

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAI ROUTE 24 (1-24)
SECTION (64-3)I-2

PATCHING AND INLET REPAIR
MASSAC COUNTY

C-99-015-16

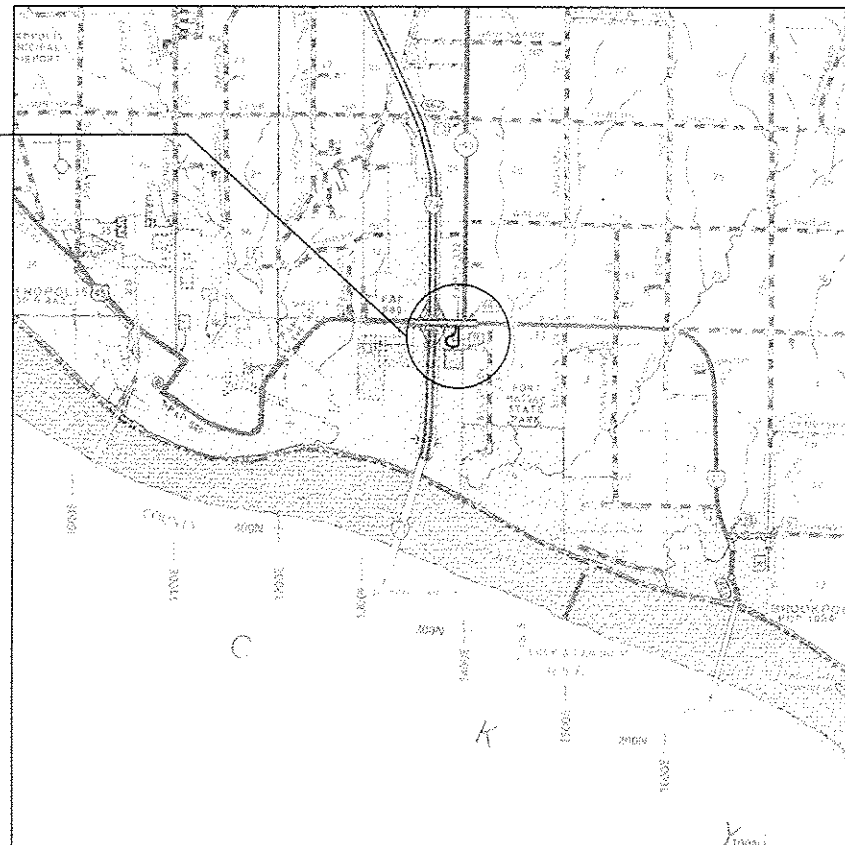
FOR INDEX OF SHEETS, SEE SHEET NO. 3

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-----------|----------|--------------------|-----------|
| 24 | (64-3)I-2 | MASSAC | 12 | 1 |
| | | ILLINOIS | CONTRACT NO. 78513 | |

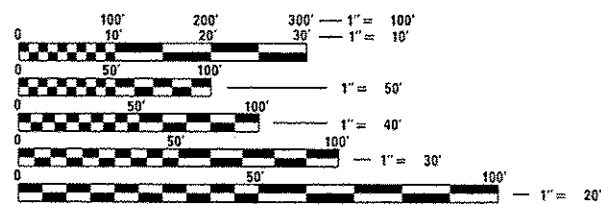
D-99-015-16



PROPOSED IMPROVEMENT AT
FAI 24 MASSAC REST AREA



TOWNSHIP: METROPOLIS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: CHARLES STEIN (618)351-5210
PROJECT MANAGER: KATHI MCCORD (618)351-5319

CONTRACT NO. 78513

GROSS LENGTH = 786 FT. = 0.15 MILE
NET LENGTH = 786 FT. = 0.15 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 9 2015

Jeffrey J. Kern
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Jan 29 2016
Maureen M. Addis, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 29 2016
Orin Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

Prepared By: *[Signature]*
DISTRICT STUDIES & PLANS ENGINEER

Examined By: *[Signature]*
DISTRICT LAND ACQUISITION ENGINEER

Examined By: *[Signature]*
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *[Signature]*
DISTRICT OPERATIONS ENGINEER

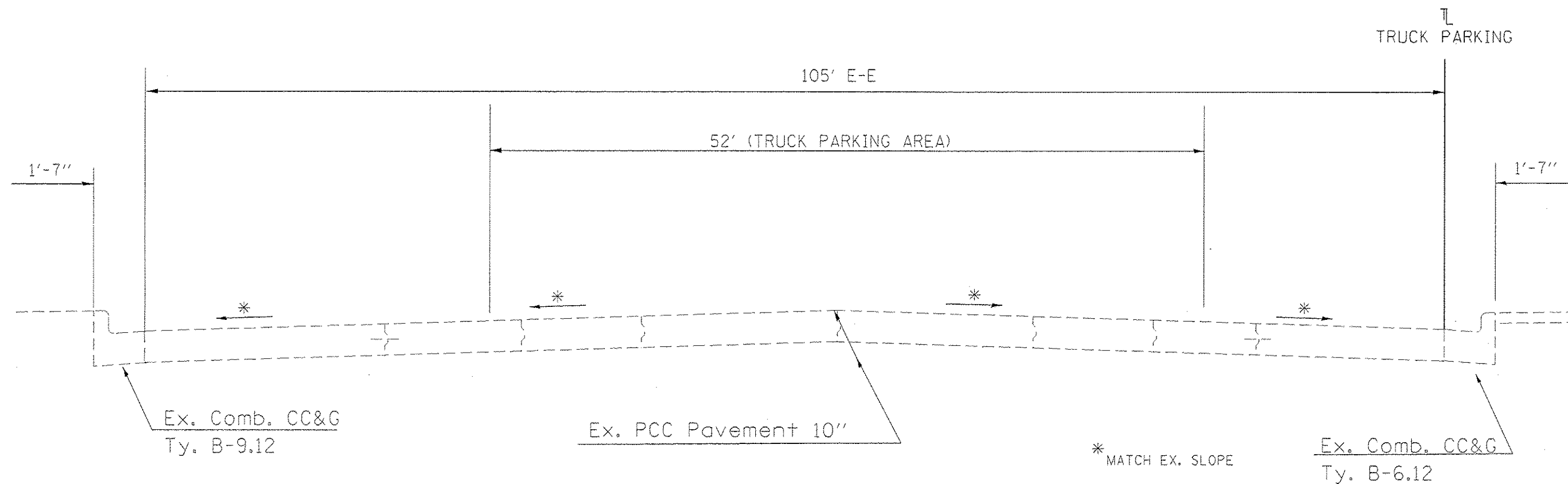
Examined By: *[Signature]*
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: *[Signature]*
DISTRICT CONSTRUCTION ENGINEER

Examined By: *[Signature]*
DISTRICT MATERIALS ENGINEER

| | | | | | | | | | | | | | |
|--|---|------------|-----------|---|------------------------|-----------|--------|--------|----------------|---------|---------------------------|--------------|-----------|
| FILE NAME * | USER NAME * | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SIGNATURE BLOCK | | | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| p:\11804EBID\INTEG\Illinois.gov\PI\2017\06 | Documents\1007 Offices\District 9\Projects\7853 | 300000 | 300000 | | 24 | 164-311-2 | MASSAC | 12 | 2 | | | | |
| Default | PLOT SCALE = 100.0000 / in. | CHECKED - | REVISED - | | SCALE: | SHEET | OF | SHEETS | STA. | TO STA. | ILLINOIS FEQ. AID PROJECT | | |
| | PLOT DATE = 11/14/2015 | DATE - | REVISED - | | CONTRACT NO. 78513 | | | | | | | | |

TYPICAL SECTION
FOR TRUCK PARKING



NOTE: SEE CLASS B PATCHING, TYPE 4,
10" (SPECIAL) DETAIL, SHEET 11.

TO BE USED:
STA. 5+43.99 TO STA. 13+30

| | | | | | | | | | | | |
|--|---|------------|-----------|---|--|-------------------------------------|-----------|--------------------|-----------------|--------------|--|
| FILE NAME = | USER NAME = mcoordhr | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TYPICAL SECTION FOR TRUCK PARKING | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| p:\N\128420\INTEG.illinois.gov\PI\DOT\DO | Documents\DOT Offices\District 9\Projects\78513\78513.dgn | CHECKED - | REVISED - | | | 24 | 164-311-2 | MASSAC | 12 | 4 | |
| Default | | DATE - | REVISED - | | | SCALE: SHEET OF SHEETS STA. TO STA. | | CONTRACT NO. 78513 | | | |
| | | | | | | ILLINOIS FED. AID PROJECT | | | | | |

SUMMARY OF QUANTITIES

FAI 24
RURAL
 100% STATE
PATCHING
MASSAC COUNTY
CONST. CODE TYPE
0005

| CODE NUMBER | ITEM DESCRIPTION | UNIT | QUANTITY |
|-------------|--|-------|----------|
| X4420684 | CLASS B PATCHES, TYPE IV, 10 INCH (SPECIAL) | SQ YD | 577 |
| X6028300 | INLETS TO BE REMOVED, SPECIAL | EACH | 1 |
| 31100100 | SUBBASE GRANULAR MATERIAL, TYPE A | TON | 4 |
| 42000500 | PORTLAND CEMENT CONCRETE PAVEMENT 10" | SQ YD | 14 |
| 42001200 | PAVEMENT FABRIC | SQ YD | 591 |
| 42001300 | PROTECTIVE COAT | SQ YD | 14 |
| 42400300 | PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH | SQ FT | 370 |
| 42400800 | DETECTABLE WARNINGS | SQ FT | 40 |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 63 |
| 44000600 | SIDEWALK REMOVAL | SQ FT | 370 |
| 44213200 | SAW CUTS | FOOT | 1290 |
| 44213204 | TIE BARS 3/4" | EACH | 670 |
| 48100100 | AGGREGATE SHOULDERS, TYPE A | TON | 22 |
| 60263100 | INLETS TO BE RECONSTRUCTED WITH NEW TYPE 3 FRAME AND GRATE | EACH | 12 |
| 60603800 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 | FOOT | 80 |
| 67100100 | MOBILIZATION | L SUM | 1 |

1/0

**SCHEDULE FOR PATCHING, PCC PAVEMENT
AND PCC SIDEWALK 6 INCH**

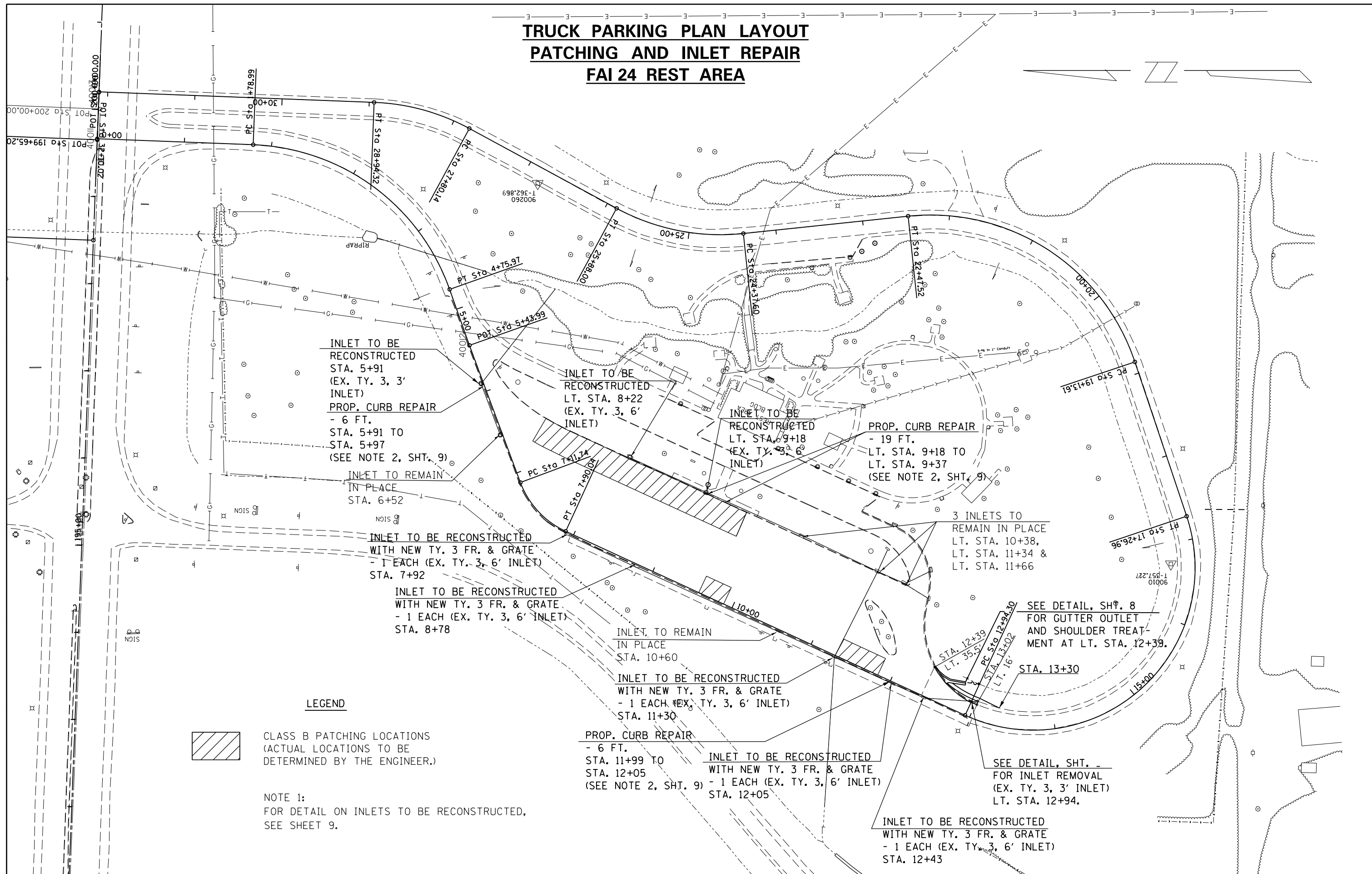
| Length | Width | Pavement Depth | CLASS B PATCHES, TYPE 4, 10" (SPECIAL) | PCC PAVEMENT 10" | SAW CUTS | PAVEMENT FABRIC | TIE BARS | SUBBASE GRANULAR MAT'L., TYPE A (4") | PROT. COAT | DETECTABLE WARNINGS | PCC SIDEWALK, 6 INCH | SIDEWALK REMOVAL |
|---|-------|----------------|--|------------------|-------------|-----------------|------------|--------------------------------------|------------|---------------------|----------------------|------------------|
| Ft. | Ft. | Inch | SQ. YD. | SQ. YD. | FOOT | SQ. YD. | EACH | TON | SQ. YD. | SQ. FT. | SQ. FT. | SQ. FT. |
| FAI 24 Massac Rest Area - Existing Truck Parking | | | | | | | | | | | | |
| 21.0 | 21.0 | 10.0 | 49.0 | | 126 | 49.0 | 89 | | | | | |
| 15.0 | 18.0 | 10.0 | 30.0 | | 99 | 30.0 | 55 | | | | | |
| 144.0 | 18.0 | 10.0 | 288.0 | | 558 | 288.0 | 279 | | | | | |
| 21.0 | 18.0 | 10.0 | 42.0 | | 117 | 42.0 | 61 | | | | | |
| 42.0 | 18.0 | 10.0 | 84.0 | | 198 | 84.0 | 82 | | | | | |
| 36.0 | 21.0 | 10.0 | 84.0 | | 192 | 84.0 | 82 | | | | | |
| LT. STA. 9+31 | | | | | | | | | | 20 | 370 | 370 |
| LT. STA. 12+60 TO STA. 13+02 | | | | 14 | | 14 | 22 | 4 | 14 | | | |
| RT. STA. 3A+83 | | | | | | | | | | 20 | | |
| Totals | | | 577 | 14 | 1290 | 591 | 670 | 4 | 14 | 40 | 370 | 370 |

QUANTITIES AND LOCATIONS SHOWN IN THE SCHEDULE FOR NEW PATCHES AND SUBBASE ARE ESTIMATES. THE ACTUAL AMOUNT AND LOCATIONS OF NEW PATCHES AND SUBBASE SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DRAINAGE SCHEDULE

| STATION LOCATION | INLETS TO BE RECONSTRUCTED WITH NEW TYPE 3 FR. & GR. | INLETS TO BE REMOVED, SPECIAL | COMB. CONC. CURB AND GUT., TY. B-6.12 | COMBINATION CURB AND GUTTER REMOVAL | AGGREGATE SHLDS., TY. A | NOTE |
|---------------------------------------|--|-------------------------------|---------------------------------------|-------------------------------------|-------------------------|-----------------|
| | EACH | EACH | FOOT | FOOT | TON | |
| FAI 24 REST AREA TRUCK PARKING | | | | | | |
| 5+91 | 1 | | | | | |
| 6+52 | | | | | | REMAIN IN PLACE |
| 7+92 | 1 | | | | | |
| LT. 8+22 | 1 | | | | | |
| 8+78 | 1 | | | | | |
| LT. 9+18 | 1 | | | | | |
| LT. 10+38 | | | | | | REMAIN IN PLACE |
| 10+60 | | | | | | REMAIN IN PLACE |
| 11+30 | 1 | | | | | |
| LT. 11+34 | | | | | | REMAIN IN PLACE |
| LT. 11+66 | | | | | | REMAIN IN PLACE |
| 12+05 | 1 | | | | | |
| LT. 12+39 TO 13+02 | | | | 63 | | |
| LT. 12+39 TO 12+60 | | | 80 | | | NEW OUTLET |
| 12+43 | 1 | | | | | |
| LT. 12+60 TO 13+30 | | | | | 22 | |
| LT. 12+94 | | 1 | | | | |
| FAI 24 REST AREA CAR PARKING | | | | | | |
| LT. 2A+40 | 1 | | | | | |
| LT. 2A+02 | 1 | | | | | |
| LT. 3A+38 | 1 | | | | | |
| LT. 5A+48 | 1 | | | | | |
| TOTALS | 12 | 1 | 80 | 63 | 22 | |

TRUCK PARKING PLAN LAYOUT PATCHING AND INLET REPAIR FAI 24 REST AREA



LEGEND



CLASS B PATCHING LOCATIONS
(ACTUAL LOCATIONS TO BE
DETERMINED BY THE ENGINEER.)

NOTE 1:
FOR DETAIL ON INLETS TO BE RECONSTRUCTED,
SEE SHEET 9.

| | | | |
|---|------------------------------|------------|-----------|
| FILE NAME = | USER NAME = mccordkr | DESIGNED - | REVISED - |
| p:\11\084EBID\INTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 9\Projects\78513\Drawings\CAB\Sheets\78513.sht.dgn | | 3/20/15 | REVISED - |
| Default | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 12/10/2015 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN LAYOUT

SCALE: SHEET OF SHEETS STA. TO STA.

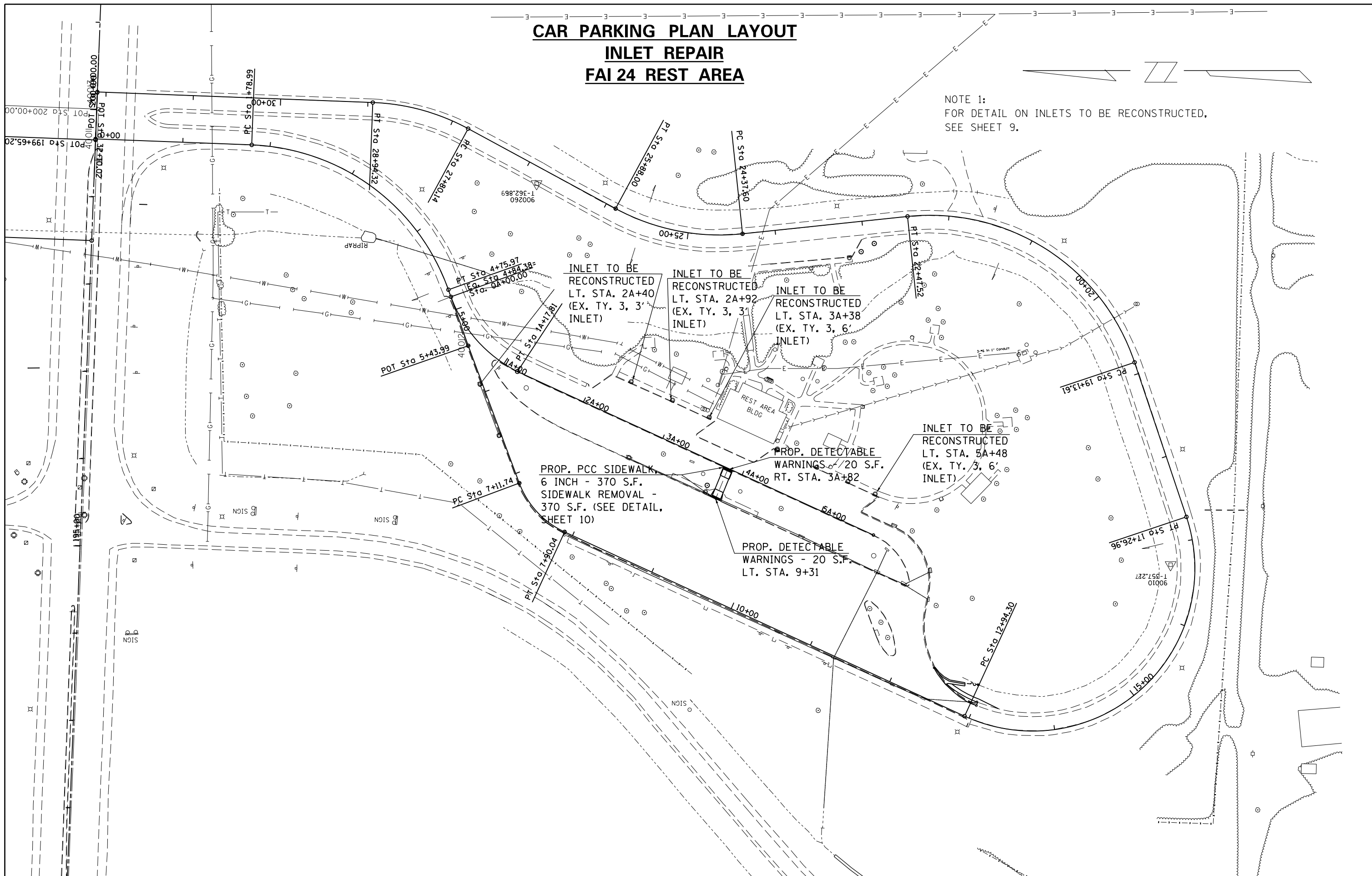
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 24 | (64-3)I-2 | MASSAC | 12 | 8 |
| CONTRACT NO. 78513 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

CAR PARKING PLAN LAYOUT

INLET REPAIR

FAI 24 REST AREA

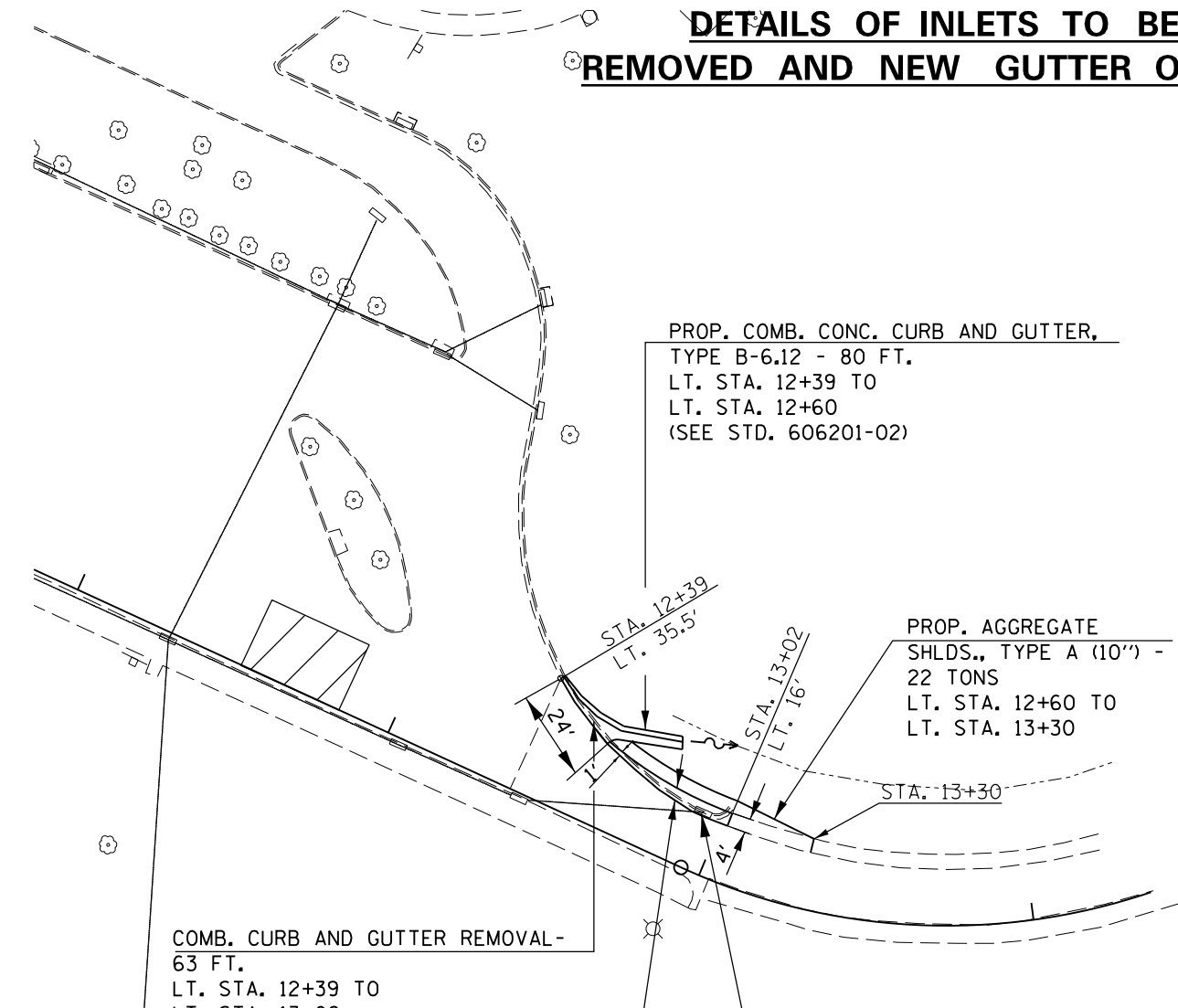
NOTE 1:
FOR DETAIL ON INLETS TO BE RECONSTRUCTED,
SEE SHEET 9.



| | | | | | | | | |
|--|------------------------------|------------|-----------|---|--------------------|--------|-----------------|--------------|
| FILE NAME = | USER NAME = mccordkr | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN LAYOUT | SCALE: | SHEET OF SHEETS | STA. TO STA. |
| pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 9\Projects\78513\DRAWING\CAB\Sheets\78513.sht.dgn | | CHECKED - | REVISED - | | | | | |
| Default | PLOT SCALE = 100.0000' / 1". | DATE - | REVISED - | | | | | |
| | PLOT DATE = 12/10/2015 | | | | | | | |

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 24 | (64-3)I-2 | MASSAC | 12 | 9 |
| CONTRACT NO. 78513 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

DETAILS OF INLETS TO BE REMOVED AND NEW GUTTER OUTLET



PROP. COMB. CONC. CURB AND GUTTER,
TYPE B-6.12 - 80 FT.
LT. STA. 12+39 TO
LT. STA. 12+60
(SEE STD. 606201-02)

PROP. AGGREGATE
SHLDS., TYPE A (10") -
22 TONS
LT. STA. 12+60 TO
LT. STA. 13+30

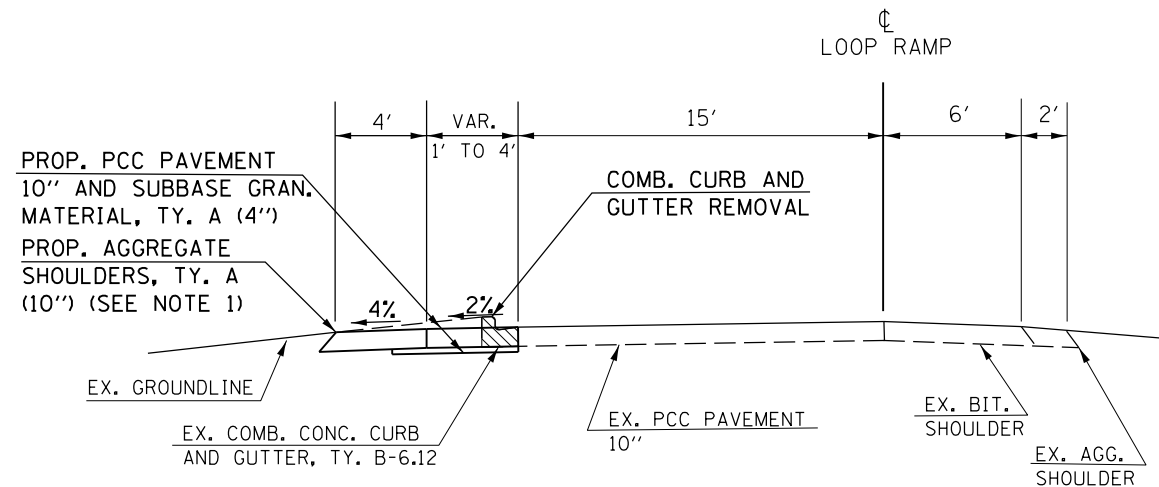
COMB. CURB AND GUTTER REMOVAL -
63 FT.
LT. STA. 12+39 TO
LT. STA. 13+02

PROP. PCC PAVEMENT 10" - 14 S.Y.
AND PROP. SUBBASE GRAN.
MATERIAL, TY. A (4") - 4 TONS
LT. STA. 12+60 TO
LT. STA. 13+02

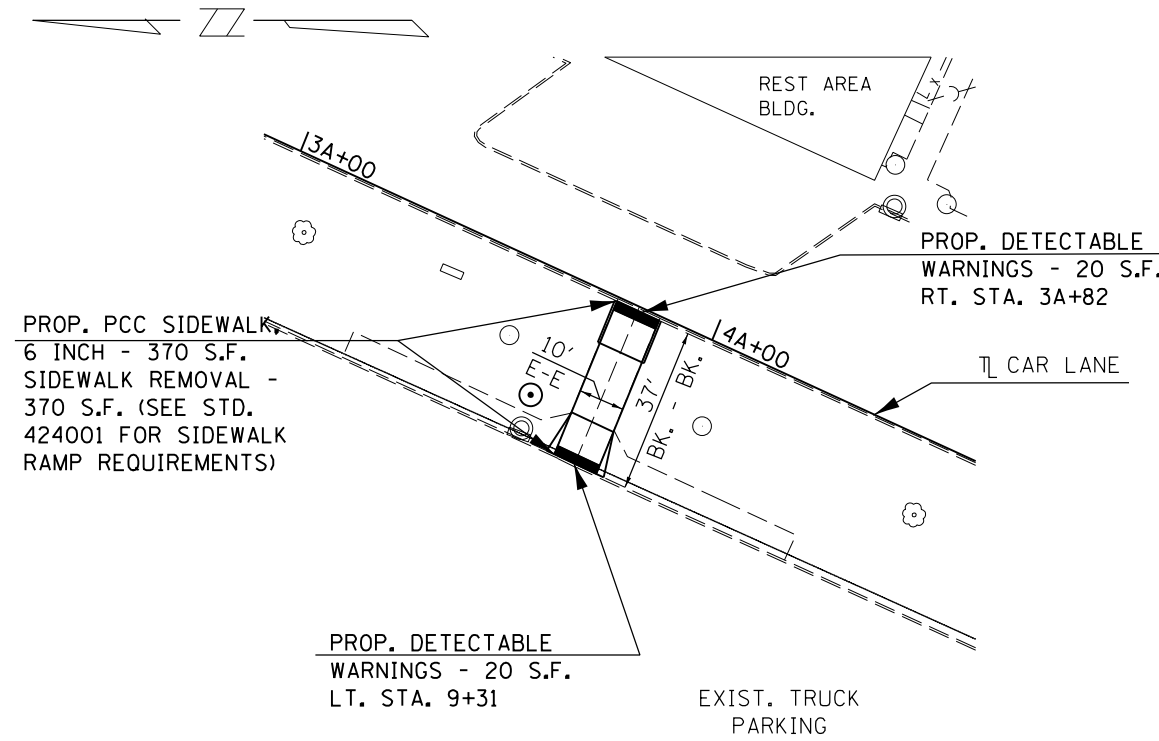
INLET TO BE REMOVED, SPECIAL - 1 EACH
(EX. TY. 3, 3' INLET) LT. STA. 12+94
(INCLUDES PLUGGING EXISTING STORM
SEWER IN ACCORDANCE WITH ART. 550.05
IN THE STANDARD SPECIFICATIONS FOR
ROAD AND BRIDGE CONSTRUCTION)

NOTE 1:
ANY EARTH EXCAVATION THAT IS REQUIRED FOR THE
CONSTRUCTION OF NEW OUTLET, WIDENING AND SHOULDER
SHALL BE INCLUDED IN THE ASSOCIATED PAY ITEMS.

**TYPICAL FOR
NEW PAVEMENT AND SHOULDER
LT. STA. 12+94**



**DETAIL FOR
PROP. PCC SIDEWALK 6 INCH
AND RAMPS**



PROP. PCC SIDEWALK
6 INCH - 370 S.F.
SIDEWALK REMOVAL -
370 S.F. (SEE STD.
424001 FOR SIDEWALK
RAMP REQUIREMENTS)

PROP. DETECTABLE
WARNINGS - 20 S.F.
LT. STA. 9+31

PROP. DETECTABLE
WARNINGS - 20 S.F.
RT. STA. 3A+82

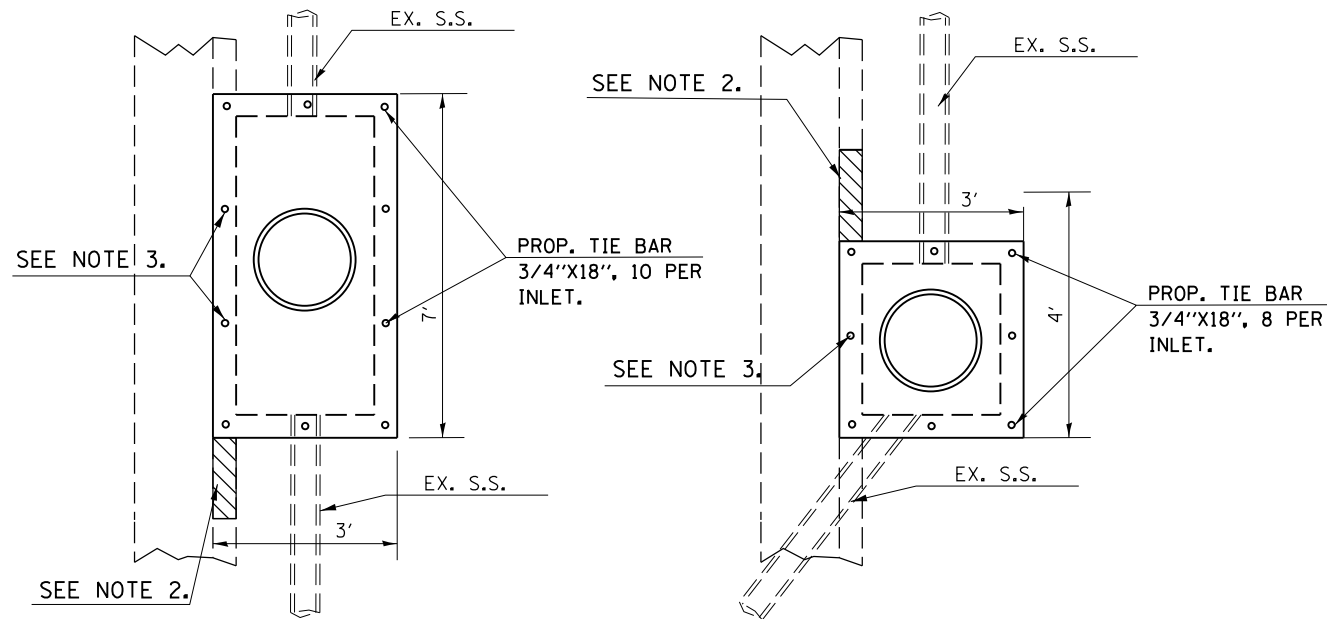
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| FILE NAME = | USER NAME = mccordkr | DESIGNED - | REVISED - |
| p:\11\084EBIDINTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 9\Projects\78513\CAD\Drawings\78513.sht.dgn | | DRAWN - | REVISED - |
| Default | PLOT SCALE = 100.0000' / 1in. | CHECKED - | REVISED - |
| | PLOT DATE = 12/10/2015 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|--|-------|-----------|--------------|
| DETAILS FOR INLET REMOVAL, NEW GUTTER OUTLET AND NEW PCC SIDEWALK AND RAMPS | | | |
| SCALE: | SHEET | OF SHEETS | STA. TO STA. |

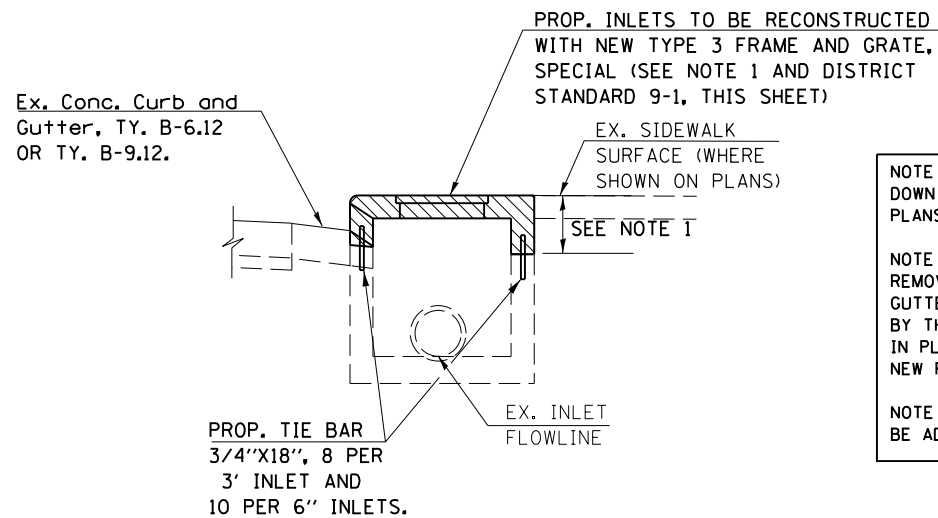
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|---------------------------|-----------|--------|--------------|-----------|
| F.A.I. RT.: | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 24 | (64-3)I-2 | MASSAC | 12 | 10 |
| CONTRACT NO. 78513 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

**DETAILS OF INLETS TO BE
RECONSTRUCTED WITH NEW TYPE 3
GRATE AND FRAME, SPECIAL**



PROP. RECONSTRUCTED
INLET DETAIL
(EX. TY. 3, 6' INLETS)

PROP. RECONSTRUCTED
INLET DETAIL
RT. STA. 5+91
(EX. TY. 3, 3' INLET)



PROP. RECONSTRUCTED INLET
SIDE VIEW DETAIL

NOTES

NOTE 1. 15" FROM THE TOP OF THE INLET DOWN SHALL BE REMOVED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

NOTE 2. LIMITS OF CURB AND GUTTER REMOVAL AND NEW COMB. CONC. CURB AND GUTTER NEAR INLETS TO BE DETERMINED BY THE ENGINEER UNLESS OTHERWISE NOTED IN PLANS. SHALL BE INCLUDED IN COST OF NEW RECONSTRUCTED INLETS.

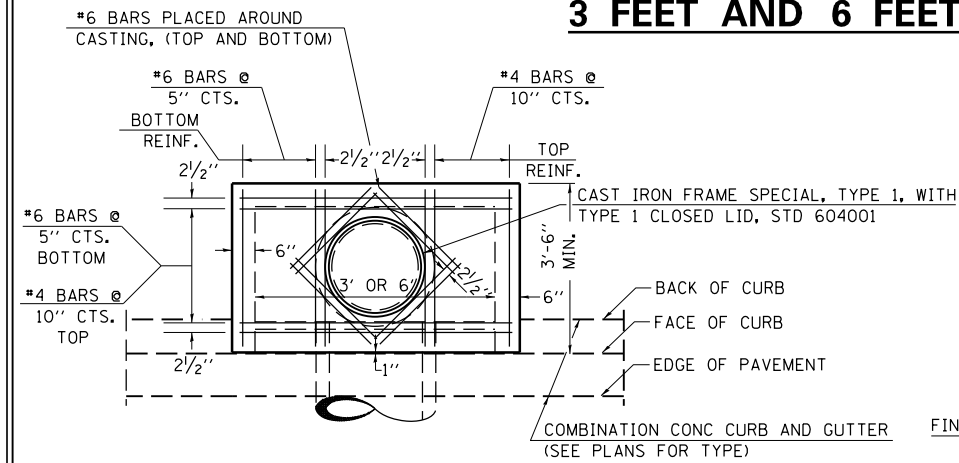
NOTE 3. PROP. TIE BAR LOCATIONS TO BE ADJUSTED DEPENDING ON INLET OPENING.

LEGEND

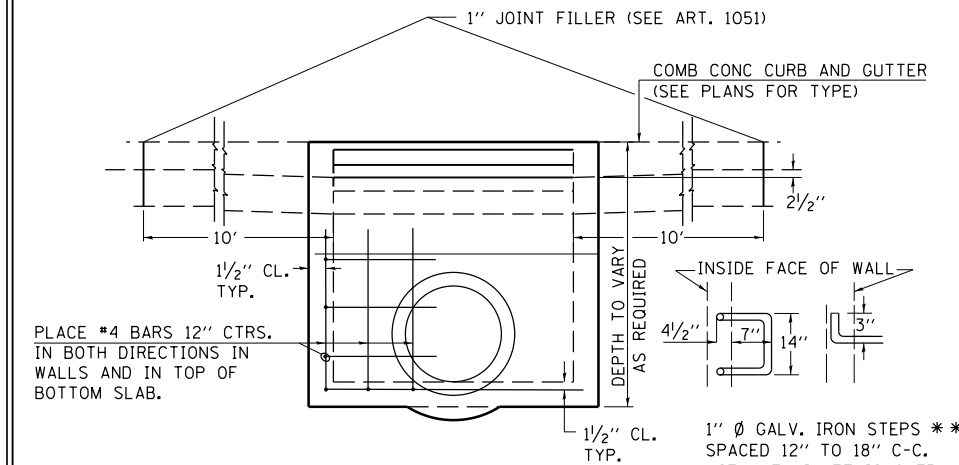


EX. INLET AND CONC. CURB & GUTTER TO BE REMOVED. (INCLUDED IN COST OF PROP. RECONSTRUCTED INLETS WITH NEW TYPE 3 FRAME & GRATE)

**DETAILS OF INLET SPECIAL, TYPE 3,
3 FEET AND 6 FEET**



PLAN



ELEVATION

NOTES:

PROVIDE 1/2" CLEARANCE TYP. ALL REINFORCEMENT UNLESS OTHERWISE SPECIFIED.

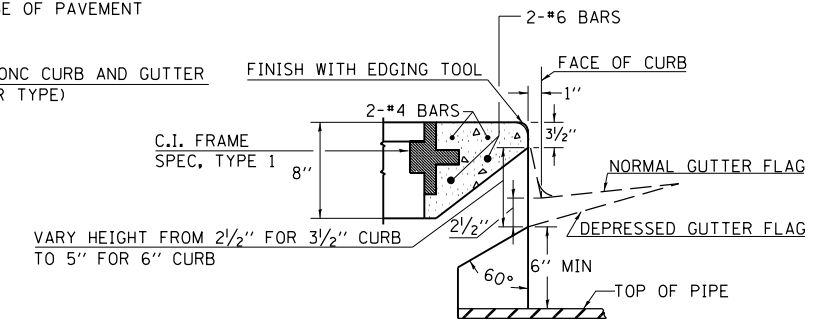
CLASS SI CONCRETE SHALL BE USED THROUGHOUT. SET FACE OF INLET 1" BEHIND FACE OF CURB. DEPRESS GUTTER FLOWLINE AT INLET 2 1/2" BELOW NORMAL GUTTER FLOWLINE. CONSTRUCT TRANSITION IN FLOWLINE IN 10 FEET EACH SIDE OF INLET. PIPES TO BE CONNECTED TO INLET AS SHOWN ON STORM SEWER LAYOUT.

INLETS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR **INLET TO BE RECONSTRUCTED**. WHICH PRICE SHALL INCLUDE THE CAST IRON FRAME, SPECIAL, TYPE 1 WITH TYPE 1 CLOSED LID, THE REINFORCEMENT BARS, METAL STEPS AND JOINT FILLER.

** THE GALVANIZED IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT WILL CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN. MAY BE USED WHEN APPROVED BY THE ENGINEER.

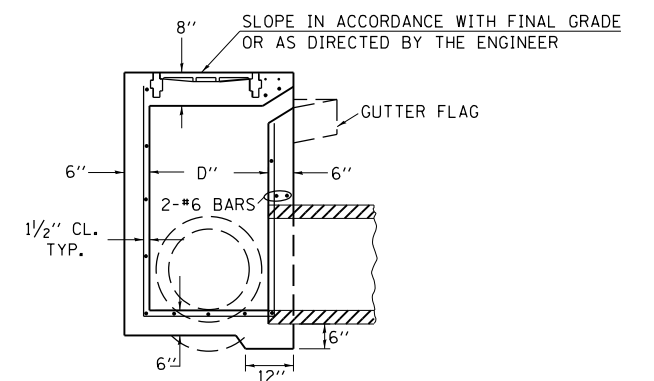
IF THE INLET IS NOT CAST IN PLACE THEN THE INLET SHALL BE PRODUCED ACCORDING TO THE DEPARTMENT'S CURRENT POLICY MEMORANDUM, "QUALITY CONTROL/QUALITY ASSURANCE PROGRAM FOR PRECAST CONCRETE PRODUCTS".

ONLY FOR REFERENCE WHEN BUILDING INLETS TO BE RECONSTRUCTED WITH NEW TYPE 3 GRATE & FRAME.



SECTION AT WEIR

| DESIGN | PIPE DIA | "D" |
|--------|------------|-------|
| A | 18" & LESS | 2'-6" |
| B | 21" & 24" | 3'-0" |
| C | 27" & 30" | 3'-7" |
| D | 33" & 36" | 4'-2" |
| E | 42" | 4'-9" |
| F | 48" | 5'-0" |
| G | 54" | 6'-1" |



SECTION

NOTE TO DESIGNER:

WHEN USING THIS STANDARD THE DESIGNER SHOULD ALSO CHECK BDE SPECIAL PROVISION 419 "PRECAST CONCRETE PRODUCTS".

| REVISIONS | | | |
|-----------|---------|---------|---------|
| REDRAWN | 2-15-89 | REVISED | 3-26-08 |
| REVISED | 8-15-94 | REVISED | |
| REVISED | 1-19-99 | REVISED | |
| STD. | 9-1 | REVISED | 5-6-04 |
| | | REVISED | |

• FAU 9760 (US 45)

| | | | |
|---|----------------------|------------|-----------|
| FILE NAME = | USER NAME = mccordkr | DESIGNED - | REVISED - |
| pw:\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 9\Projects\78513\DRAWING\CAD\Sheets\78513.sht.dgn | | CHECKED - | REVISED - |
| | | DATE - | REVISED - |
| PLOT SCALE = 100.0000' / 1" | | | |
| PLOT DATE = 12/10/2015 | | | |

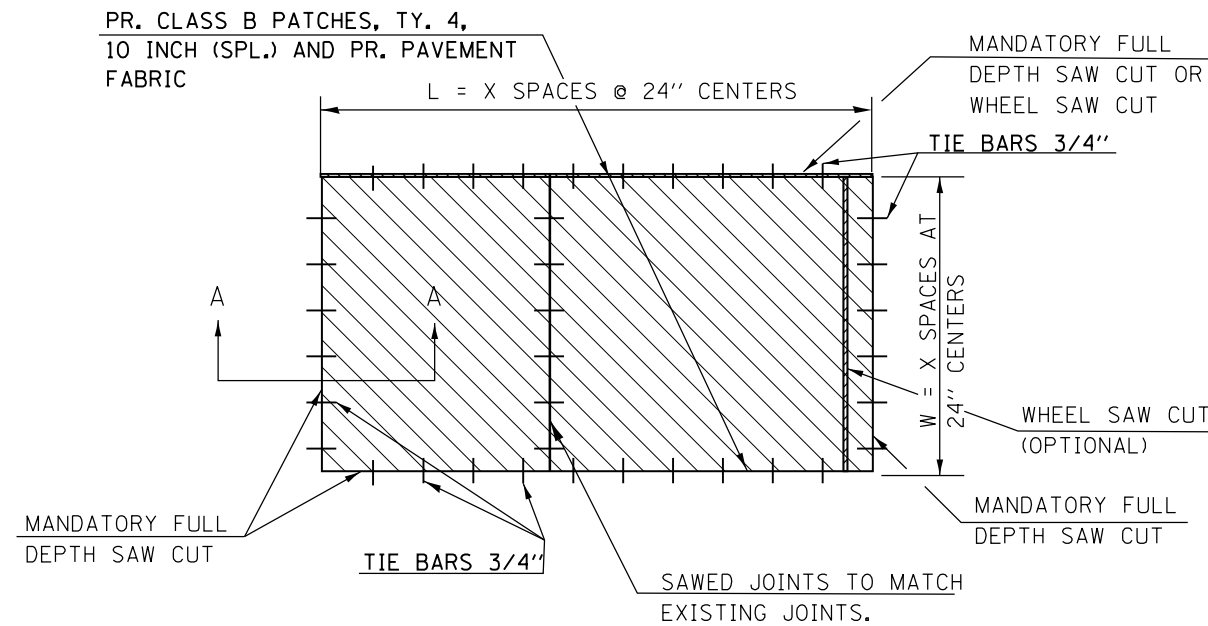
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAILS: INLETS TO BE RECONSTRUCTED AND
INLET SPECIAL, TYPE 3, 3' & 6 FEET**

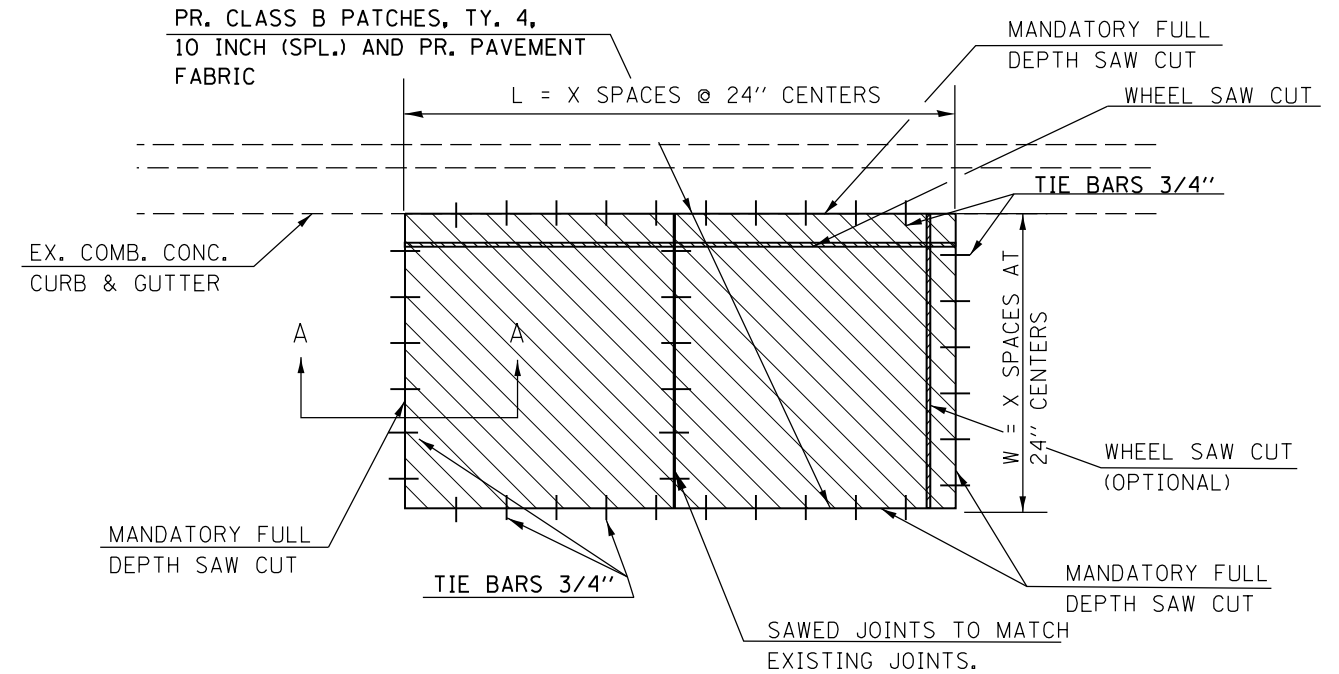
SCALE: SHEET NO. OF SHEETS STA. TO STA.

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| 24 | (64-3)I-2 | MASSAC | 12 | 11 |
| CONTRACT NO. 78513 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

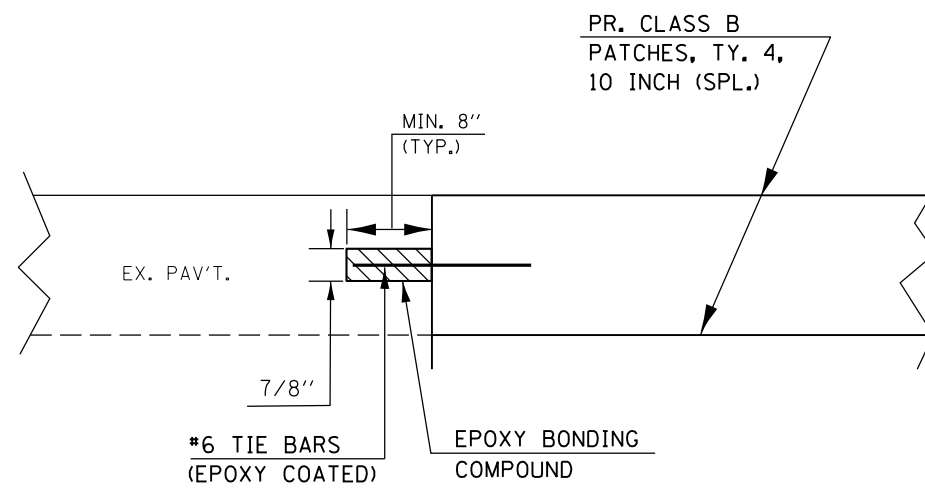
DETAIL FOR CLASS B PATCHING, TYPE 4, 10" (SPECIAL)



PLAN VIEW



PLAN VIEW
(WHERE CURB & GUTTER
ARE PRESENT)



SEC. A-A

NOTES

NOTE 1: SEE SPECIAL PROVISIONS FOR INFORMATION ON CONSTRUCTION & PAYMENT OF CLASS B PATCHES, TY. 4, 10 INCH (SPECIAL).

NOTE 2: PATCHES SHALL HAVE FULL DEPTH SAWCUT JOINTS EVERY 20' OR AS DIRECTED BY THE ENGINEER.

| | | | | | | | | | | |
|---|------------------------------|------------|-----------|---|---|-------------------------------------|-----------|--------------------|--------------|-----------|
| FILE NAME = | USER NAME = mccordkr | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DETAIL: CLASS B PATCHING TYPE 4, 10" (SPECIAL) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| pw:\IL\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 9\Projects\78513\Drawings\CAB\Drawings\78513.sht.dgn | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - | | | 24 | (64-3)I-2 | MASSAC | 12 | 12 |
| Default | PLOT DATE = 12/10/2015 | DATE - | REVISED - | | | SCALE: SHEET OF SHEETS STA. TO STA. | | CONTRACT NO. 78513 | | |