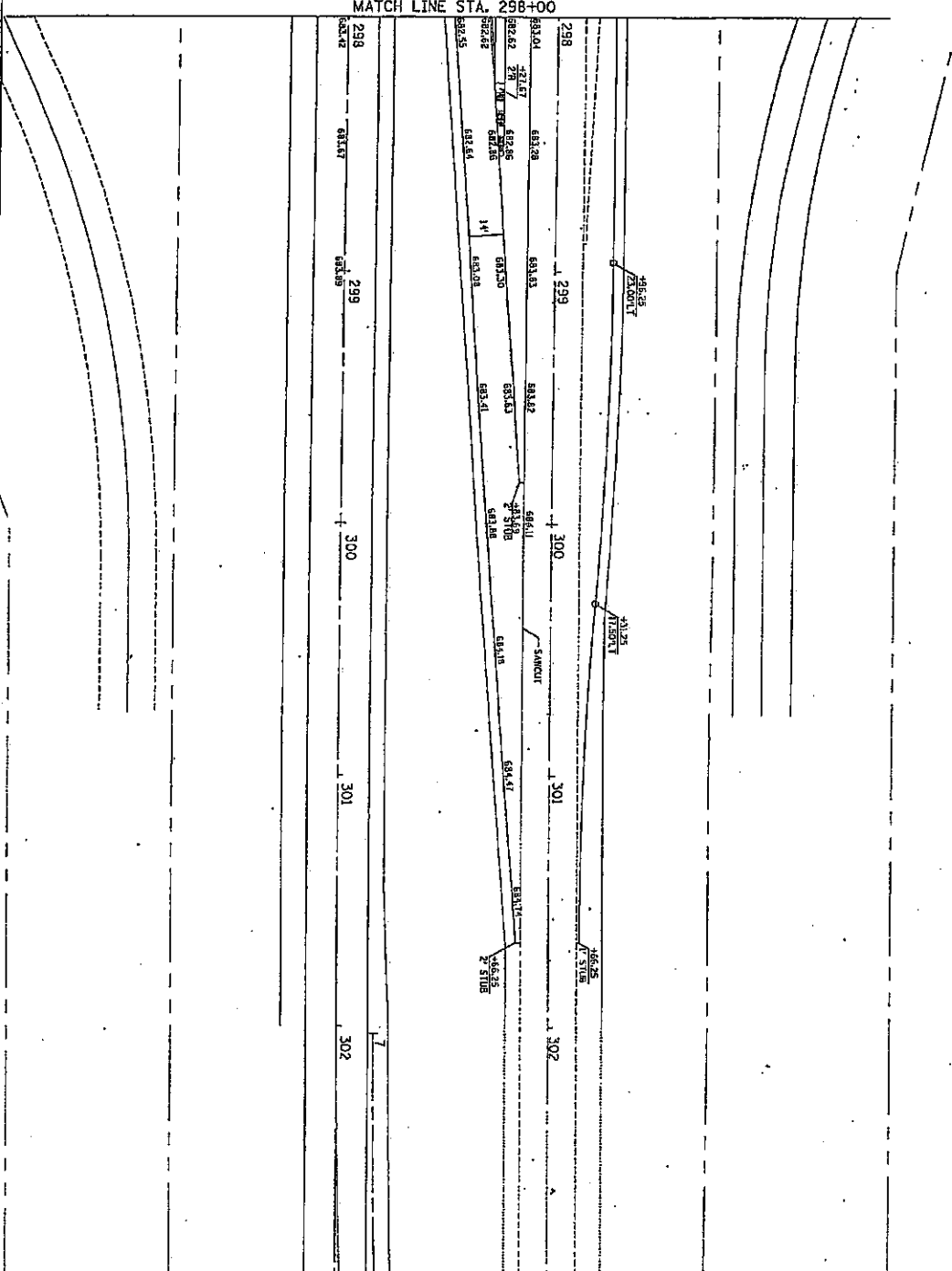
FAP Route 561 (L 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 102 of 136

Fmaha & R.

DESIGNED BY:

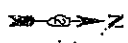
DRAWN BY:

CHECKED BY:



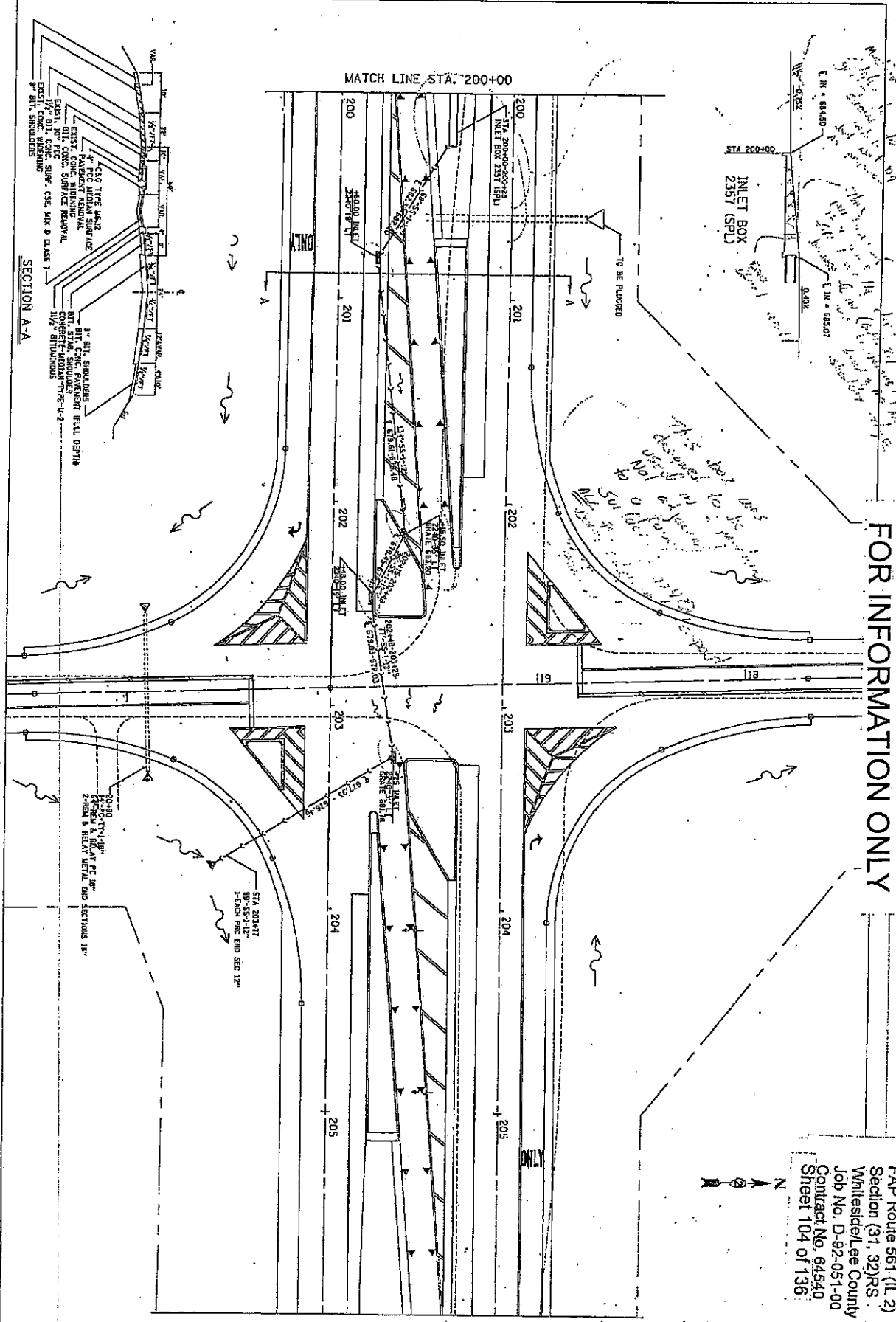
FOR INFORMATION ONLY

FAP Route 561 (LL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 103 of 136



Drummond D1 B

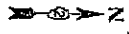
DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____



This inlet was designed to be installed to No. 0 sandstone. No. 0 sandstone is not available in this area.

FOR INFORMATION ONLY

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 104 of 136

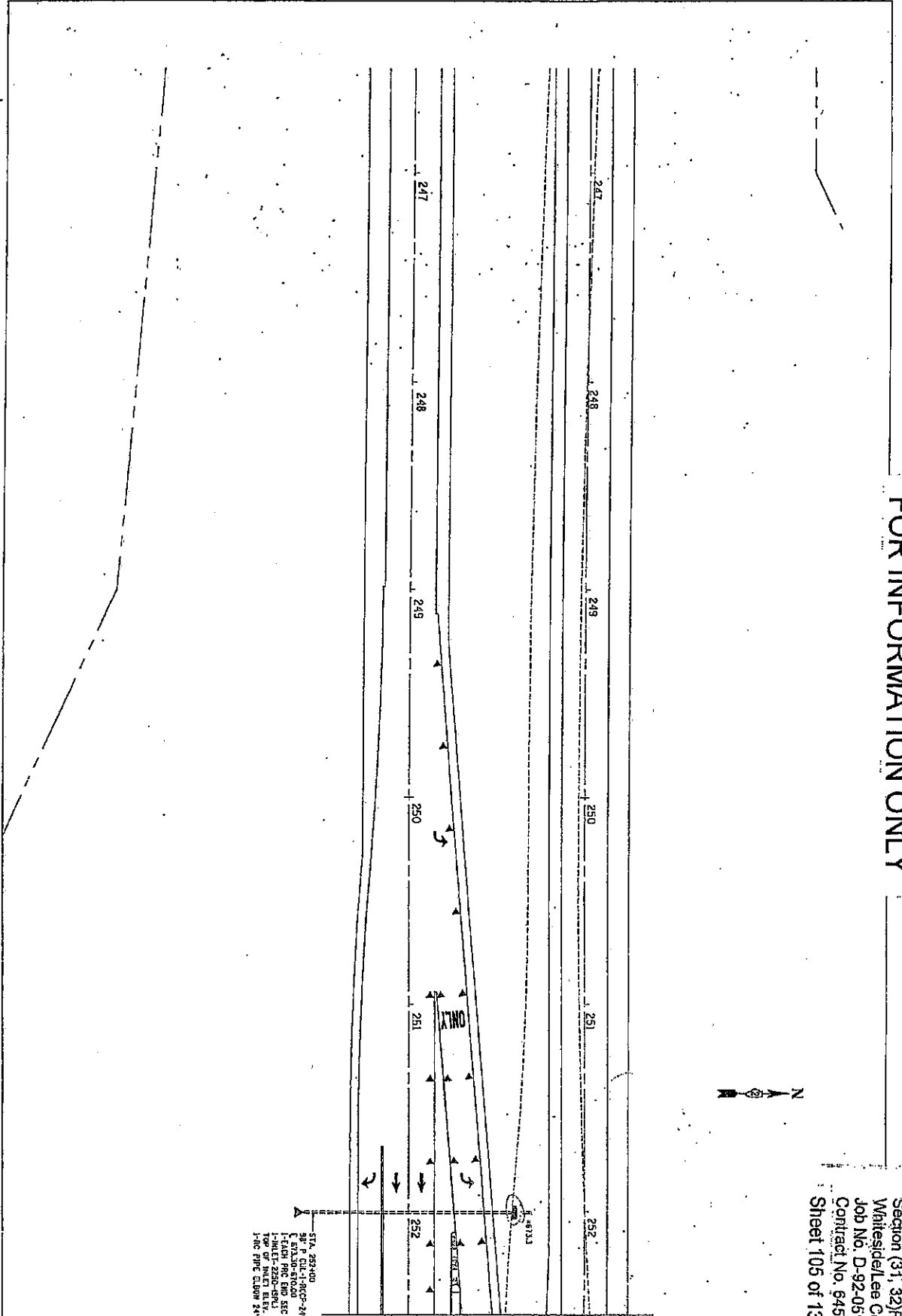


DESIGNED BY: W. STULTZ

DRAWN BY: D. GRIFFITH

CHECKED BY:

FOR INFORMATION ONLY



STA. 252+00
 P.B. STATION STOOD
 I-EACH PRC END SEC 24"
 I-MAIL-2250-1991
 TOP OF PROJECT MARK. 5133.0
 JWC PRC DRAWN BY

MATCH LINE STA. 252+50

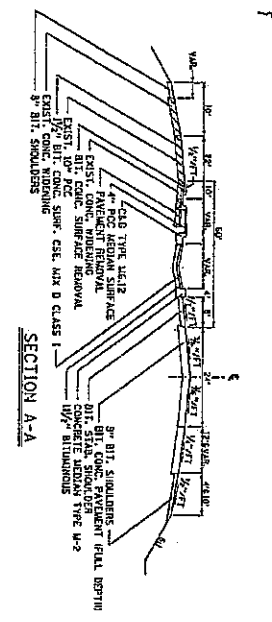
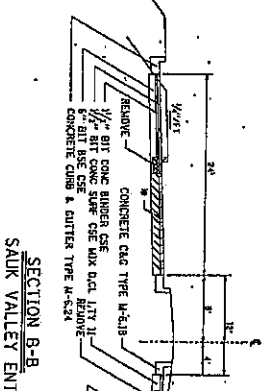
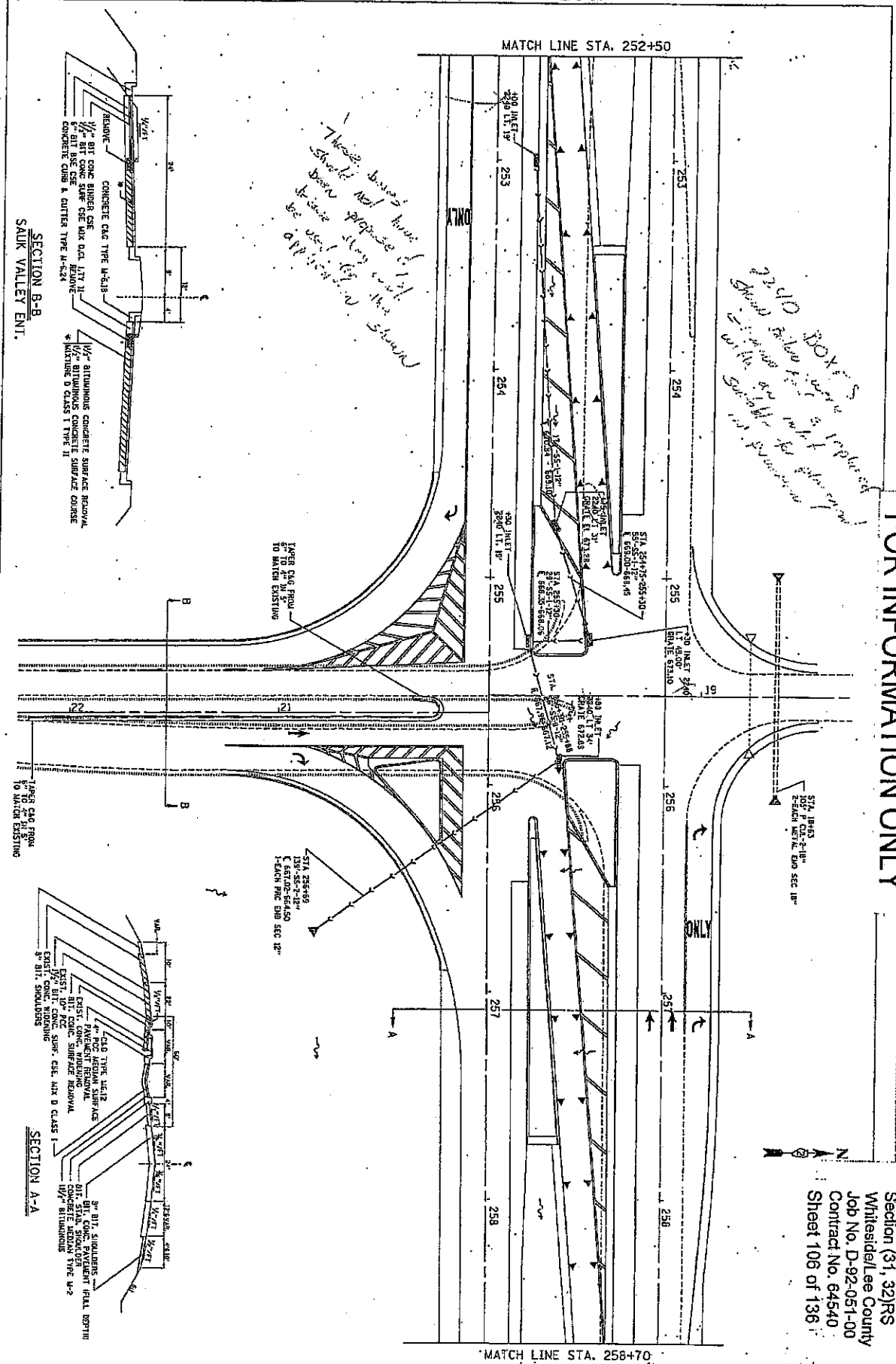
FAP Route 561 (L 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 105 of 136

SAUNDERS, KELLY, ENR.

DESIGNED BY: W. STULTZ

DRAWN BY: D. GRIFFITH

CHECKED BY:



FOR INFORMATION ONLY

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 106 of 136

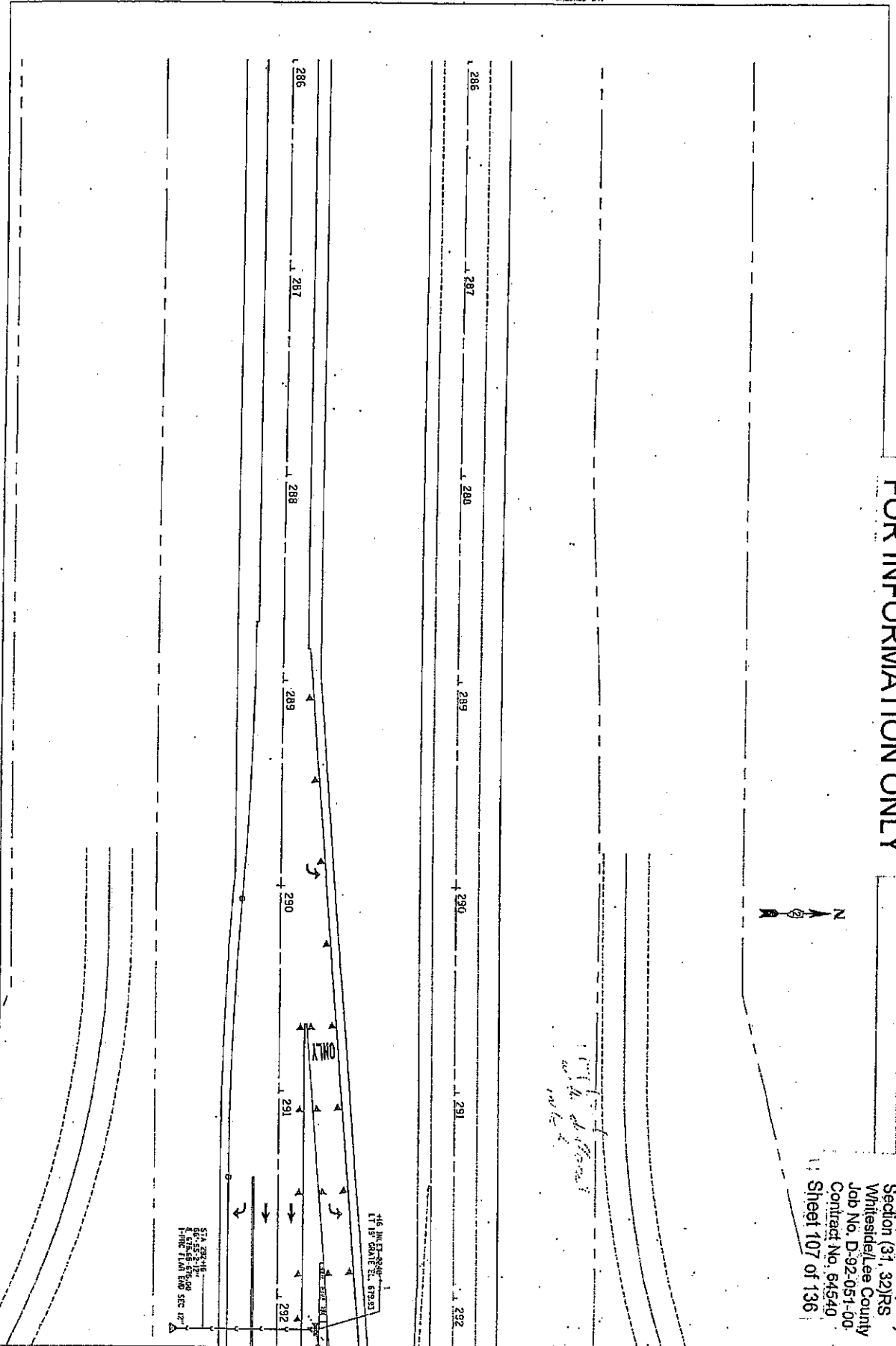
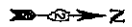
SAUK VALLEY ENT.

DESIGNED BY:

DRAWN BY:

CHECKED BY:

FOR INFORMATION ONLY



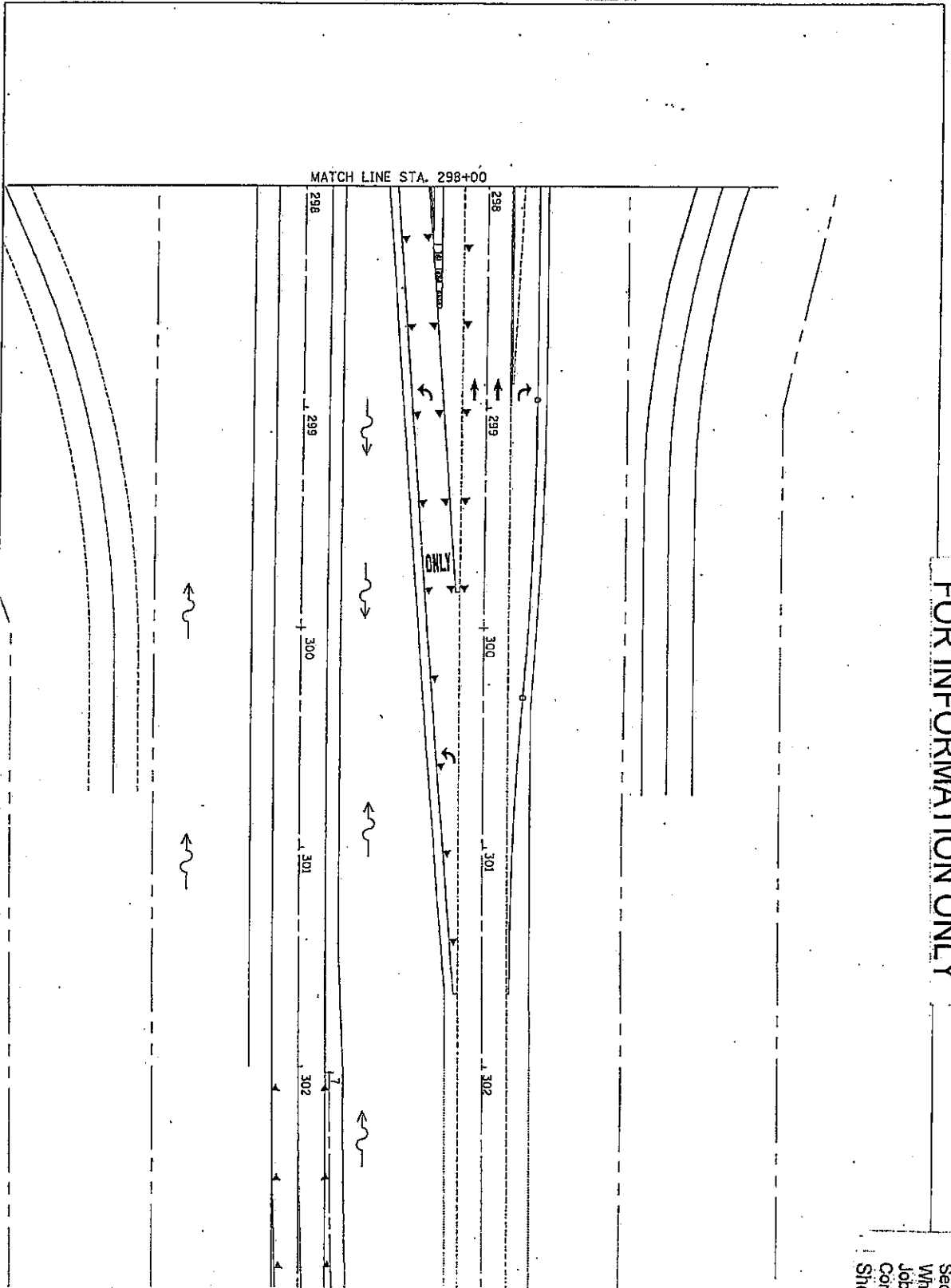
FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 84540
Sheet 107 of 136

MATCH LINE STA. 292+25

DESIGNED BY:

DRAWN BY:

CHECKED BY:



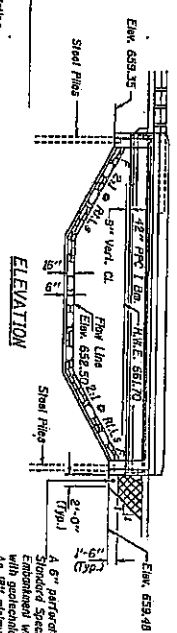
FOR INFORMATION ONLY

FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 109 of 136

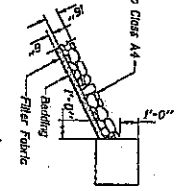
Frostberg RA B

FOR INFORMATION ONLY

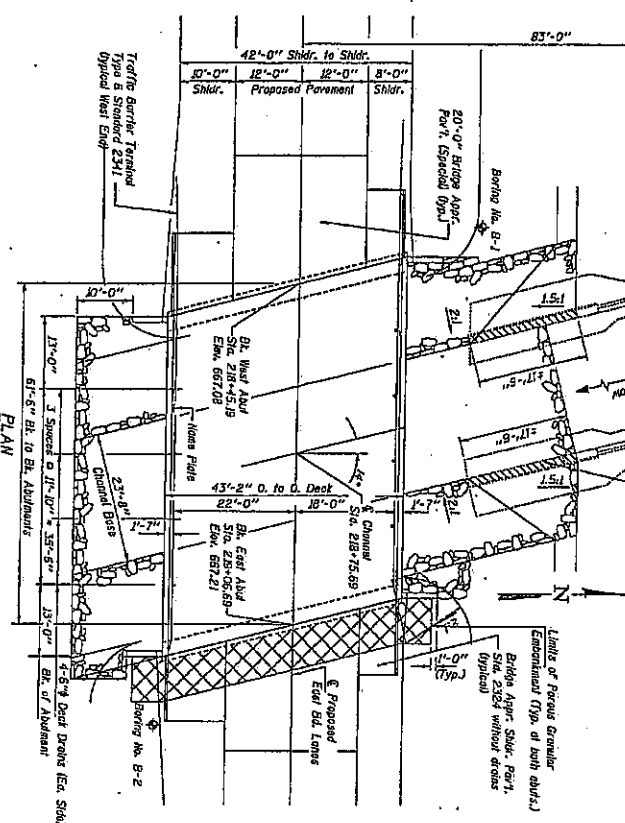
Notes: Cross-hatched areas indicate unapproved
Proposed and Bridge
Contractor after Abatement and Superstructure
are in place. (Type 1)



Remove and replace portion
of wall to slope down to
stone riprap bed (Type 1)
Stone riprap bed (Type 1)
Fabric is intended to be
placed in the area
of concrete removal in the area.



STONE RIPRAP TREATMENT



DESIGNED **WATERWAY INFORMATION**

Item	Value
Channel	Open Channel
Material	Concrete
Design	Open Channel
Construction	Open Channel

DESIGNED **WATERWAY INFORMATION**

Item	Value
Channel	Open Channel
Material	Concrete
Design	Open Channel
Construction	Open Channel

DESIGNED **WATERWAY INFORMATION**

Item	Value
Channel	Open Channel
Material	Concrete
Design	Open Channel
Construction	Open Channel

DESIGNED **WATERWAY INFORMATION**

Item	Value
Channel	Open Channel
Material	Concrete
Design	Open Channel
Construction	Open Channel

DESIGNED **WATERWAY INFORMATION**

Item	Value
Channel	Open Channel
Material	Concrete
Design	Open Channel
Construction	Open Channel

DESIGNED **WATERWAY INFORMATION**

Item	Value
Channel	Open Channel
Material	Concrete
Design	Open Channel
Construction	Open Channel

See Proposed for Boring Data.
The contractor shall conform to the requirements of AASHTO R-31
and AASHTO R-32. Also Section and be used in the field to
control the construction of the bridge.
The embankment construction shown shall be the minimum substandard
that must be constructed prior to construction of the abutment.
The contractor shall give the area that is in the embankment.
The contractor shall be responsible for the design of the abutment
and the remainder of the bridge.

GENERAL NOTES

FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 110 of 136

STATION 288+75.69
STATE OF ILLINOIS
F.A. RT. 501 SEC. 31B-1
LOADING HS20-44
SFR. NO. 052-0264
MAKE PLATE
See Sit. 5115

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Formwork	Sq. Yd.	18	18	36
Structural Steel	Tons	24	24	48
Rebar	Lbs.	24	24	48
Concrete	Cu. Yd.	24	24	48
Gravel	Cu. Yd.	24	24	48
Stone Riprap	Cu. Yd.	24	24	48
Filter Fabric	Sq. Yd.	24	24	48
Other				

DESIGN SPECIFICATIONS

LOADING HS20-44

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

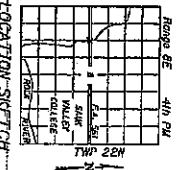
DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES

DESIGN STRESSSES



GENERAL PLAN
IL. RTE. 2 OVER
STREAM WEST OF
SAUK VALLEY COLLEGE
F.A. RTE. 561 SEC. 31B-1
LEE COUNTY
STATION 288+75.69
STRUCTURE NUMBER 052-0264

U.S.G.S. Data Sheet 514 6 A (1923)
 Bench Marks: Cassel - "a" on Riv. winged Sta. 266-95 40' L. E.M. 664.01
 no existing structure.

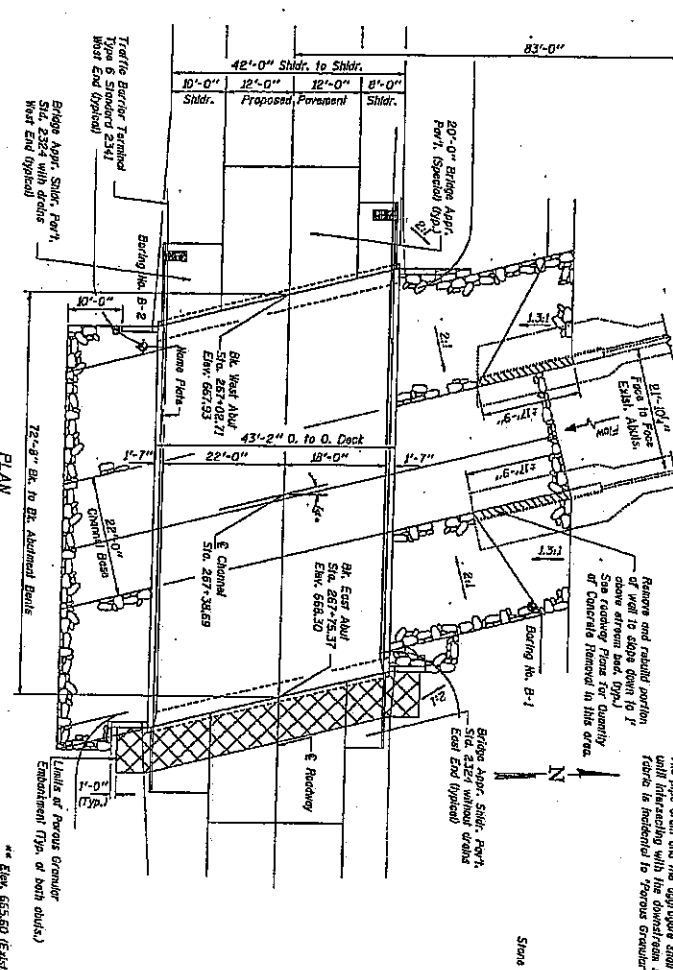
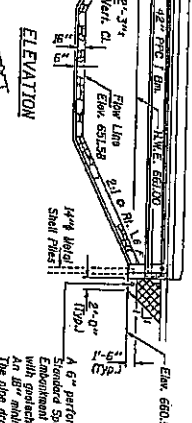
FOR INFORMATION ONLY
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FAP Route 561 (L 2)
 Section 31, 32RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 111 of 136

GENERAL NOTES

See Proposal for Boring Data.
 Reinforcement bars shall conform to the requirements of AASHTO A-31,
 A-42 or A-63 Grade 60.
 Form of Stone Protection System may be varied in the field to
 suit local conditions as approved by the Engineer.
 The embankment shall be constructed by the contractor and any adjustment
 they must be constructed prior to construction of the embankment.
 The contractor shall drive and install steel tie pile in a permanent
 location of each Abutment as directed by the Engineer before ordering
 the remainder of pile.

Notes: Coarse banded aggregate include unaccompanied
 porous granular material such as crushed limestone
 and in place. (Type 1)

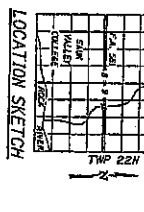


DESIGN SPECIFICATIONS

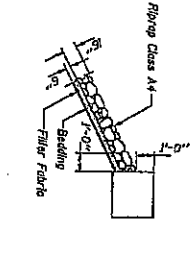
LOADING HS20-44
 Allow 25% for surface
 DESIGN STRESSSES
 FIELD UNITS
 7/8" 3500 psi (Rein.)
 1/2" 6000 psi
 7/8" 10000 psi
 1 1/4" 18000 psi
 1 3/4" 24000 psi

DESIGN INFORMATION

Item	Quantity	Unit
Concrete	450	cu yd
Reinforcing Steel	150	tons
Gravel	1500	cu yd
Sand	1000	cu yd
Asphalt	100	tons
Other	50	tons



GENERAL PLAN
 II. RTE. 2 OVER
 STREAM EAST OF
 SAUV VALLEY COLLEGE
 F.A. RTE. 561 SEC. 31B-2
 LEE COUNTY
 STATION 267+30.69
 STRUCTURE NUMBER 052-0065



TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY	PRICE	TOTAL
Concrete	cu yd	450	1.10	495.00
Reinforcing Steel	tons	150	2.00	300.00
Gravel	cu yd	1500	0.40	600.00
Sand	cu yd	1000	0.30	300.00
Asphalt	tons	100	1.50	150.00
Other	tons	50	1.00	50.00

* Quantity included top and handle face surfaces of parapets.

STATION 267+30.69
 BUILT BY BR
 STATE OF ILLINOIS
 F.A. RTE. 561 SEC. 31B-2
 LOADING HS20-44
 STR. NO. 052-0065
 NAME PLATE
 SEE SIDE ELEV

U.S.S. DATUM
5TH GA (1925)

84' ANGLE IN TREE ROOT
84' B. STA. 349+17' ELEV. 726.20

FOR INFORMATION ONLY

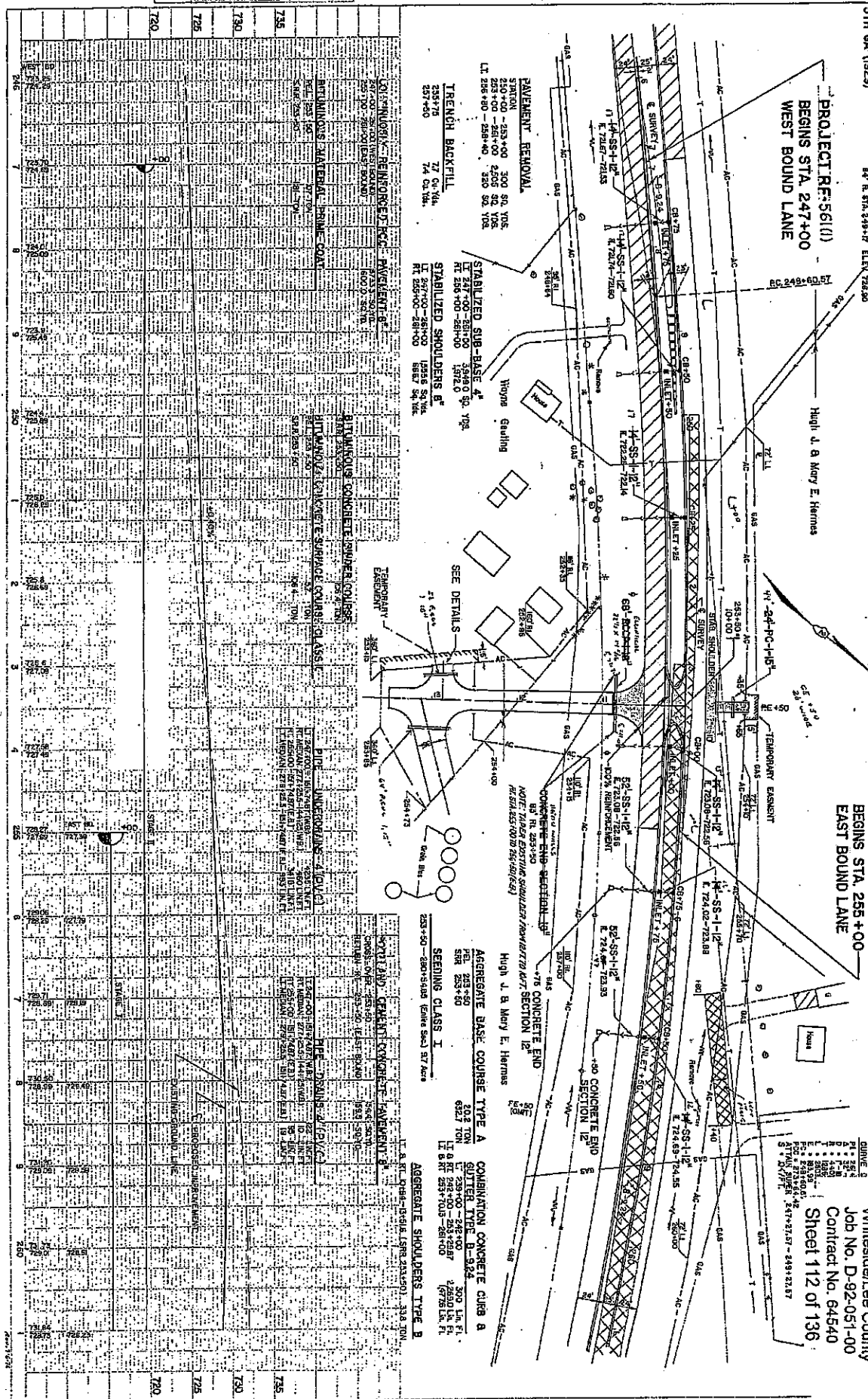
PROJECT RF-561(1)
BEGINS STA. 247+00
WEST BOUND LANE

BEGINS STA. 255+00
EAST BOUND LANE

FAP Route 561 (IL 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 112 of 136

PLAN	DATE	BY	CHK
REVISION			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

PROFILE	DATE	BY	CHK
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			



PAVEMENT REMOVAL
STATION 253+00 - 253+00 300 SQ. YDS.
253+00 - 253+00 300 SQ. YDS.
LT 253+00 - 253+00 300 SQ. YDS.

TRENCH BACKFILL
253+78 77 Cu Yds.
74 Cu Yds.
257+00

STABILIZED SUB-BASE A
LT 247+00 - 251+00 15920 SQ. YDS.
RT 250+00 - 251+00 15920 SQ. YDS.

STABILIZED SHOULDERS B
LT 257+00 - 258+00 12556 SQ. YDS.
RT 255+00 - 258+00 8557 SQ. YDS.

AGGREGATE BASE COURSE TYPE A
P&L 253+50 102 TON
S&M 253+50 602 TON
LT 253+00 - 253+00 300 SQ. YDS.
RT 253+00 - 253+00 300 SQ. YDS.

COMBINATION CONCRETE CLASS B
P&L 253+50 102 TON
S&M 253+50 602 TON
LT 253+00 - 253+00 300 SQ. YDS.
RT 253+00 - 253+00 300 SQ. YDS.

SEEDING CLASS I
253+50 - 253+50 (Area Seal) 37.2 SQ. YDS.

AGGREGATE SHOULDERS TYPE B
LT 257+00 - 258+00 12556 SQ. YDS.
RT 255+00 - 258+00 8557 SQ. YDS.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

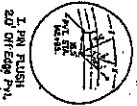
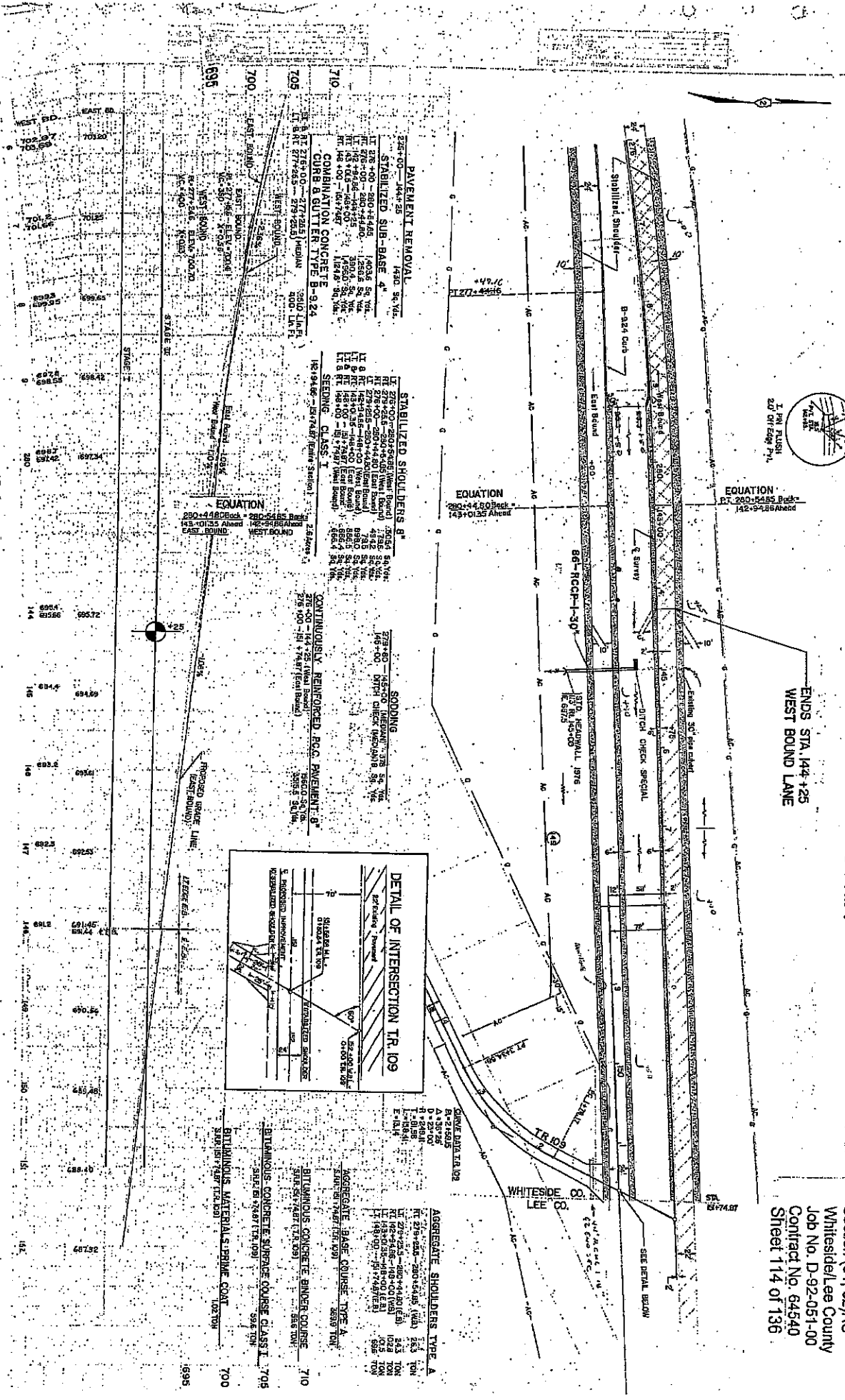
REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

REINFORCED PORTLAND CEMENT CONCRETE
CLASS B
3000 PSI
4" MIN. SLAB THICKNESS
#4 REINFORCEMENT @ 12" O.C.

FOR INFORMATION ONLY

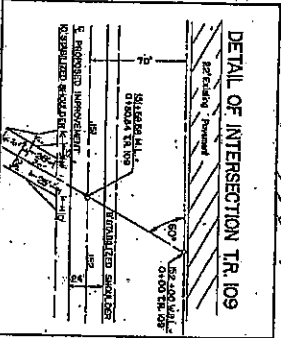
ENDS STA. 144+25
WEST BOUND LANE

FAP Route 561 (L 2)
Section (31, 32)RS
Whiteside/Lee County
Job No. D-92-051-00
Contract No. 64540
Sheet 114 of 136



EQUATION
ST 200+44.80 Back
143+01.35 Ahead

EQUATION
ST 200+44.80 Back
143+01.35 Ahead



PAVEMENT REMOVAL
1430 SQ. YL.
STABILIZED SUB-BASE 4"
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

STABILIZED SHOULDERS 8"
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

SODDING
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

CONTINUOUSLY REINFORCED P.C. PAVEMENT 8"
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

AGGREGATE BASE COURSE TYPE A
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

BITUMINOUS CONCRETE BINDER COURSE
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

BITUMINOUS CONCRETE SURFACE COURSE CLASS T. 705
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

COMBINATION CONCRETE CURB & GUTTER TYPE B-9-24
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

SEEDING CLASS I
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

REINFORCED GRADE LINE (WEST BOUND)
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

BITUMINOUS MATERIAL SPRING COAT
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

STAGE W
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

WEST BOUND
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

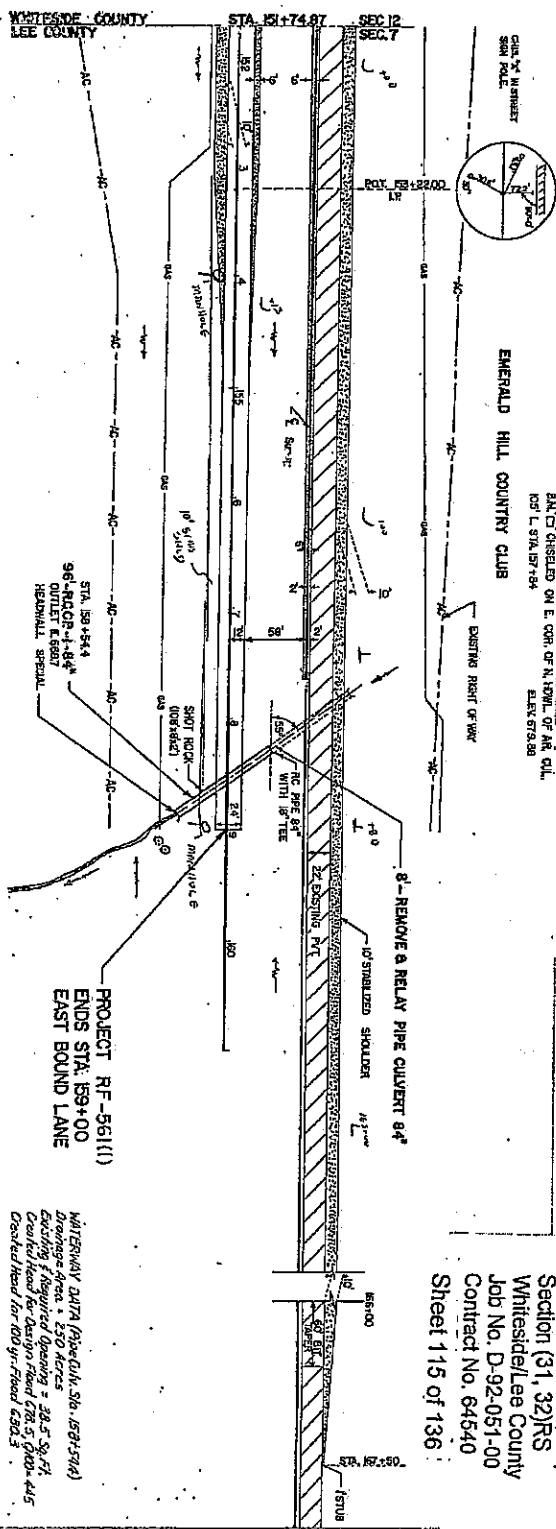
EAST BOUND
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.
LI 278+00 - 280+44.80 1430 SQ. YL.
RI 278+00 - 280+44.80 1430 SQ. YL.

FOR INFORMATION ONLY

EMERALD HILL COUNTRY CLUB

PLAN OF CONSIDERED ON E. COR. OF N. 100' W. OF NE. CUL.
 60' L. STA. 57+74
 EAST STA. 58

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 115 of 136



WATERWAY DATA (see plan, Sta. 58+57.64)
 Average width = 130' across
 Average depth = 28.5' at H.W.
 Contouring based on 1987 data
 Crossed here for 100 yr. Flood 600.5

DATE	BY	CHKD
10/1/87	J. L. ...	J. L. ...
10/1/87	J. L. ...	J. L. ...

NO.	DESCRIPTION	DATE
1
2

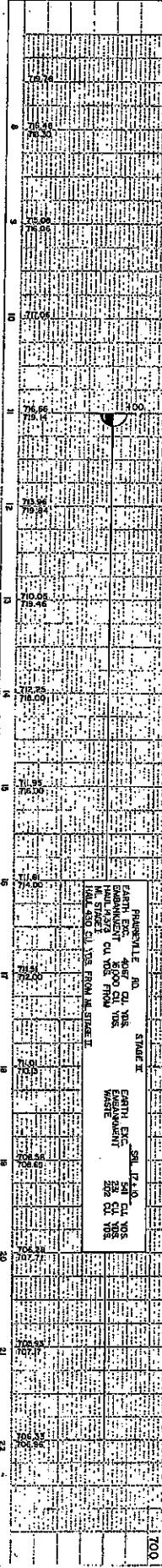
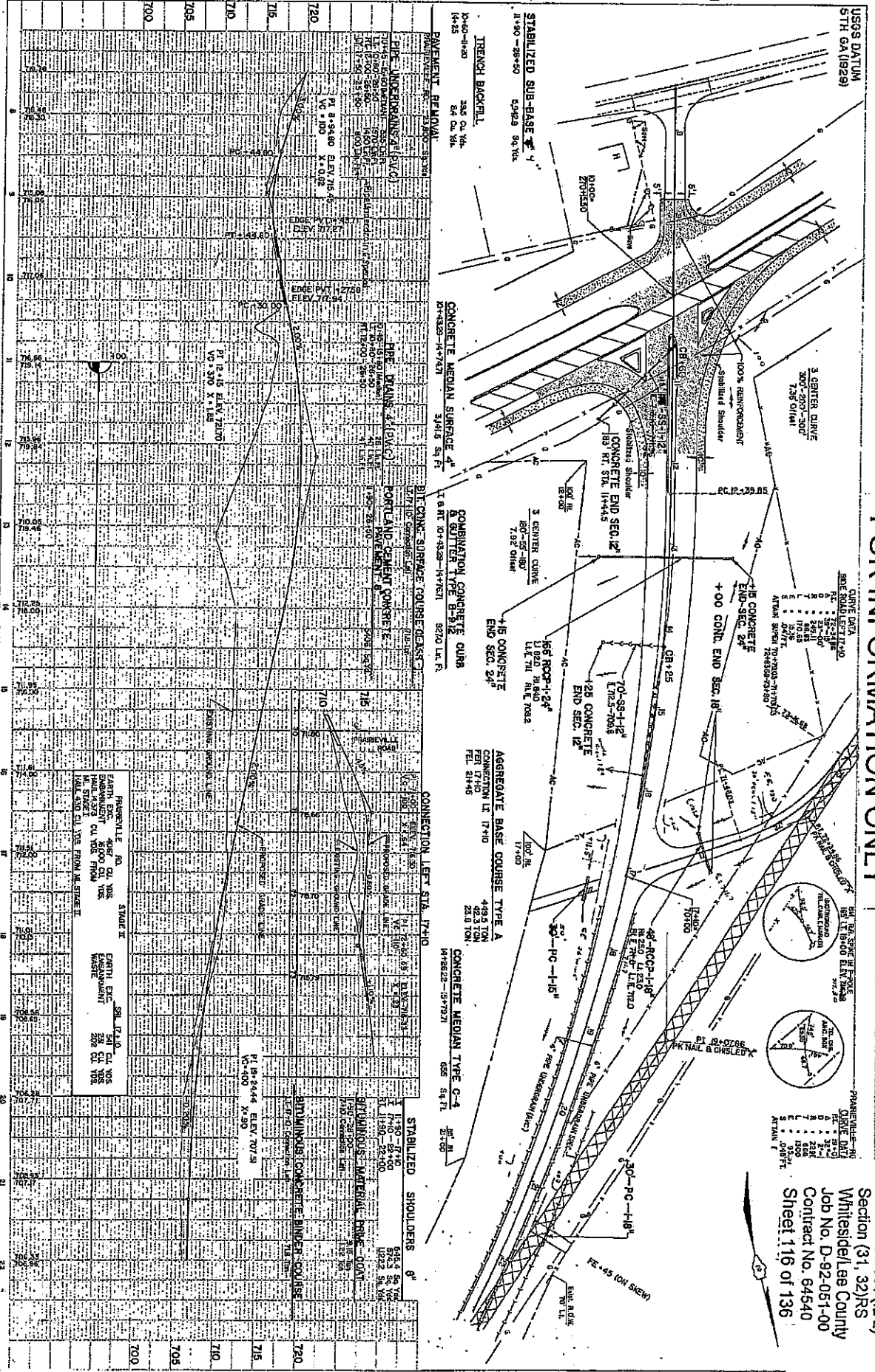
STATION	DESCRIPTION	REMARKS
57+00	STABILIZED SUB-BASE 4"	...
57+00	STEELING CLASS 1"	...
57+00	STABILIZED SHOULDER 5'	...
57+00	TIME REMOVAL (6" RICHMOND) 1"	...
57+00	AGGREGATE SHOULDER TYPE A	...
57+00	REMOVE & RELAY PIPE CULVERT 84"	...
57+00	CONTINUOUSLY REINFORCED CONC. PAVEMENT 8"	...
57+00	REMOVE AND RELAY PIPE CULVERT 84"	...
57+00	PROJECT RF-561(1)	...
57+00	ENDS STA. 59+00	...
57+00	EAST BOUND LANE	...

FOR INFORMATION ONLY

FAY ROUTE 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 116 of 136

PLAN	DATE	BY
DESIGN	11/80	...
CONSTRUCTION	11/80	...
REVISION

PROFILE	DATE	BY
DESIGN	11/80	...
CONSTRUCTION	11/80	...
REVISION



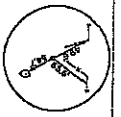
STAGE I	STAGE II
EMULSION ASPHALT	EMULSION ASPHALT
4.5" CONCRETE	4.5" CONCRETE
AGGREGATE BASE COURSE	AGGREGATE BASE COURSE
CONNECTION LEFT STA. 17+10	CONNECTION LEFT STA. 17+10
CONCRETE MEDIAN TYPE C-4	CONCRETE MEDIAN TYPE C-4
STABILIZED SHOULDERS	STABILIZED SHOULDERS

PEARLE VILLE ROAD

FOR INFORMATION ONLY

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 117 of 136

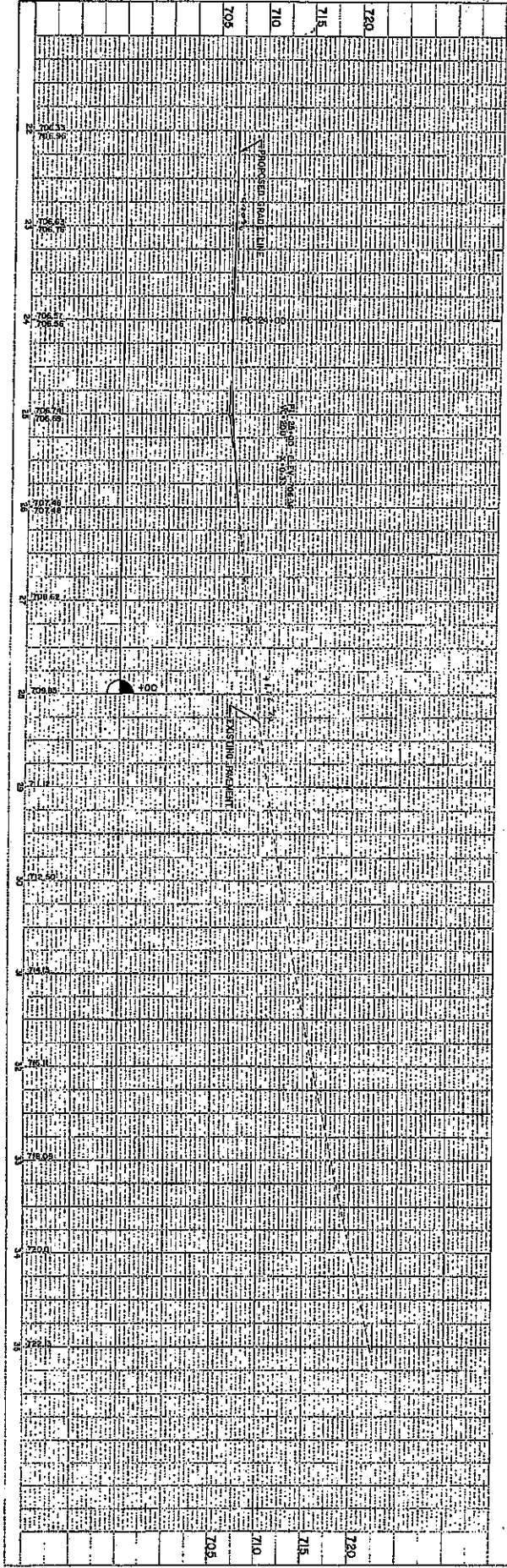
SEE PLAN SHEET 117E
 34' R.C. 25+94 ELEV. 708.53



PLAN	DATE	BY	CHK

PROFILE	DATE	BY	CHK

STABILIZED SHOULDERS 8"
 LT 8 RT 23+00-26+50
 LT 8 RT 26+50-29+00 (road shoulder)
 24" WIDE
 34' R.C. 25+94
 REMOVE EXISTING STRUCTURE
 25+30



PRAIRIEVILLE ROAD

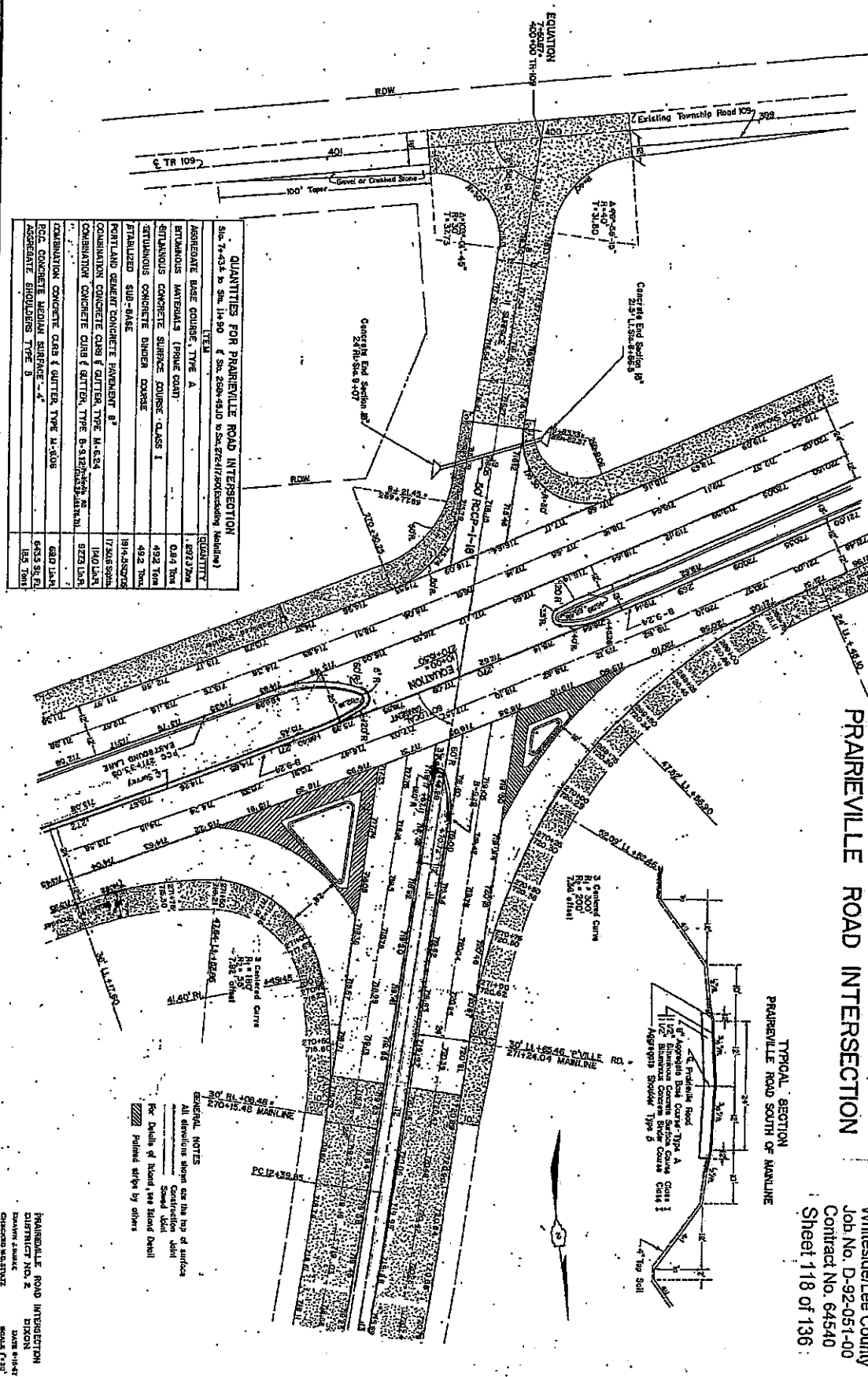
FOR INFORMATION ONLY

PRAIRIEVILLE ROAD INTERSECTION

FAP Route 561 (1L 2)
 Section (31, 32)RS
 Whitesidel/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 118 of 136

QUANTITIES FOR PRAIRIEVILLE ROAD INTERSECTION
 Sta. 7+43.2 to Sta. 11+90.0 of Sp. 258+45.0 to Sp. 272+50.0 (excluding building)

ITEM	QUANTITY
AGGREGATE BASE COURSE, TYPE A	2872.28
BITUMINOUS MATERIALS (THICK COAT)	0.94 Ton
BITUMINOUS CONCRETE SURFACE COURSE - CLASS I	492.76
BITUMINOUS CONCRETE BINDER COURSE	492.76
STABILIZED SUB-BASE	914.52
PORTLAND CEMENT CONCRETE PAVEMENT "B"	1726.58
COMBINATION CONCRETE CURB & GUTTER, TYPE B-312 (SEE PLAN)	1940.14
COMBINATION CONCRETE CURB & GUTTER, TYPE B-312 (SEE PLAN)	523.14
COMBINATION CONCRETE CURB & GUTTER, TYPE M-408	680.14
FGC CONCRETE MEDIAN SURFACE - "C"	6453.92
AGGREGATE SHOULDER, TYPE B	153.78



GENERAL NOTES
 All elevations shown are the top of surface
 Construction shall conform to the Standard Specifications for Highway Construction
 Per Details of Standard Specifications
 Paved surface by others

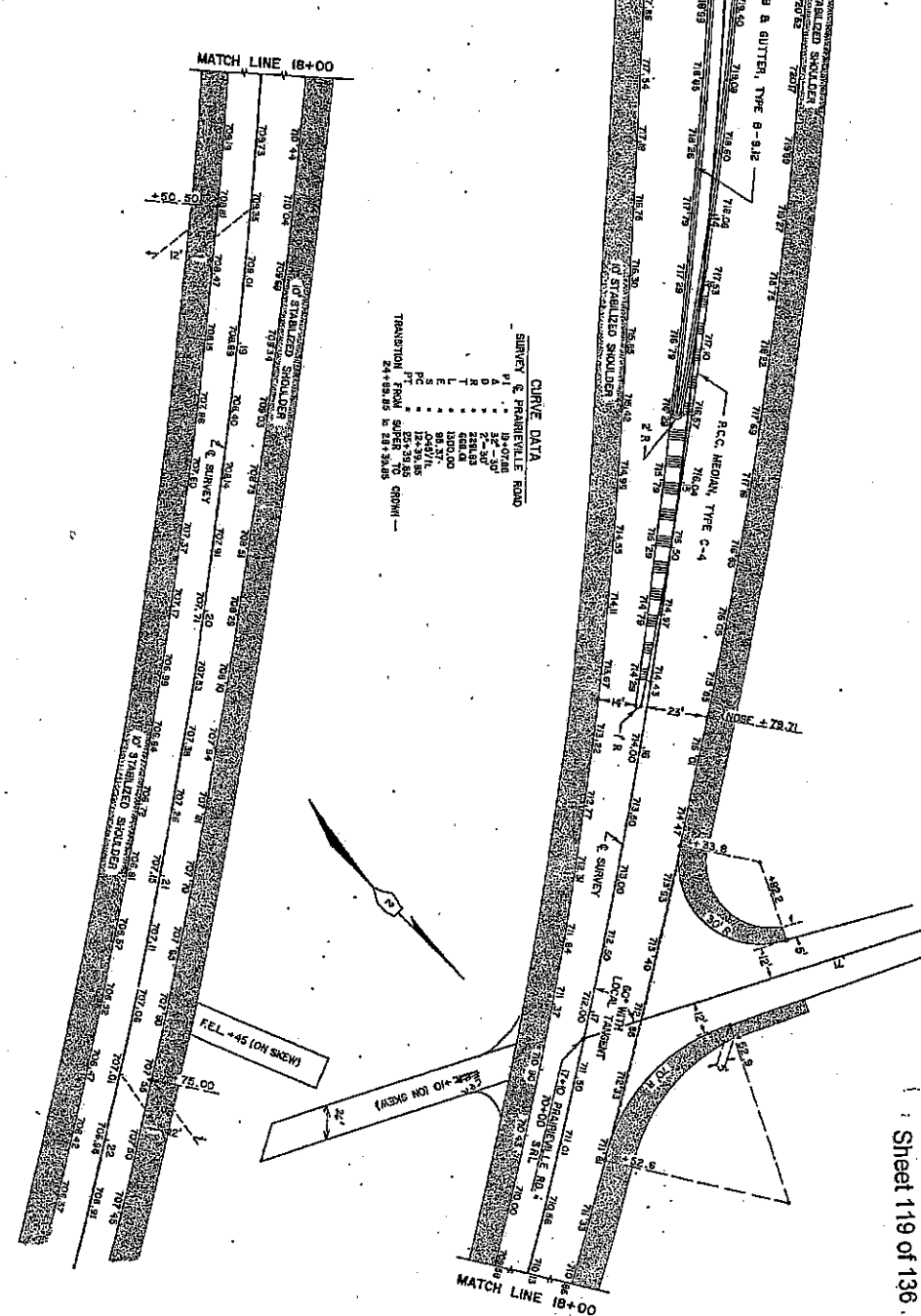
PRAIRIEVILLE ROAD INTERSECTION
 DISTRICT NO. 2
 CHICAGO DISTRICT
 DATE 8-15-87
 SCALE 1"=50'

FOR INFORMATION ONLY

DETAILS OF APPROACH NOSE, PRAIRIEVILLE ROAD

FAP Route 561 (IL 2)
 Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 119 of 136.

STATION	OFFSET TO LEFT EDGE	ISLAND	BEHOLD	MEAN	PAV'T
12+00.00	5.07	6	6	6	6
12+00.50	5.07	6	6	6	6
12+01.00	5.07	6	6	6	6
12+01.50	5.07	6	6	6	6
12+02.00	5.07	6	6	6	6
12+02.50	5.07	6	6	6	6
12+03.00	5.07	6	6	6	6
12+03.50	5.07	6	6	6	6
12+04.00	5.07	6	6	6	6
12+04.50	5.07	6	6	6	6
12+05.00	5.07	6	6	6	6
12+05.50	5.07	6	6	6	6
12+06.00	5.07	6	6	6	6
12+06.50	5.07	6	6	6	6
12+07.00	5.07	6	6	6	6
12+07.50	5.07	6	6	6	6
12+08.00	5.07	6	6	6	6
12+08.50	5.07	6	6	6	6
12+09.00	5.07	6	6	6	6
12+09.50	5.07	6	6	6	6
12+10.00	5.07	6	6	6	6
12+10.50	5.07	6	6	6	6
12+11.00	5.07	6	6	6	6
12+11.50	5.07	6	6	6	6
12+12.00	5.07	6	6	6	6
12+12.50	5.07	6	6	6	6
12+13.00	5.07	6	6	6	6
12+13.50	5.07	6	6	6	6
12+14.00	5.07	6	6	6	6
12+14.50	5.07	6	6	6	6
12+15.00	5.07	6	6	6	6
12+15.50	5.07	6	6	6	6
12+16.00	5.07	6	6	6	6
12+16.50	5.07	6	6	6	6
12+17.00	5.07	6	6	6	6
12+17.50	5.07	6	6	6	6
12+18.00	5.07	6	6	6	6
12+18.50	5.07	6	6	6	6
12+19.00	5.07	6	6	6	6
12+19.50	5.07	6	6	6	6
12+20.00	5.07	6	6	6	6



CURVE DATA

SURVEY & PRANGVILLE ROAD

PI 1 9+07.06
 P2 22+30
 R 24+93.85
 L 90.00
 E 0.00
 S 0.00
 PC 24+93.85
 PT 24+93.85
 TRANSITION FROM SUPER TO CROWN -

DISTRICT NO. 2
 DRAWN D.E. MOSEY
 CHECKED W.B. STULTZ
 DIXON
 DATE 9/8/70
 SCALE

FOR INFORMATION ONLY

Section (31, 32)RS
 Whiteside/Lee County
 Job No. D-92-051-00
 Contract No. 64540
 Sheet 120 of 136

VEAVING ANALYSIS

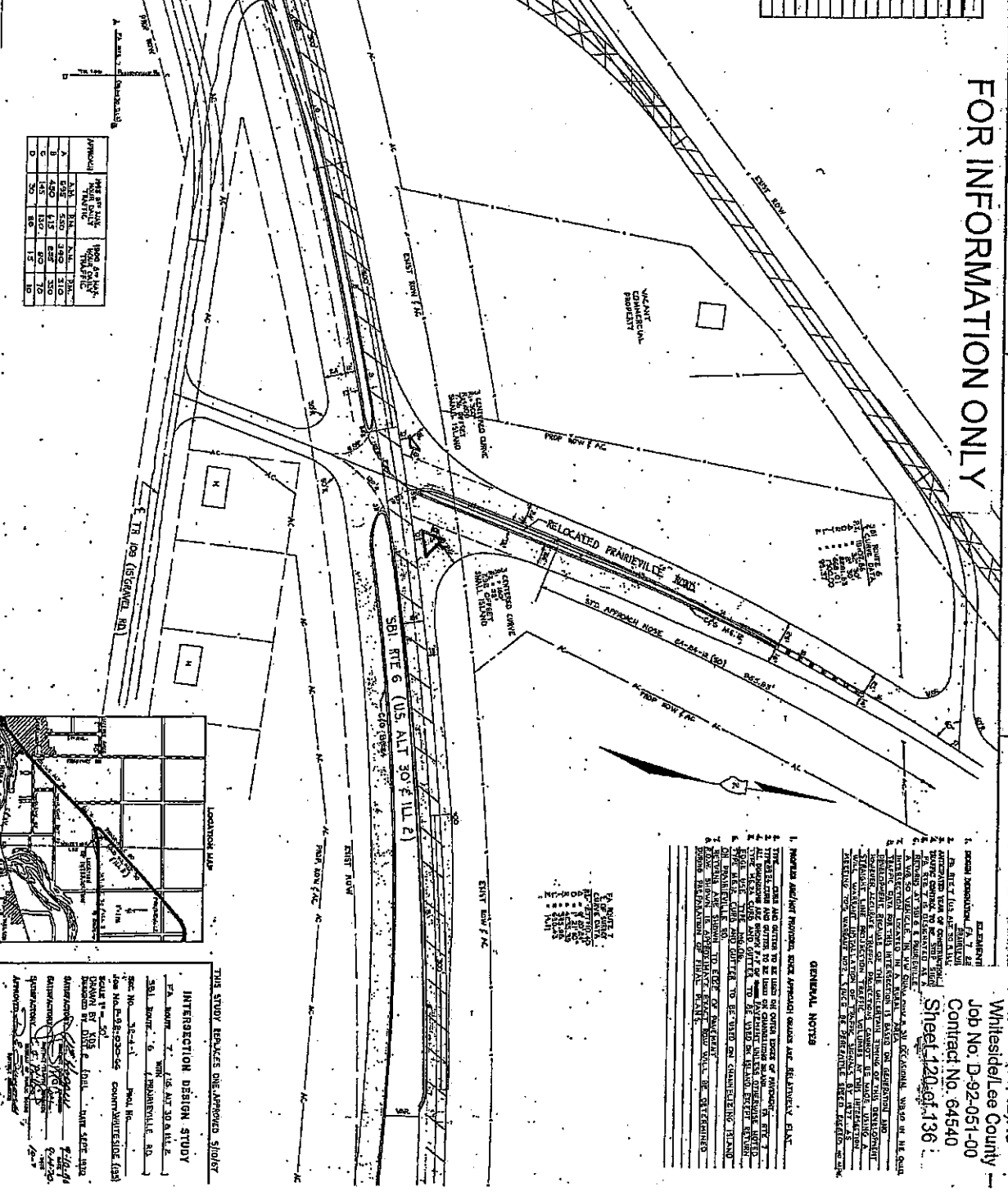
VEAVING	NO. OF VEAVES	NO. OF VEAVES PER HOUR	NO. OF VEAVES PER DAY	NO. OF VEAVES PER YEAR
1. VEAVING	10	10	10	10
2. VEAVING	10	10	10	10
3. VEAVING	10	10	10	10
4. VEAVING	10	10	10	10
5. VEAVING	10	10	10	10
6. VEAVING	10	10	10	10
7. VEAVING	10	10	10	10
8. VEAVING	10	10	10	10
9. VEAVING	10	10	10	10
10. VEAVING	10	10	10	10

TRAFFIC DATA

TRAFFIC	NO. OF TRAFFIC	NO. OF TRAFFIC PER HOUR	NO. OF TRAFFIC PER DAY	NO. OF TRAFFIC PER YEAR
1. TRAFFIC	10	10	10	10
2. TRAFFIC	10	10	10	10
3. TRAFFIC	10	10	10	10
4. TRAFFIC	10	10	10	10
5. TRAFFIC	10	10	10	10
6. TRAFFIC	10	10	10	10
7. TRAFFIC	10	10	10	10
8. TRAFFIC	10	10	10	10
9. TRAFFIC	10	10	10	10
10. TRAFFIC	10	10	10	10

GENERAL NOTES

1. GENERAL NOTES
2. GENERAL NOTES
3. GENERAL NOTES
4. GENERAL NOTES
5. GENERAL NOTES
6. GENERAL NOTES
7. GENERAL NOTES
8. GENERAL NOTES
9. GENERAL NOTES
10. GENERAL NOTES



INTERSECTION DESIGN STUDY
 THIS STUDY REPLACES ONE APPROVED STUDY
 PROJECT NO. 31-32-RS
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 12/15/92

NOT DATE * For Use of Engineer Only
 PLAN NO. *
 SHEET NO. *
 DATE *
 BY *
 CHECKED BY *

CATCH BASIN OR INLETS TO BE ADJUSTED OR RECONSTRUCTED (DETAILS FOR CURB & GUTTER REPLACEMENT)

CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606601 AND THIS DRAWING.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. A HOLE 1-1/2" IN DIAMETER AND 9" DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE CURB AS SHOWN. A 1-1/4" X 18" SMOOTH DOWEL BAR SHALL BE GROUTED IN THE HOLE LONGITUDINALLY.

JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

THE PROPOSED CONFIGURATION OF THE CURB AND GUTTER SHALL MATCH THAT REMOVED.

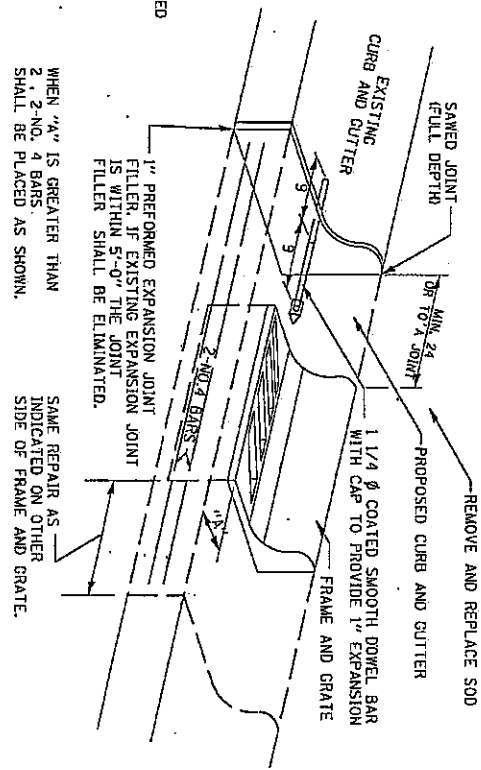
THE LOCATION OF THE DOWEL BAR SHALL BE DETERMINED BY THE ENGINEER.

ALL EXISTING TIE BARS IN EDGE OF PAVEMENT SLAB THRU REPLACEMENT AREA SHALL BE CUT OFF.

THE WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS AND INCLUDES THE REMOVAL AND REPLACEMENT OF SOD, CONCRETE PAVEMENT AND/OR CURB AND GUTTER ADJACENT TO CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AND SHALL BE INCLUDED IN THE PAY ITEM OF CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AS SPECIFIED.

REVISED - 9-30-11

CATCH BASIN OR INLETS TO BE ADJUSTED OR RECONSTRUCTED 17.4



WHEN "A" IS GREATER THAN 2, 1-2 NO. 4 BARS SHALL BE PLACED AS SHOWN.

SAME REPAIR AS INDICATED ON OTHER SIDE OF FRAME AND GRATE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

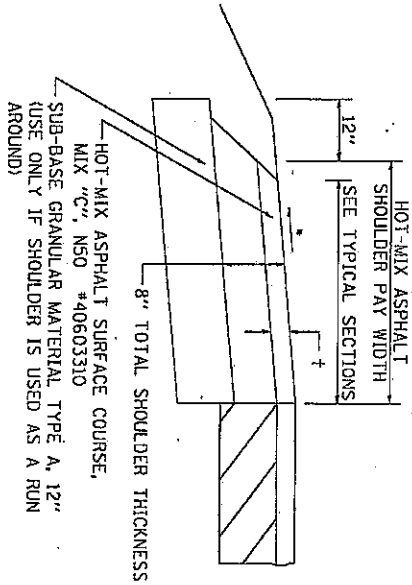
F.A.P. RITE	SECTION	COUNTY	TOTAL SHEET NO.
561	131.321 RS.	*	136 / 121

* WHITESIDE & LEE

CONTRACT NO. 64C15

PLOT DATE * For Use BY 880428 2:11
 FILE NAME * 482001.dwg
 PLOT SCALE * 1:1
 USER NAME * ash2001

HOT-MIX ASPHALT SHOULDER



REVISED - 6-06-11

GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", NSO #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", NSO #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", NSO #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS, THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS, THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", NSO #40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

*42 WHEN MAINLINE IS ON TANGENT, FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

HOT-MIX ASPHALT SHOULDER 23.4a

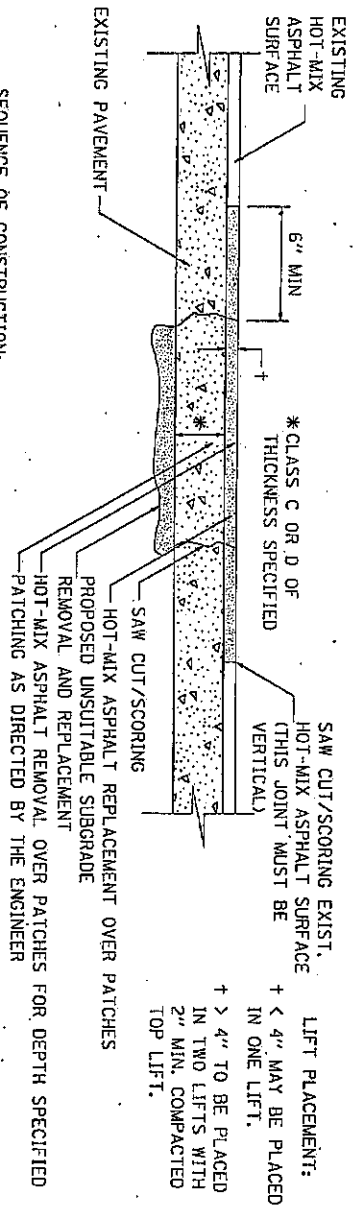
FILE	SECTION	COUNTY	TOTAL SHEET NO.	SHEET NO.
561	131.321.85	*	136	122

* WHITESIDE & LEE

CONTRACT NO. 6AC15

PLAN DATE 1 For Use Of 66542C 881
 FILE NO. 1
 DRAWING NO. 1
 SHEET NO. 1
 DATE 10-3-11

PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT



- SEQUENCE OF CONSTRUCTION:**
1. REMOVE THE EXISTING HOT-MIX ASPHALT SURFACE.
 2. RESIDENT ENGINEER WILL DETERMINE IF LOCATION IS TO BE PATCHED OR TO ONLY REPLACE HOT-MIX ASPHALT SURFACE.
 3. REMOVE AND REPLACE FULL DEPTH PATCHES AT LOCATIONS DIRECTED BY THE ENGINEER.
 4. REPLACE HOT-MIX ASPHALT SURFACE OVER FULL DEPTH PATCHES AND AT LOCATIONS OF HOT-MIX ASPHALT SURFACE REMOVAL.

- GENERAL NOTES:**
1. FOR BASIS OF PAYMENT: SEE THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-3-11

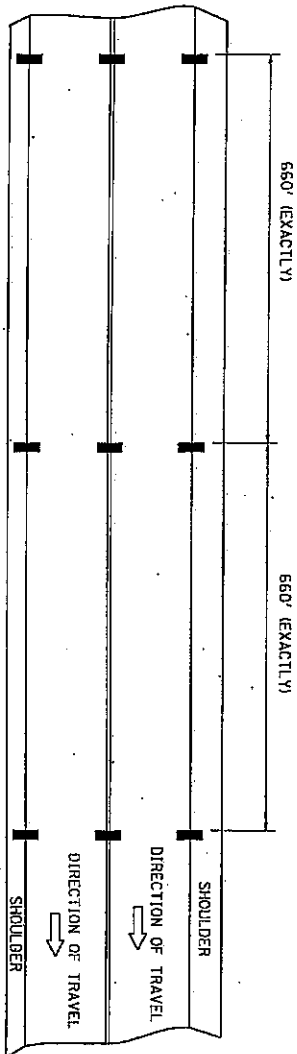
PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT 32.4

FAA R.F.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	131,321,85	*	136	123

* WHITESIDE & LEE

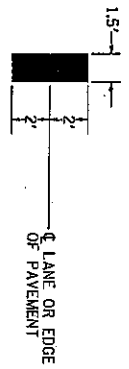
CONTRACT NO. 64C15

AERIAL SPEED CHECK ZONES



USE THERMOPLASTIC PAVEMENT MARKINGS

PAVEMENT MARKING DETAIL



REVISED - 10-3-11

POLICE AERIAL SPEED CHECK ZONES

ESTABLISHED ZONES AND NEW ZONES REQUESTED BY THE ILLINOIS STATE POLICE SHALL BE MARKED CONSISTENT WITH THE REQUIREMENTS OF SECTION 38-23 OF THE MUTCD. WHEN NEW ZONES ARE PLACED IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF THE MEASUREMENT CAN BE ATTESTED TO IN COURT.

ILLINOIS STATE POLICE

DISTRICT 1 STERLING 815/632-4010 CARROLL, LEE, OGLE, WHITESIDE
 DISTRICT 7 EAST MOLINE 309/752-4915 HENRY, ROCK ISLAND
 DISTRICT 16 PECAATONICA 815/239-1152 BOONE, JO DAVIESS, STEPHENSON, WINNEBAGO

BASIS OF PAYMENT:

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR AERIAL SPEED CHECK MARKING.

AERIAL SPEED CHECK ZONES

46.4

F.A.P. R.F.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	131.321 RS.	*	136.	124

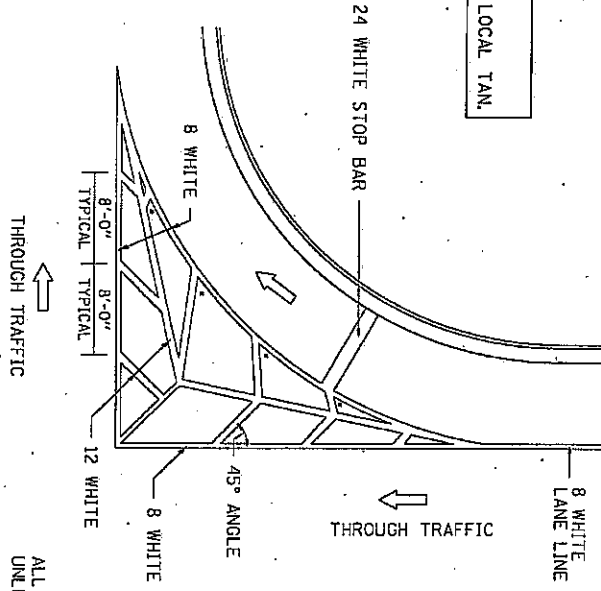
* WHITESIDE & LEE

CONTRACT NO. 64C15

PLOT DATE * Fri Dec 01 08:45:53 EST
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 PLOT SCALE * 1/8"=1'-0"
 USER NAME * antrigo

TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
 * 45° TO LOCAL TAN.



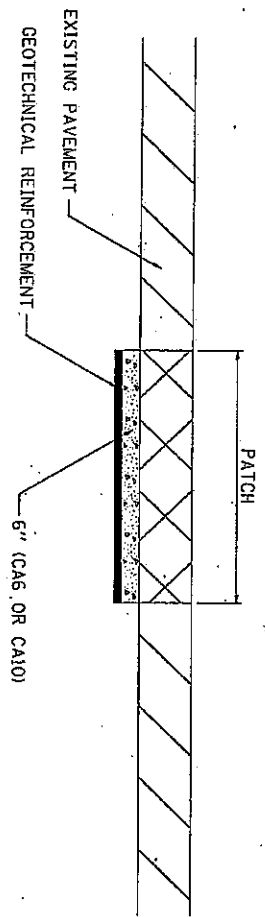
REVISED - 10-5-11

ALL DIMENSIONS ARE IN INCHES
 UNLESS OTHERWISE NOTED.

TYPICAL MARKING FOR PAINTED ISLANDS 93.4

CONTRACT NO. 6AC15			
F.A.C. RTEL	SECTION	COUNTY	TOTAL SHEET NO.
581	131,321, 95	*	136
* WHITESIDE & LEE			125

SUBGRADE REPLACEMENT



NOTES:
THE CA 6 OR CA 10 SHALL BE COMPACTED IN A MANNER APPROVED BY THE ENGINEER, IF THE MOISTURE CONTENT OF THE MATERIAL IS SUCH THAT COMPACTION SATISFACTORY TO THE ENGINEER CANNOT BE OBTAINED, SUFFICIENT WATER SHALL BE ADDED SO THAT SATISFACTORY COMPACTION CAN BE OBTAINED.
THE CA 6 OR CA 10 WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU YD FOR GRANULAR SUBGRADE REPLACEMENT
THE GEOTECHNICAL REINFORCEMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ YD FOR GEOTECHNICAL REINFORCEMENT
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-11-11

SUBGRADE REPLACEMENT 97.4

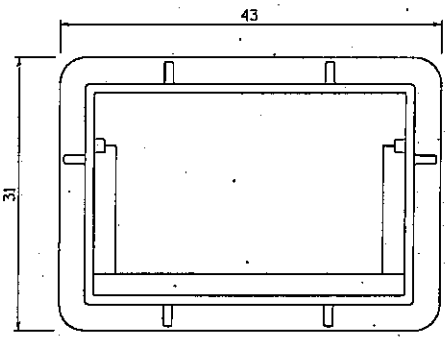
FARE	SECTION	COUNTY	TOTAL SHEET
RTE.			SHEETS NO.
561	131.321.RS	*	136

CONTRACT NO. 64C15

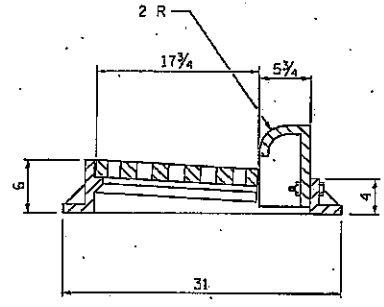
* WHITESIDE & LEE

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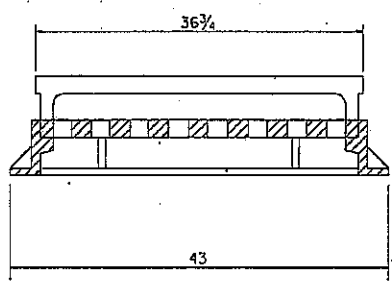
FRAME AND GRATE FOR INLET SPECIAL



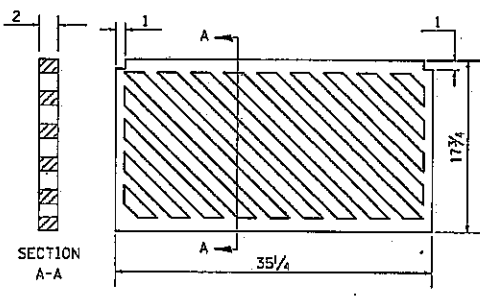
PLAN OF FRAME
WITHOUT GRATE AND CURB BOX



TRANSVERSE SECTION



LONGITUDINAL SECTION



PLAN OF GRATE

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

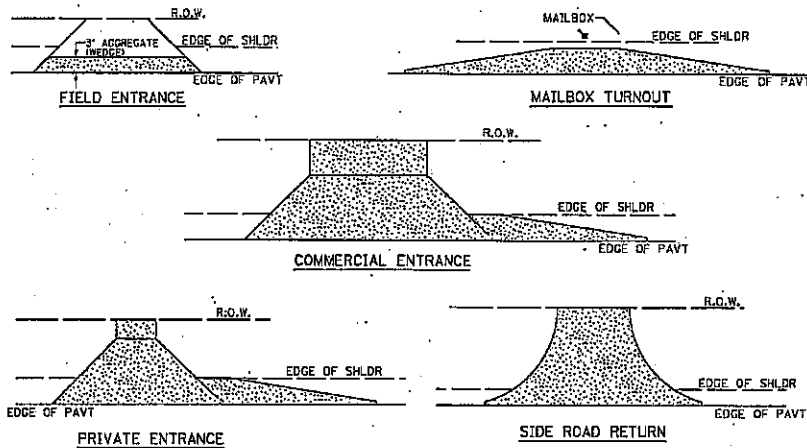
REVISED - 10-13-11

R 3067 OR EQUIVALENT
APPROXIMATE WEIGHT - 510 LBS.

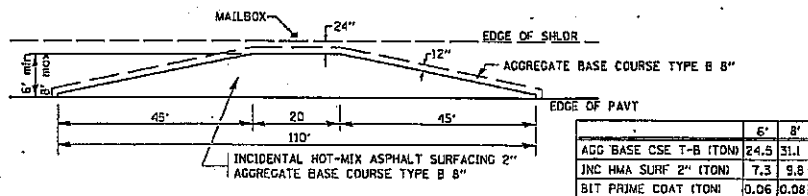
F.A.P. RITE	SECTION	COUNTY	TOTAL SHEET NO.
561	131,321,385	*	136
* WHITESIDE & LEE			127

CONTRACT NO. 84C15

HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR SINGLE LIFT (SMART) RESURFACING PROJECTS



- NOTE:** EXISTING HMA PE's, CE's, SR's, & MB TURNOUTS
Place 1 1/2" Incidental Hot-Mix Asphalt Surfacing #40800050 on entrance to conform to the existing configuration.
- EXISTING AGG. PE's & CE's
Place 2" Incidental Hot-Mix Asphalt Surfacing #40800050 on existing entrance to conform to the present configuration.
- EXISTING AGG. SIDEROADS
Place 3" Incidental Hot-Mix Asphalt Surfacing #40800050 on sideroad to conform to the present configuration.
- EXISTING AGG. MAILBOX TURNOUTS
Existing Agg. Mailbox Turnouts shall be constructed as shown below.



	6'	8'
AGG BASE CSE T-B (TON)	24.5	31.1
JNC HMA SURF 2" (TON)	7.3	9.8
BIT PRIME COAT (TON)	0.06	0.08

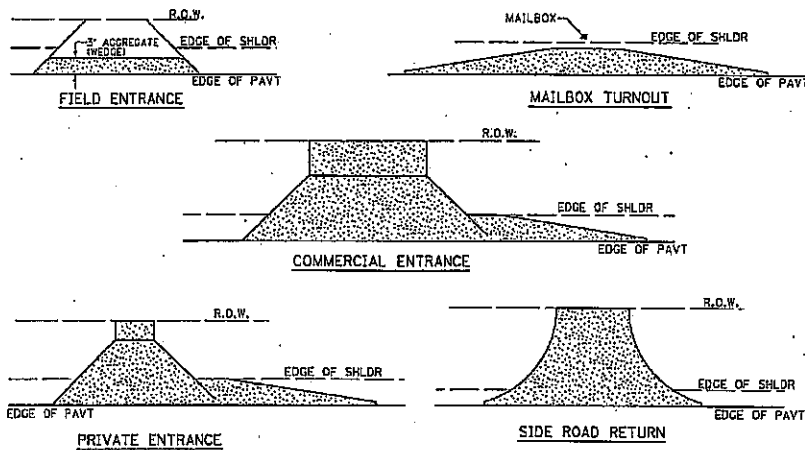
REVISED - 10-21-08

* WHITESIDE & LEE

F.A.R. RITE	SECTION	COUNTY	TOTAL SHEET NO.
561	-131,321,BS-	*	138-128

CONTRACT NO. 64015

HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR TWO LIFT (3P) RESURFACING PROJECTS

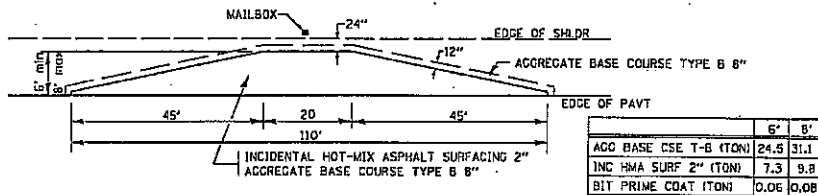


NOTE: EXISTING HMA PE's, CE's, SR's, & MB TURNOUTS
 Place 2 1/4" Incidental Hot-Mix Asphalt Surfacing #40800050 on entrance to conform to the existing configuration.

EXISTING AGG. PE's & CE's
 Place 2" Incidental Hot-Mix Asphalt Surfacing #40800050 on existing entrance to conform to the present configuration.

EXISTING AGG. SIDEROADS
 Place 3" Incidental Hot-Mix Asphalt Surfacing #40800050 on sideroad to conform to the present configuration.

EXISTING AGG. MAILBOX TURNOUTS
 Existing Agg. Mailbox Turnouts shall be constructed as shown below.



REVISED - 10-21-06

F.A.R. RATE	SECTION	COUNTY	TOTAL SHEET NO.
561	131,321,85	*	136
			129

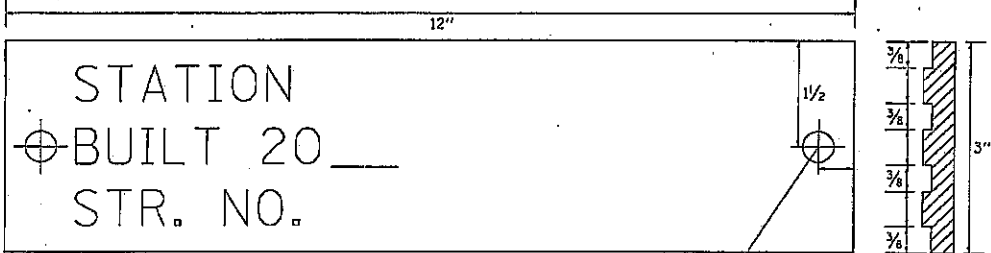
* WHITESIDE & LEE

CONTRACT NO. 64C15

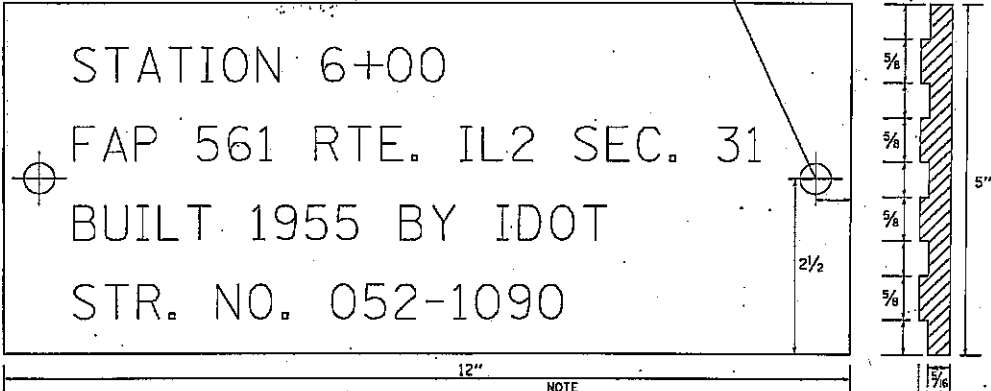
PLOT DATE = Fri Dec 04 09:45:22 AM
 FILE NAME = c:\p1\work\bridge\bridge\plate\88284284\88284284.dwg
 PLOT SCALE = 1:1
 DATE PLOTTED = 12/04/09

NAME PLATE FOR CULVERTS

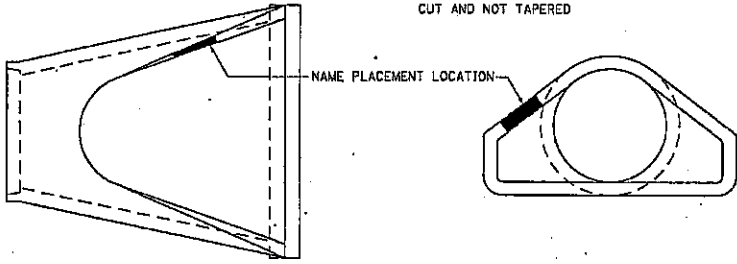
FOR 24"-42" PIPE CULVERTS



FOR 48"-84" PIPE CULVERTS



NOTE
LETTERING RAISED 1/8, SQUARE CUT AND NOT TAPERED



DESIGNERS NOTE

NAME PLATES SHALL BE FURNISHED & INSTALLED ACCORDING TO SECTION 515 OF THE STANDARD SPECIFICATIONS, EXCEPT 2 BOLTS SHALL BE USE TO FASTEN THE PLATE TO THE END SECTION.

USE STANDARD 515001 FOR BRIDGES AND MULTI-CELL CULVERTS WITH SPANS OF 20' OR MORE MEASURED ALONG THE CENTERLINE AT THE HIGHWAY.

USE THIS DETAIL FOR ALL OTHER PIPE CULVERTS & BOX CULVERTS WITH STRUCTURE NUMBERS. INCLUDE THE INFORMATION TO FILL OUT THE NAME PLATE FOR EACH CULVERT.

IN BOTH CASES INCLUDE A PAY ITEM FOR NAME PLATES.

REVISED - 5-27-09

STATION	STRUCTURE NO.
5+99.5	052-1090

* WHITESIDE & LEE

F.A.P. FILE	SECTION	COUNTY	TOTAL SHEET
561	131.127.85	*	136
			131

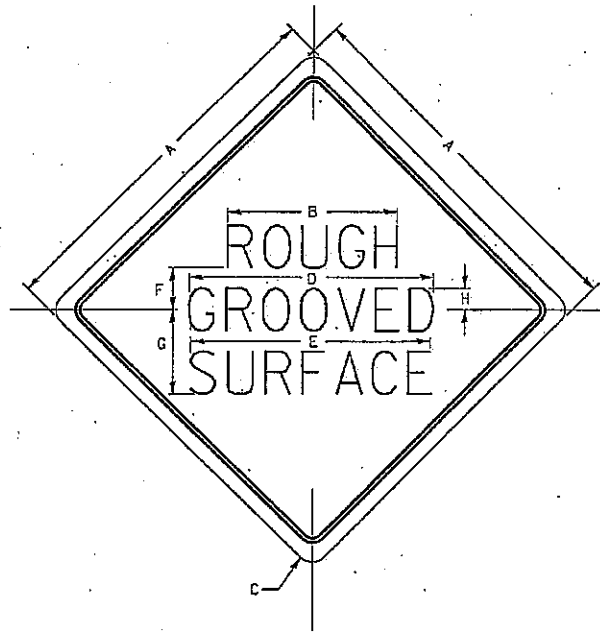
CONTRACT NO. 64C15

PLD DATE * Pr. Rev. 01 2005-07 2001
 FILE NAME * c:\pwworkspace\autodesk\acad\2005\2005-07-20\1107.dwg
 PLD SCALE * 1/8"=1'-0"
 USER NAME * autodesk

ROUGH GROOVED SURFACE SIGN

ILLINOIS STANDARD W8-I107

SIGN PANEL TYPE 1



COLOR: LEGEND AND BORDER - BLACK NON-REFLECTIVE
 BACKGROUND - ORANGE REFLECTORIZED

SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	H
48x48	48.0	24.1	3.0	34.0	33.0	6.0	13.0	3.5

SIGN SIZE	SERIES LINES			MARGIN	BORDER	BLANK STD.
	1	2	3			
48x48	7C	7C	7C	0.8	1.2	B4-4BD

ALL DIMENSIONS IN INCHES.

GENERAL NOTES

SIGN PANELS AND FACE MATERIALS SHALL BE ACCORDING TO SECTION 720 OF THE STANDARD SPECIFICATIONS

METAL POSTS SHALL BE IN ACCORDANCE WITH STD. 720011.

ALL MOUNTING HARDWARE SHALL BE ALUMINUM, STAINLESS STEEL, ZINC OR CADMIUM PLATED STEEL AND SHALL BE INCLUDED TO THE COST OF THE INSTALLATION.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-14-11

ROUGH GROOVED SURFACE SIGN

91.2

561	FEAR	SECTION	COUNTY	TOTAL SHEET
	RT			
	561	131,321,85	*	136
				132

* WHITESIDE & LEE

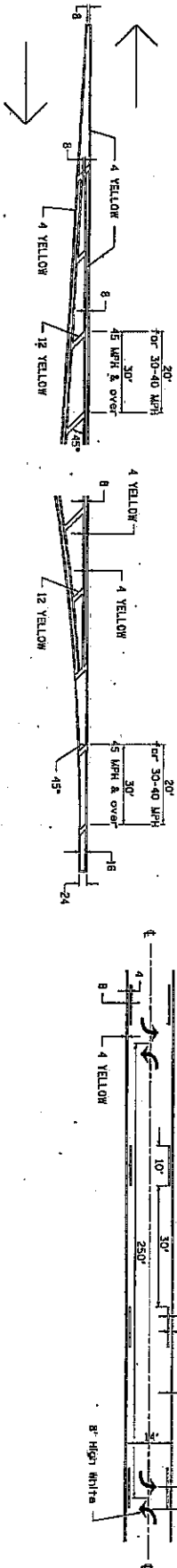
CONTRACT NO. 64015

TYPICAL PAVEMENT MARKINGS

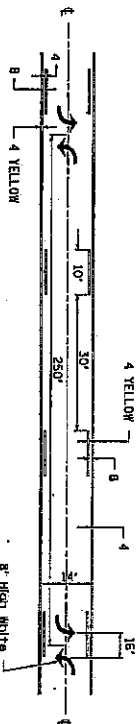
CONTRACT NO. 64C15

STATE	SECTION	COUNTY	TOTAL SHEET NO.
561	J31,32,35	*	136
* WHITESIDE & LEE			134

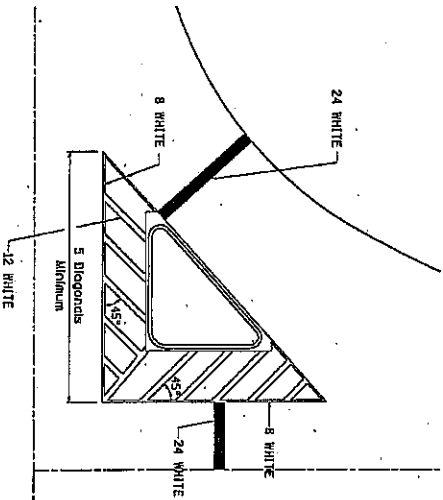
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE



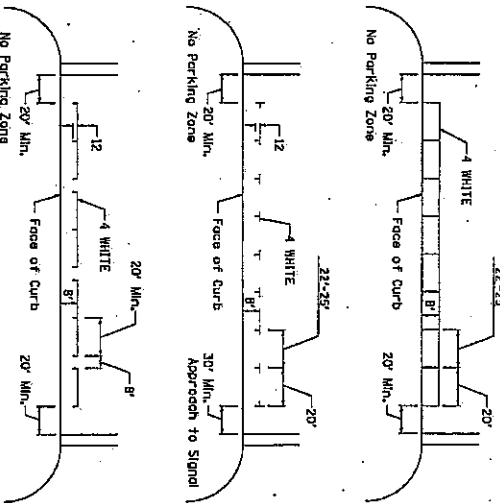
MEDIAN PAVEMENT MARKING



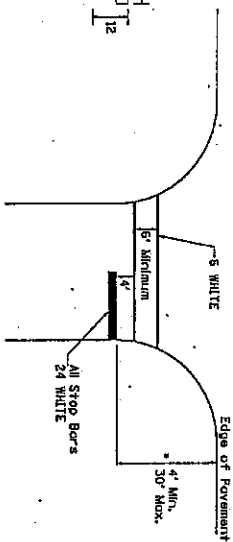
TYPICAL ISLAND OFFSET SHOULDER WIDTH



TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

See Schedules for Locations

FILE DATE: 7/21/2011
 FILE TIME: 10:15:11 AM
 FILE SIZE: 100 KB
 USER: jason

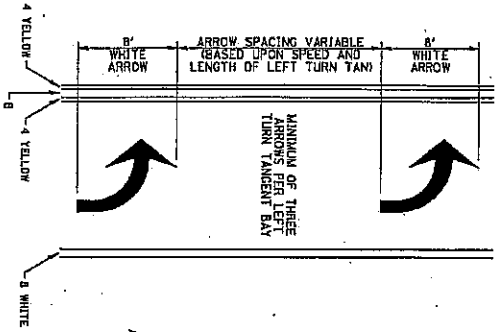
TYPICAL PAVEMENT MARKINGS

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
561	J31,32 185	*	136	135

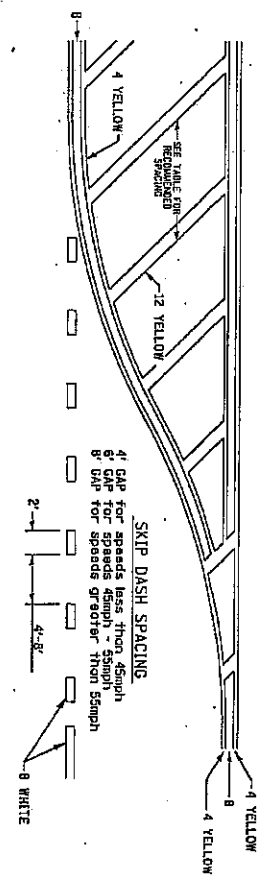
CONTRACT NO. 64C15

* WHITESIDE & LEE

ARROW LAYOUT



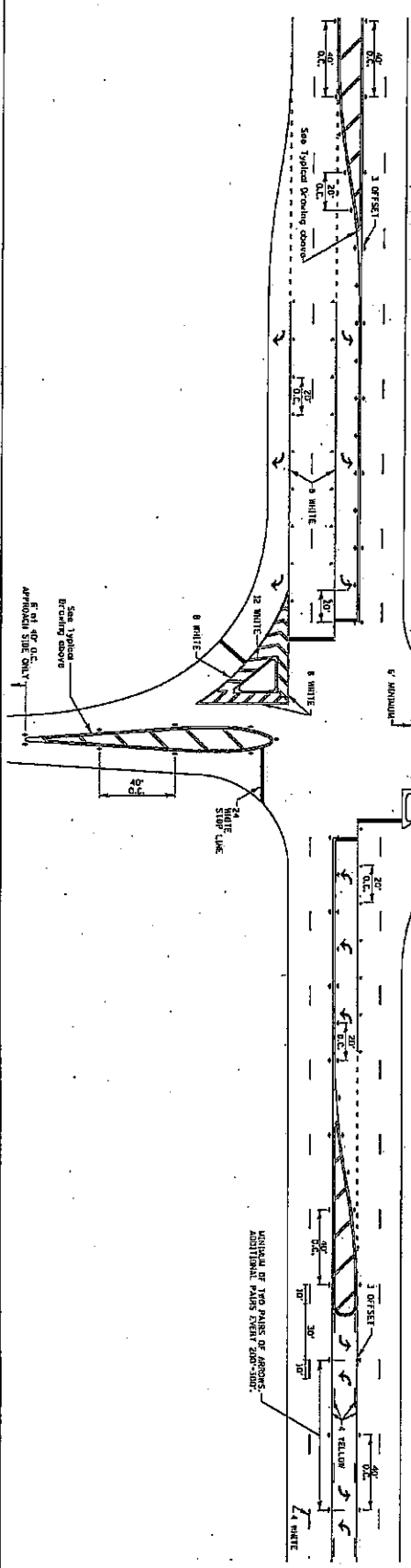
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: If the spacing recommended in the Table does not permit at least two diagonal pairs per bay, the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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ATTACHMENTS

- A. Employment Preference for Appalachian Contracts
(included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4 and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

- a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
- b. The contractor will accept as his operating policy the following statement: "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred

to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women

for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or quailifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

- (1)** The number of minority and non-minority group members and women employed in each work classification on the project;
- (2)** The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
- (3)** The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
- (4)** The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the

contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred

during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as

appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and

individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take

such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- a.** Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b.** The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of

contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

- c.** Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.
- d.** Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1)** that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
 - (2)** that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
 - (3)** that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e.** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f.** The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S. C. 1001 and 31 U.S.C. 231.
- g.** The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such

actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - c. Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).

- a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in

this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from

- covered transactions by any Federal department or agency;
- b.** Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c.** Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
 - d.** Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a.** By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b.** The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c.** The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d.** The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e.** The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f.** The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g.** A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not

- required to, check the Nonprocurement List.
- h.** Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- i.** Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a.** No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b.** If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not

more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <http://www.dot.state.il.us/desenv/delett.html>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <http://www.dot.state.il.us/desenv/subsc.html>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.