FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE CITY OF WINTHROP HARBOR AND ILLINOIS BEACH STATE PARK NORTH IN LACK COUNTY

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

CONTRACT NO. 6**0B**73

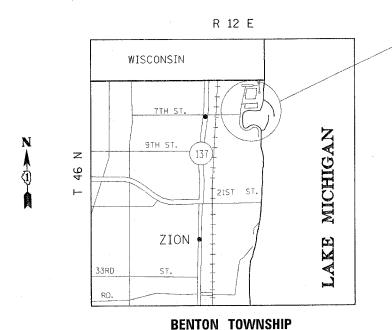
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

PLANS FOR PROPOSED HIGHWAY

PARK ROADS (ILLINOIS BEACH STATE PARK) NORTH POINT MARINA **SECTION: 2006-027 I** PARKING LOT IMPROVEMENTS LAKE COUNTY C-91-401-06



IMPROVEMENT LIMITS: NORTH POINT MARINA

TRAFFIC DATA

POSTED SPEED LIMIT= 5 MPH

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

> PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

RTE. SECTION \* 2006-027 I LAKE \* PARK ROADS IDNR File No. 2-03-025B D91-401-06

LOCATION OF SECTION INDICATED THUS: -

PLAN PREPARATION ENGINEER: (847)705-4240

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					1111110		•••	0001		
_	RTE.	SECTION	COUNTY			TO1 SHE	TAL ETS	SHEET NO.		
	*	2006-027	I	L	AKE		31	2		
	FED. RO	AD DIST. NO. 1	ILL	INOIS	FED.	AID	PRO	DJECT		

\* PARK ROADS IDNR File No. 2-03-025 B

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-			
HEET NO.	DESCRIPTION	STANDARD NO.	DESCRIPTION
1.	COVER SHEET	000001 <b>-04</b>	STANDARD SYMBOLS
2.	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	280001 <b>- 03</b>	TEMPORARY EROSIO
3.	SUMMARY OF QUANTITIES	424001- <b>04</b>	CURB RAMPS FOR S
4.	TYPICAL SECTIONS	780001 <b>- 01</b>	TYPICAL PAVEMENT
5.	LOCATIONS OF PARKING LOTS	886001	DETECTOR LOOP IN
6-10.	EXISTING UTILITY & PARKING LOT PLANS	886006	TYPICAL LAYOUT F
11-15.	PROPOSED PARKING LOT PLANS	701501 - 03 702001 - 06	
16-19.	EROSION CONTROL PLAN		
20-24.	PROPOSED PAVEMENT MARKING		
25.	PROPOSED LOOP DETECTOR DETAIL		
26.	PARKING LOT PAVEMENT MARKING AND PLASTIC CAR BUMPER DETAIL		
27.	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT		

STANDARD NO.	DESCRIPTION
000001 <b>-04</b>	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001- <b>03</b>	TEMPORARY EROSION CONTROL SYSTEMS
424001- <b>04</b>	CURB RAMPS FOR SIDEWALKS
780001 <b>- 01</b>	TYPICAL PAVEMENT MARKINGS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTOR LOOPS
701501-03	

1.	BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" A	٠T
	800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND	
	GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED)	

CONTACT AREA TRAFFIC FIELD ENGINEER, MS. DEBBIE HANLON AT (847) 438-2300, TWO WEEKS PRIOR TO INSTALLATION OF FINAL PAVEMENT MARKINGS.

GENERAL NOTES

- SPECIAL CONSTRUCTION MEASURES SHOULD BE EMPLOYED DURING EXCAVATION AND PLACEMENT OF SUBGRADE AND BASE COURSES IN AREAS WHICH CONTAIN EXISTING WATER MAINS.
- THE DEVELOPMENT AND COMPLETION OF THE IMPROVEMENT NEEDS TO INCLUDE AND BE IN COMPLIANCE WITH IDNR'S HEALTH AND SAFETY PLAN.
- CONTACT IDNR'S DISTRICT RESTORATION ECOLOGIST, DEB NELSON AT (815) 675-2386 X-321, IN AT LEAST THE FOLLOWING CIRCUMSTANCES RELATED TO SEEDING OPERATIONS:

  - 1. IMMEDIATELY AFTER THE CONTRACTOR PROVIDES 48-HOUR ADVANCE NOTIFICATION OF THE HAND BROADCAST SEEDING OPERATIONS TO THE RESIDENT ENGINEER.
    2. IF THE CONTRACTOR REQUESTS SEED MATERIAL SUBSTITUTIONS. NO SEED SPECIES BE APPROVED BY THE RESIDENT ENGINEER THAT ARE NOT ALSO APPROVED BY IDNR'S RESTORATION ECOLOGIST. THIS IS NECESSARY TO AVOID PLANTING OF UNDESIRABLE SPECIES THAT MAY REQUIRE COSTLY ERADICATION AFTER THE PROJECT IS COLUMN. IS COLSED OUT.
  - 3. TO REVIEW REQUIRED CERTIFICATIONS, LAB ANALYSIS, AND SAMPLES OF TOPSOIL (SPECIAL), THE INDIVIDUAL COMPOST AND SAND PRODUCTS, AS WELL AS THE FINAL MIXTURES.
- CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH NORTH POINT MARINA
- CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS TO PERFORM THE WORK NEEDED TO COMPLETE THE IMPROVEMENT AS SHOWN ON THE PLAN

## 20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)

DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STATION NORTH POINT DR.	OFFSET (FT.)	SIDE	UNIT	TYPE
14+30.9	64.16	RT	8	RED MAPLE

BUTT JOINT AND HMA TAPER DETAILS

TEMPORARY INFORMATION SIGNING

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

28.

29.

30.

31.

INDEX OF SHEETS

# BITUMINOUS MIXTURES REQUIREMENTS CHART

ITEM	AC TYPE	VOID	RAP %
HOT-MIX ASPHALT SURFACE COURSE, SUPERPAVE, MIX "D", N50	PG 64-22	4% @ 50 GYR	15
HOT-MIX ASPHALT BINDER COURSE, SUPERPAVE, IL-19.0, N50	PG 58-22	4% @ 50 GYR	25

\* THE UNIT WEIGHT USED FOR ALL HOT-MIX ASHPALT MIXTURES IS 112 LBS/SQ YD IN \*

X2010300	TREE	REMOVAL	(UNDER	6	UNITS	DIAMETER)

HARTH BATHT F	STATION	OFFSET (FT.)	SIDE	UNIT	TYPE
NORTH POINT D	23+88.4	62.80	LT	2	HACKBERRY
	24+02.7	69.21	LT	2	HACKBERRY

ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA INDEX OF SHEETS. STATE STANDARDS, GENERAL NOTES AND SCHEDULE OF QUANTITIES DRAWN BY: COT CHECKED BY

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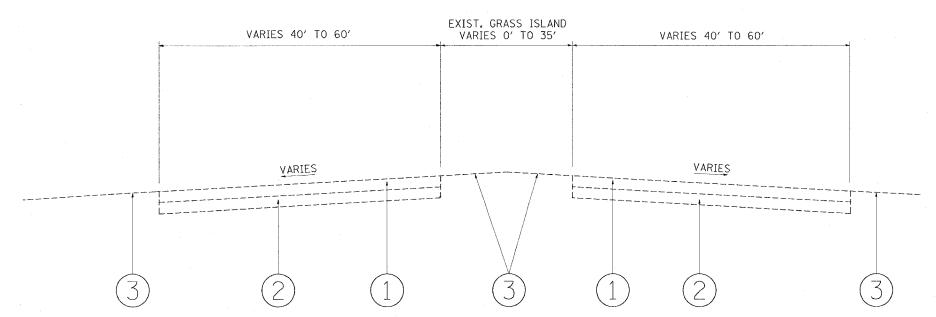
CONTRACT NO. 60B73

					and the control of th										F.A RTE. * FED. ROAD	SECTION 2006-027 I DIST. NO. 1 ROADS		31
	SUMMARY OF QUANTITIES					CONSTRUCT	ION TYPE	CODE		SUMMARY OF Q	UANTITIES				CC	NSTRUCTION	TYPE CODE	
CODE NO	ITEM	UNIT	URBAN 100 % STATE	Y025 PARKING					CODE NO	ITEM	ı	UNIT	URBAN 100 % STATE	Y025 PARKING		٠		
0100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	8	8					X0321566	MULCH, SPECIAL		SQ YD	1092	1092				
200100	EARTH EXCAVATION	CU YD	394	394					X0323359	WASHING AND CLEANING		L SUM	1	1				
201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	117	117					X2010300	TREE REMOVAL (UNDER 6 U		TINU	4	4				
001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1050	1050	•				X2110104	TOPSOIL FURNISH AND PLAC (SPECIAL)	Ε, 4"	SQ YD	1092	1092				
000400	NITROGEN FERTILIZER NUTRIENT	POUND	21	21					XX006338	EROSION CONTROL BLANKET	(SPECIAL)	SQ YD	1092	1092				
000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	21	21					Z0001050	AGGREGATE SUBGRADE 12"		SQ YD	1050	1050				
000600	POTASSIUM FERTILIZER NUTRIENT	POUND	21	21					A									
002014	SEEDING, CLASS 4A (MODIFIED)	ACRE	0.3	0.3														
200200	SUPPLEMENTAL WATERING	UNIT	11	11														
000400	PERIMETER EROSION BARRIER	FOOT	13800	13800														-
500215	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	TON	17	17														
600300	AGGREGATE (PRIME COAT)	TON	84	84											and the state of t			
600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	20	20														
600895	CONSTRUCTING TEST STRIP	EACH	1	1														
500982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	600	600														
603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	2952	2952										Action to control to the control to		-		
603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	2952	2952										or a constitution of a constit				
101300	PROTECTIVE COAT	SQ YD	757	757														
2400200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SQ FT	6815	6815					Actual Control of Cont									The state of the s
000600	SIDEWALK REMOVAL	SQ FT	6815	6815														
000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	-													
100100	MOBILIZATION	L SUM	1	1												and the state of t		
005100	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1000	1000		:												
8005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	24260	24260								rus and a second	-					
600600	DETECTOR LOOP REPLACEMENT	FOOT	385	385														
301339	REMOVE EXISTING PARKING BLOCKS	EACH	622	622														
321083	PLASTIC CAR BUMPER	EACH	1300	1300														

PLOT DATE: 11/3/2006

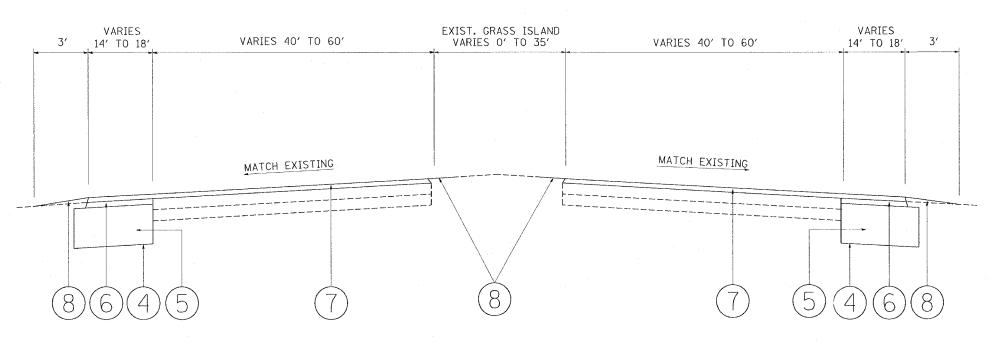
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COUNTY \* 2006-027 I LAKE FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



## LEGEND

- EXISTING HOT-MIX ASPHALT PAVEMENT, 21/2"
- EXISTING AGGREGATE SUBGRADE
- EXISTING GROUND COVER
- PROPOSED GEOTECHNICAL FABRIC
- PROPOSED AGGREGATE SUBGRADE, 12"
- PROPOSED HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50,  $1\frac{1}{2}$
- PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50,  $1\frac{1}{2}$ "
- PROPOSED TOPSOIL FURNISH AND PLACE, 4" (SPECIAL), SEEDING, CLASS 4A (MODIFIED), EROSION CONTROL BLANKET (SPECIAL) AND MULCH (SPECIAL)

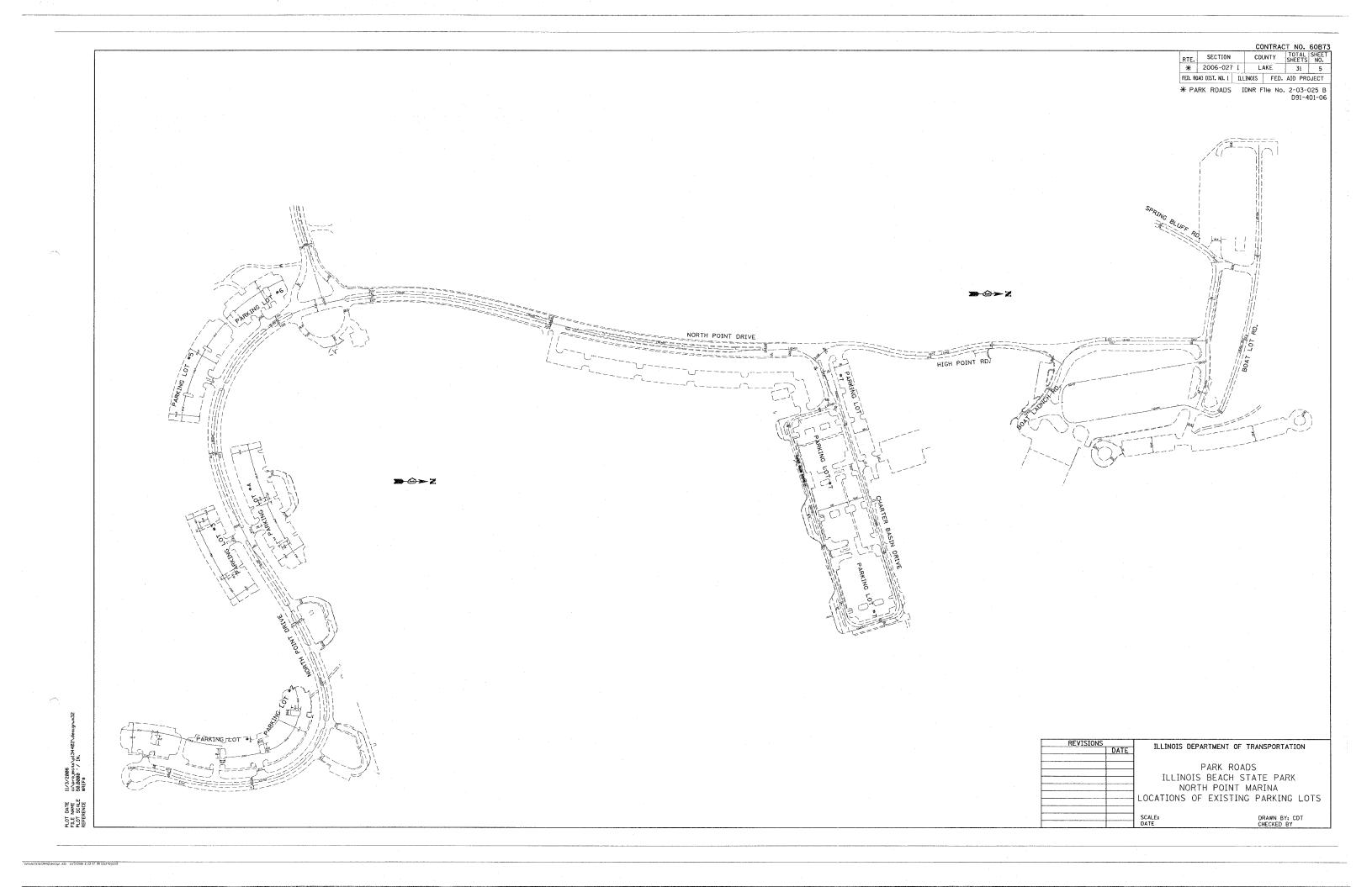


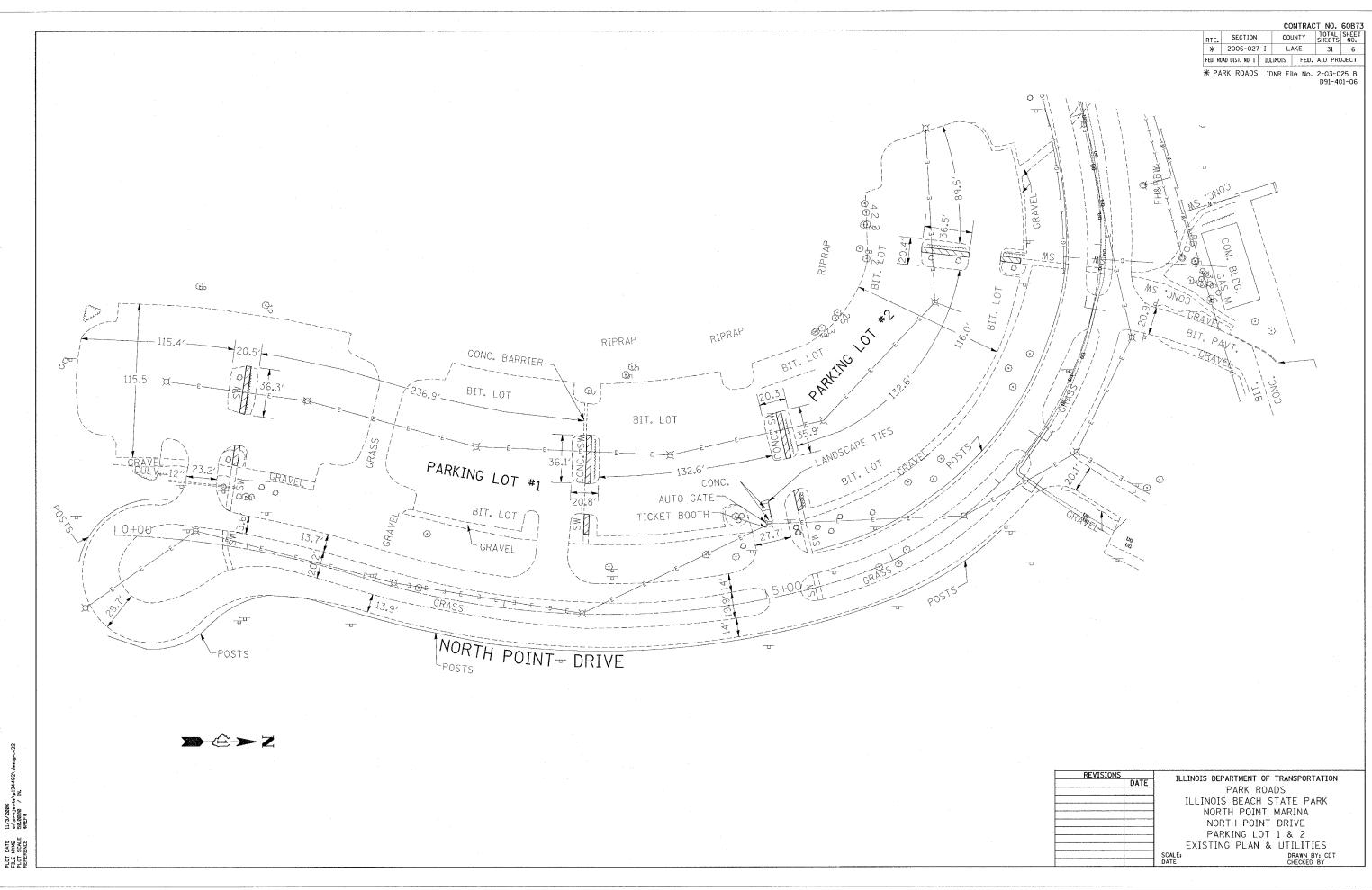
EXISTING TYPICAL SECTION

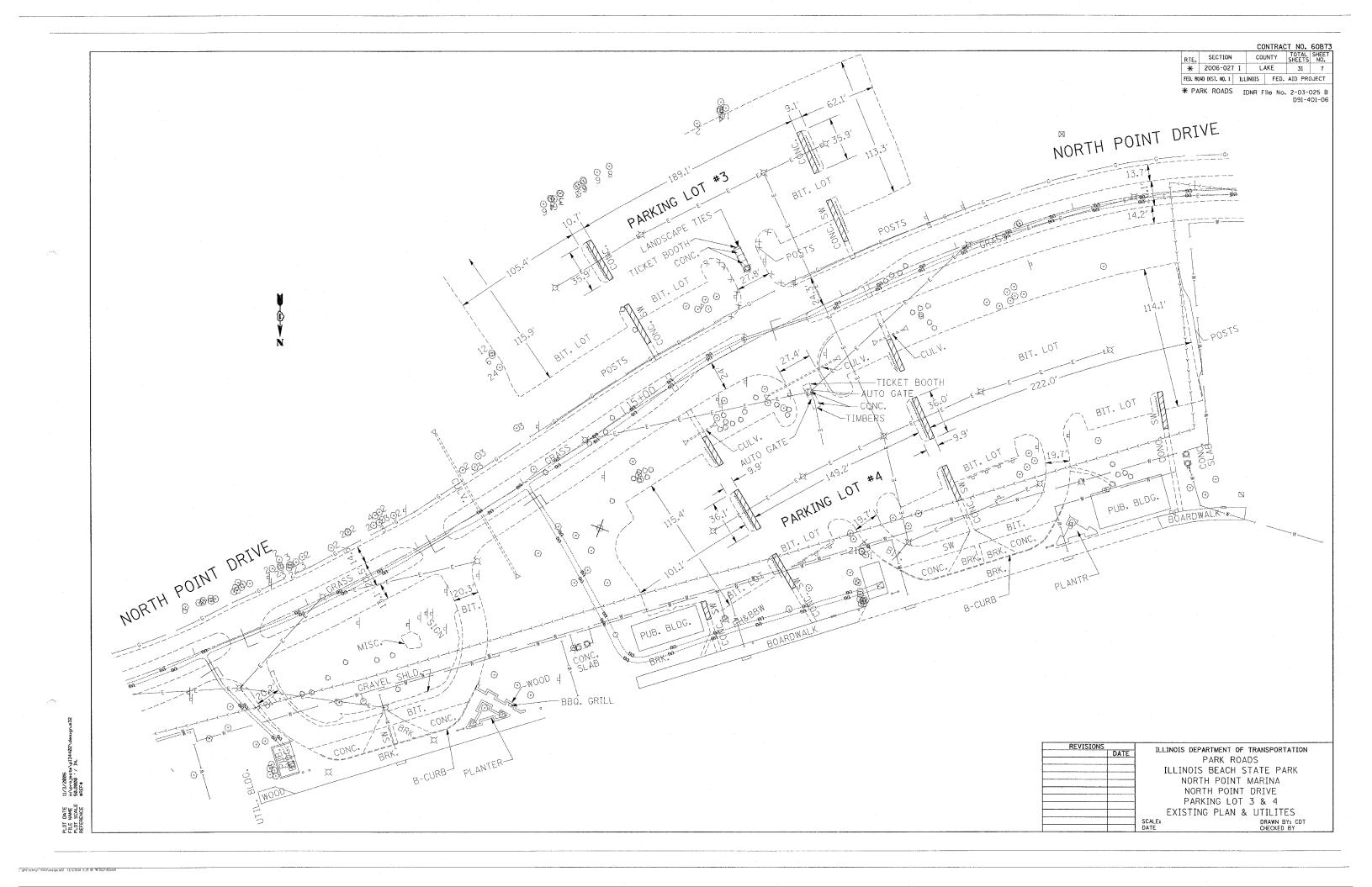
PARKING LOT RESURFACING WITH CORNER WIDENING

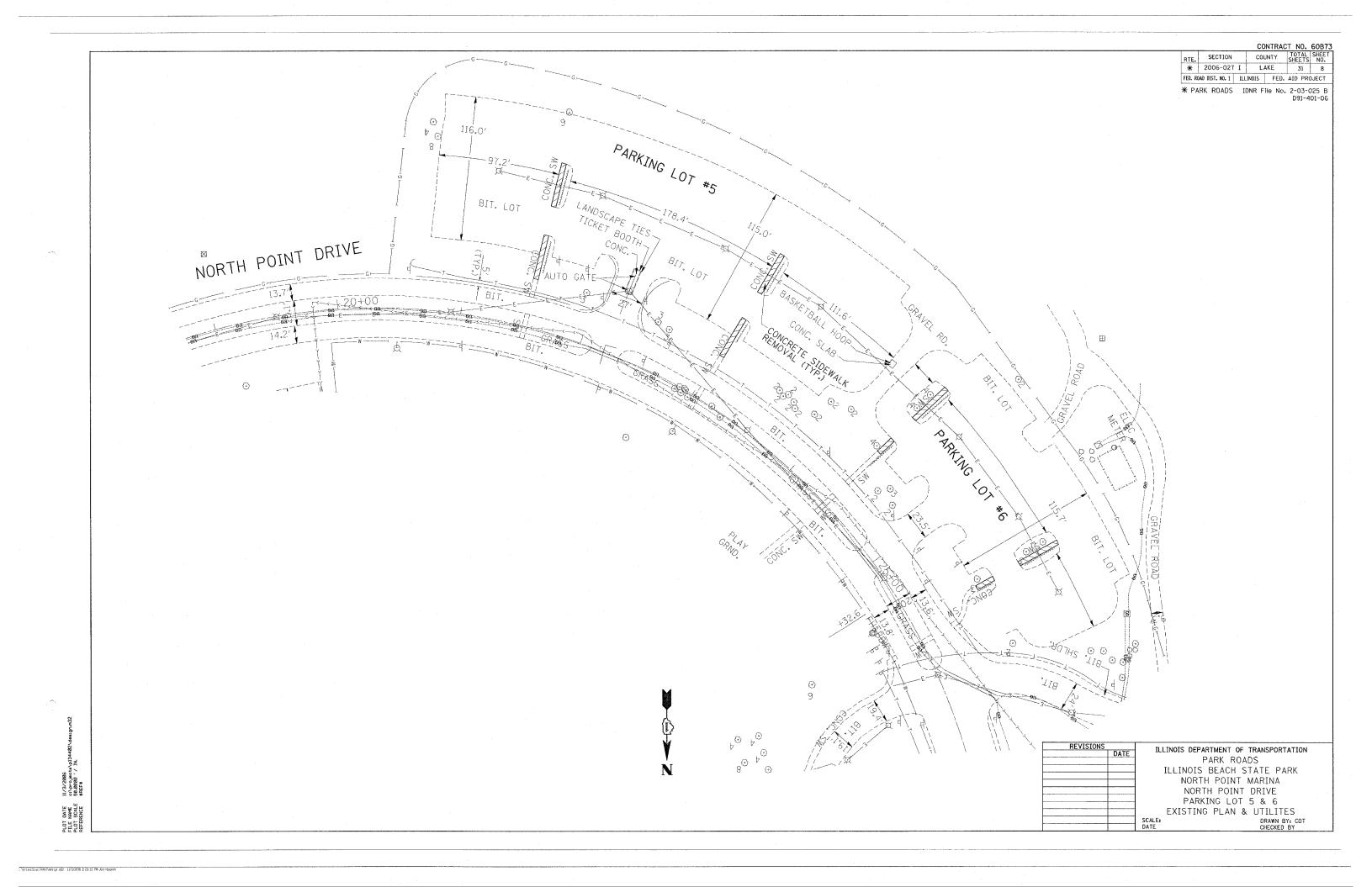
PROPOSED TYPICAL SECTION PARKING LOT RESURFACING WITH CORNER WIDENING

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION						
NAME	DATE	ICCINOIS DE ANT	MERT OF TRANSPORTATION					
		P#	ARK ROADS					
			BEACH STATE PARK					
		NORTH POINT MARINA						
		TYPICAL SECTION						
		SCALE: VERT.	DRAWN BY: CDT					
		DATE	CHECKED BY					





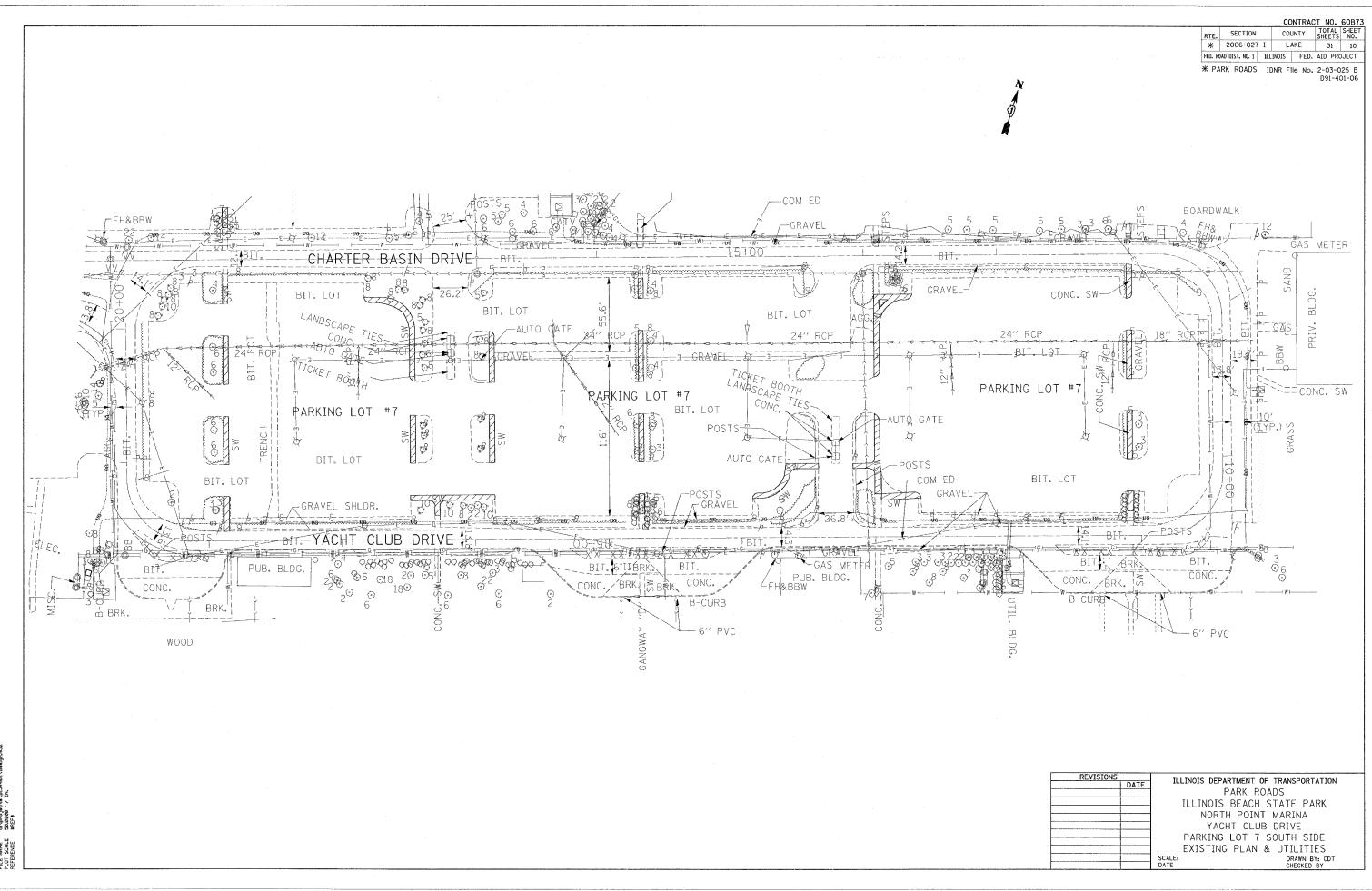




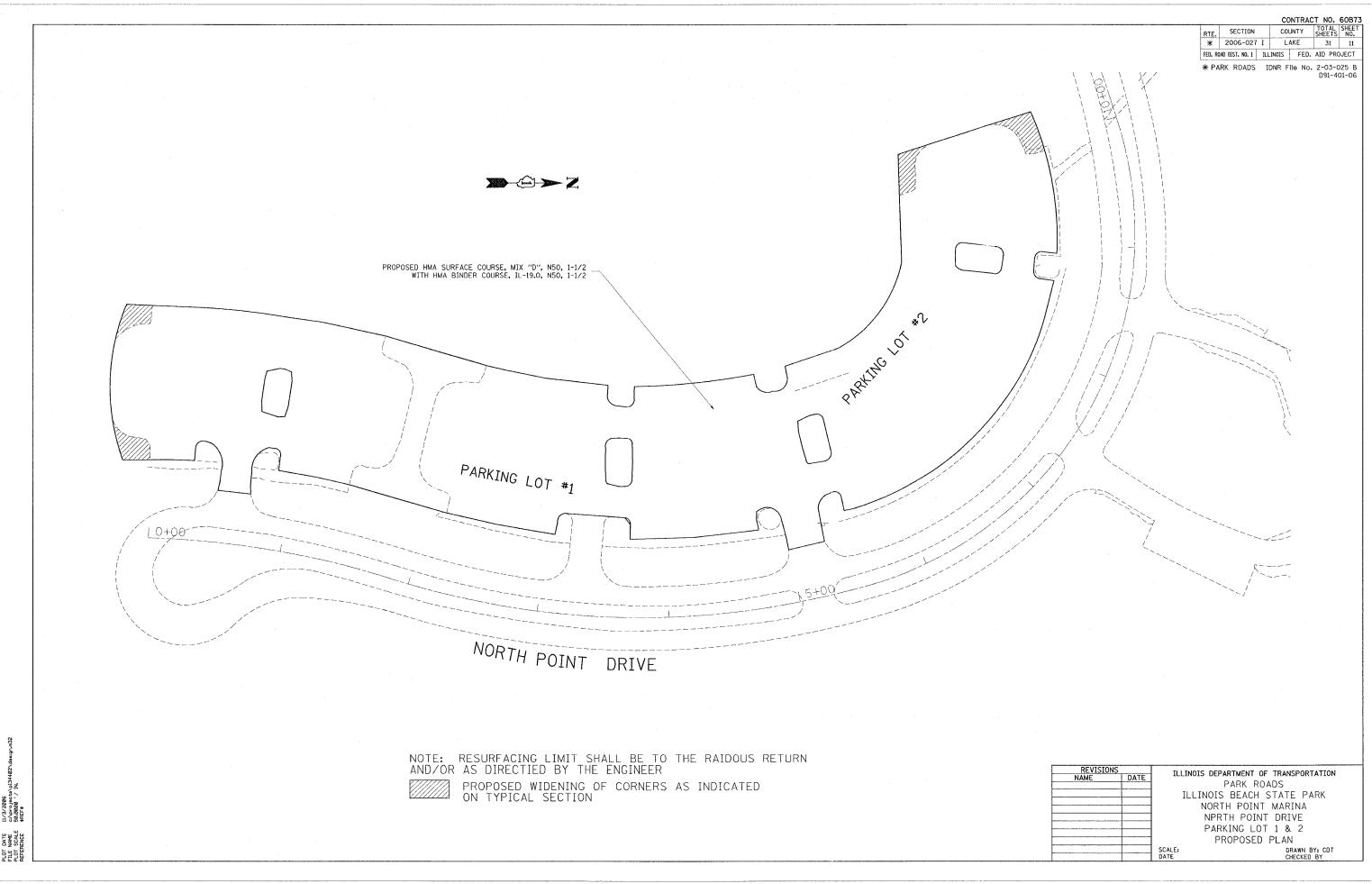
COUNTY TOTAL SHEET NO. \* 2006-027 I LAKE 31 9 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT \* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 ACCESS COVERS GRAVEL 0000 BIT. LOT PARKING LOT CHARTER BASIN DRIVE BIT. LOT LANDSCAPE CONC BIT. LOT FICKET BOOK RARKING LOT #7 BIT. LOT PARKING LOT #7 POSTS AUTO GATE BIT. LOT BIT. LOT PLAYGROUND BIT. B-CURB BRK. 6" PVC WOOD ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA CHARTER BASIN DRIVE
PARKING LOT 7 NORTH SIDE
EXISTING PLAN & UTILITIES
DRAWN 81; CDT
CHECKED BY

PLOT DATE FILE NAME PLOT SCALE REFERENCE

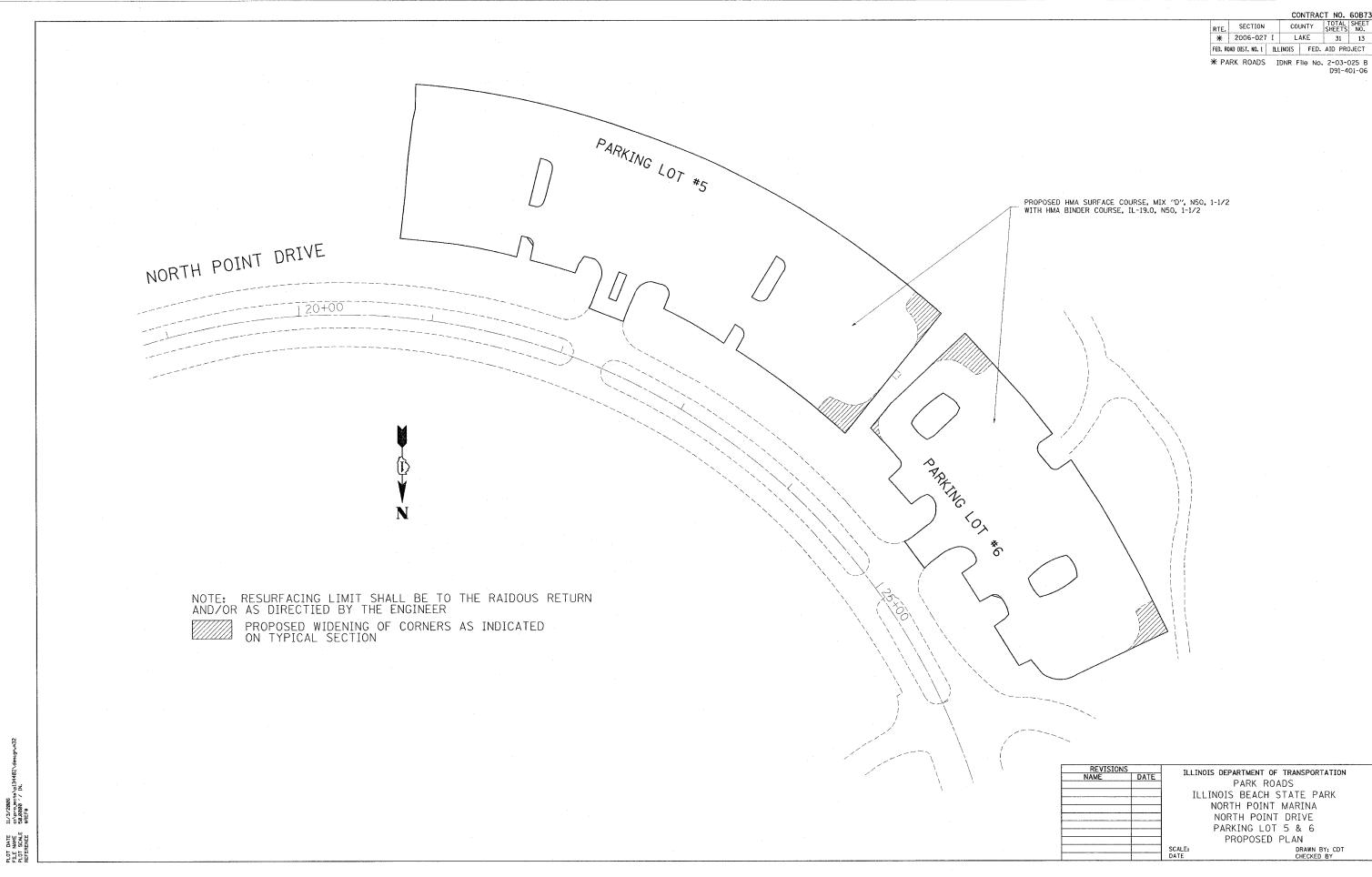
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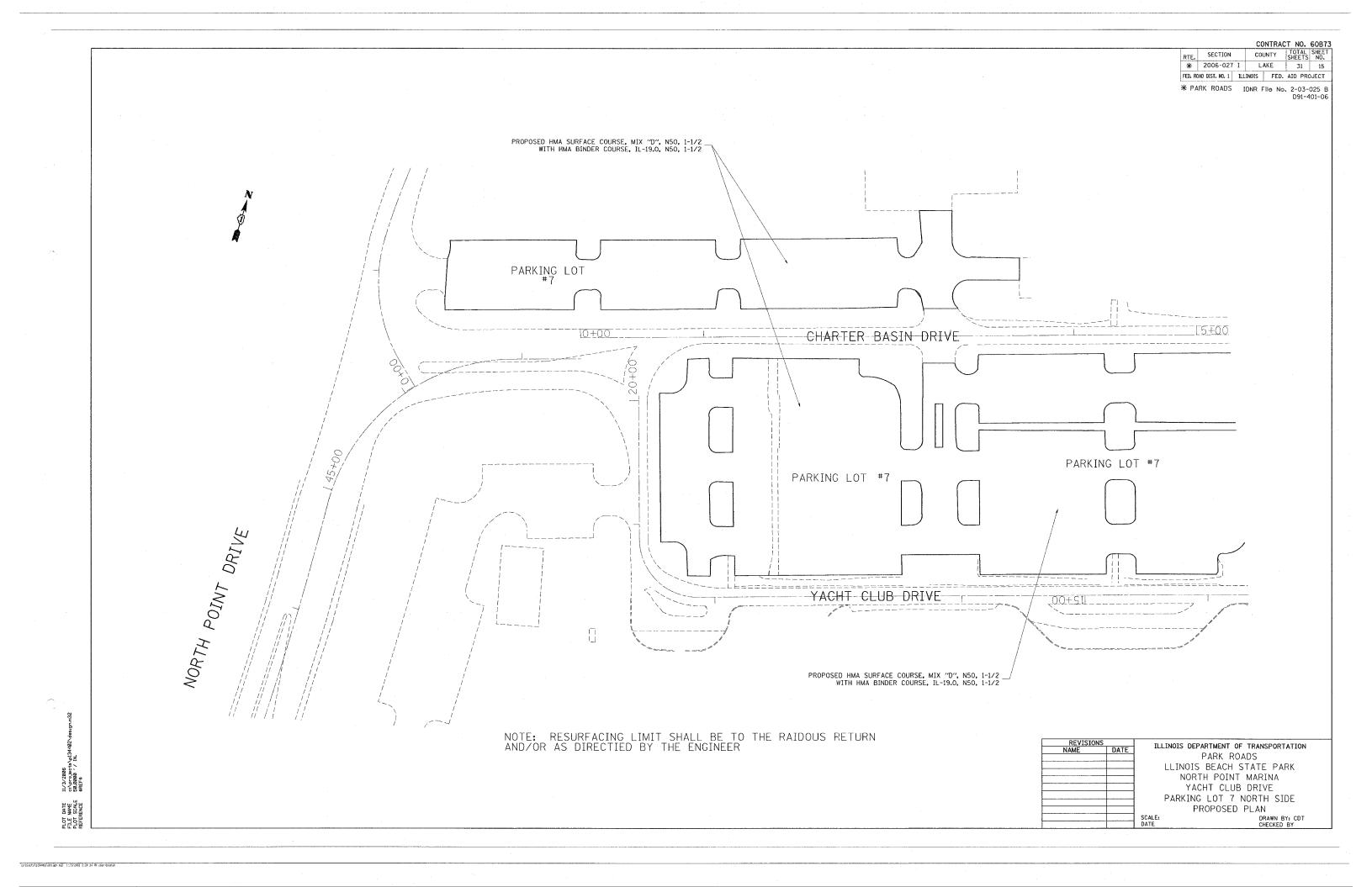


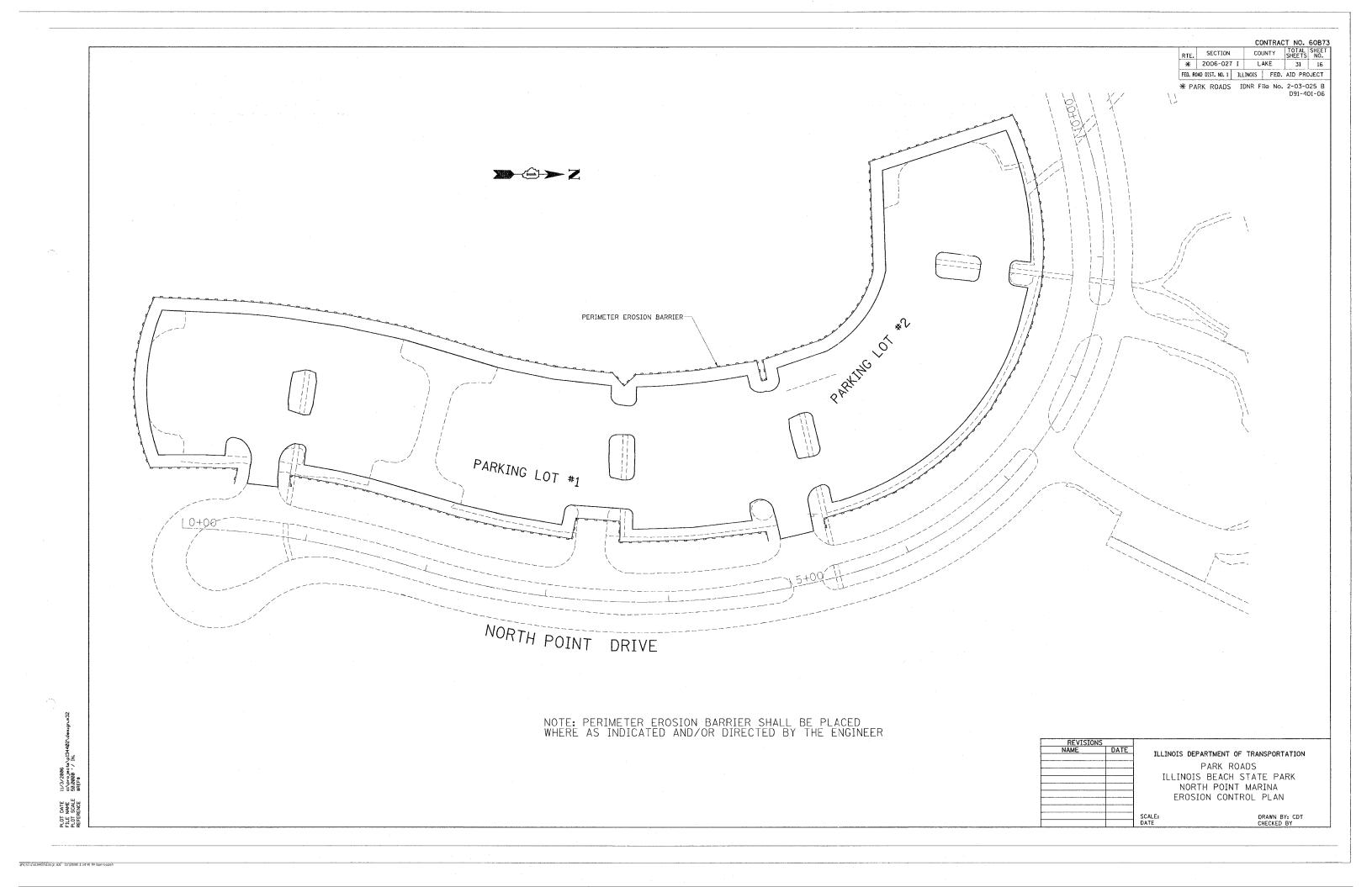
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT \* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 PROPOSED HMA SURFACE COURSE, MIX "D", N50, 1-1/2 WITH HMA BINDER COURSE, IL-19.0, N50, 1-1/2 NORTH POINT DRIVE 117444 PARKING LOT #3 NOTE: RESURFACING LIMIT SHALL BE TO THE RAIDOUS RETURN AND/OR AS DIRECTIED BY THE ENGINEER PROPOSED WIDENING OF CORNERS AS INDICATED ON TYPICAL SECTION PROPOSED HMA SURFACE COURSE, MIX "D", N50, 1-1/2 WITH HMA BINDER COURSE, IL-19.0, N50, 1-1/2 ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS
ILLINOIS BEACH STATE PARK
NORTH POINT MARINA
NORTH POINT DRIVE PARKING LOT 3 & 4 PROPOSED PLAN



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CONTRACT NO. 60B73 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT \* PARK ROADS | IDNR File No. 2-03-025 B | D91-401-06 PROPOSED HMA SURFACE COURSE, MIX "D", N50, 1-1/2 WITH HMA BINDER COURSE, IL-19.0, N50, 1-1/2 PROPOSED HMA SURFACE COURSE, MIX "D", N50, 1-1/2 WITH HMA BINDER COURSE, IL-19.0, N50, 1-1/2 CHARTER BASIN DRIVE PARKING LOT #7 PARKING LOT #7 PARKING LOT #7 YACHT CLUB DRIVE NOTE: RESURFACING LIMIT SHALL BE TO THE RAIDOUS RETURN AND/OR AS DIRECTIED BY THE ENGINEER ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA YACHT CLUB DRIVE PARKING LOT 7 SOUTH SIDE PROPOSED PLAN





CONTRACT NO. 60B73

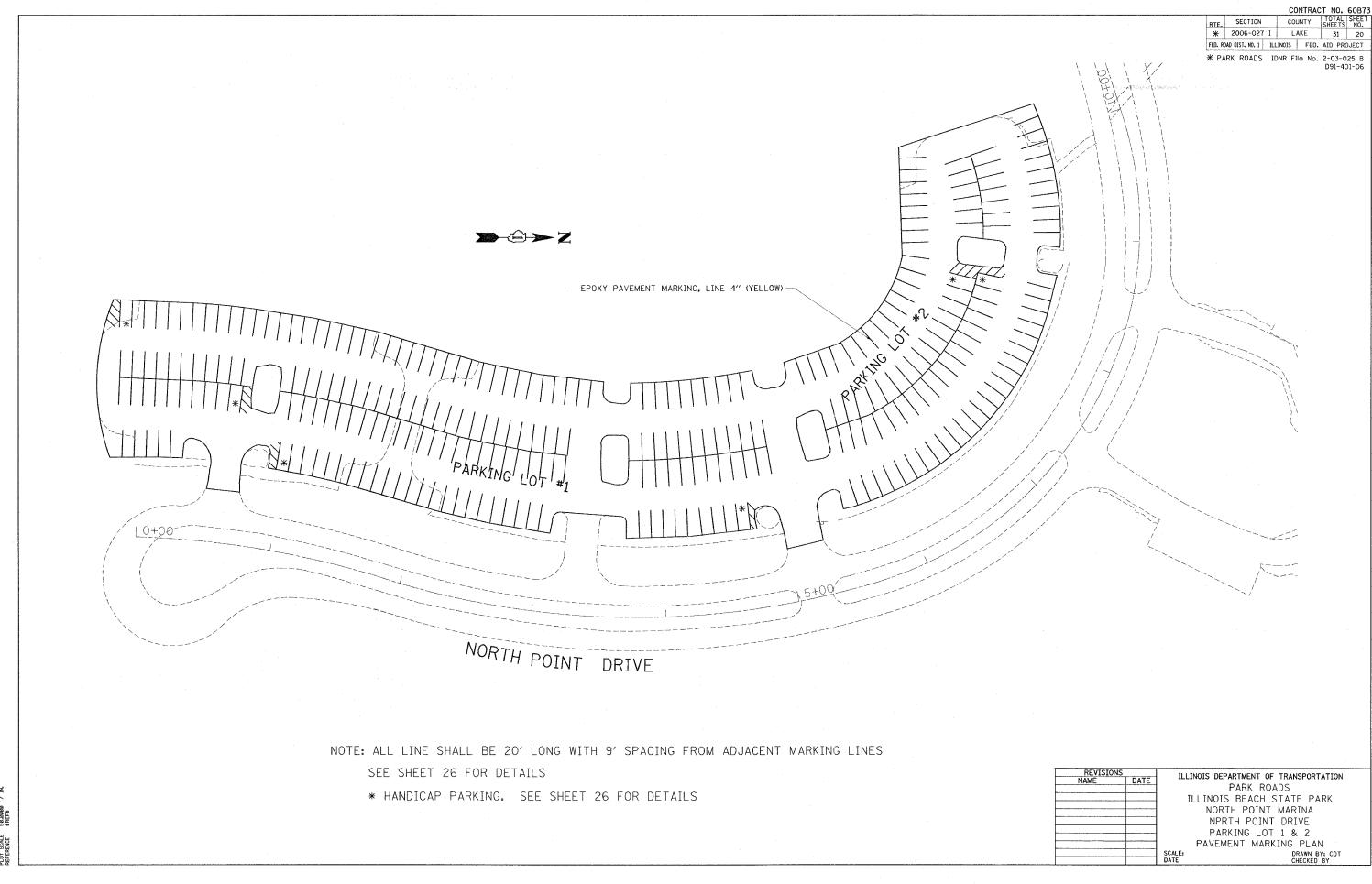
COUNTY TOTAL SHEET SHEETS NO. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT \* PARK ROADS IDNR FIle No. 2-03-025 B D91-401-06 NORTH POINT DRIVE PERIMETER EROSION BARRIER PARKING LOT #3 PERIMETER EROSION BARRIER ILLINOIS DEPARTMENT OF TRANSPORTATION NOTE: PERIMETER EROSION BARRIER SHALL BE PLACED WHERE AS INDICATED AND/OR DIRECTED BY THE ENGINEER PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA EROSION CONTROL PLAN DRAWN BY: CDT CHECKED BY

CONTRACT NO. 60B73 \* PARK ROADS | IDNR File No. 2-03-025 B | D91-401-06 PARKING LOT \*5 PERIMETER EROSION BARRIER NORTH POINT DRIVE NOTE: PERIMETER EROSION BARRIER SHALL BE PLACED WHERE AS INDICATED AND/OR DIRECTED BY THE ENGINEER ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA EROSION CONTROL PLAN DATE NAME SCALE RENCE DRAWN BY: CDT CHECKED BY

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CONTRACT NO. 60B73 \* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 PERIMETER EROSION BARRIER PERIMETER EROSION BARRIER PARKING LOT CHARTER BASIN DRIVE PARKING LOT #7 PARKING LOT #7 MORTH POINT DRIVE YACHT CLUB DRIVE NOTE: PERIMETER EROSION BARRIER SHALL BE PLACED WHERE INDICATED AND/OR AS DIRECTED BY THE ENGINEER ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS
ILLINOIS BEACH STATE PARK
NORTH POINT MARINA
EROSION CONTROL PLAN PERIMETER BARRIER IS NOT REQUIRED FOR SOUTH SIDE PARKING LOT 7 DRAWN BY: CDT CHECKED BY

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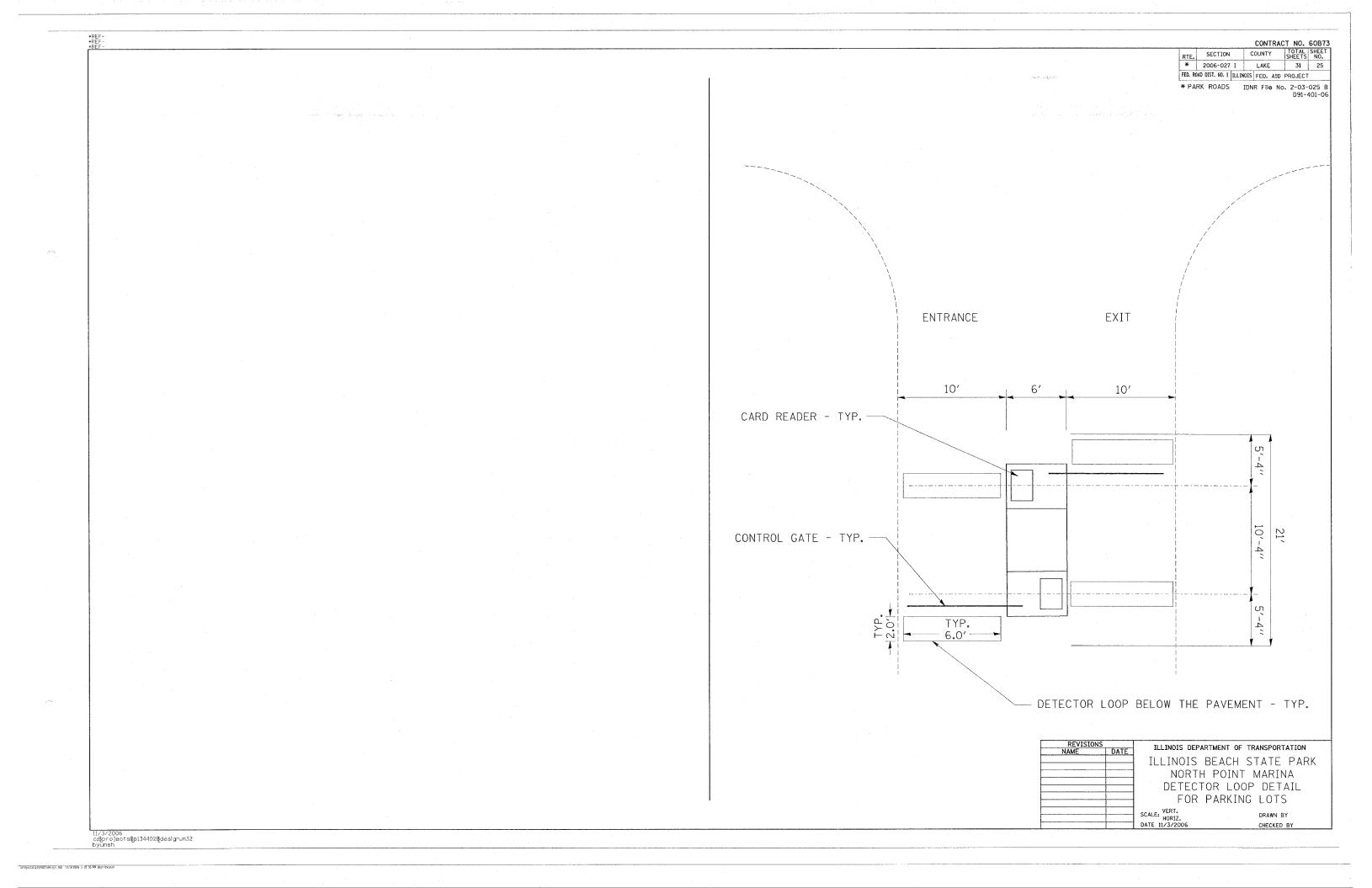
RTE. SECTION COUNTY

\* 2006-027 I LAKE FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT \* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 EPOXY PAVEMENT MARKING, LINE 4" (YELLOW)-NORTH POINT DRIVE EPOXY PAVEMENT MARKING, LINE 4" (YELLOW) ILLINOIS DEPARTMENT OF TRANSPORTATION NOTE: ALL LINE SHALL BE 20' LONG WITH 9' SPACING FROM ADJACENT MARKING LINES PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA SEE SHEET 26 FOR DETAILS NORTH POINT DRIVE
PARKING LOT 3 & 4
PAVEMENT MARKING
DRAWN BY: COT
CHECKED BY \* HANDICAP PARKING. SEE SHEET 26 FOR DETAILS

\* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 EPOXY PAVEMENT MARKING, LINE 4" (YELLOW) NORTH POINT DRIVE NOTE: ALL LINE SHALL BE 20' LONG WITH 9' SPACING FROM ADJACENT MARKING LINES SEE SHEET 26 FOR DETAILS ILLINOIS DEPARTMENT OF TRANSPORTATION PARK ROADS ILLINOIS BEACH STATE PARK NORTH POINT MARINA NORTH POINT DRIVE PARKING LOT 5 & 6
PAVEMENT MARKING PLAN
DRAWN BY: CDT
CHECKED BY PLOT DATE FILE NAME PLOT SCALE REFERENCE

RTE. SECTION \* 2006-027 I LAKE 31 23 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT \* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 - EPOXY PAVEMENT MARKING, LINE 4" (YELLOW) CHARTER BASIN DRIVE PARKING LOT #7 YACHT CLUB DRIVE NOTE: ALL LINE SHALL BE 20' LONG WITH 9' SPACING FROM ADJACENT MARKING LINES SEE SHEET 26 FOR DETAILS ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS DEPARTMENT OF TRANSPORTATION
PARK ROADS
ILLINOIS BEACH STATE PARK
NORTH POINT MARINA
YACHT CLUB DRIVE
PARKING LOT 7 SOUTH SIDE
PAVEMENT MARKING PLAN
BRAWN RY COL DATE NAME SCALE RENCE

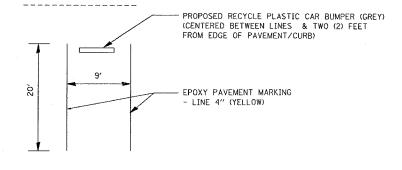
\* PARK ROADS IDNR File No. 2-03-025 B D91-401-06 EPOXY PAVEMENT MARKING, LINE 4" (YELLOW) CHARTER BASIN DRIVE PARKING LOT #7 NORTH POINT DRIVE YACHT CLUB DRIVE NOTE: ALL LINE SHALL BE 20' LONG WITH 9' SPACING FROM ADJACENT MARKING LINES SEE SHEET 26 FOR DETAILS ILLINOIS DEPARTMENT OF TRANSPORTATION
PARK ROADS
LLINOIS BEACH STATE PARK
NORTH POINT MARINA
CHARTER BASIN DRIVE
PARKING LOT 7 NORTH SIDE
PAVEMENT MARKING PLAN
CALE:
DRAWN BY: COT
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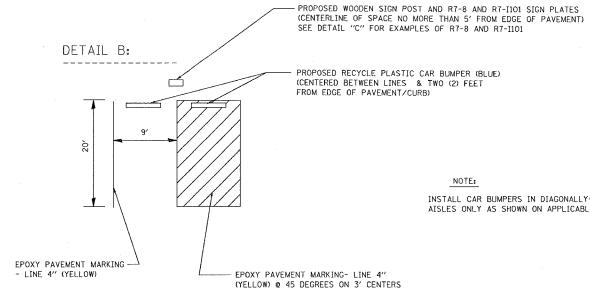


# 2006-027 I LAKE 31 26 FED. ROAD DIST. NO. 1 [LLINOIS FED. AID PROJECT

\* PARK ROADS

I.D.N.R. FILE # 2-03-025B





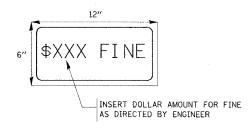
INSTALL CAR BUMPERS IN DIAGONALLY-STRIPED ACCESS AISLES ONLY AS SHOWN ON APPLICABLE PLAN SHEETS

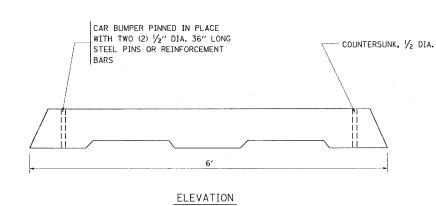
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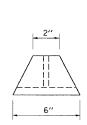
DETAIL A:

R7-I101

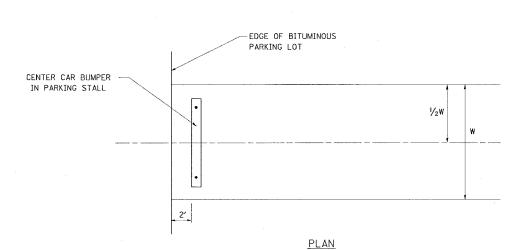








END VIEW



PLASTIC BUMPER BLOCKS

ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS BEACH STATE PARK PARKING LOT PAVEMENT MARKING AND PLASTIC CAR BUMPER SCALE: VERT. HORIZ. DATE 11/3/2006

DETAIL DRAWN BY DN CHECKED BY

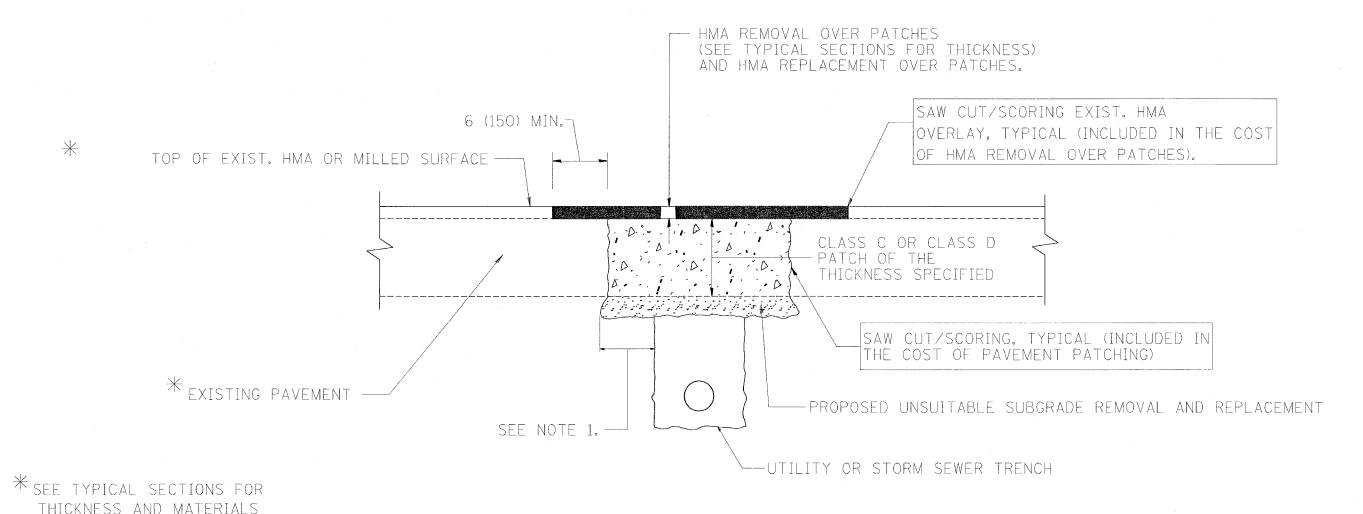
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CONTRACT NO. 6-87

F.A. SECTION COUNTY TOTAL SHEETS NO.

STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



## NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

### SEQUENCE OF CONSTRUCTION

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

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;	
DATE	
10/25/94	
01/14/95	
03/23/95	
04/24/95	
03/15/96	
03/21/97	
01/20/98	
04/27/98	sc
10/11/06	30
	DATE 10/25/94 01/14/95 03/23/95 04/24/95 03/15/96 03/21/97 01/20/98 04/27/98

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

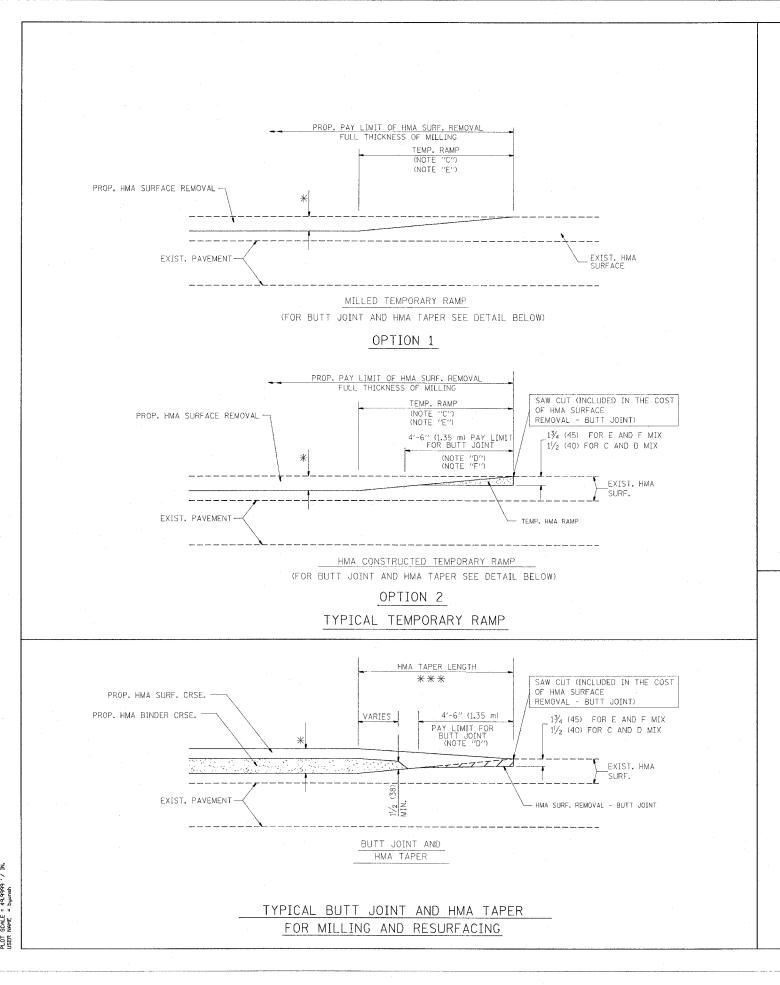
SCALE: VERT.

DRAWN BY CHECKED BY

BD400-04 (BD-22)

REVISION DATE: 10/11/06

PLOT DATE = 11/3/2006 FILE NAME = Wi\distatd\bd22.dgn PLOT SCALE = 50.000 '/ IN.



CONTRACT NO. 60873 COUNTY SECTION 3/ 28 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT 30'-0" (9.0 m) (NOTE "A") SAW CUT (INCLUDED IN THE COST OF HMA OR P.C.C. SURFACE REMOVAL EXIST. HMA OR PCC SURFACE 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D")  $1\frac{3}{4}$  (45) FOR E AND F MIX 11/2 (40) FOR C AND D MIX \* \* EXIST. PAVEMENT BUTT JOINT DETAIL TAPER LENGTH \* \* \* VARIES PROP. HMA SURF. CRSE. - $1\frac{3}{4}$  (45) FOR E AND F MIX  $1\frac{1}{2}$  (40) FOR C AND D MIX PROP. HMA BINDER CRSE. \* \* EXIST. PAVEMENT HMA TAPER DETAIL

## TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP, RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

 $\mbox{\em $\star$}\mbox{\em $\star$}$ 

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

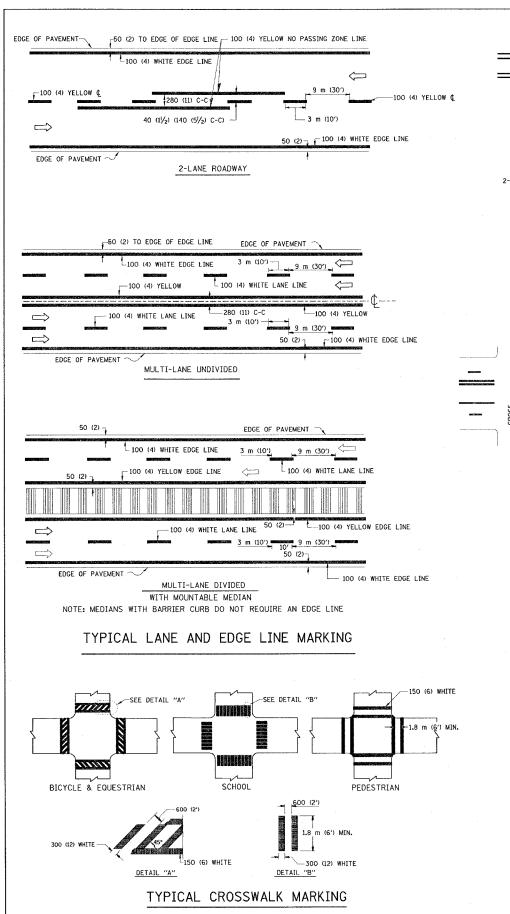
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A. ABBAS
M. GOMEZ
R. BORO 10/25/9 ILLINOIS DEPARTMENT OF TRANSPORTATION

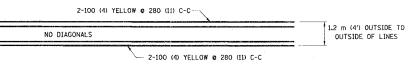
BUTT JOINT AND HMA TAPER DETAILS

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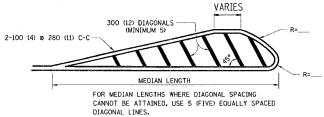
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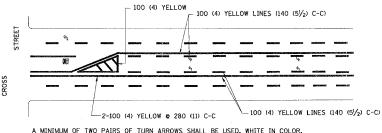


#### 1.2 m (4') WIDE MEDIANS ONLY

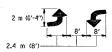


DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

#### MEDIANS OVER 1.2 m (4') WIDE

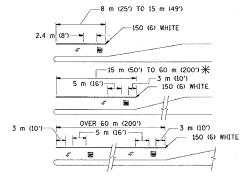


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING



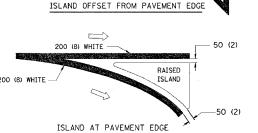
FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.  $\P$  AREA = 1.5 m<sup>2</sup> (15.6 SQ. FT.) **THIY** AREA = 1.9 m<sup>2</sup> (20.8 SQ. FT.)

\*\* TURN LANES IN EXCESS OF 120 m (400") IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

### TYPICAL TURN LANE MARKING

200 (8) WHITE -300 (12) WHITE DIAGONALS @ 3 m (10') OR LESS SPACING ISLAND OFFSET FROM PAVEMENT EDGE



## TYPICAL ISLAND MARKING

			·		
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS	
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE	
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 & 100 (4)	SOLID	YELLOW	280 (11) C-C	
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 & 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5½) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN	
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE	
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE	
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB	
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL	
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5½) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE	
	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL	
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.	
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE	
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS	SOLID	YELLOW: TWO WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE	
	0 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TYPICAL PAINTED MEDIAN MARKING.	
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))	
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m2 (3.6 SQ. FT.) EACH "X"=5.0 m2 (54.0 SQ. FT.)	
SHOULDER DIAGONALS	300 (12) <b>e</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))	

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in millimeters (inches)

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ALEX HOUSEH	10-09-96					
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T. RAMMACHER	01-06-00					
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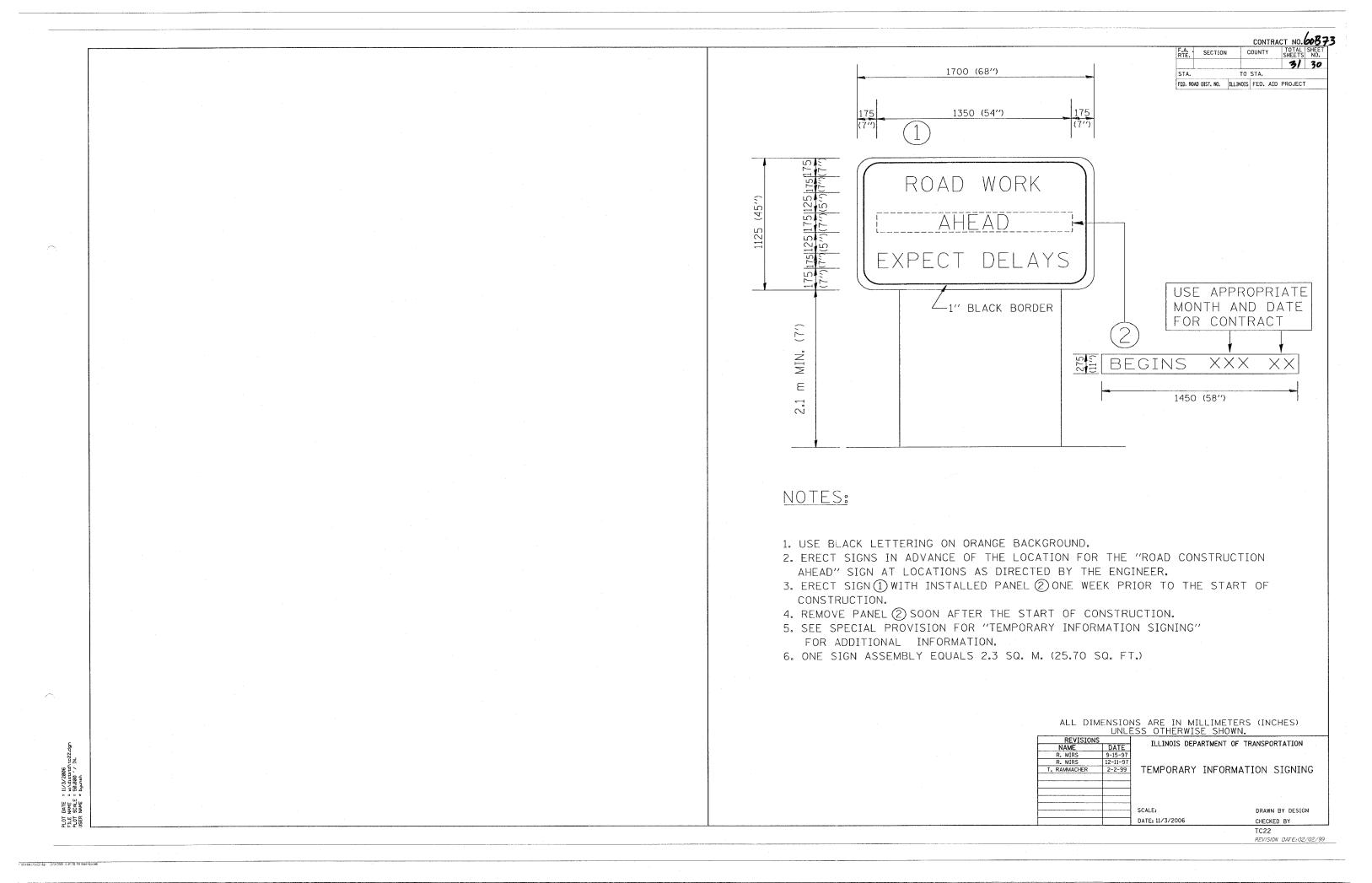
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# LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER H (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT DUCT-TRENCHED TO E/P \*\* (3.0 m)

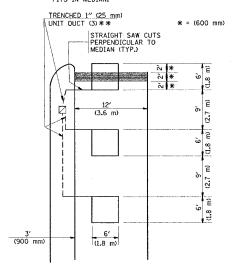
\* = (600 mm)

\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

#### LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



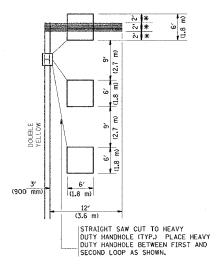
\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

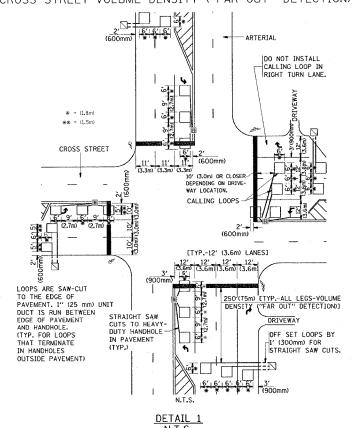
(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm)

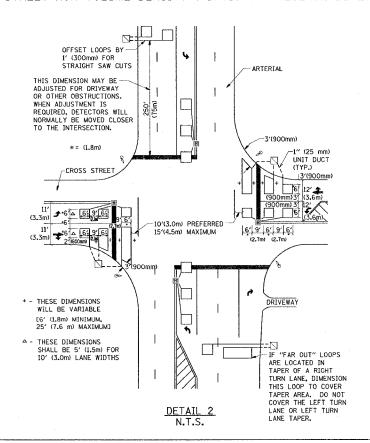


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



NOTES:

#### VEHICLES LOOP DETECTORS

\* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.

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- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS, EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES. AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS, "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.



REVISION DATE.

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