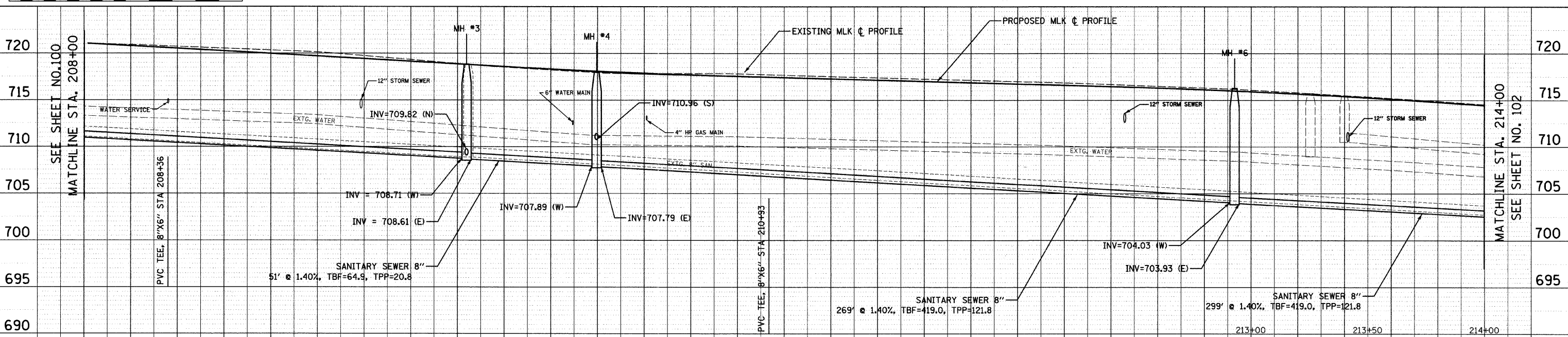
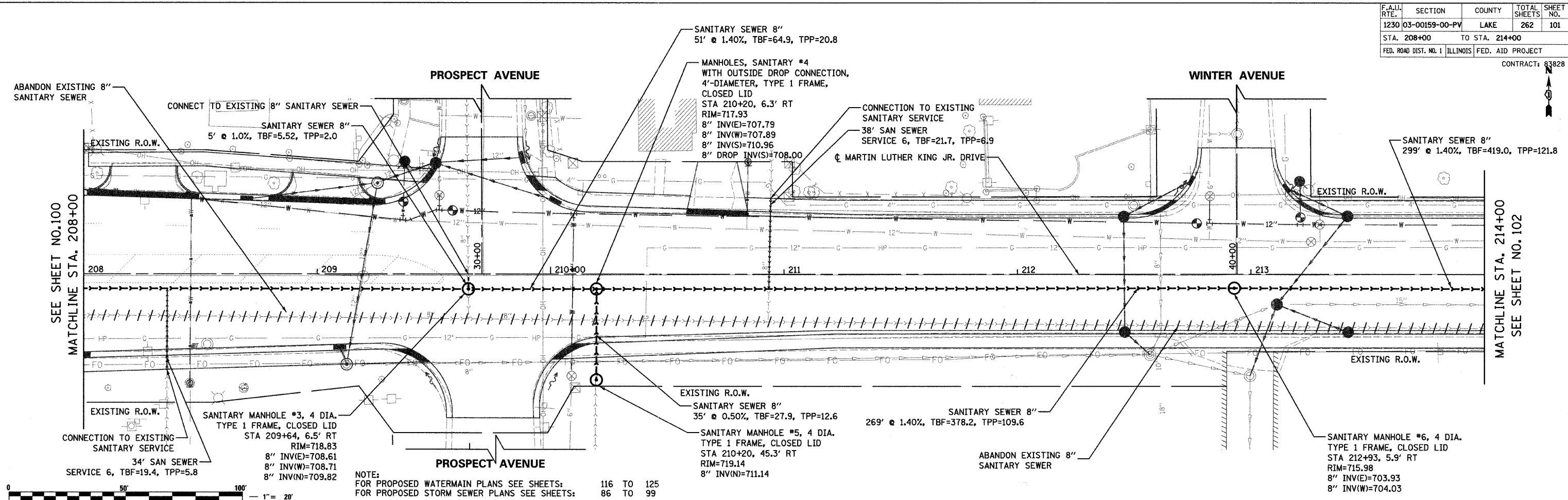


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	101
STA. 208+00		TO STA. 214+00		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT

CONTRACT: 83828

DATE	BY
PLAN	CHECKED
NO.	NO.

DATE	BY
PROFILE	CHECKED
NO.	NO.



DATE: 7/1/2008
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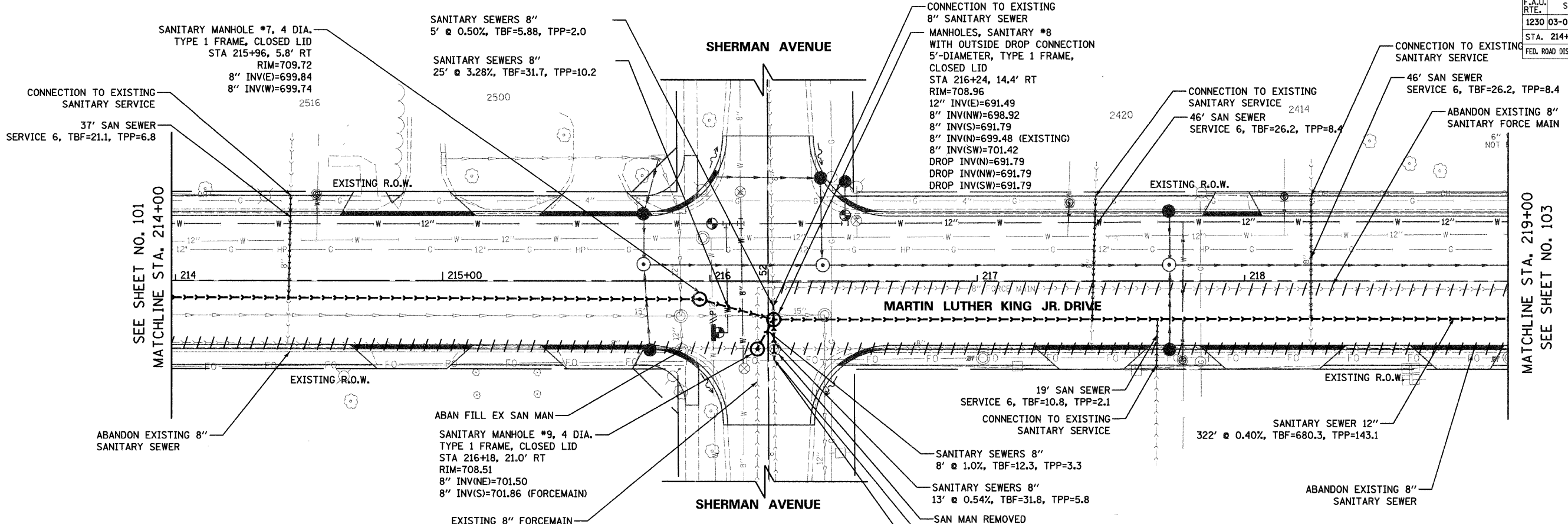
REVISIONS	
NAME	DATE

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 CONSULTING ENGINEERS
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 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

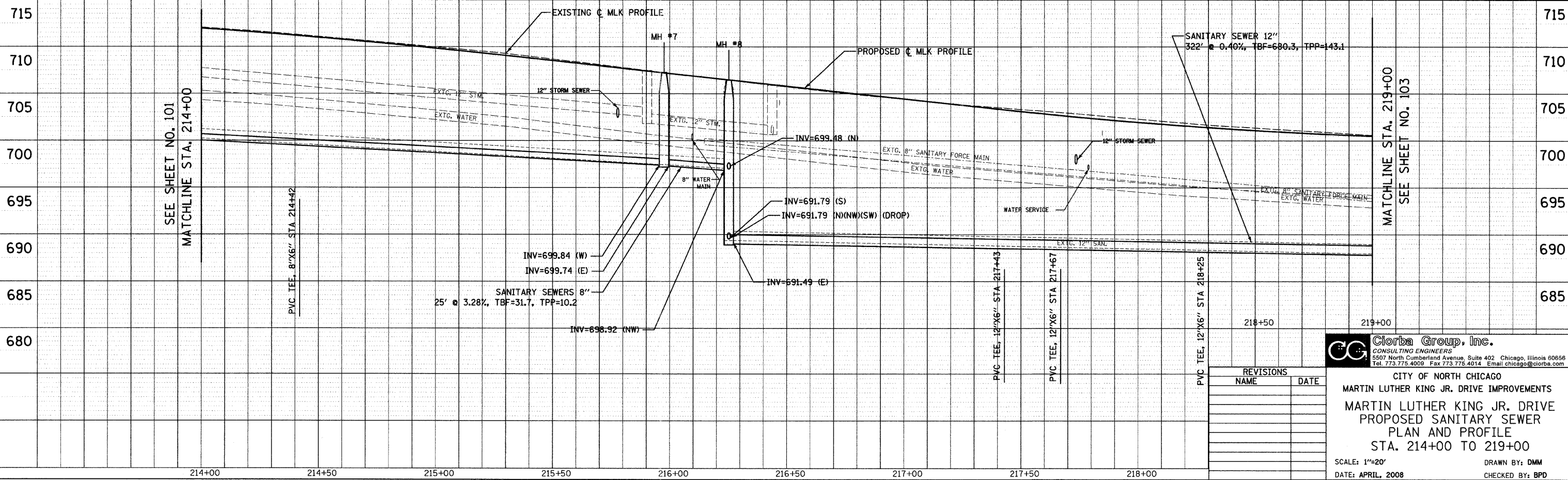
CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 PROPOSED SANITARY SEWER
 PLAN AND PROFILE
 STA. 208+00 TO 214+00

SCALE: 1"=20'
 DATE: APRIL, 2008

DRAWN BY: DMM
 CHECKED BY: BPD



NOTE:
 FOR PROPOSED WATERMAIN PLANS SEE SHEETS: 116 TO 125
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99



PLAN	NO.	DATE

PROFILE	NO.	DATE

DATE: 7/1/2008
 DRAWN BY: DMM
 FILENAME: N:\PROJ\05161\Design\Sanitary\PSA03.dgn

REVISIONS	
NAME	DATE

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 PROPOSED SANITARY SEWER
 PLAN AND PROFILE
 STA. 214+00 TO 219+00

SCALE: 1"=20'
 DATE: APRIL, 2008

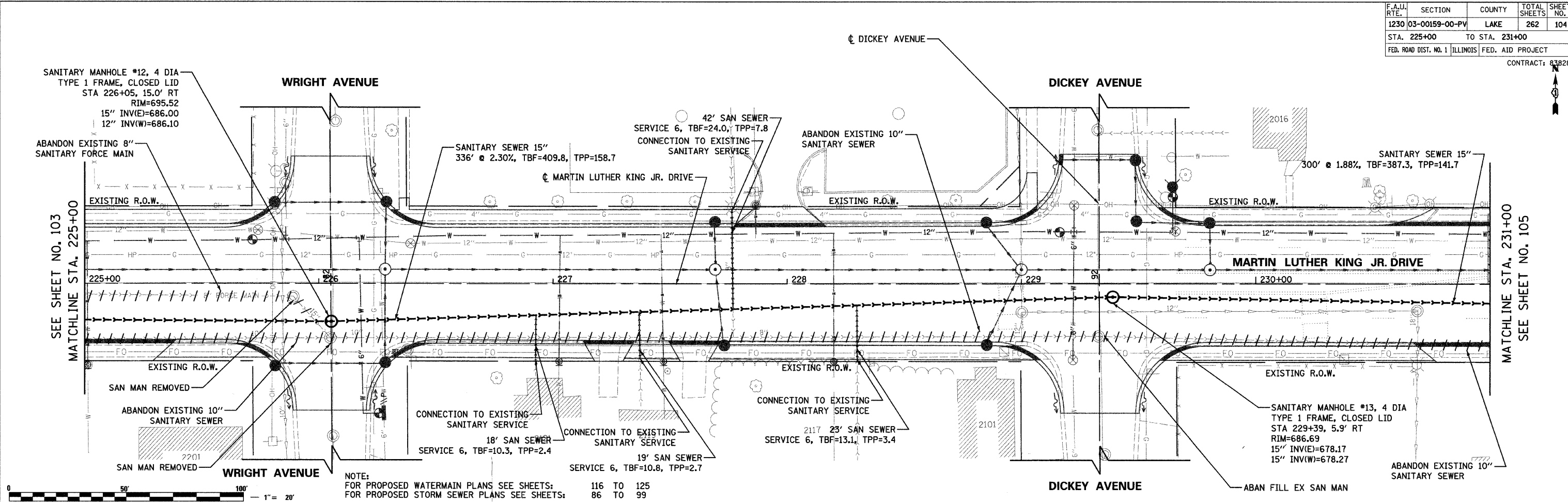
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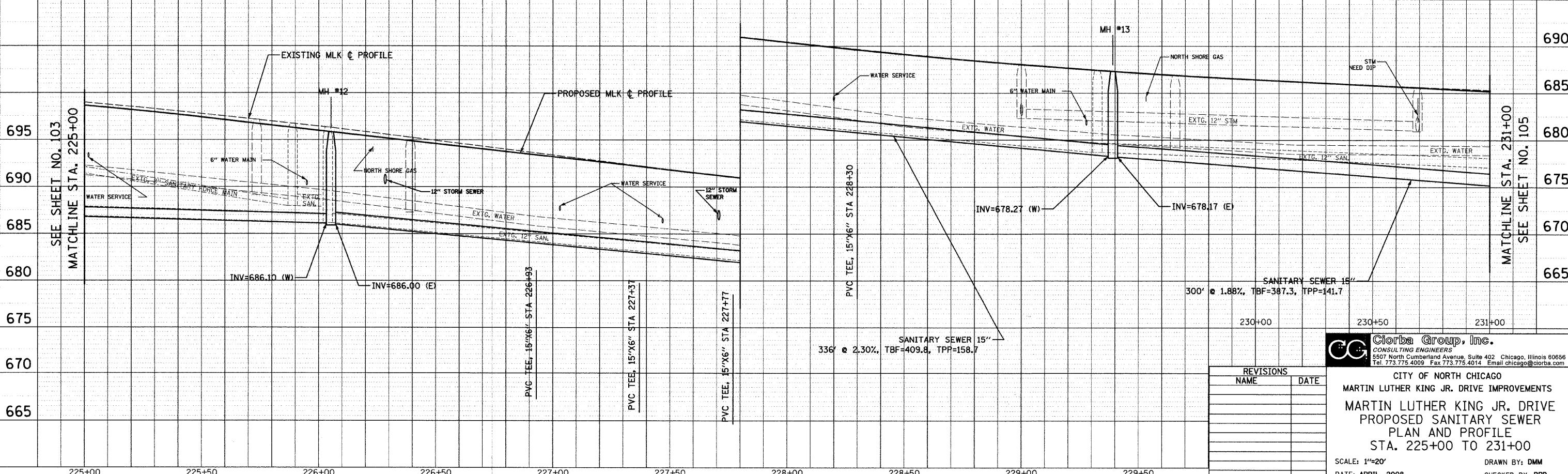
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REVISIONS	
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DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	

DATE: 7/1/2008
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NOTE:
 FOR PROPOSED WATERMAIN PLANS SEE SHEETS: 116 TO 125
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99



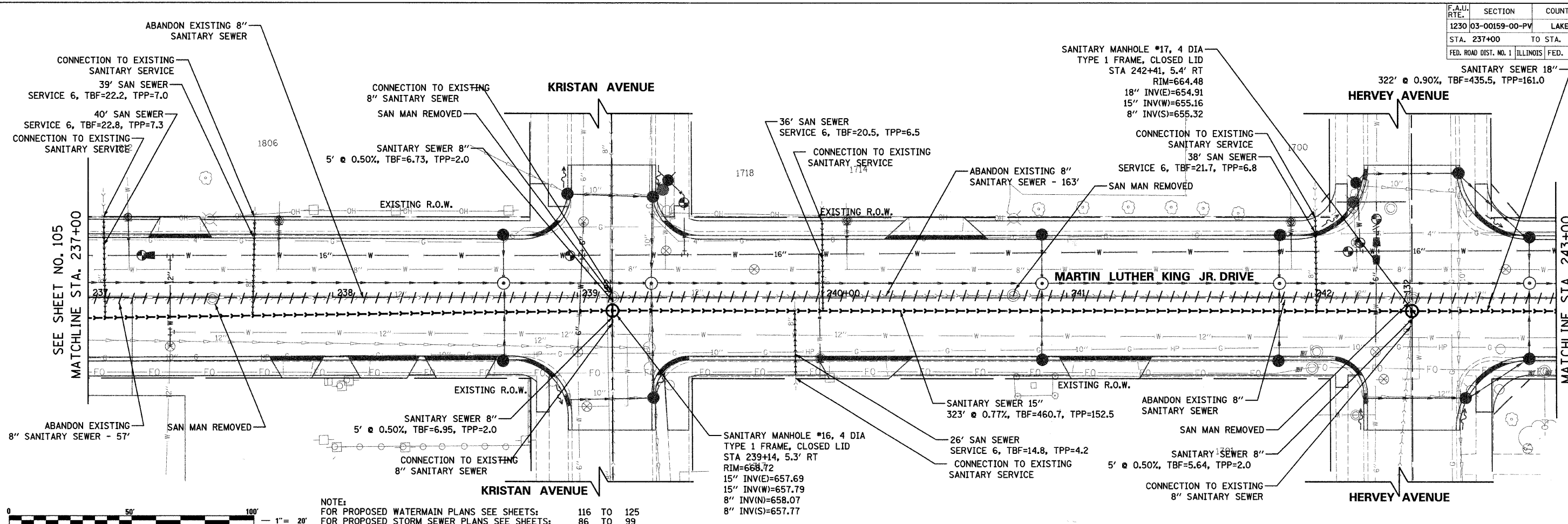
REVISIONS	
NAME	DATE

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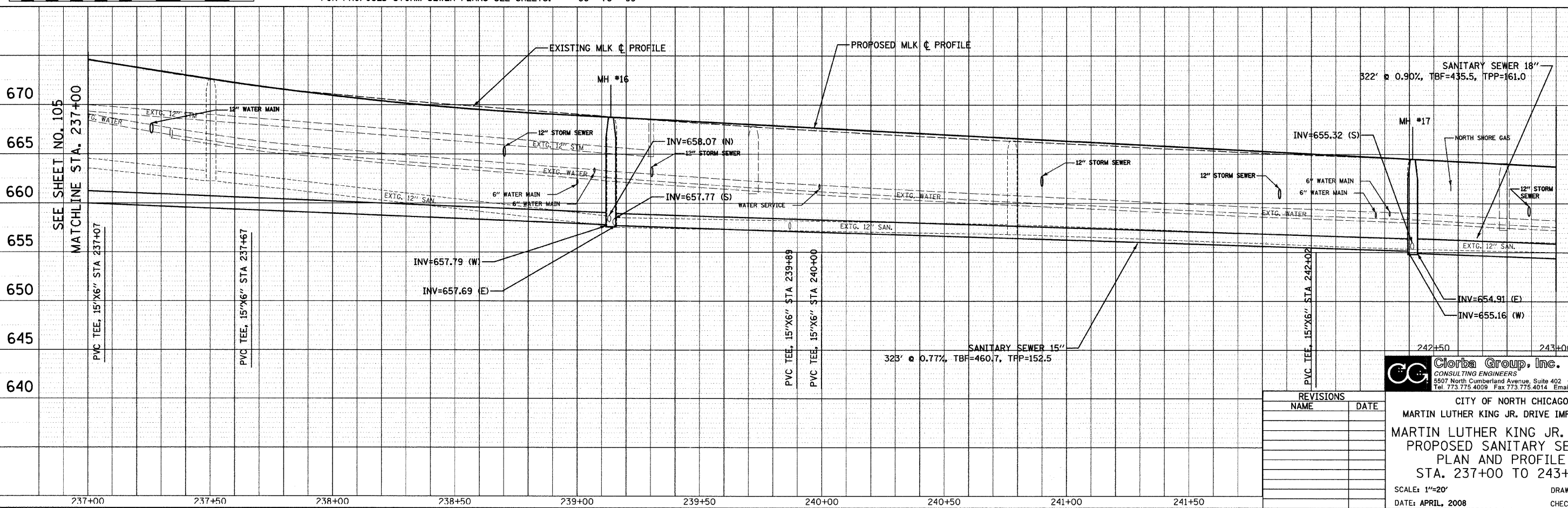
CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 PROPOSED SANITARY SEWER
 PLAN AND PROFILE
 STA. 225+00 TO 231+00

SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY: DMM
 CHECKED BY: BPD

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	106
STA. 237+00	TO STA. 243+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	CONTRACT: 83A28	



NOTE:
 FOR PROPOSED WATERMAIN PLANS SEE SHEETS: 116 TO 125
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99



REVISIONS	
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 PROPOSED SANITARY SEWER
 PLAN AND PROFILE
 STA. 237+00 TO 243+00

SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY: DMM
 CHECKED BY: BPD

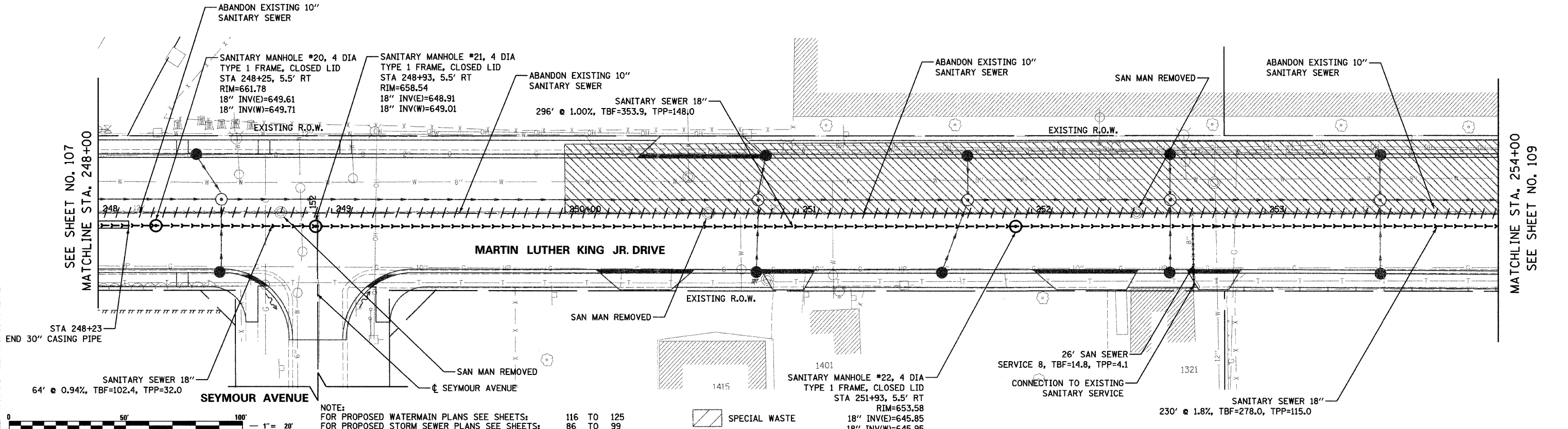
PLAN	DATE
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NO.	BY
NO.	BY
NO.	BY
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NO.	BY

PROFILE	DATE
NO.	BY
NO.	BY
NO.	BY
NO.	BY
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NO.	BY
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NO.	BY
NO.	BY

DATE: 7/12/08
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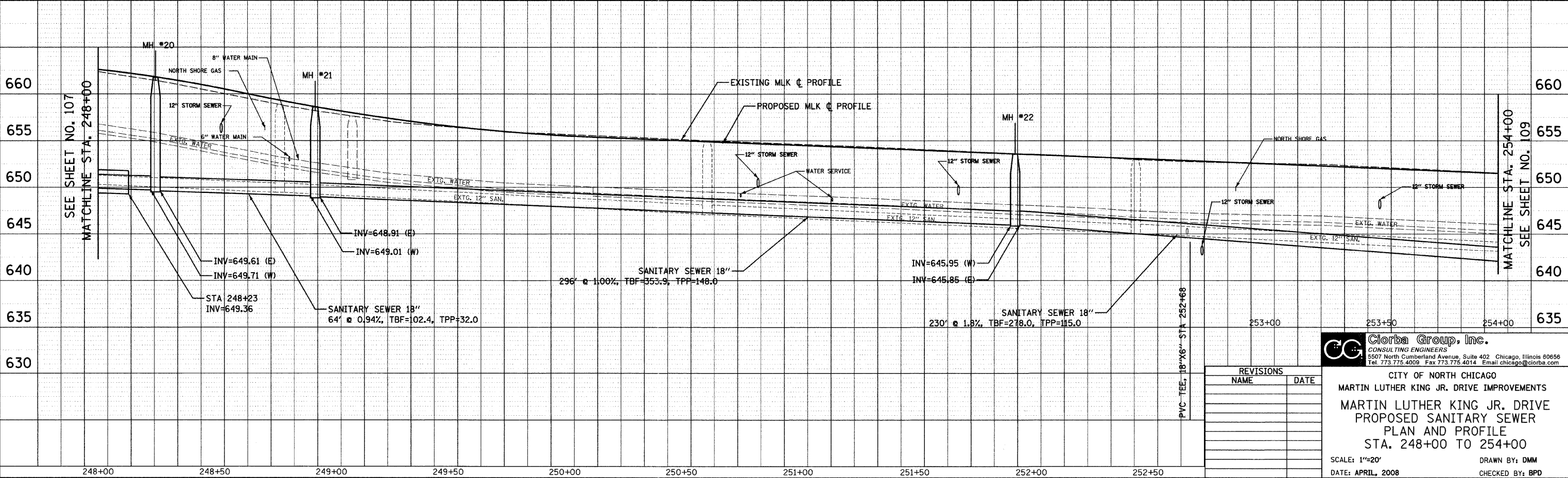
DATE	BY

DATE	BY



NOTE:
 FOR PROPOSED WATERMAIN PLANS SEE SHEETS: 116 TO 125
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99

SPECIAL WASTE



REVISIONS	
NAME	DATE

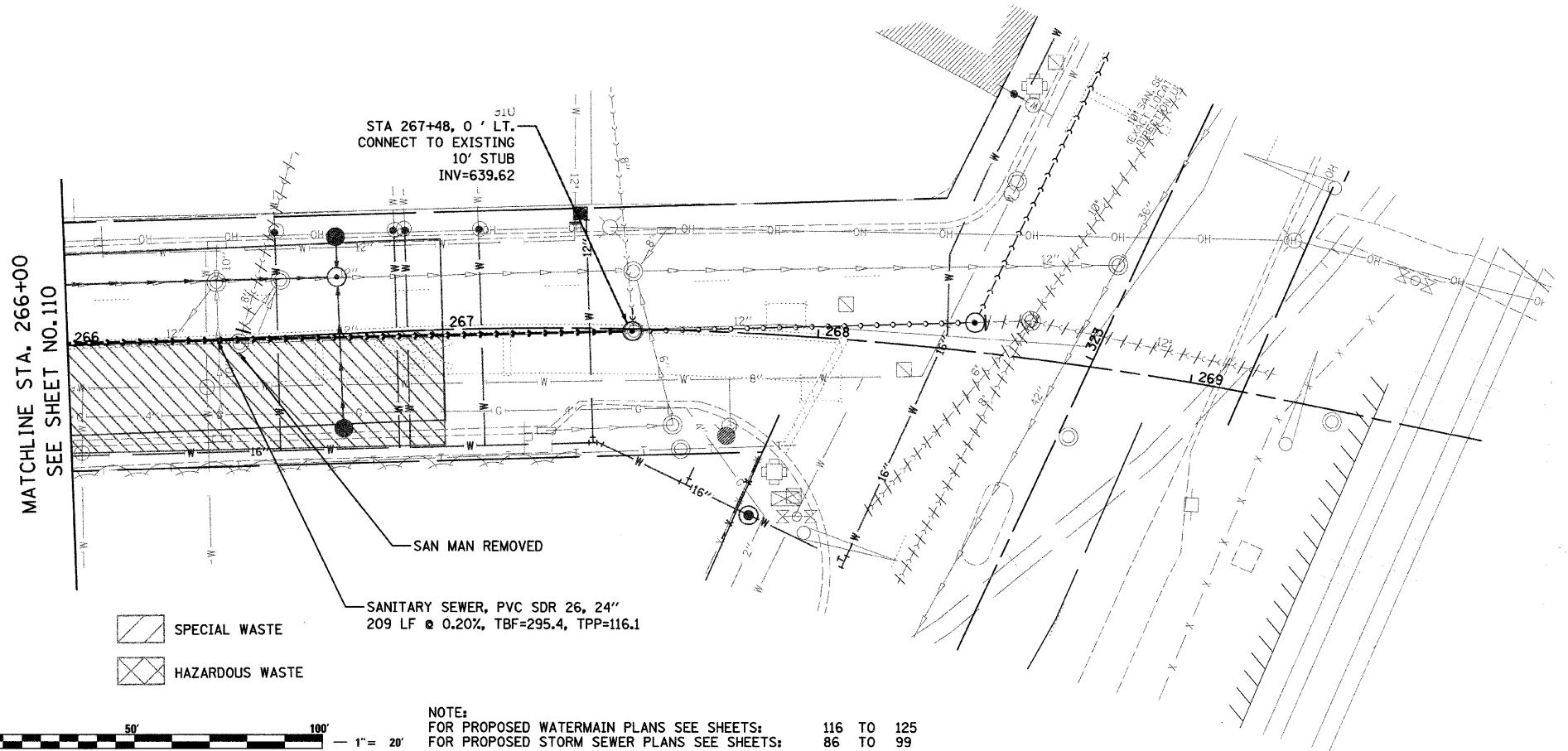
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 PROPOSED SANITARY SEWER
 PLAN AND PROFILE
 STA. 248+00 TO 254+00

SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY: DMM
 CHECKED BY: BPD

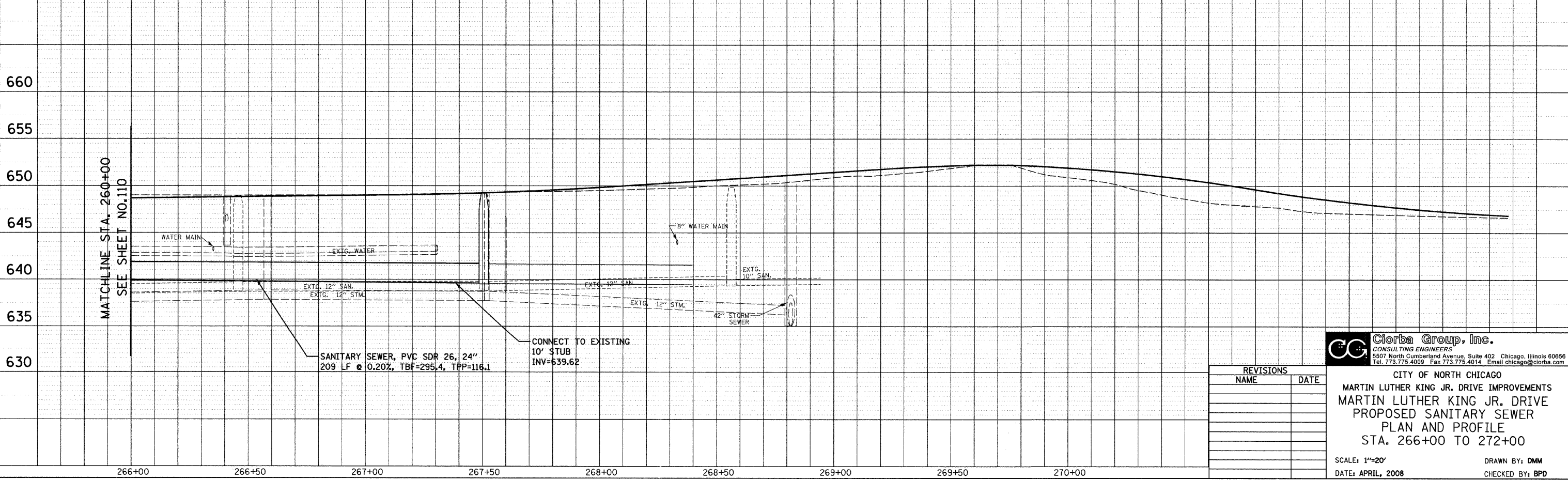
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PLAN	DATE
BY	
REVIEWED	
PLOTTED	
ALIGNMENT CHECKED	
NOTE BOOK	
CADD FILE NAME	
NO.	



NOTE:
 FOR PROPOSED WATERMAIN PLANS SEE SHEETS: 116 TO 125
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99

PROFILE	DATE
BY	
REVIEWED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK	
NO.	



SANITARY SEWER, PVC SDR 26, 24"
 209 LF @ 0.20%, TBF=295.4, TPP=116.1

CONNECT TO EXISTING
 10' STUB
 INV=639.62

REVISIONS	
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 MARTIN LUTHER KING JR. DRIVE
 PROPOSED SANITARY SEWER
 PLAN AND PROFILE
 STA. 266+00 TO 272+00

SCALE: 1"=20'
 DATE: APRIL, 2008

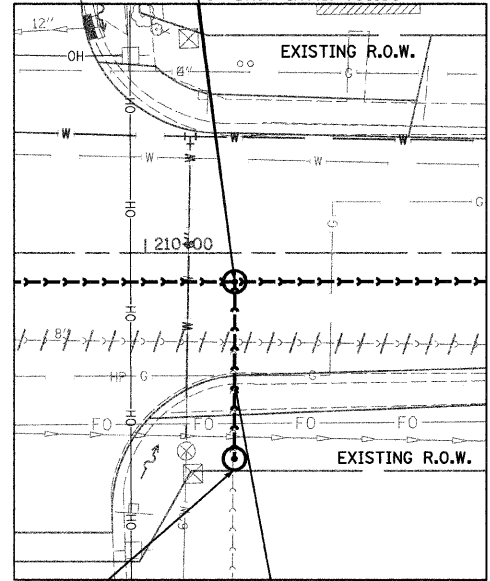
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DATE: 7/1/2008
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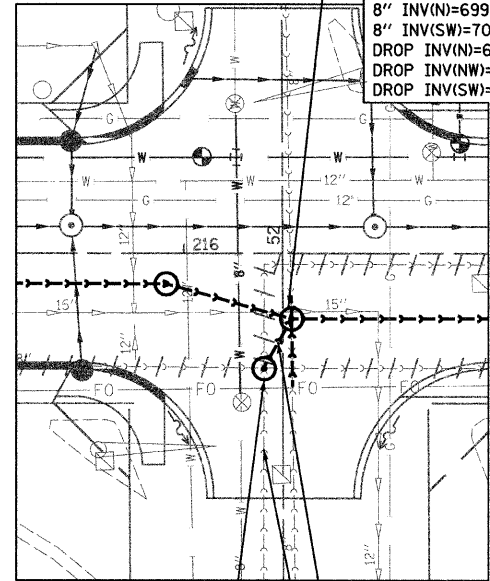
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230 03-00159-00-PV	LAKE	262	112	
STA. 202+00		TO STA. 208+00		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT
				CONTRACT: 83828

DATE	BY
DATE	BY
DATE	BY
DATE	BY

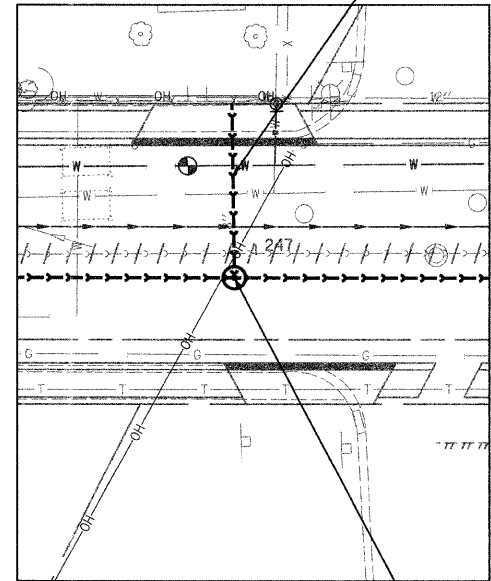
MANHOLES, SANITARY #4
WITH OUTSIDE DROP CONNECTION,
4'-DIAMETER, TYPE 1 FRAME, CLOSED LID
STA 210+20, 6.3' RT
RIM=717.93
8" INV(E)=707.79
8" INV(W)=707.89
8" INV(S)=710.96
8" DROP INV(S)=708.00



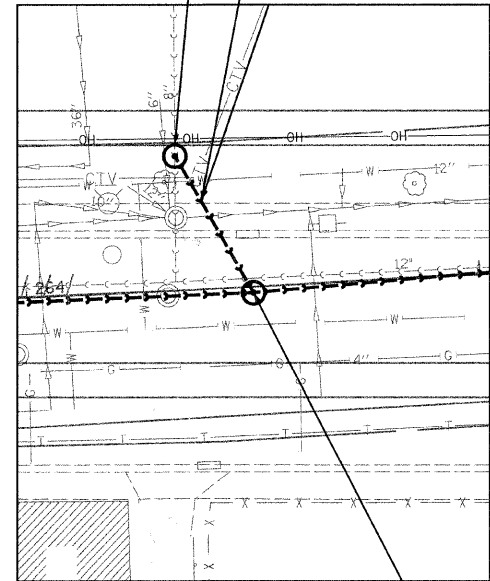
MANHOLES, SANITARY #8
WITH OUTSIDE DROP CONNECTION,
5'-DIAMETER, TYPE 1 FRAME,
CLOSED LID
STA 216+24, 14.4' RT
RIM=708.96
12" INV(E)=691.49
8" INV(NW)=699.45
8" INV(S)=691.79
8" INV(N)=699.48
8" INV(SW)=701.42
DROP INV(N)=691.79
DROP INV(NW)=691.79
DROP INV(SW)=691.79



SANITARY SEWER 8"
39' @ 0.50%, TBF=47.9, TPP=15.9

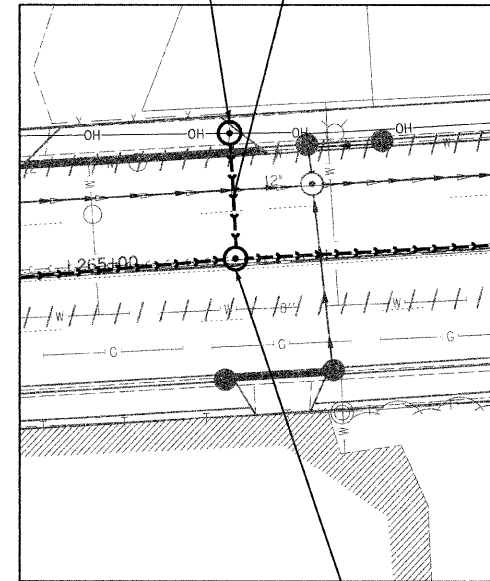


SANITARY MANHOLE #28, 4 DIA
STA 264+34, 30' LT.
TYPE 1 FRAME, CLOSED LID
RIM=649.07
8" INV(S)=641.69



SANITARY SEWER 8"
35' @ 0.57%, TBF=31.6, TPP=14.3

SANITARY MANHOLE #29, 4 DIA
STA 265+37, 30' LT.
TYPE 1 FRAME, CLOSED LID
RIM=649.33
8" INV(S)=641.12



SANITARY SEWER 8"
24' @ 0.50%, TBF=23.4, TPP=9.8

SANITARY MANHOLE #5, 4 DIA.
TYPE 1 FRAME, CLOSED LID
STA 210+20, 45.3' RT
RIM=719.14
8" INV(N)=711.14

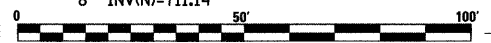
SANITARY MANHOLE #9, 4 DIA.
TYPE 1 FRAME, CLOSED LID
STA 216+18, 21.0' RT
RIM=708.51
8" INV(NE)=701.50
8" INV(S)=701.86 (FORCEMAIN)

SANITARY SEWERS 8"
8' @ 1.0%, TBF=12.3, TPP=3.3

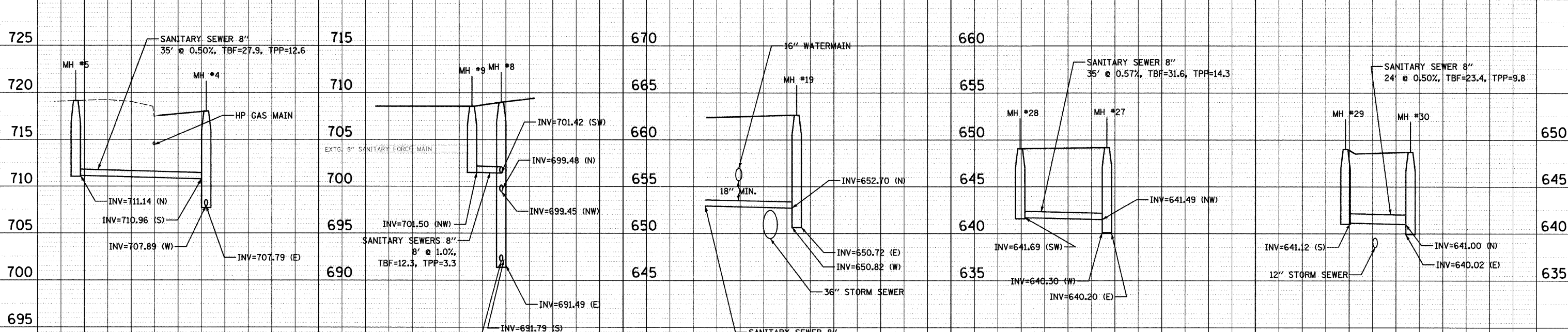
SANITARY MANHOLE #19, 4 DIA
TYPE 1 FRAME, CLOSED LID
STA 246+95, 5.2' RT
RIM=662.63
18" INV(E)=650.72
18" INV(W)=650.82
8" INV(N)=652.70

SANITARY MANHOLE #27, 5 DIA
TYPE 1 FRAME, CLOSED LID
STA 264+13, 2.5' RT.
RIM=649.36
24" INV(E)=640.20
24" INV(W)=640.30
8" INV(NE)=641.49

SANITARY MANHOLE #30, 5 DIA
TYPE 1 FRAME, CLOSED LID
STA 265+37, 1.5' LT.
RIM=649.01
24" INV(E)=640.02
24" INV(W)=640.12
8" INV(N)=641.00



DATE	BY
DATE	BY
DATE	BY
DATE	BY



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NAME	DATE

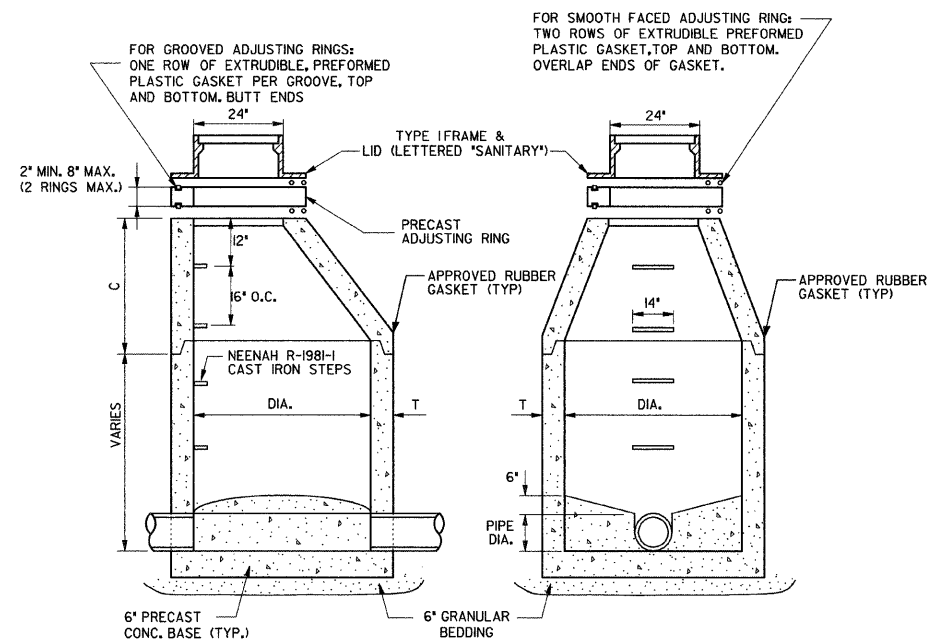
Clorba Group, Inc.
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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED SANITARY
PLAN AND PROFILE

SCALE: 1"=20'
DATE: APRIL, 2008

DRAWN BY: DMM
CHECKED BY: BPD

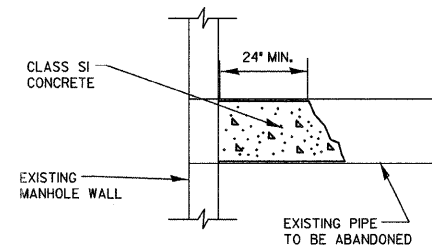
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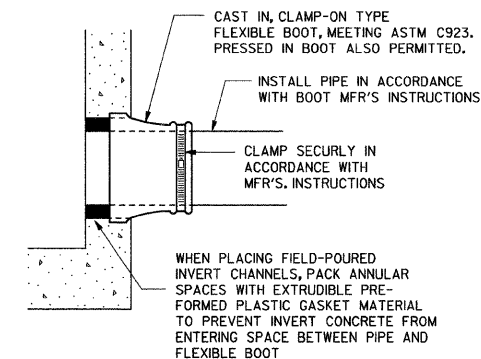
D	T	C
4'-0"	4'	30"
5'-0"	5'	3'-9"

SANITARY MANHOLE

NOTE: CAST FLEXIBLE BOOT INTO STRUCTURE AT PIPE PENETRATIONS.

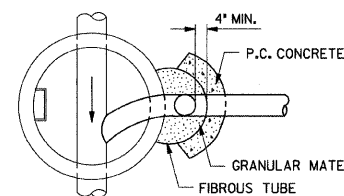


PLUG EXISTING PIPE



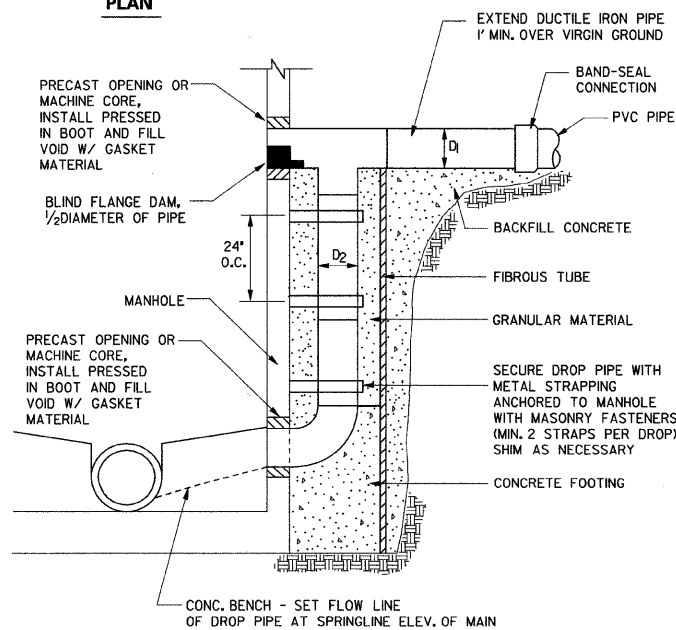
SANITARY MANHOLE-PIPE CONNECTIONS

NOTE: FOR CONNECTIONS TO EXISTING MANHOLES, MACHINE CORE EXISTING STRUCTURE AND INSTALL PRESSED IN BOOT.

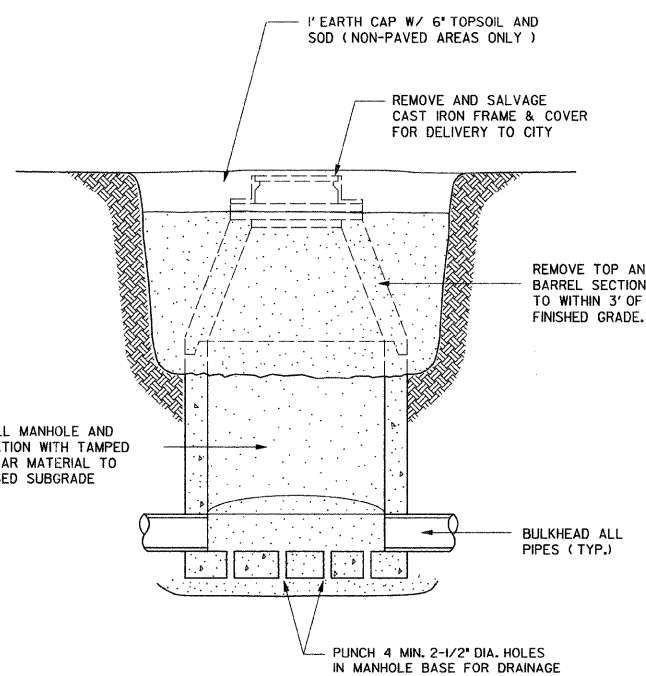


D1	D2
8	8
10	8
12	8
15	10
18	12
21	15
24	18

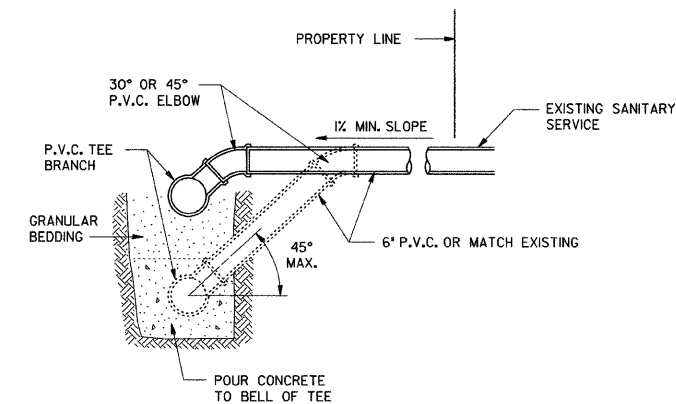
PLAN



OUTSIDE DROP CONNECTION



ABANDON EXISTING STRUCTURE



SEWER SERVICE

DATE: 7/1/2008
 TIME: 7:53:28 AM
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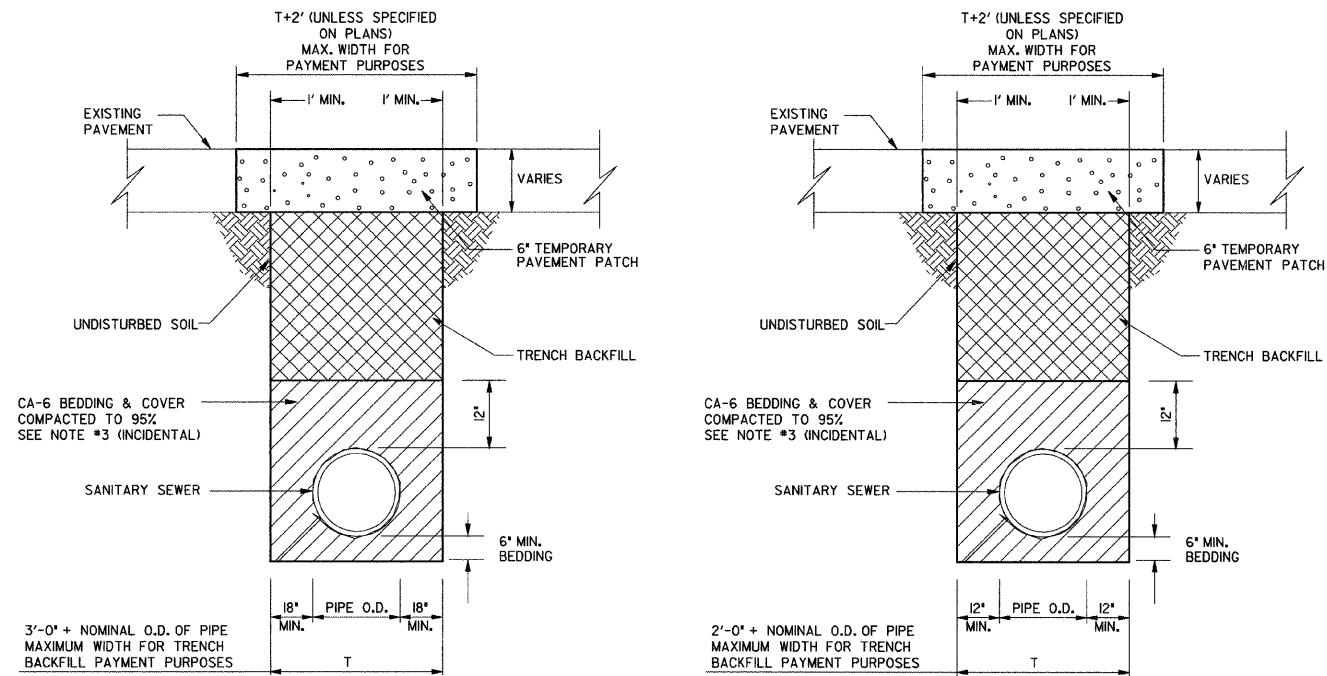
REVISIONS	
NAME	DATE

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CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 SANITARY SEWER
 DETAILS

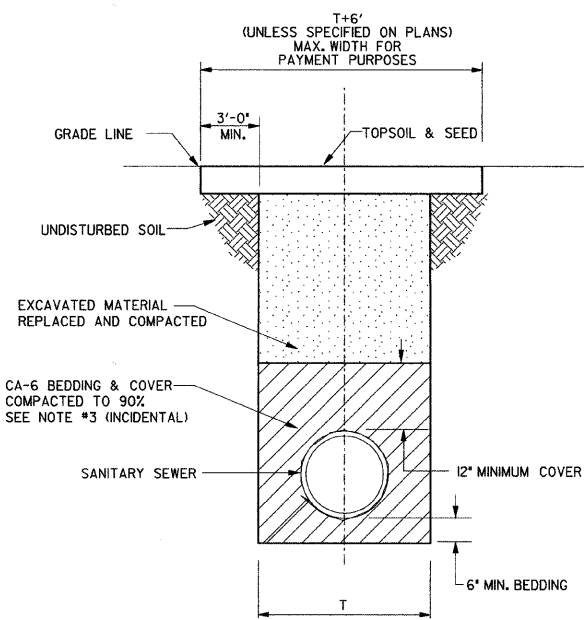
SCALE: N.T.S.
 DATE: APRIL, 2008

DRAWN BY: DMM
 CHECKED BY: BPD



TRENCH IN PAVEMENT AREA FOR PIPES GREATER THAN 5' DEEP

TRENCH IN PAVEMENT AREA FOR PIPES LESS THAN 5' DEEP

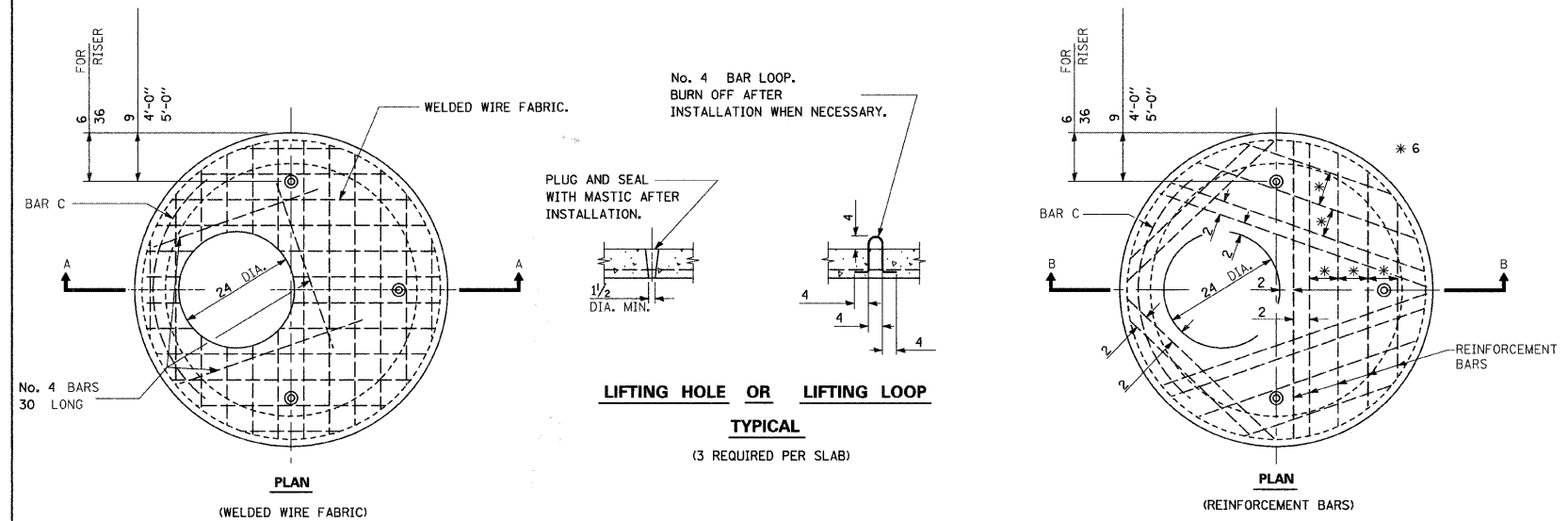


TRENCH IN NON PAVED AREA

NOTES:

- CONTRACTOR IS TO DISPOSE OF ALL UNUSED EXCAVATED MATERIAL OFF-SITE.
- TRENCH IS TO BE EXCAVATED TO FIRM, UNDISTURBED SOIL. IF OVER EXCAVATION IS REQUIRED TO REACH A FIRM TRENCH BOTTOM, THE CONTRACTOR SHALL FILL THE VOID WITH CA-6 AND COMPACT TO OBTAIN PROPER DENSITY AND GRADE.
- CRUSHED STONE, GRADATION CA-6 OR CRUSHED STONE, GRADATION CA-7

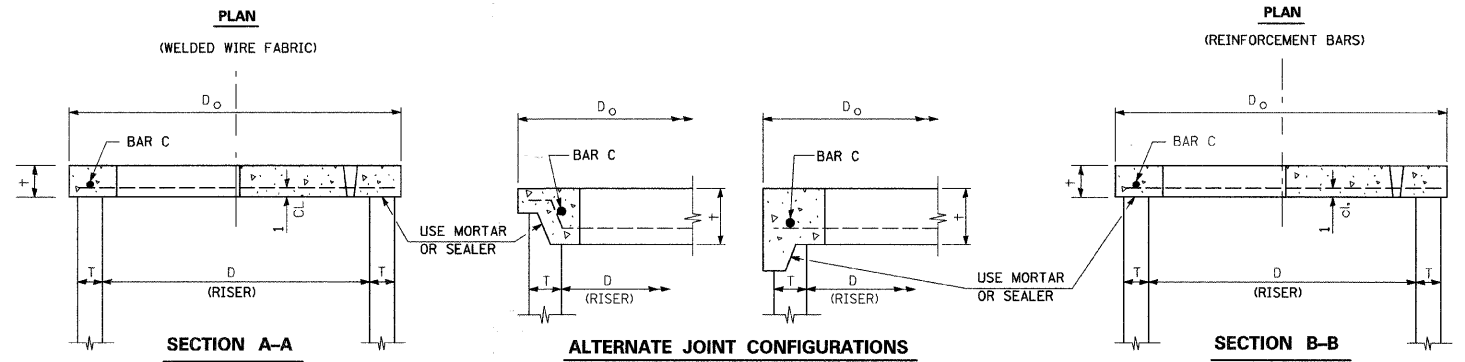
SANITARY SEWER TRENCH/BEDDING



LIFTING HOLE OR LIFTING LOOP

TYPICAL

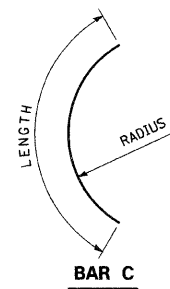
(3 REQUIRED PER SLAB)



SECTION A-A

ALTERNATE JOINT CONFIGURATIONS

SECTION B-B



BAR C

TABLE

D	T	D _o (MIN.)	†	REINFORCEMENT W.W.F. EACH DIRECTION	OR BAR SIZE	No. 4 BAR C LENGTH/RADIUS
36	SEE APPLICABLE STANDARDS	D + 2T	6	.20 SQ. INCH/FT.	No. 4	4'-0"
4'-0"			6	.35 SQ. INCH/FT.	No. 5	4'-6"
5'-0"			8	.35 SQ. INCH/FT.	No. 5	5'-0"
6'-0"			10	.50 SQ. INCH/FT.	No. 5	5'-6"

PRECAST REINFORCED CONCRETE FLAT SLAB TOP

GENERAL NOTES

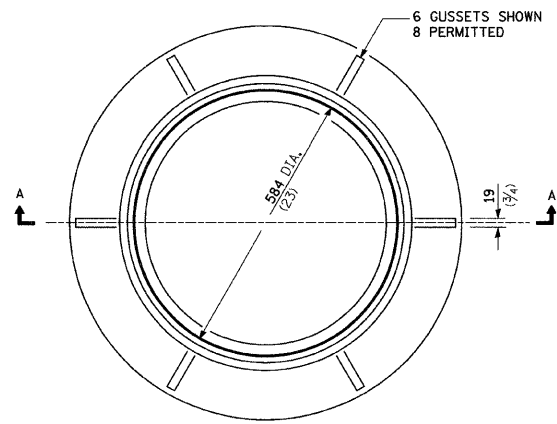
THE FLAT SLAB TOP MAY BE USED IN LIEU OF THE TAPERED TOPS SHOWN ON STANDARD 602001 AT THE OPTION OF THE CONTRACTOR OR WHEN FIELD CONDITIONS PROHIBIT THE USE OF TAPERED TOPS.

REVISIONS	
NAME	DATE

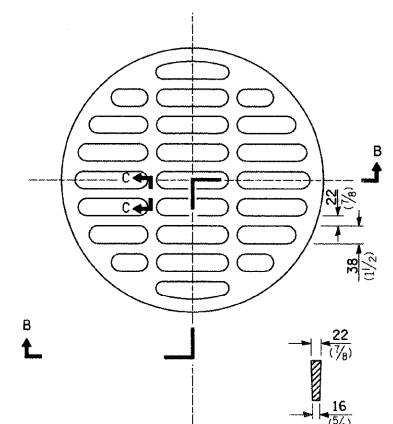
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CITY OF NORTH CHICAGO
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MARTIN LUTHER KING JR. DRIVE
SANITARY SEWER
DETAILS

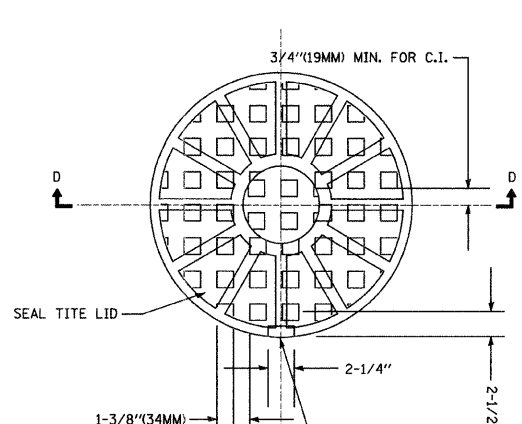
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DATE: APRIL, 2008 CHECKED BY: BPD



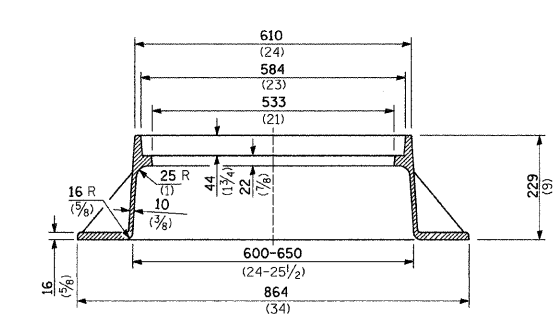
CAST FRAME



SECTION C-C

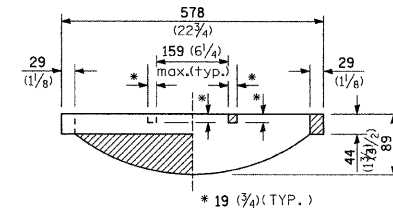


SECTION D-D



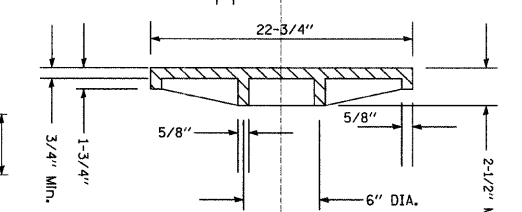
SECTION A-A

GRAY IRON
73.5 kg (162 LB)



SECTION B-B

CAST OPEN LID



SECTION D-D

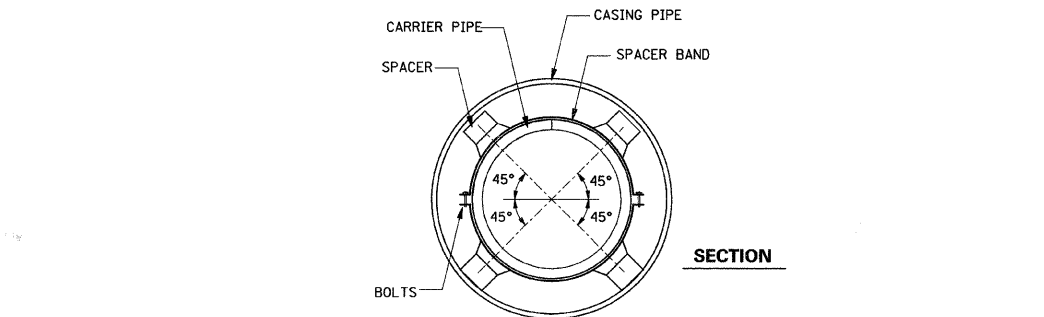
CAST CLOSED LID

CONCEALED PICK-HOLE

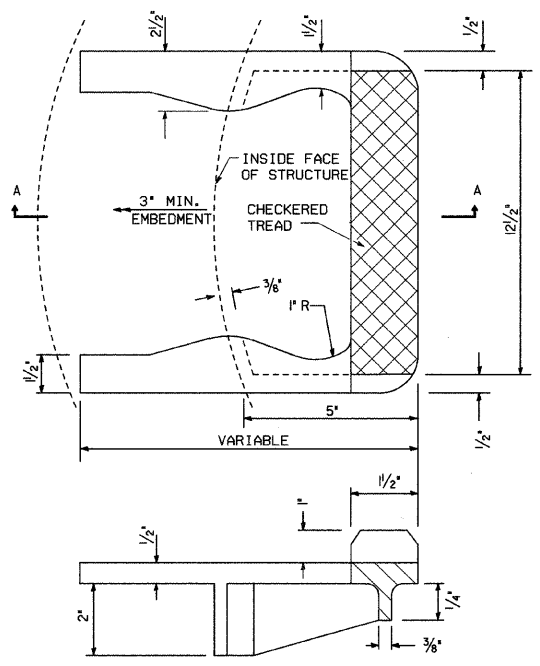
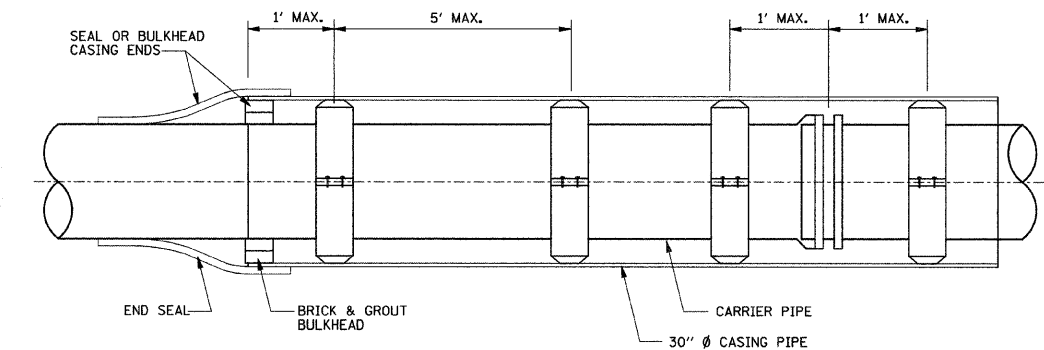
FRAME AND LIDS - TYPE 1

- ALL FRAMES AND COVERS SHALL HAVE MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES SHALL NOT CREATE OPENINGS IN THE COVER. LIDS SHALL BE SELF-SEALING.
- ALL CASTINGS SHALL BE SHOP PAINTED WITH AN ASPHALTIC BASE PAINT

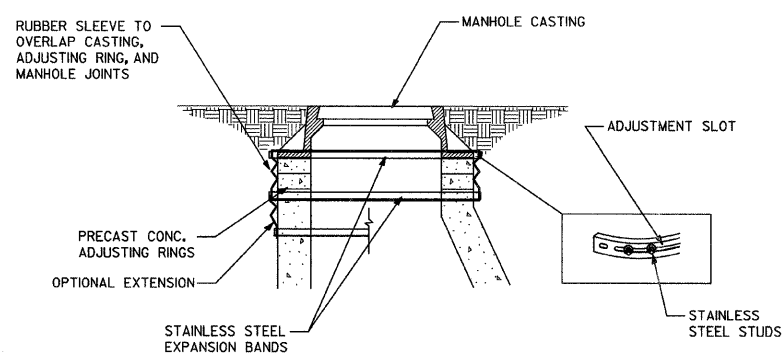
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.



CASING SPACER INSTALLATION

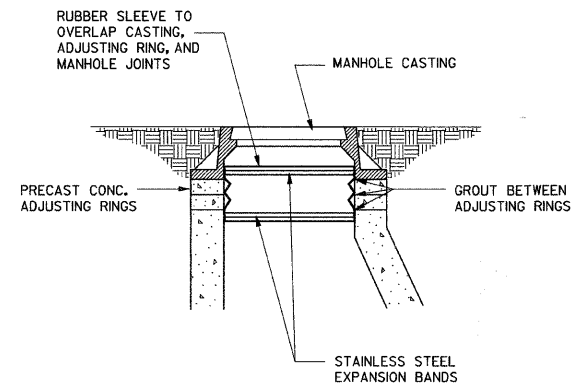


CIRCULAR WALL STRUCTURE
CAST IRON STEPS



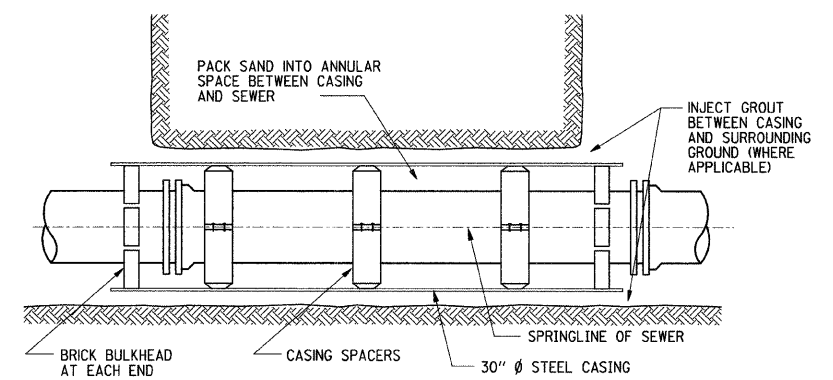
EXTERNAL CHIMNEY SEAL

NOTE: INSTALL CHIMNEY SEAL AS SPECIFIED, ACCORDING TO MANUFACTURERS RECOMMENDATIONS.



INTERNAL CHIMNEY SEAL

NOTE: INSTALL CHIMNEY SEAL AS SPECIFIED, ACCORDING TO MANUFACTURERS RECOMMENDATIONS.



STEEL CASING PIPE, 30 BORED AND JACKED (FOR RAILROAD CROSSING)

REVISIONS	
NAME	DATE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax. 773.775.4014 Email: chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
SANITARY SEWER
DETAILS

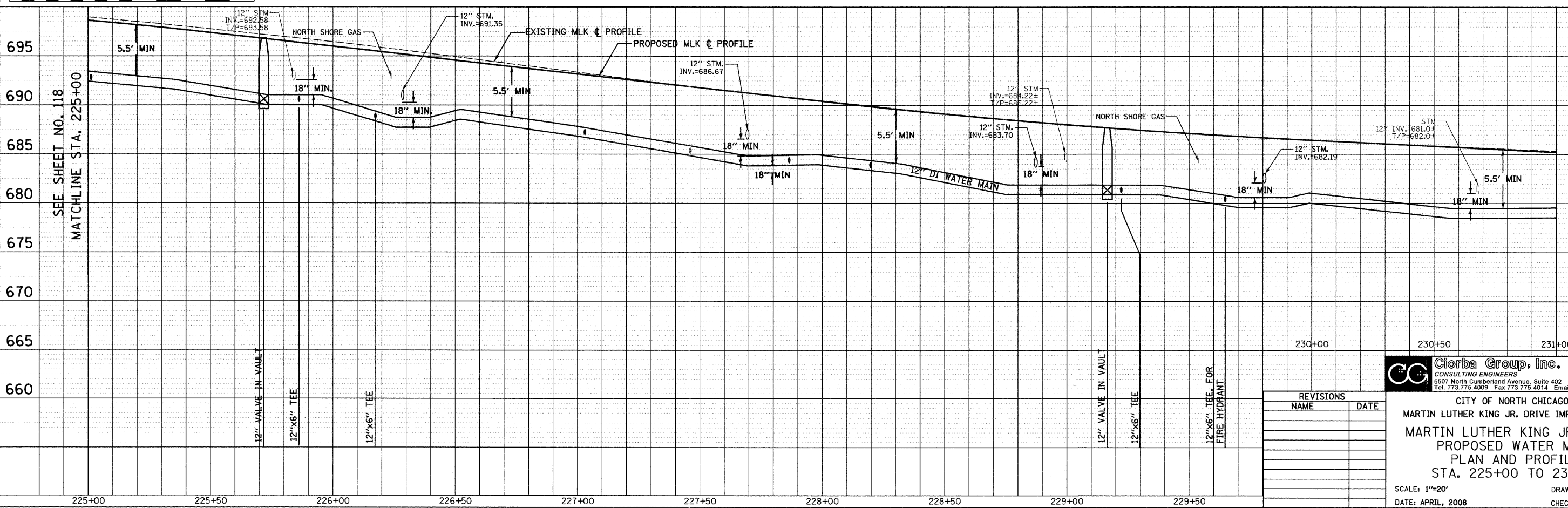
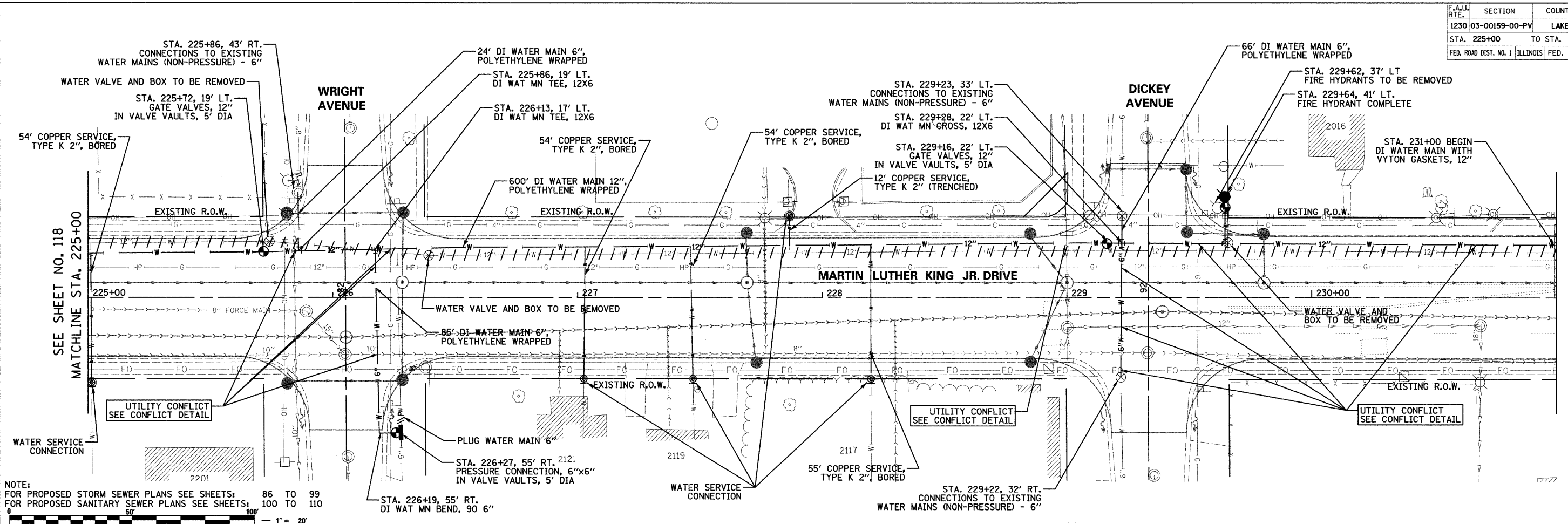
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DATE: APRIL, 2008 CHECKED BY: BPD

DATE: 7/1/2008
TIME: 7:53:52 AM
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230 03-00159-00-PV	LAKE	LAKE	262	119
STA. 225+00 TO STA. 231+00		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
CONTRACT: 83828				

PLAN	NO.	DATE
NO.		

PROFILE	NO.	DATE
NO.		



DATE: 7/1/2008
 FILENAME: N:\PROJ\05161\Design\water main\WAT05.dgn

REVISIONS	NAME	DATE

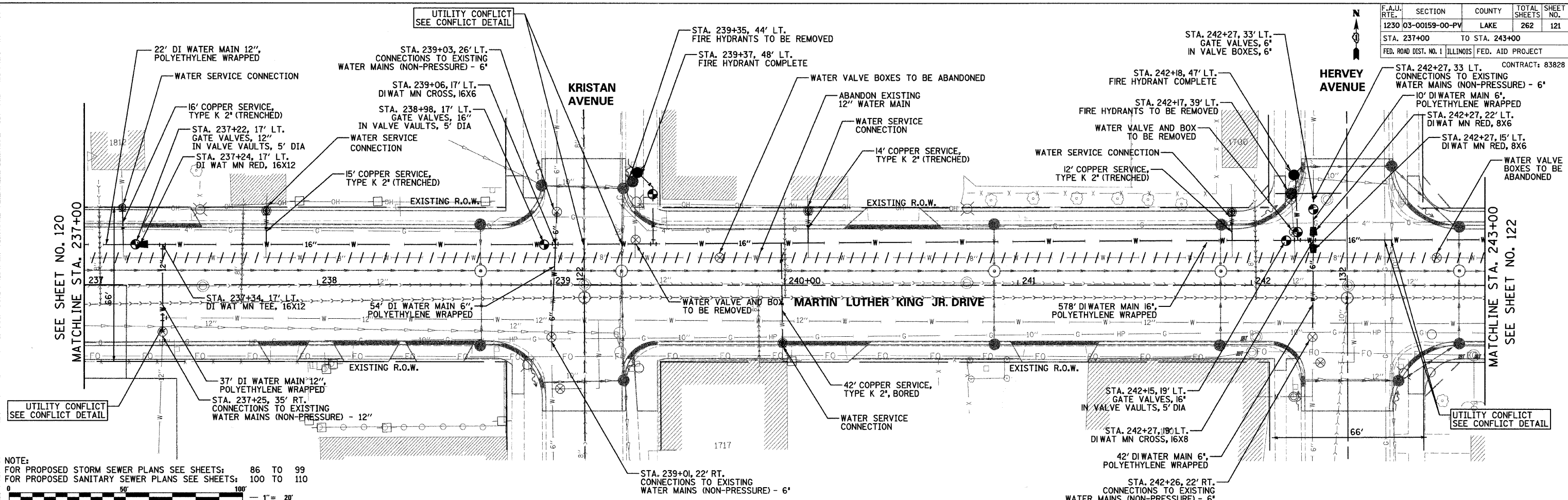
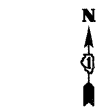
Clorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@clorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 PROPOSED WATER MAIN
 PLAN AND PROFILE
 STA. 225+00 TO 231+00
 SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY:
 CHECKED BY: MJL

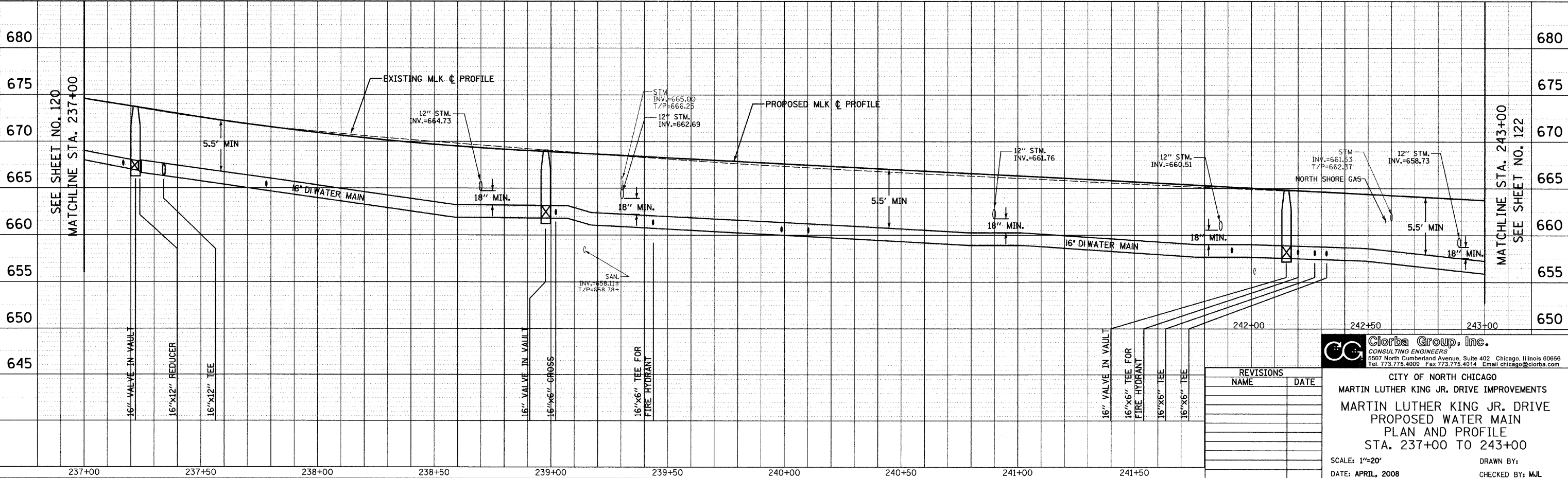
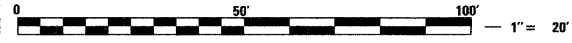
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230 03-00159-00-PV	LAKE	262	121	

STA. 237+00 TO STA. 243+00
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

CONTRACT: 83828



NOTE:
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99
 FOR PROPOSED SANITARY SEWER PLANS SEE SHEETS: 100 TO 110



DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY

DATE: 7/12/2008
 FILENAME: R:\PROJECTS\151\Design\water main\PA107.dgn

REVISIONS	
NAME	DATE

Clorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

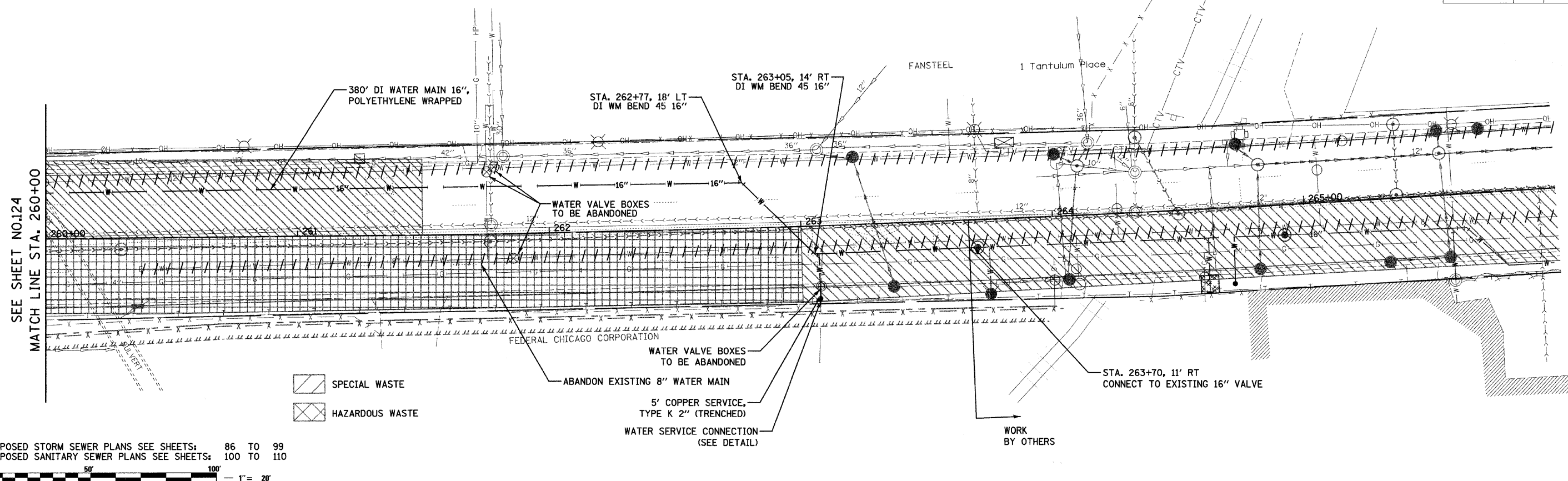
CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 PROPOSED WATER MAIN
 PLAN AND PROFILE
 STA. 237+00 TO 243+00
 SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY:
 CHECKED BY: MJL

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	125
STA. 260+00		TO STA. 266+00		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT: 83828

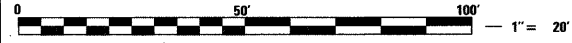


PLAN	REVISIONS	DATE
NO.	NO.	
NO.	NO.	
NO.	NO.	

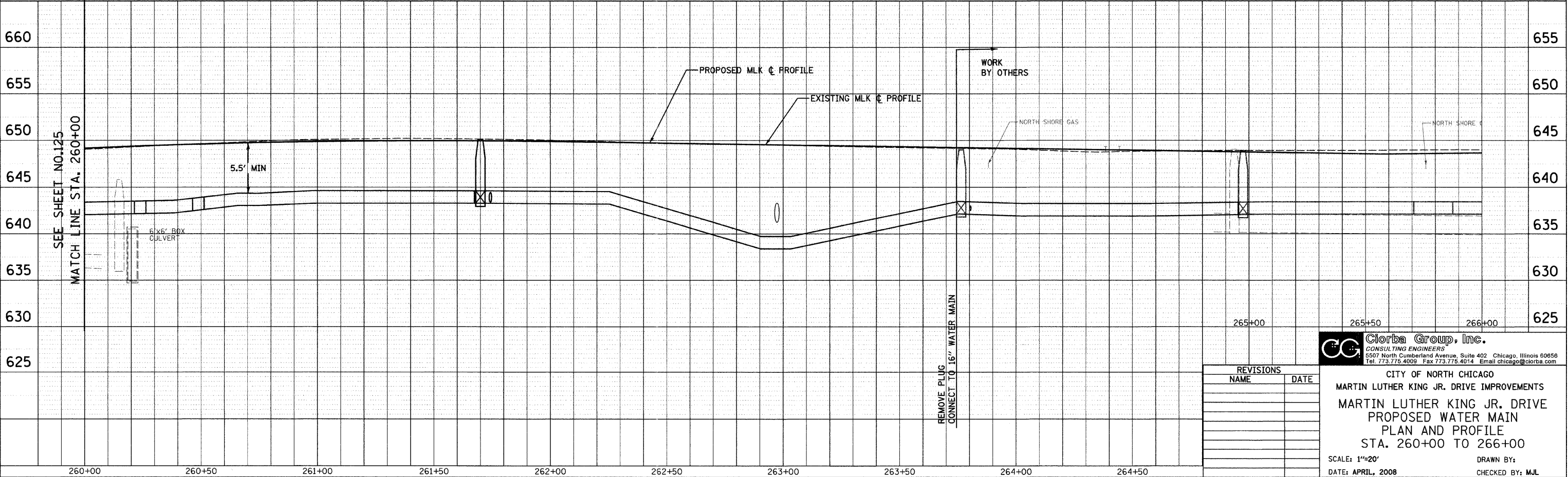


SPECIAL WASTE
 HAZARDOUS WASTE

NOTE:
 FOR PROPOSED STORM SEWER PLANS SEE SHEETS: 86 TO 99
 FOR PROPOSED SANITARY SEWER PLANS SEE SHEETS: 100 TO 110



PROFILE	REVISIONS	DATE
NO.	NO.	
NO.	NO.	
NO.	NO.	

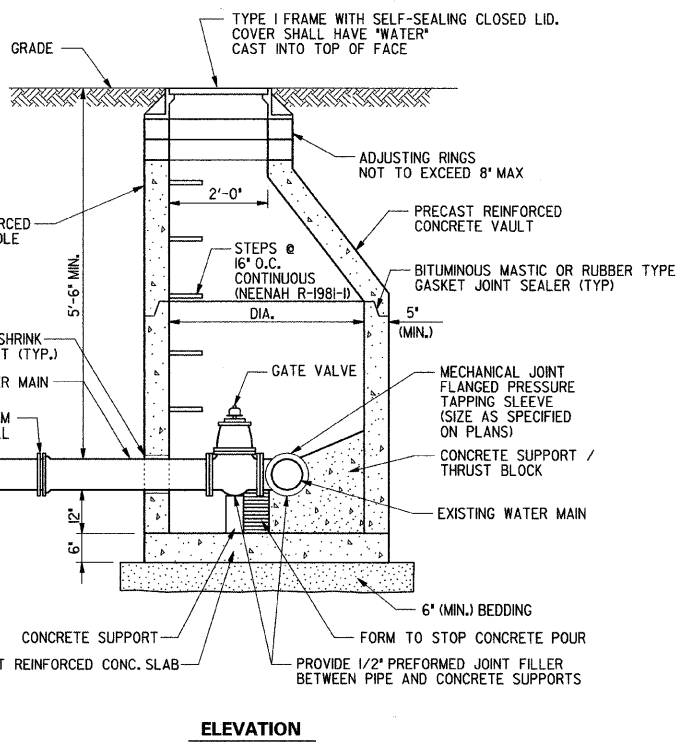
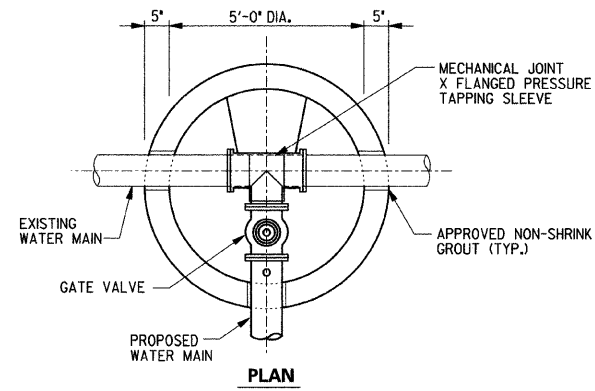


REVISIONS	
NAME	DATE

Ciorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.776.4009 Fax 773.776.4014 Email chicago@ciorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 PROPOSED WATER MAIN
 PLAN AND PROFILE
 STA. 260+00 TO 266+00
 SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY:
 CHECKED BY: MJL

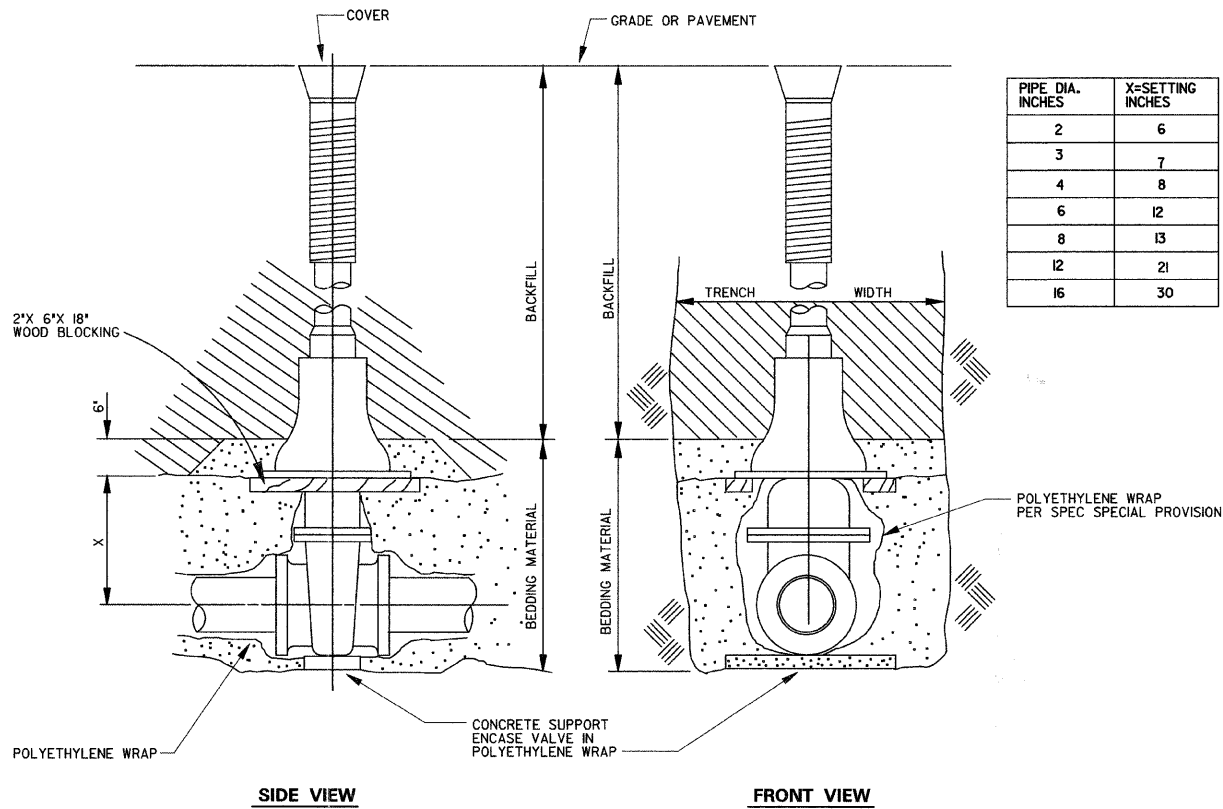
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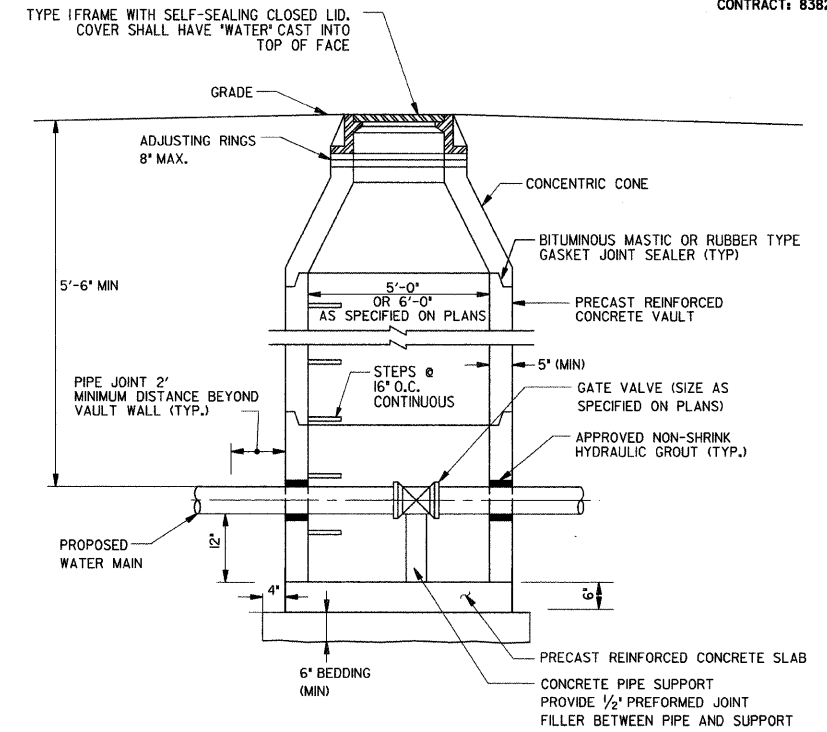
CONNECTION SIZE	VALVE VAULT DIA.
6" X 6"	5'
12" X 12"	6'

**VALVE VAULT,
WITH PRESSURE CONNECTION**

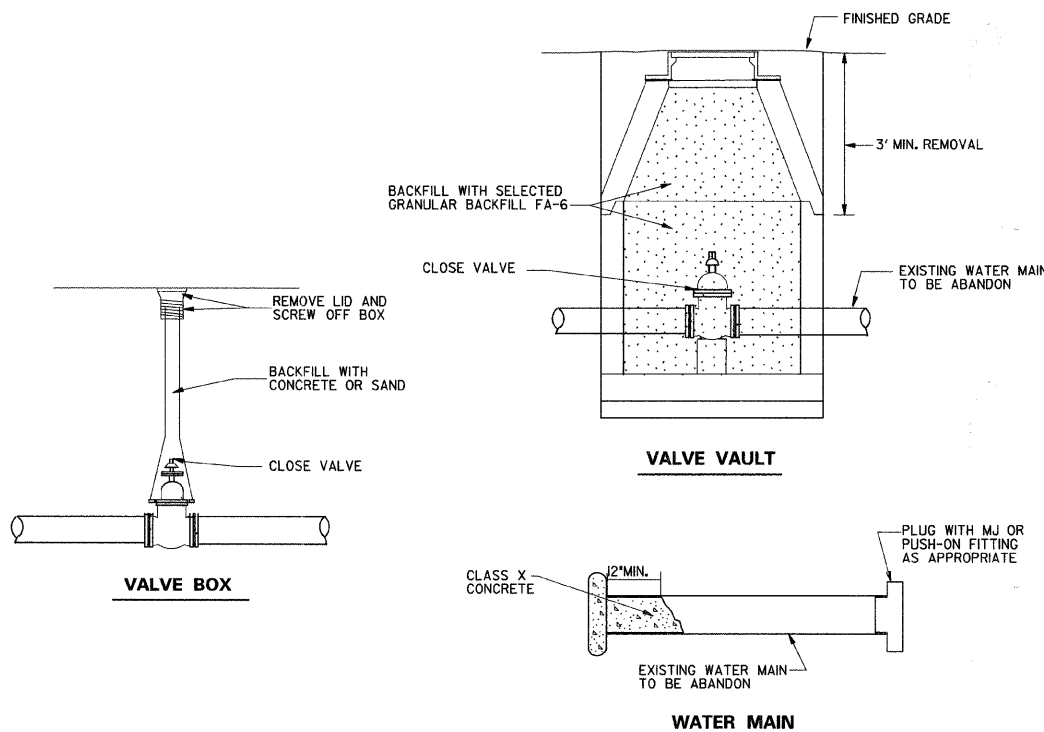
NOTE: VALVE NUT MUST BE ACCESSIBLE BY KEY FROM SURFACE.



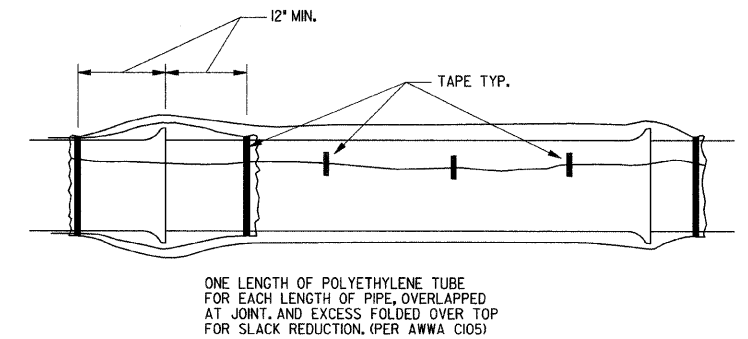
**VALVE BOX SETTING
VALVES 12" AND SMALLER**
NTS



VALVE VAULT
NTS



VALVE VAULT, WATER MAIN & VALVE BOX ABANDONMENT DETAIL



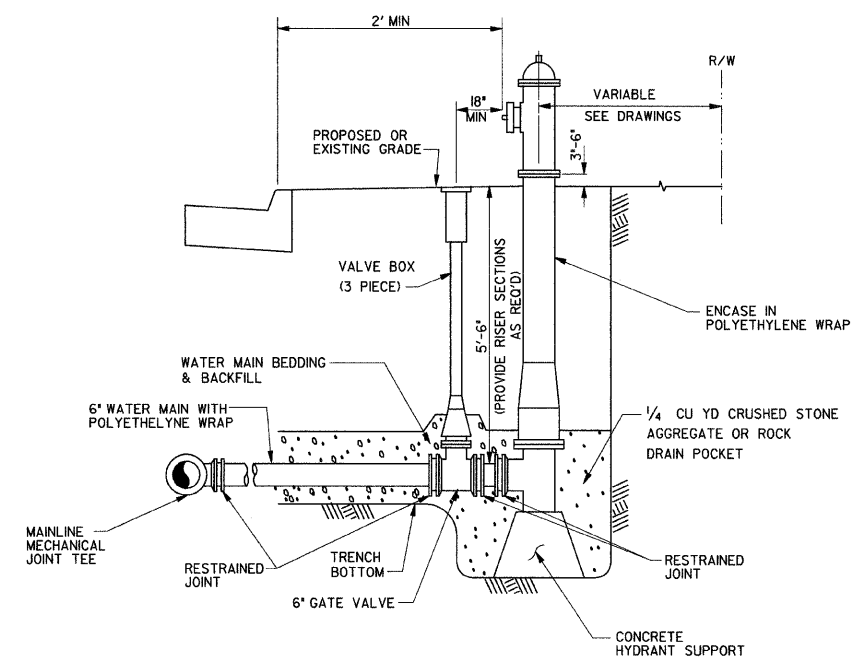
POLYETHYLENE WRAP DETAIL
NTS

REVISIONS	
NAME	DATE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

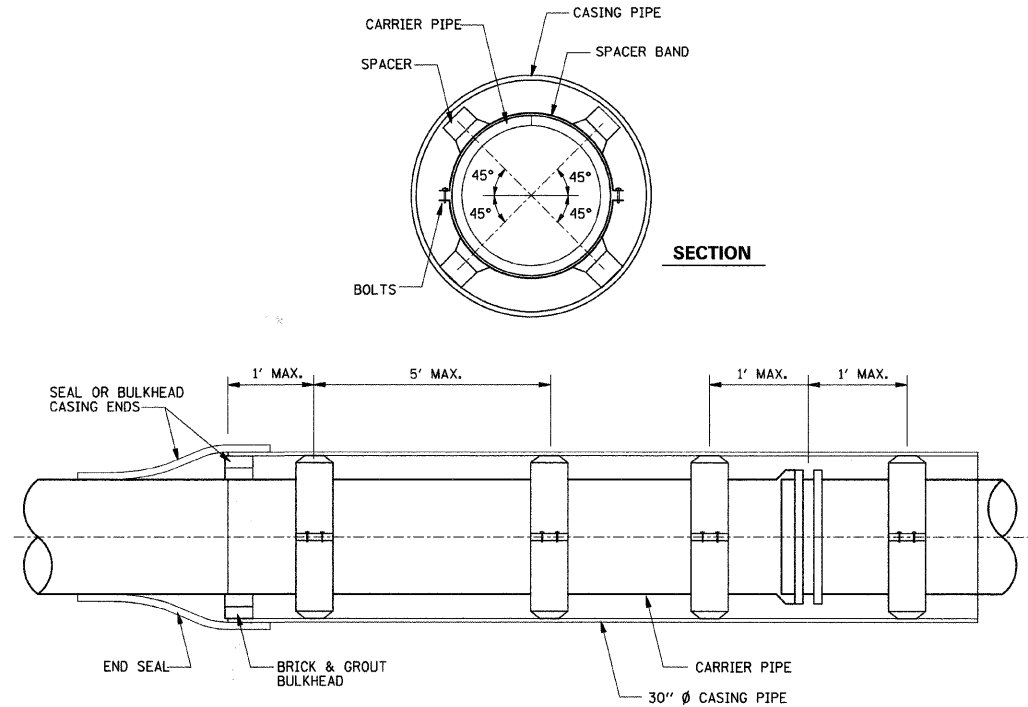
CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
WATER MAIN
DETAILS

SCALE: DATE: APRIL, 2008 DRAWN BY: DMM CHECKED BY: WCHK

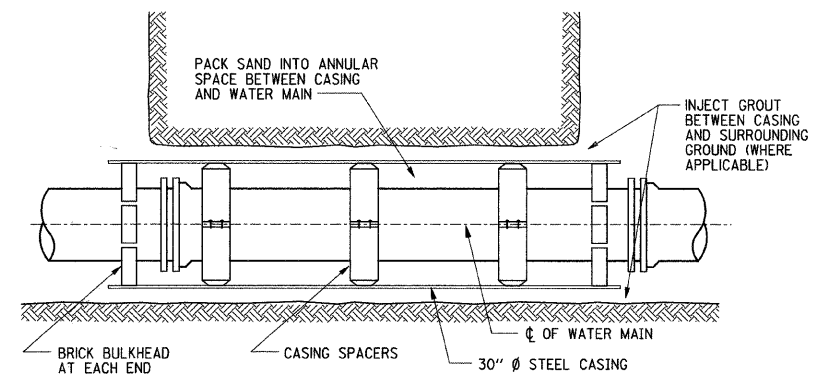


FIRE HYDRANT, COMPLETE

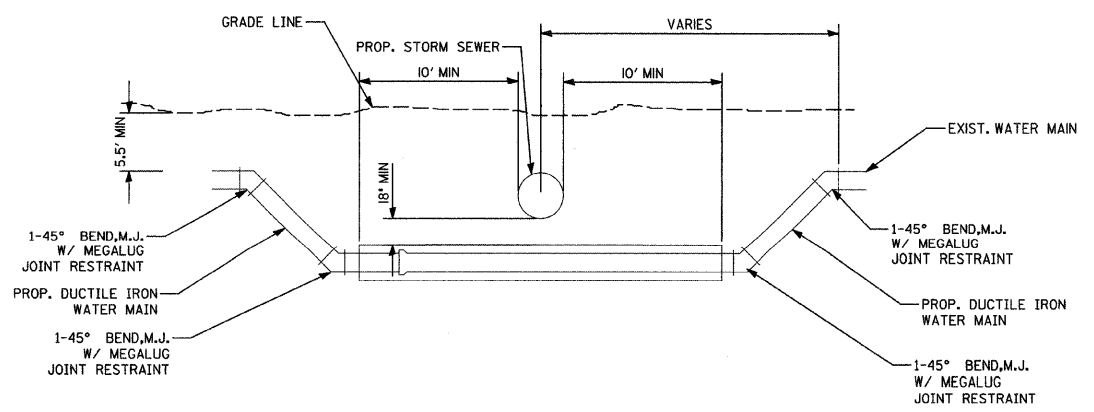
1. DUCTILE IRON WATER MAIN TEE
2. AUXILIARY VALVE
3. DUCTILE IRON WATER MAIN LEAD
4. FIRE HYDRANT



CASING SPACER INSTALLATION



STEEL CASING PIPE, 30" BORED AND JACKED (FOR RAILROAD CROSSING)



UTILITY CONFLICT DETAIL

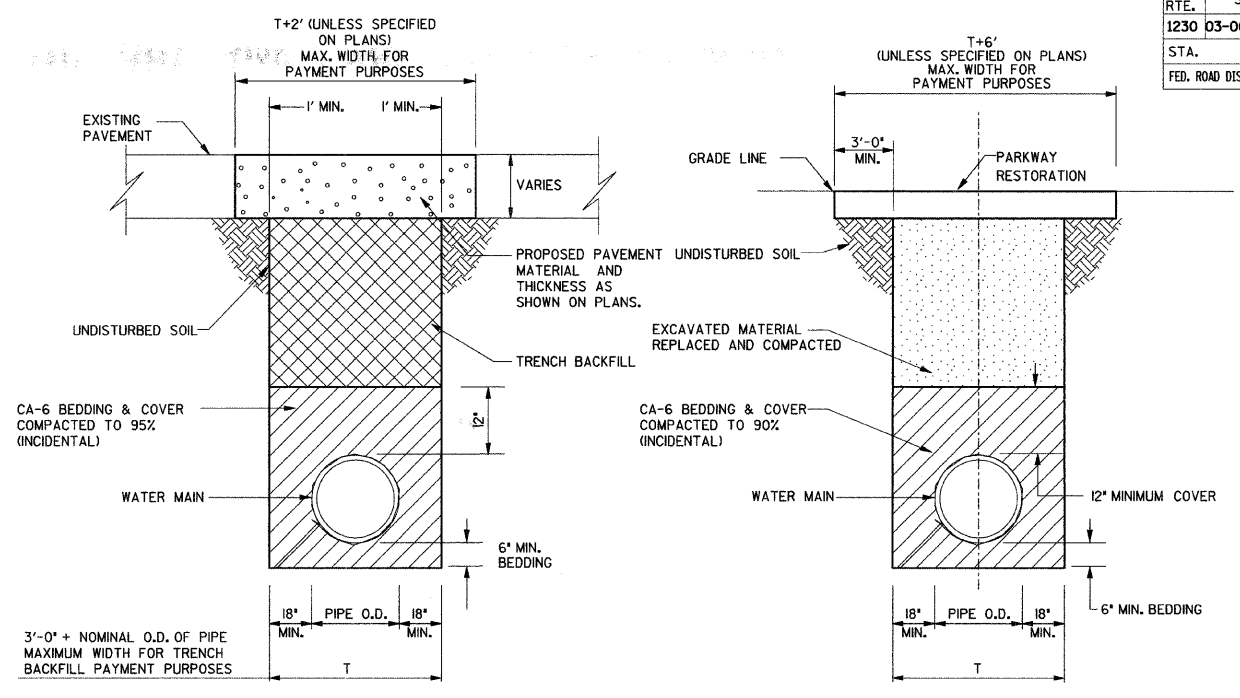
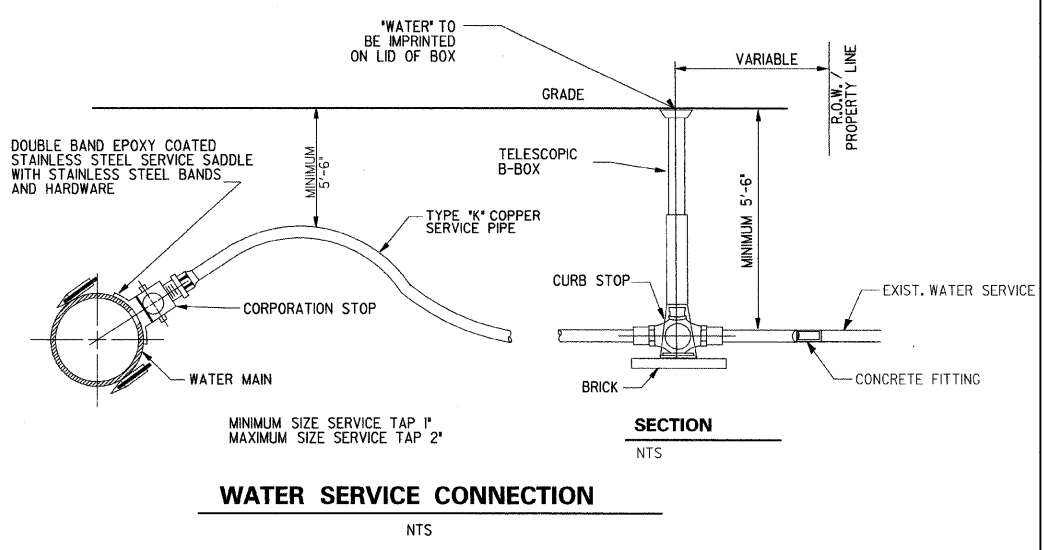
REVISIONS	
NAME	DATE

Clorba Group, Inc.
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5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
WATER MAIN
DETAILS

SCALE: DRAWN BY: DMM
DATE: APRIL, 2008 CHECKED BY: WCHK

DATE: 7/1/2008
TIME: 8:03:35 AM
FILENAME: N:\PROJECTS\161\Design\Details\161_watermain_details.dgn



- NOTES:**
- CONTRACTOR IS TO DISPOSE OF ALL UNUSED EXCAVATED MATERIAL OFF-SITE.
 - TRENCH IS TO BE EXCAVATED TO FIRM, UNDISTURBED SOIL. IF OVER EXCAVATION IS REQUIRED TO REACH A FIRM TRENCH BOTTOM, THE CONTRACTOR SHALL FILL THE VOID WITH CA-6 AND COMPACT TO OBTAIN PROPER DENSITY AND GRADE.

WATER MAIN TRENCH/BEDDING

DATE: 7/1/2008
 TIME: 8:03:44 AM
 FILENAME: N:\PROJ\05161\Design\Details\05161_watermain_details.dgn

REVISIONS	
NAME	DATE

Clorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 WATER MAIN
 DETAILS

SCALE: DATE: APRIL, 2008

DRAWN BY: DMM
 CHECKED BY: WCHK

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 130
Contract 83828



LEGEND

	SECTION CORNER		QUARTER SECTION CORNER		CENTER OF SECTION
	EXISTING CENTERLINE		EXISTING RIGHT OF WAY LINE		PROPOSED CENTERLINE
	PROPOSED RIGHT OF WAY LINE		PROPOSED TEMPORARY EASEMENT LINE		PROPOSED PERMANENT EASEMENT LINE
	SECTION LINE		QUARTER SECTION LINE		QUARTER QUARTER SECTION LINE
	PLATTED LOT LINE		PROPERTY (DEED) LINE		APPARENT PROPERTY LINE
	ACCESS CONTROL LINE		MEASURED OR COMPUTED DIMENSION		RECORD DATA
	FOUND IRON PIPE OR IRON ROD		SET 3/8 INCH IRON ROD		PERMANENT SURVEY MONUMENT, I.O.T. STD. 2135 (TO BE SET BY OTHERS)
	CUT CROSS FOUND OR SET		SAME OWNERSHIP		FENCE LINE
	SIGN				

• T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

• BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.

■ U STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

Coventine Fidis
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



**PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE**

SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 216+00 TO STATION 220+00
SCALE 1" = 20' SHEET 2

AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

DATE: 5/7/2008
TIME: 10:00 AM
DRAWN: J. DYBAS
CHECKED: M. WOOD
SCALE: 1" = 20'

CALCULATIONS BY: J. DYBAS

DRAFTING BY: M. BARAN

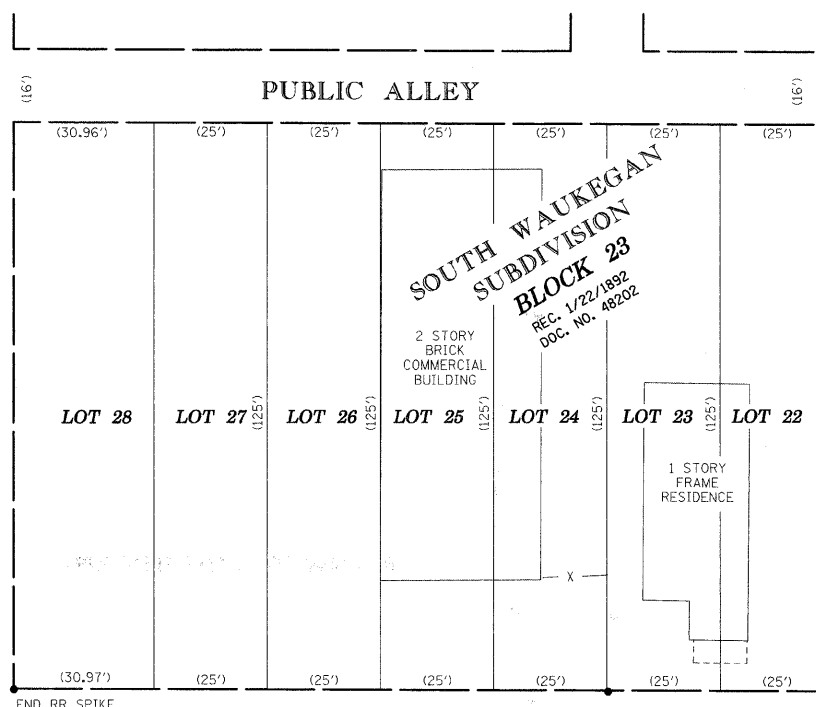
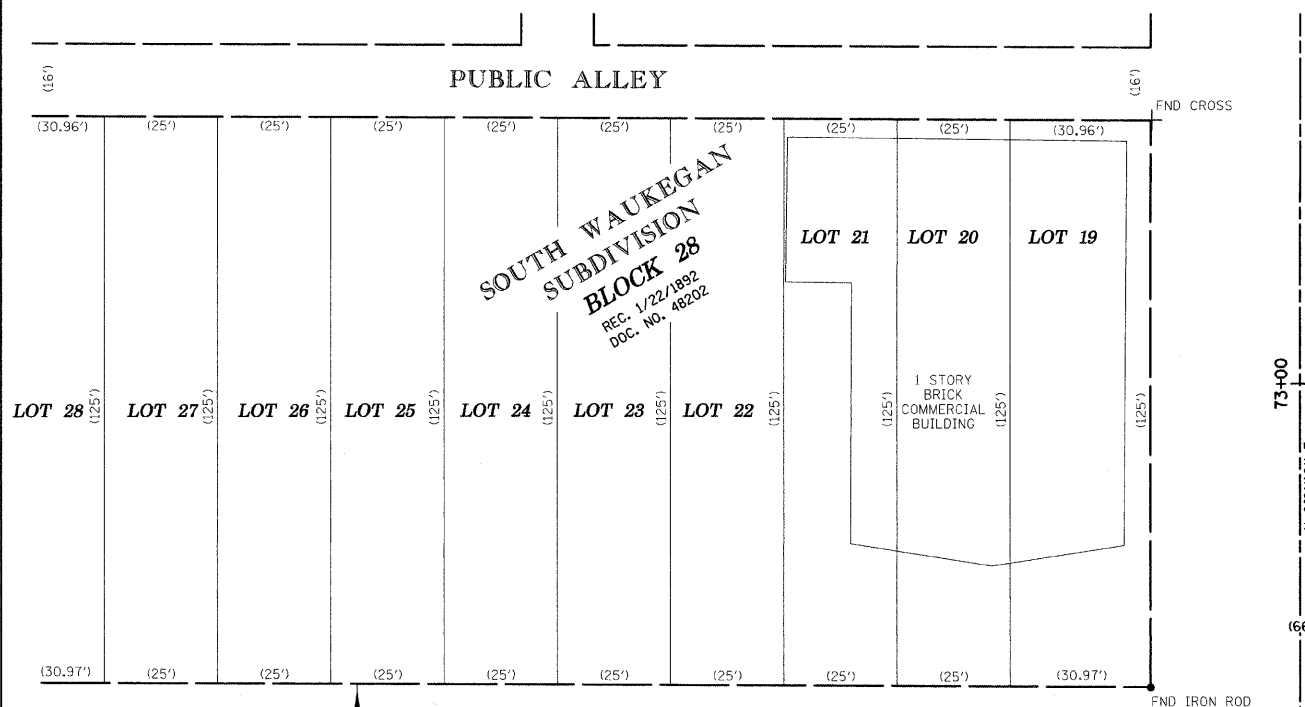
CHECKED BY: M. WOOD

REVISION DATE: 5/7/2008

ASC JOB NO. 204061

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 131
Contract 83828



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- CENTER OF SECTION
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- MEASURED OR COMPUTED DIMENSION
- RECORD DATA
- FOUND IRON PIPE OR IRON ROD
- SET 3/8 INCH IRON ROD
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE
- SIGN

BEARINGS SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (1997 ADJUSTMENT). ALL MEASURED AND CALCULATED VALUES ARE "GROUND."

COMBINED SCALE FACTOR (GROUND TO GRID) = 0.99996118436 (GRID TO GROUND) = 1.00003881715

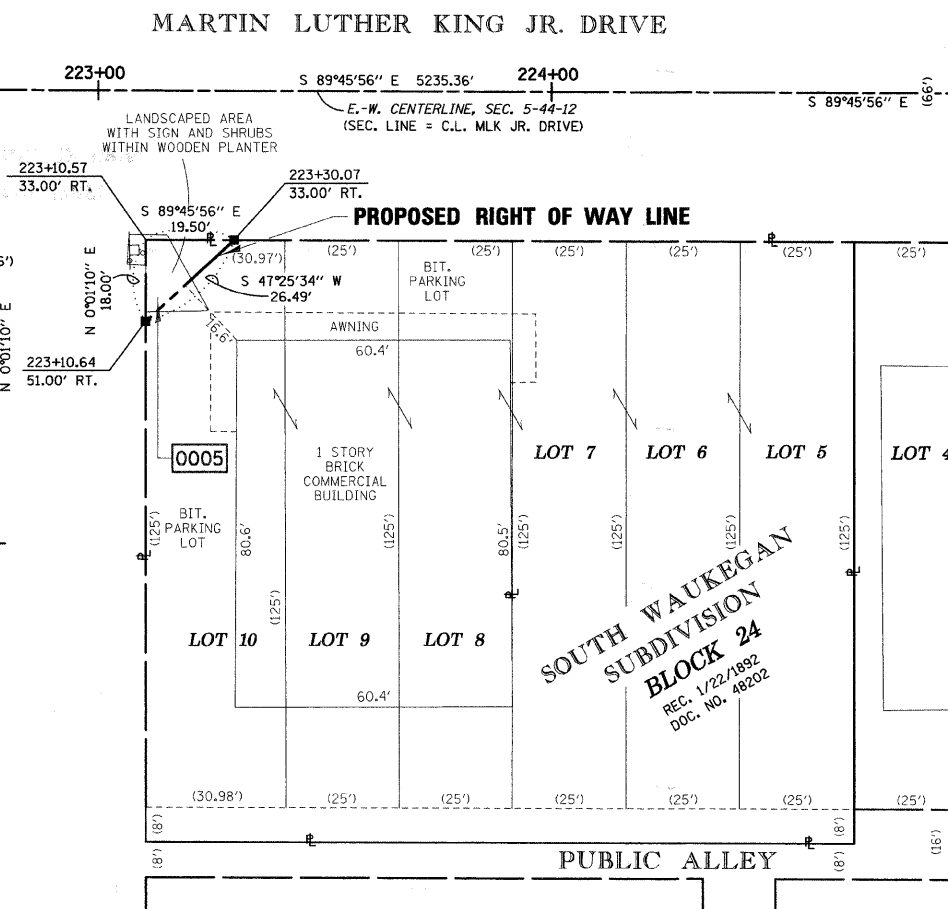
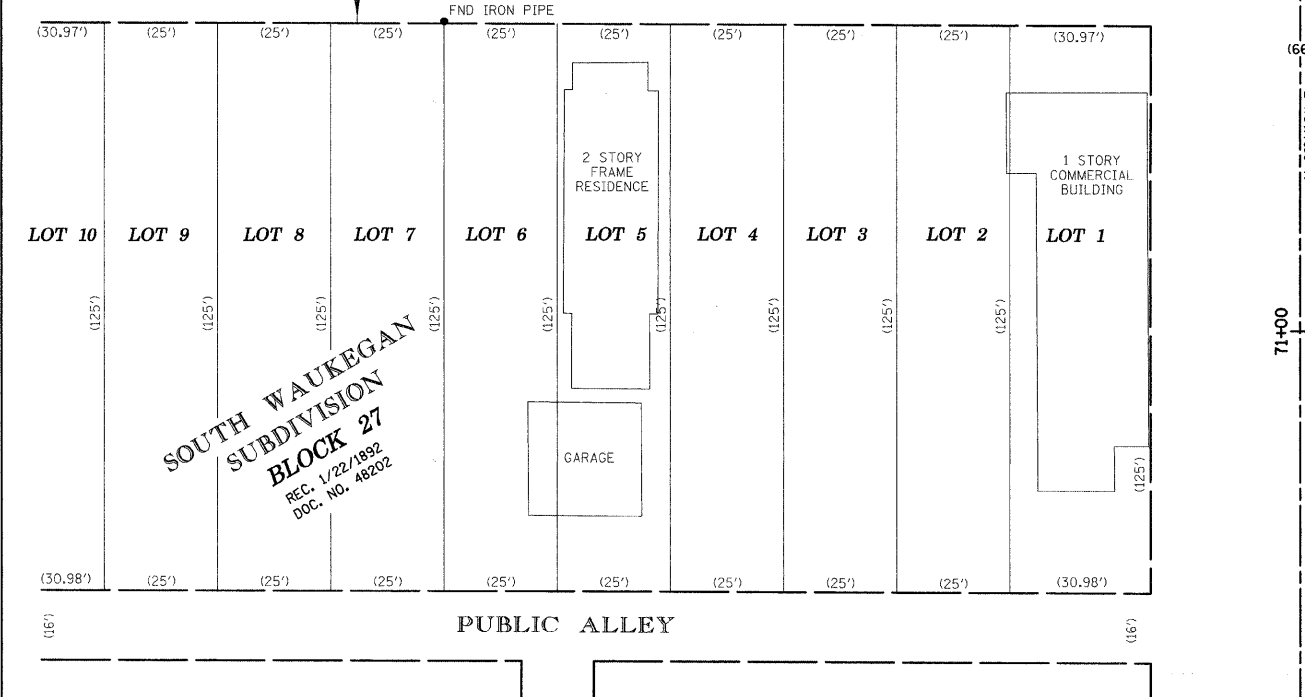
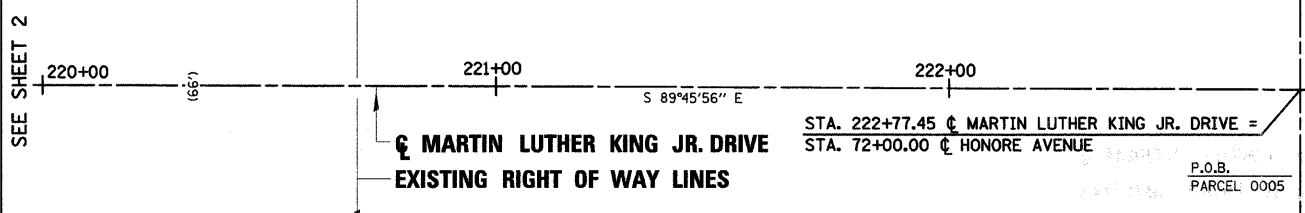
T1, T2, T3: THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

BT1, BT2, BT3: THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

M: STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

U: STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.

U: STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.



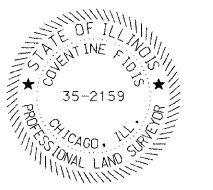
- T1, T2, T3: THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1, BT2, BT3: THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- M: STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- U: STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
- U: STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F.I.
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008



THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.

PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS		EASEMENT PURPOSE	PROPERTY ACQUIRED BY
							TEMP	PERM		
0005	JAE HWANG JO AND KYOUNG HI JO TITLE REPORT NO. 000714574	12-05-304-001	0.476 AC 20,738 SF	0.004 AC 175 SF	—	0.472 AC 20,563 SF	—	—		

CALCULATIONS BY: J. DYBAS

DRAFTING BY: M. BARAN

CHECKED BY: M. WOOD

REVISION DATE: 5/7/2008

ASC JOB NO. 204061

AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE

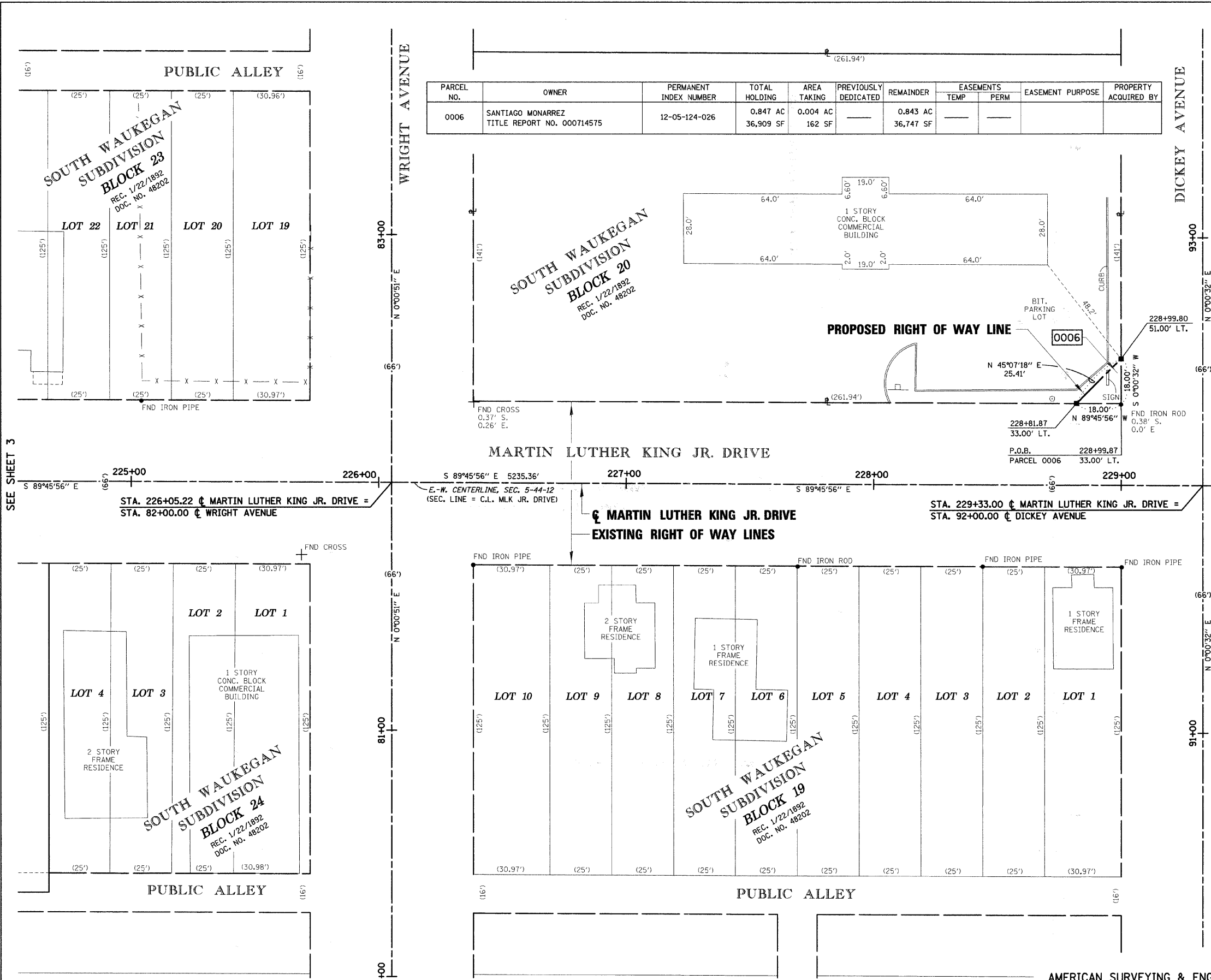
SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 220+00 TO STATION 224+50
SCALE 1" = 20' SHEET 3

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

DATE: 5/7/08
DRAWN: J. DYBAS
CHECKED: M. WOOD
DATE: 5/7/08

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 132
Contract 83828



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- CENTER OF SECTION
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- MEASURED OR COMPUTED DIMENSION
- RECORD DATA
- FOUND IRON PIPE OR IRON ROD
- SET 3/8" IRON ROD
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE
- SIGN
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8" IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8" IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2
- BT3
- M STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8" IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
- U STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8" IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

BEARINGS SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (1997 ADJUSTMENT). ALL MEASURED AND CALCULATED VALUES ARE "GROUND."

COMBINED SCALE FACTOR:
GROUND TO GRID) = 0.99996118436
GRID TO GROUND) = 1.00003881715

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F. Fidis
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



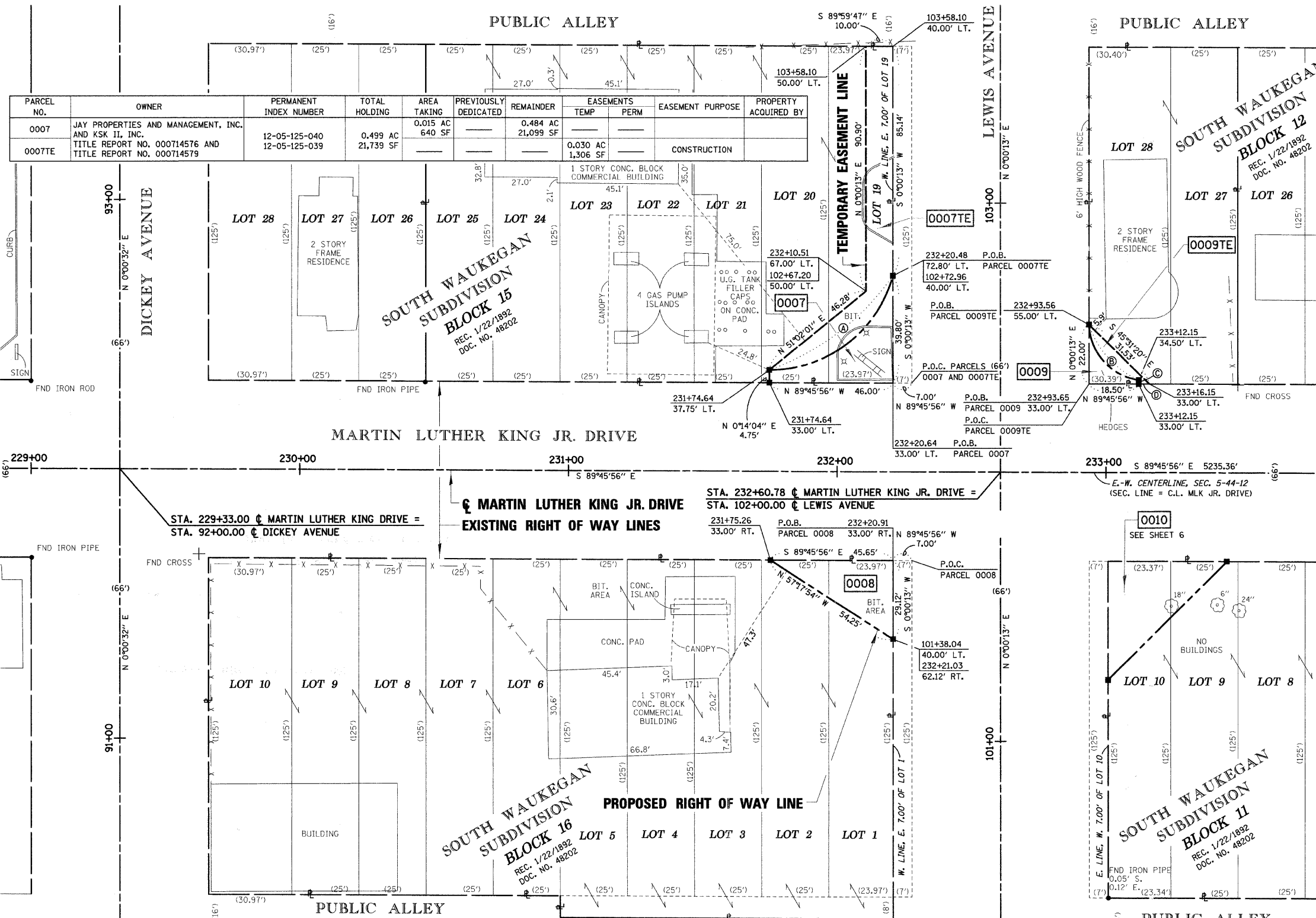
PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE

SECTION: GREEN BAY ROAD TO SHERIDAN ROAD LAKE COUNTY JOB NO. R-91-002-06
STATION 224+50 TO STATION 229+00
SCALE 1" = 20' SHEET 4

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 133
Contract 83828



PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS TEMP	EASEMENTS PERM	EASEMENT PURPOSE	PROPERTY ACQUIRED BY
0007	JAY PROPERTIES AND MANAGEMENT, INC. AND KSK II, INC.	12-05-125-040	0.499 AC	0.015 AC	—	0.484 AC	—	—	—	—
0007TE	TITLE REPORT NO. 000714576 AND TITLE REPORT NO. 000714579	12-05-125-039	21,739 SF	640 SF	—	21,099 SF	0.030 AC	—	CONSTRUCTION	—

PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS TEMP	EASEMENTS PERM	EASEMENT PURPOSE	PROPERTY ACQUIRED BY
0008	GRAND NATIONAL BANK, TRUSTEE, TRUST NO. 3392	12-05-306-028	0.754 AC	0.015 AC	—	0.739 AC	—	—	—	—
0009	MELISSA L. LEWIS	12-05-222-034	0.159 AC	0.003 AC	—	0.156 AC	—	—	—	—
0009TE	TITLE REPORT NO. 000714579	—	6,920 SF	122 SF	—	6,798 SF	0.003 AC	—	CONSTRUCTION	—

LEGEND

SECTION CORNER: 15, 16
QUARTER SECTION CORNER: 15, 16
CENTER OF SECTION: 16

EXISTING CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED CENTERLINE
PROPOSED RIGHT OF WAY LINE
PROPOSED TEMPORARY EASEMENT LINE
PROPOSED PERMANENT EASEMENT LINE
SECTION LINE
QUARTER SECTION LINE
QUARTER QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APPARENT PROPERTY LINE
ACCESS CONTROL LINE
MEASURED OR COMPUTED DIMENSION
RECORD DATA
FOUND IRON PIPE OR IRON ROD
SET 3/4 INCH IRON ROD
PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
CUT CROSS FOUND OR SET
SAME OWNERSHIP
FENCE LINE
SIGN

T1, T2, T3: THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/4 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

BT1, BT2, BT3: THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/4 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

M: STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/4 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.

U: STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/4 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 27TH DAY OF JUNE, 2008.

C.F.I.D.
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



LINE LEGEND

Ⓐ L = 62.02'
R = 47.50'
Δ = 74°48'22"
LC = N 52°49'53" E 57.70'

Ⓑ L = 30.06'
R = 21.50'
Δ = 80°06'52"
LC = S 41°57'59" E 27.67'

Ⓒ S 0°14'04" W 1.50'
Ⓓ N 89°45'56" W 4.00'

AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

**PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE**

SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 229+00 TO STATION 233+50
SCALE 1" = 20' SHEET 5

**BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196**

DATE: 6/27/08
TIME: 10:00 AM
DRAWN: J. DYBAS
CHECKED: M. WOOD
SCALE: 1" = 20'

CALCULATIONS BY: J. DYBAS

DRAFTING BY: M. BARAN

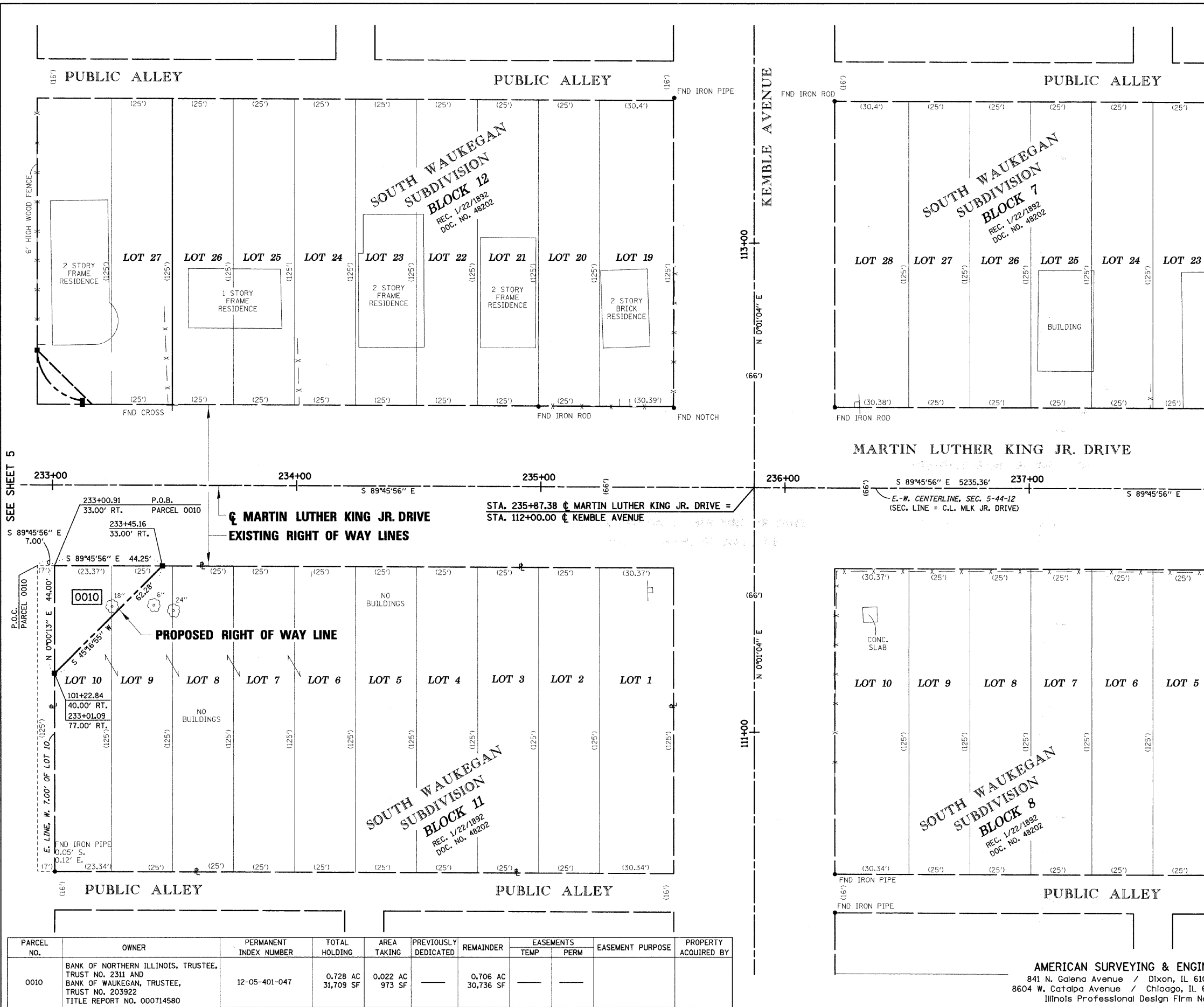
CHECKED BY: M. WOOD

REVISION DATE: 6/27/2008

ASC JOB NO. 204061

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 134
Contract 83828



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- CENTER OF SECTION
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- MEASURED OR COMPUTED DIMENSION
- RECORD DATA
- FOUND IRON PIPE OR IRON ROD
- SET 3/8 INCH IRON ROD
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE SIGN
- T1, T2, T3: THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1, BT2, BT3: THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- M: STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M: STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
- U: STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

BEARINGS SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (1997 ADJUSTMENT). ALL MEASURED AND CALCULATED VALUES ARE "GROUND."

COMBINED SCALE FACTOR (GROUND TO GRID) = 0.99996118436 (GRID TO GROUND) = 1.00003881715

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

[Signature]
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE

SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 233+50 TO STATION 237+50
SCALE 1" = 20' SHEET 6

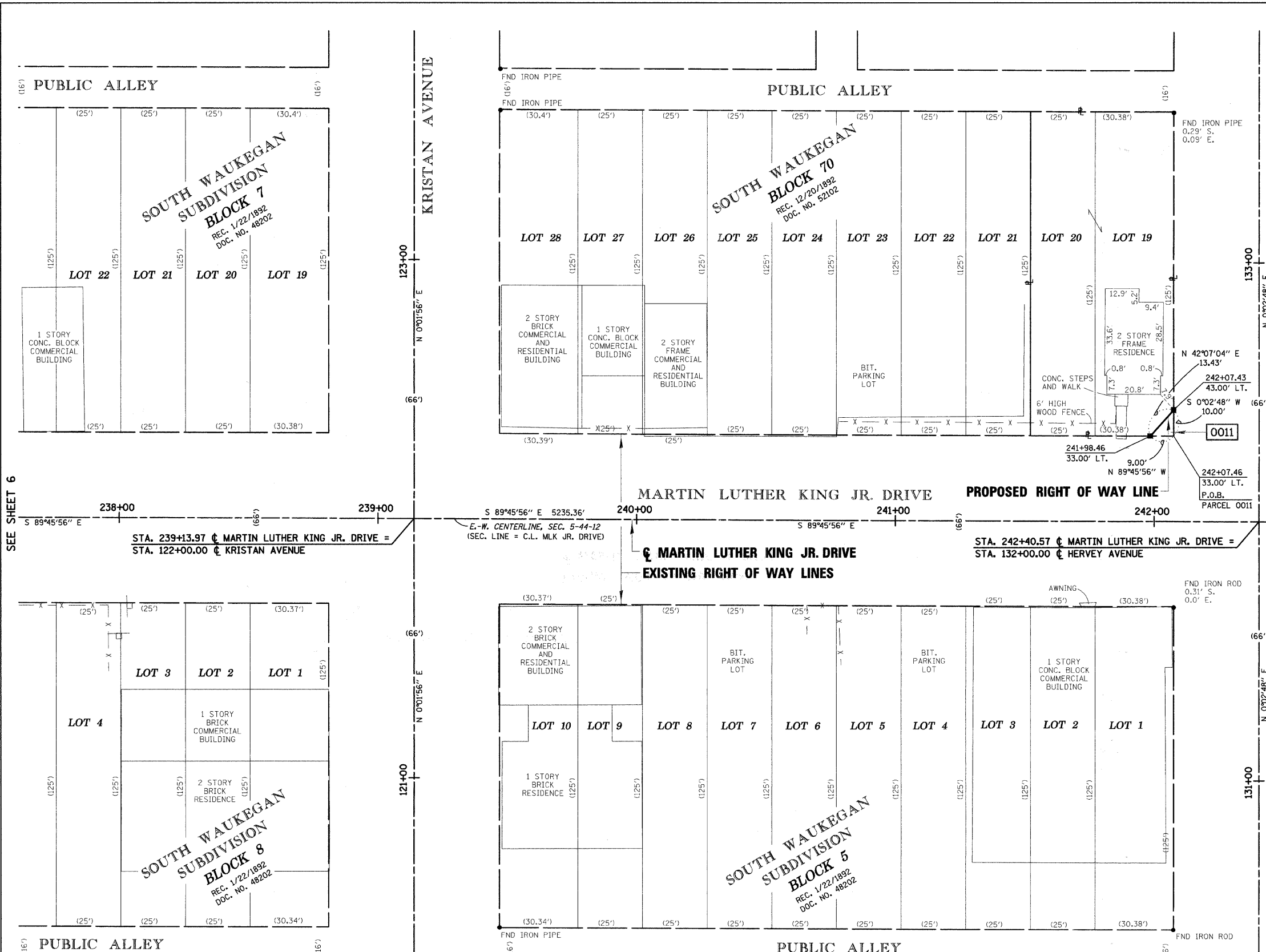
BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS		EASEMENT PURPOSE	PROPERTY ACQUIRED BY
							TEMP	PERM		
0010	BANK OF NORTHERN ILLINOIS, TRUSTEE, TRUST NO. 2311 AND BANK OF WAUKEGAN, TRUSTEE, TRUST NO. 203922 TITLE REPORT NO. 000714580	12-05-401-047	0.728 AC 31,709 SF	0.022 AC 973 SF		0.706 AC 30,736 SF				

DATE
 TIME
 JOB-SPEC
 REF
 REF
 REF

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 135
Contact 83828



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- CENTER OF SECTION
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- MEASURED OR COMPUTED DIMENSION
- RECORD DATA
- FOUND IRON PIPE OR IRON ROD
- SET 3/8" IRON ROD
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE SIGN
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8" IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2
- T3
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8" IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2
- BT3
- M STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8" IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
- U STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8" IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F.I.D.

COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

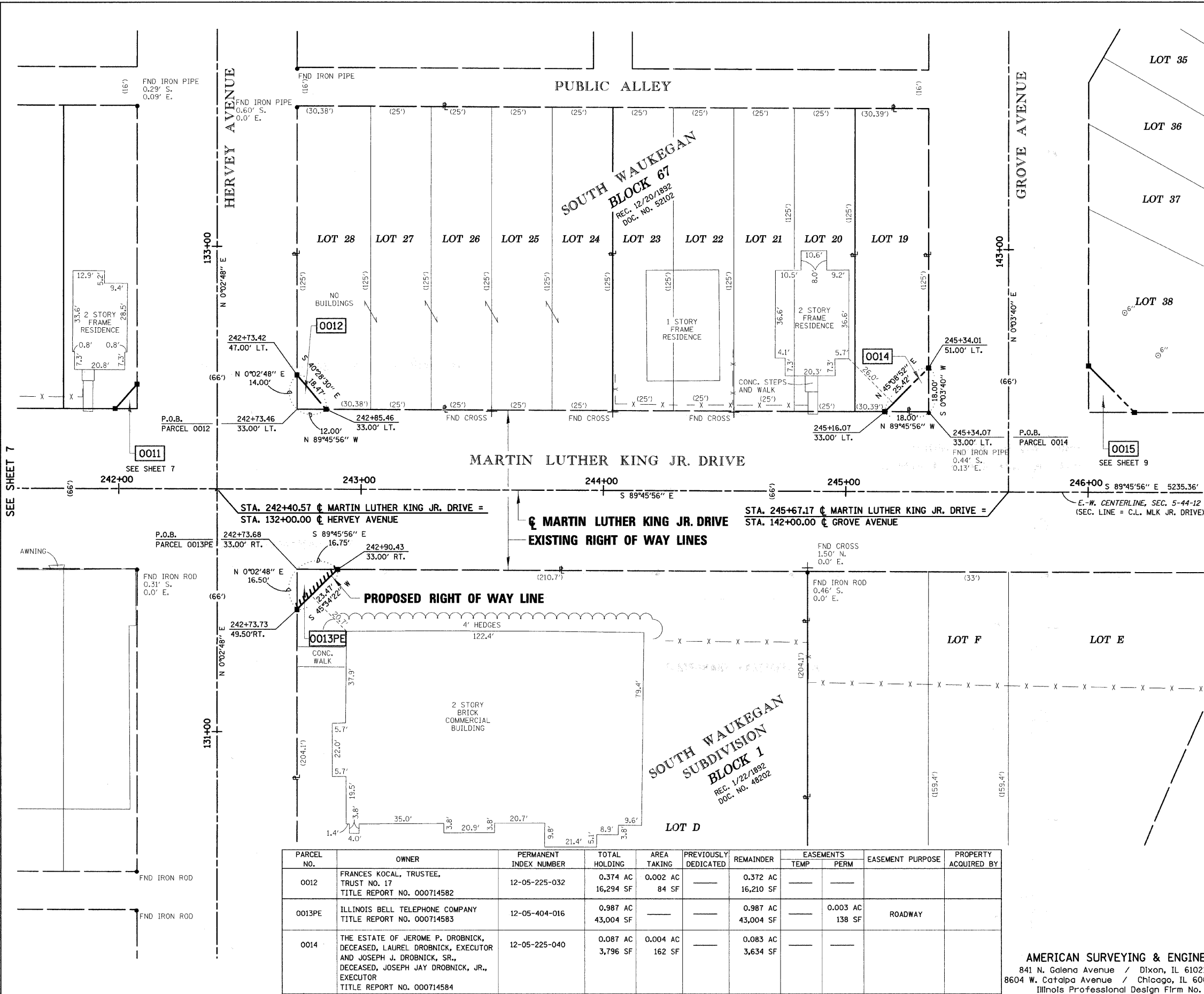
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS		EASEMENT PURPOSE	PROPERTY ACQUIRED BY
							TEMP	PERM		
0011	JOAN M. COLEMAN ALMOND TITLE REPORT NO. 000714581	12-05-224-043	0.159 AC 6,919 SF	0.001 AC 45 SF		0.158 AC 6,874 SF				

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 136
Contract 83828



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- CENTER OF SECTION
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- MEASURED OR COMPUTED DIMENSION
- RECORD DATA
- FOUND IRON PIPE OR IRON ROD
- SET 1/2 INCH IRON ROD
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE
- SIGN
- THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 1/2 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 - T1
 - T2
 - T3
- THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 - BT1
 - BT2
 - BT3
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

BEARINGS SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (1997 ADJUSTMENT). ALL MEASURED AND CALCULATED VALUES ARE "GROUND."

COMBINED SCALE FACTOR:
(GROUND TO GRID) = 0.99996118436
(GRID TO GROUND) = 1.00003881715

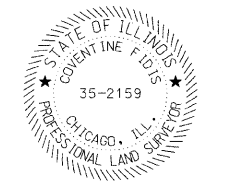
STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

[Signature]
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS		EASEMENT PURPOSE	PROPERTY ACQUIRED BY
							TEMP	PERM		
0012	FRANCES KOCAL, TRUSTEE, TRUST NO. 17 TITLE REPORT NO. 000714582	12-05-225-032	0.374 AC 16,294 SF	0.002 AC 84 SF	---	0.372 AC 16,210 SF	---	---	---	---
0013PE	ILLINOIS BELL TELEPHONE COMPANY TITLE REPORT NO. 000714583	12-05-404-016	0.987 AC 43,004 SF	---	---	0.987 AC 43,004 SF	---	0.003 AC 138 SF	ROADWAY	---
0014	THE ESTATE OF JEROME P. DROBNICK, DECEASED, LAUREL DROBNICK, EXECUTOR AND JOSEPH J. DROBNICK, SR., DECEASED, JOSEPH JAY DROBNICK, JR., EXECUTOR TITLE REPORT NO. 000714584	12-05-225-040	0.087 AC 3,796 SF	0.004 AC 162 SF	---	0.083 AC 3,634 SF	---	---	---	---

AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE

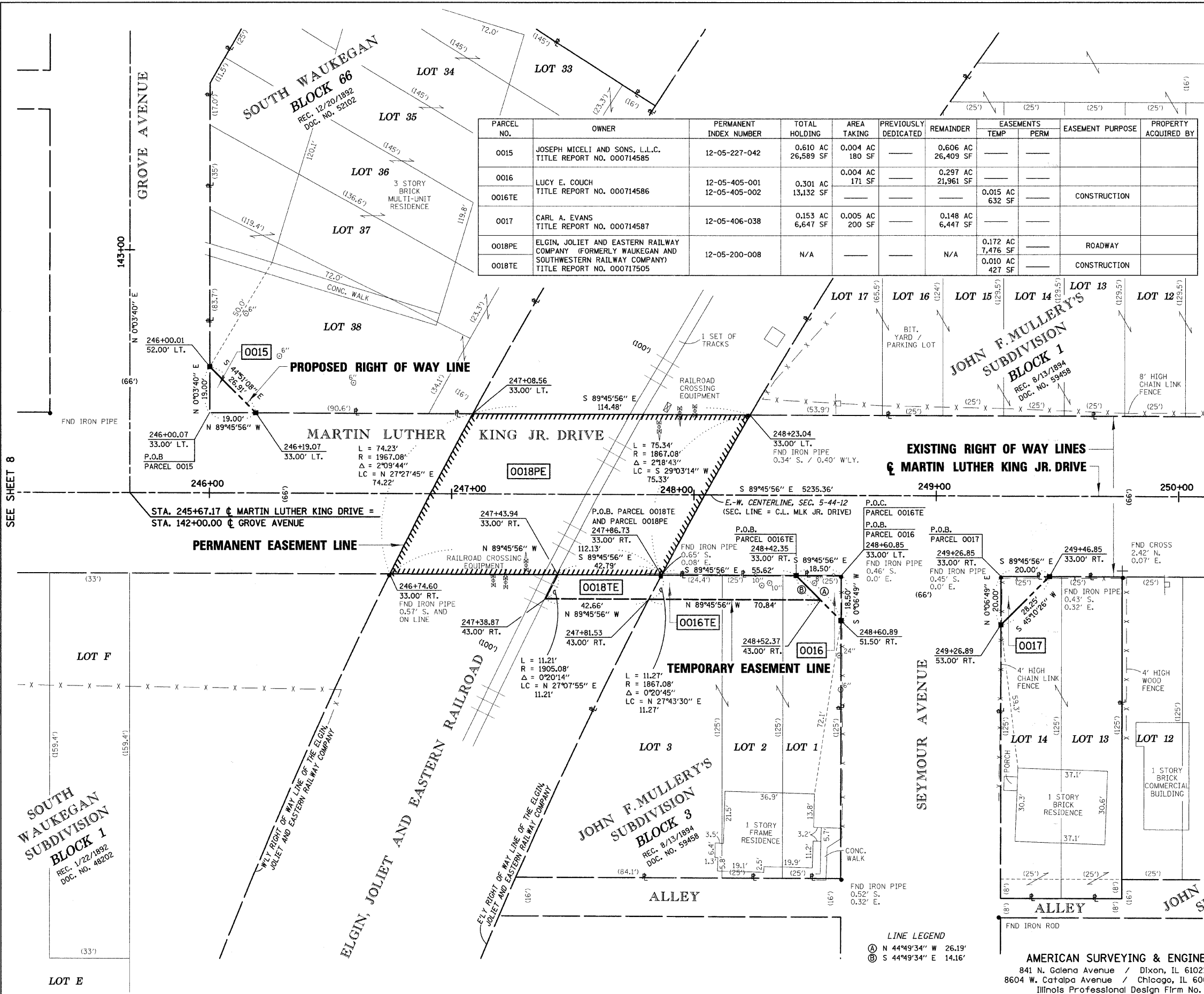
SECTION: GREEN BAY ROAD TO SHERIDAN ROAD
STATION 242+00
SCALE 1" = 20'

LAKE COUNTY
JOB NO. R-91-002-06
TO STATION 246+50
SHEET 8

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 137
Contract 83828



PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS TEMP	EASEMENTS PERM	EASEMENT PURPOSE	PROPERTY ACQUIRED BY
0015	JOSEPH MICELI AND SONS, L.L.C. TITLE REPORT NO. 000714585	12-05-227-042	0.610 AC 26,589 SF	0.004 AC 180 SF	—	0.606 AC 26,409 SF	—	—	—	—
0016	LUCY E. COUCH TITLE REPORT NO. 000714586	12-05-405-001 12-05-405-002	0.301 AC 13,132 SF	0.004 AC 171 SF	—	0.297 AC 21,961 SF	—	—	—	—
0017	CARL A. EVANS TITLE REPORT NO. 000714587	12-05-406-038	0.153 AC 6,647 SF	0.005 AC 200 SF	—	0.148 AC 6,447 SF	0.015 AC 632 SF	—	CONSTRUCTION	—
0018PE	ELGIN, JOLIET AND EASTERN RAILWAY COMPANY (FORMERLY WAUKEGAN AND SOUTHWESTERN RAILWAY COMPANY) TITLE REPORT NO. 000717505	12-05-200-008	N/A	—	—	N/A	0.172 AC 7,476 SF	—	ROADWAY	—
0018TE	—	—	—	—	—	—	0.010 AC 427 SF	—	CONSTRUCTION	—

LEGEND

SECTION CORNER
QUARTER SECTION CORNER
CENTER OF SECTION

EXISTING CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED CENTERLINE
PROPOSED RIGHT OF WAY LINE
PROPOSED TEMPORARY EASEMENT LINE
PROPOSED PERMANENT EASEMENT LINE
SECTION LINE
QUARTER SECTION LINE
QUARTER QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APPARENT PROPERTY LINE
ACCESS CONTROL LINE
MEASURED OR COMPUTED DIMENSION
RECORD DATA
FOUND IRON PIPE OR IRON ROD
SET 3/8 INCH IRON ROD
PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
CUT CROSS FOUND OR SET
SAME OWNERSHIP
FENCE LINE
SIGN

T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
T2 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
T3 STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 3/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
U STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F. Fidis
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.

**PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE**

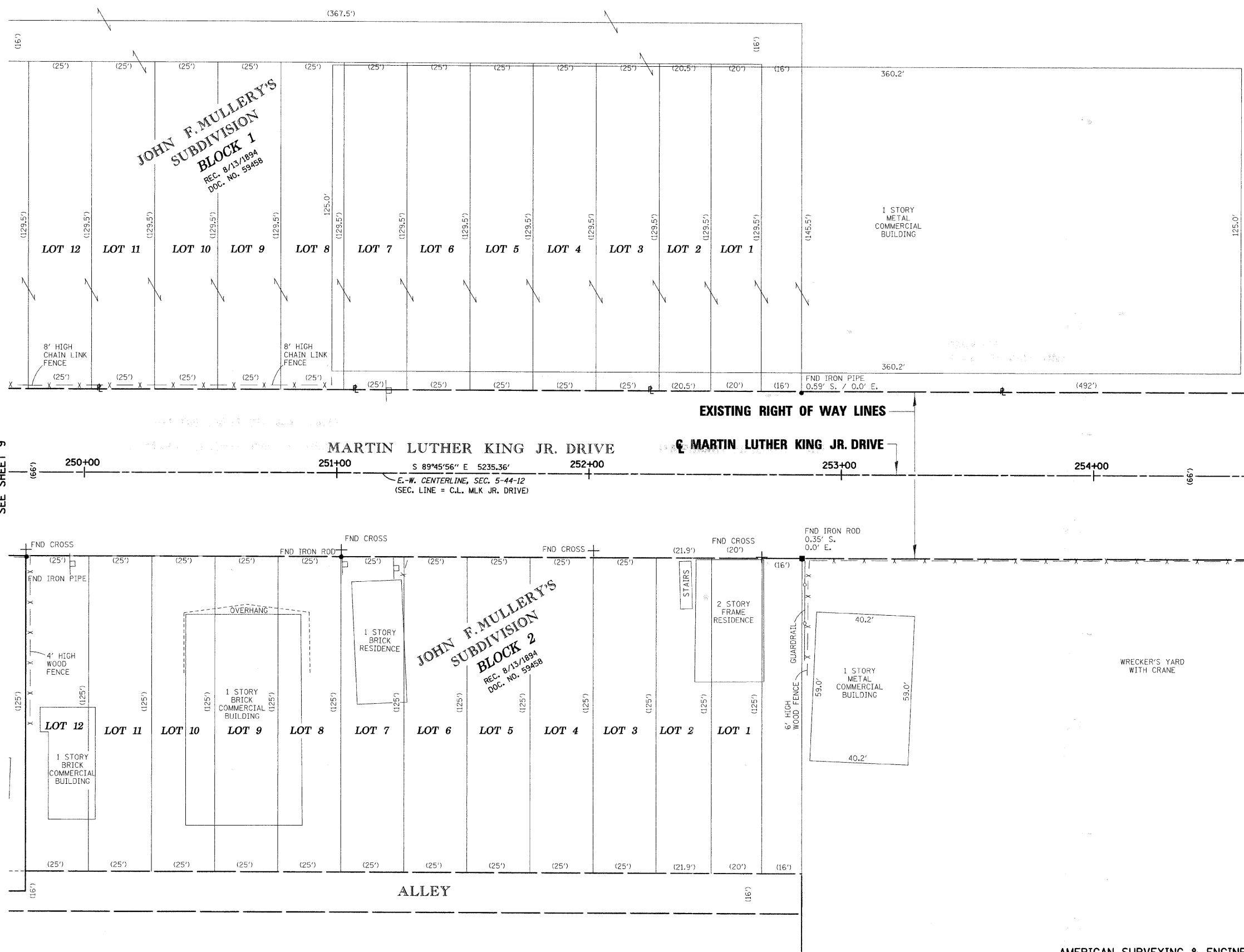
SECTION: GREEN BAY ROAD TO SHERIDAN ROAD
STATION 246+50
SCALE 1" = 20'

LAKE COUNTY
JOB NO. R-91-002-06
TO STATION 250+00
SHEET 9

**BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196**

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 138
Contract 83828



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- CENTER OF SECTION
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- PLATTED QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- RECORD DATA
- MEASURED OR COMPUTED DIMENSION
- FOUND IRON PIPE OR IRON ROD
- SET 1/8 INCH IRON ROD
- PERMANENT SURVEY MONUMENT, I.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE
- SIGN

• T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 1/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

• BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

■ M STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

■ U STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.

■ U STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8 INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

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DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F. Fidis
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



**PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE**

SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 250+00 TO STATION 254+50
SCALE 1" = 20' SHEET 10

AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

**BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196**

PART OF SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 139
Contact 83828

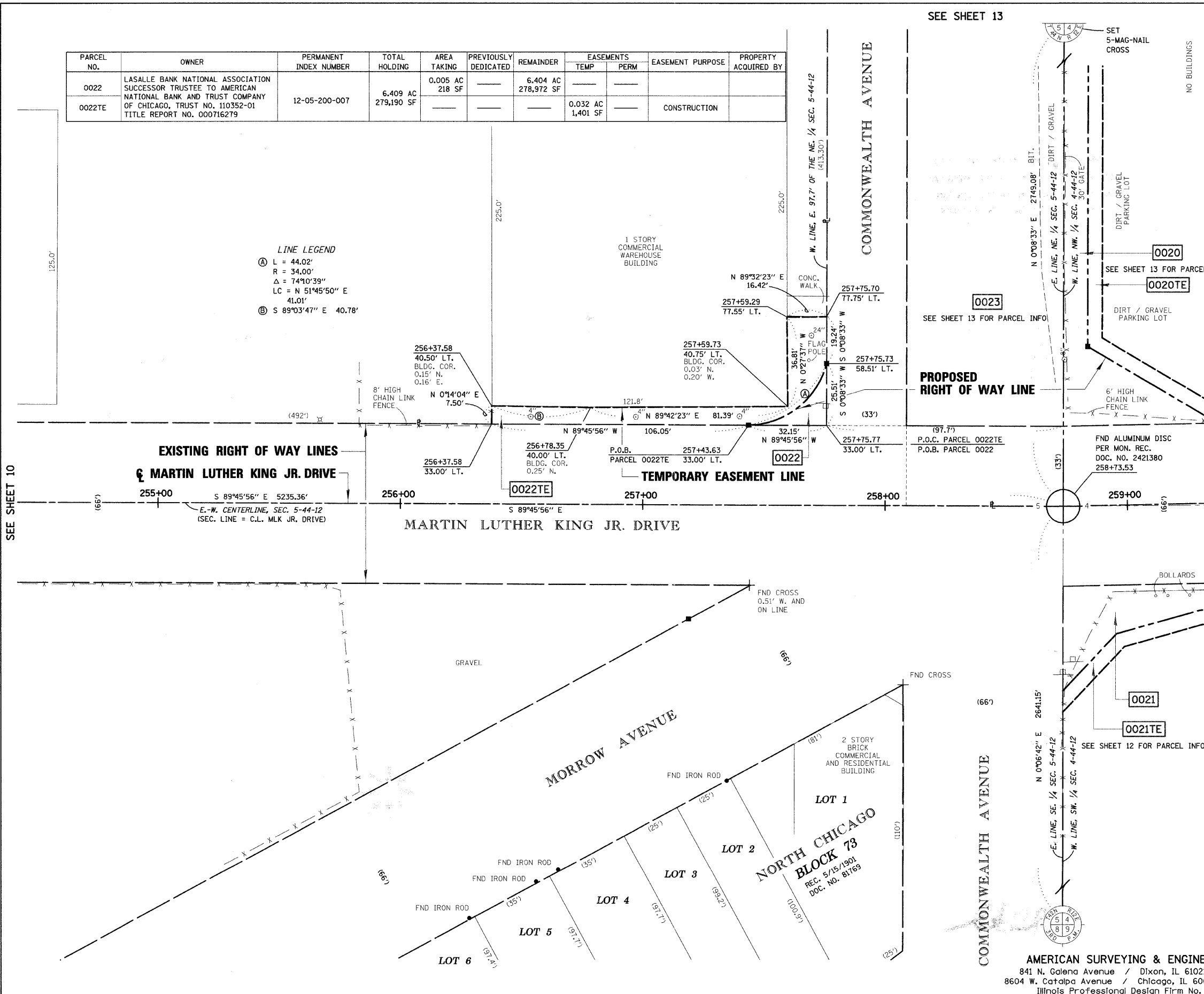
PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS		EASEMENT PURPOSE	PROPERTY ACQUIRED BY
							TEMP	PERM		
0022	LASALLE BANK NATIONAL ASSOCIATION SUCCESSOR TRUSTEE TO AMERICAN NATIONAL BANK AND TRUST COMPANY OF CHICAGO, TRUST NO. 110352-01 TITLE REPORT NO. 000716279	12-05-200-007	6.409 AC 279,190 SF	0.005 AC 218 SF		6.404 AC 278,972 SF				
0022TE							0.032 AC 1,401 SF		CONSTRUCTION	

LINE LEGEND
 (A) L = 44.02'
 R = 34.00'
 Δ = 74°10'39"
 LC = N 51°45'50" E
 41.01'
 (B) S 89°03'47" E 40.78'

LEGEND

- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- ACCESS CONTROL LINE
- MEASURED OR COMPUTED DIMENSION
- RECORD DATA
- FOUND IRON PIPE OR IRON ROD
- SET 3/8" INCH IRON ROD
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- FENCE LINE SIGN
- T1, T2, T3: THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 3/8" INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1, BT2, BT3: THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 3/8" INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- M: STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- U: STAKING OF PROPOSED RIGHT OF WAY IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES. SET DIVISION OF HIGHWAYS SURVEY MARKER ON 3/8" INCH IRON ROD (BETWEEN 6 INCHES AND 12 INCHES IN LENGTH) TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

BEARINGS SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (1997 ADJUSTMENT). ALL MEASURED AND CALCULATED VALUES ARE "GROUND."
 COMBINED SCALE FACTOR (GROUND TO GRID) = 0.99996118436 (GRID TO GROUND) = 1.00003881715



STATE OF ILLINOIS)
 COUNTY OF COOK) S.S.

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 5, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F. Fidis
 COVENTINE FIDIS
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
 LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 MARTIN LUTHER KING JR. DRIVE

SECTION: GREEN BAY ROAD LAKE COUNTY
 TO SHERIDAN ROAD JOB NO. R-91-002-06
 STATION 254+50 TO STATION 259+00
 SCALE 1" = 20' SHEET 11

BUREAU OF LAND ACQUISITION
 201 WEST CENTER COURT
 SCHAMBURG, ILLINOIS 60196

AMERICAN SURVEYING & ENGINEERING, P.C.
 841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
 8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
 Illinois Professional Design Firm No. 184-003192

DATE: 5/7/2008
 TIME: 10:00 AM
 DRAWN: J. DYBAS
 CHECKED: M. WOOD
 DRAFTED: M. BARAN

CALCULATIONS BY: J. DYBAS

DRAFTING BY: M. BARAN

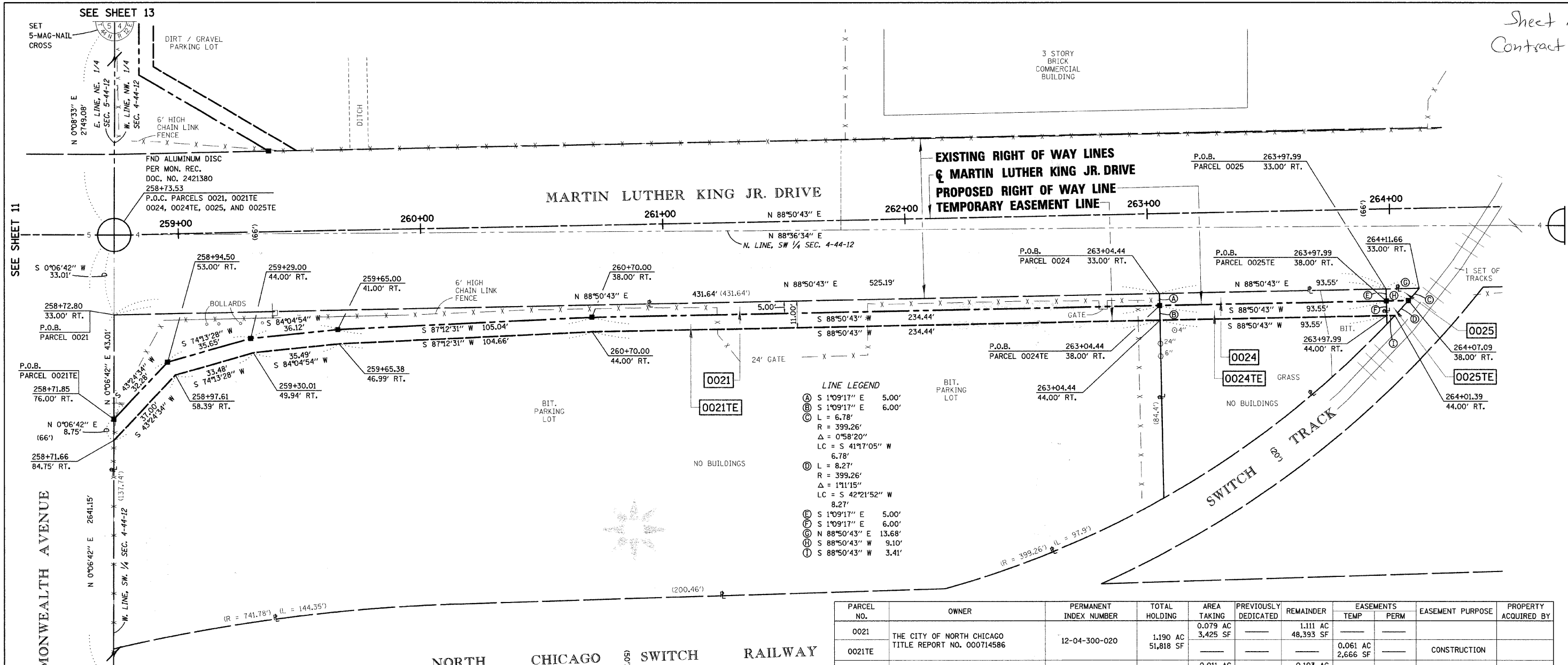
CHECKED BY: M. WOOD

REVISION DATE: 5/7/2008

ASC JOB NO. 204061

PART OF SECTION 4, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 140
Contract 83828

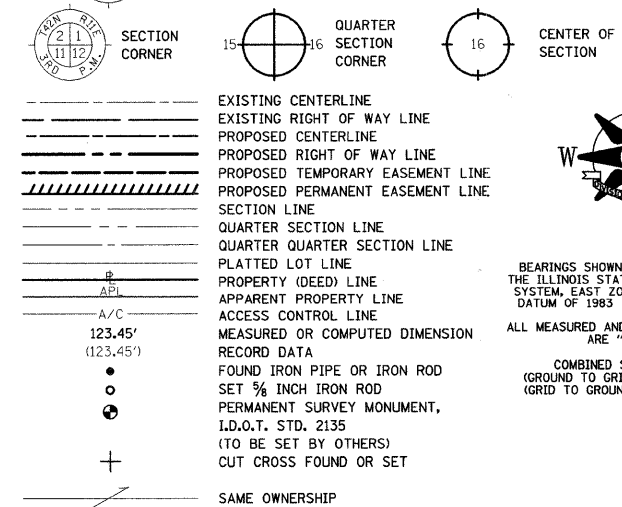


LINE LEGEND

(A)	S 1°09'17" E	5.00'
(B)	S 1°09'17" E	6.00'
(C)	L = 6.78'	
	R = 399.26'	
	Δ = 0°58'20"	
	LC = S 41°17'05" W	6.78'
(D)	L = 8.27'	
	R = 399.26'	
	Δ = 1°11'15"	
	LC = S 42°21'52" W	8.27'
(E)	S 1°09'17" E	5.00'
(F)	S 1°09'17" E	6.00'
(G)	N 88°50'43" E	13.68'
(H)	S 88°50'43" W	9.10'
(I)	S 88°50'43" W	3.41'

PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS TEMP	EASEMENTS PERM	EASEMENT PURPOSE	PROPERTY ACQUIRED BY
0021	THE CITY OF NORTH CHICAGO	12-04-300-020	1,190 AC	3,425 SF		1,111 AC				
0021TE	TITLE REPORT NO. 000714586		51,818 SF			48,393 SF			CONSTRUCTION	
0024	LAKESIDE BANK, TRUSTEE, TRUST NO. 10-1870	12-04-300-035 (PT.)	0,114 AC	468 SF		0,103 AC				
0024TE	TITLE REPORT NO. 000717505		4,959 SF			4,491 SF			CONSTRUCTION	
0025	901 MLK, L.L.C.	12-04-300-038 (PT.)	0,002 AC	57 SF		0,001 AC				
0025TE	TITLE REPORT NO. 000717505		101 SF			44 SF			CONSTRUCTION	

LEGEND



BEARINGS SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (1997 ADJUSTMENT). ALL MEASURED AND CALCULATED VALUES ARE "GROUND."

COMBINED SCALE FACTOR:
(GROUND TO GRID) = 0.99996118436
(GRID TO GROUND) = 1.00003881715

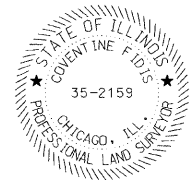
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2
- T3
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2
- BT3
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND SURFACE TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP AND SURVEYORS REGISTRATION NUMBER.
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STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

THIS IS TO CERTIFY THAT I, COVENTINE FIDIS, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 4, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C.F. Fidis
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008



THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.

AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Galena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

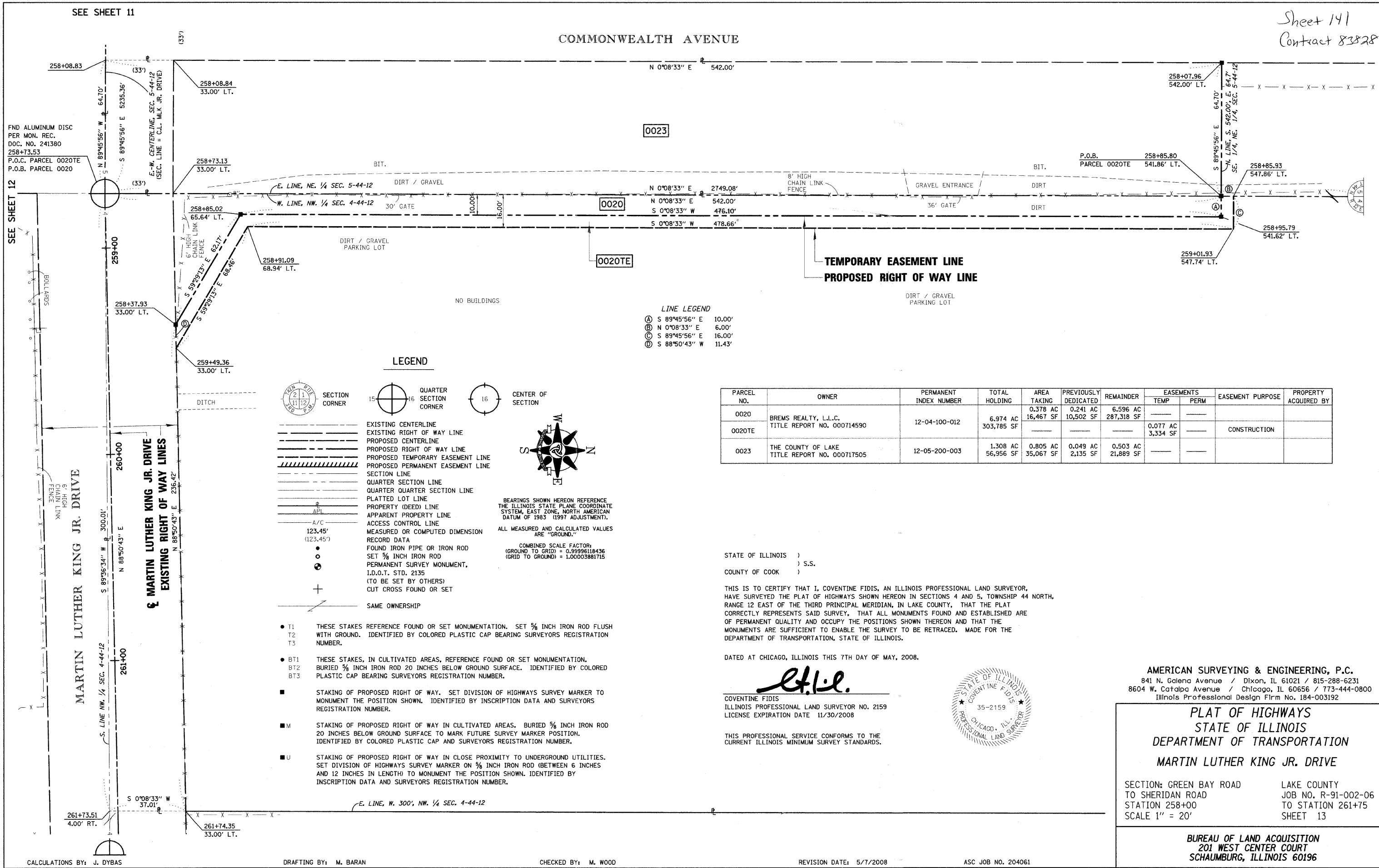
PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE

SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 258+50 TO STATION 264+50
SCALE 1" = 20' SHEET 12

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

PART OF SECTION 4 AND SECTION 5, T44N, R12E, OF THE 3RD PM, LAKE COUNTY, ILLINOIS

Sheet 141
Contract 83828



0023

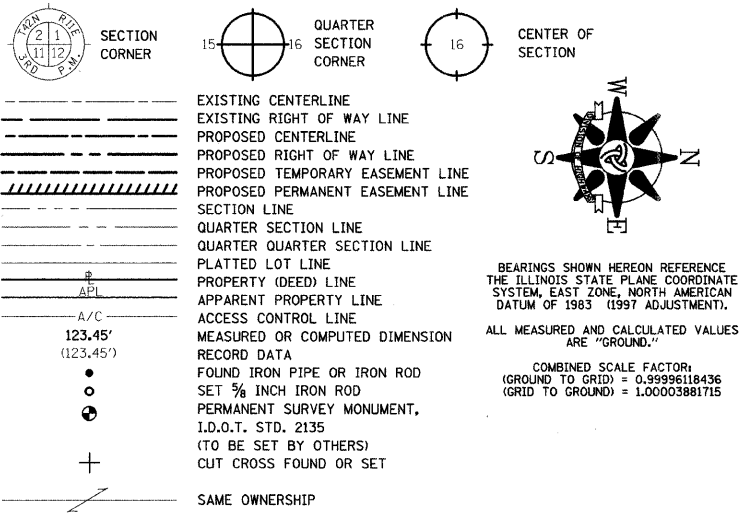
0020

0020TE

LINE LEGEND

Ⓐ	S 89°45'56" E	10.00'
Ⓑ	N 0°08'33" E	6.00'
Ⓒ	S 89°45'56" E	16.00'
Ⓓ	S 88°50'43" W	11.43'

LEGEND



PARCEL NO.	OWNER	PERMANENT INDEX NUMBER	TOTAL HOLDING	AREA TAKING	PREVIOUSLY DEDICATED	REMAINDER	EASEMENTS		EASEMENT PURPOSE	PROPERTY ACQUIRED BY
							TEMP	PERM		
0020	BREMS REALTY, L.L.C.	12-04-100-012	6.974 AC	0.378 AC	0.241 AC	6.596 AC	—	—	—	—
0020TE	TITLE REPORT NO. 000714590		303,785 SF	16,467 SF	10,502 SF	287,318 SF	0.077 AC	3,334 SF	CONSTRUCTION	—
0023	THE COUNTY OF LAKE	12-05-200-003	1.308 AC	0.805 AC	0.049 AC	0.503 AC	—	—	—	—
	TITLE REPORT NO. 000717505		56,956 SF	35,067 SF	2,135 SF	21,889 SF	—	—	—	—

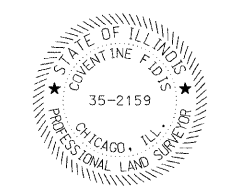
STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

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DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF MAY, 2008.

C. F. I.
COVENTINE FIDIS
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2159
LICENSE EXPIRATION DATE 11/30/2008

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM SURVEY STANDARDS.



AMERICAN SURVEYING & ENGINEERING, P.C.
841 N. Calena Avenue / Dixon, IL 61021 / 815-288-6231
8604 W. Catalpa Avenue / Chicago, IL 60656 / 773-444-0800
Illinois Professional Design Firm No. 184-003192

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
MARTIN LUTHER KING JR. DRIVE

SECTION: GREEN BAY ROAD LAKE COUNTY
TO SHERIDAN ROAD JOB NO. R-91-002-06
STATION 258+00 TO STATION 261+75
SCALE 1" = 20' SHEET 13

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

DATE: 5/7/2008
DRAWN: J. DYBAS
CHECKED: M. WOOD
DRAFTING: M. BARAN

CALCULATIONS BY: J. DYBAS

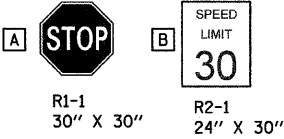
DRAFTING BY: M. BARAN

CHECKED BY: M. WOOD

REVISION DATE: 5/7/2008

ASC JOB NO. 204061

SIGN LEGEND

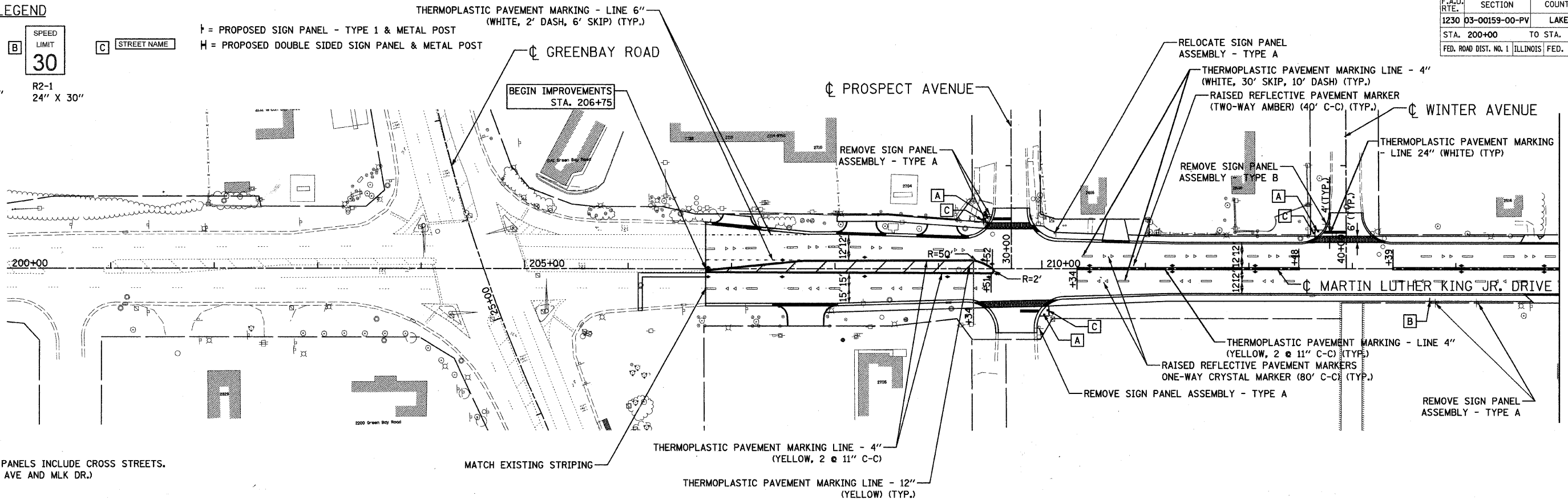


† = PROPOSED SIGN PANEL - TYPE 1 & METAL POST
 H = PROPOSED DOUBLE SIDED SIGN PANEL & METAL POST
 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE, 2' DASH, 6' SKIP) (TYP.)

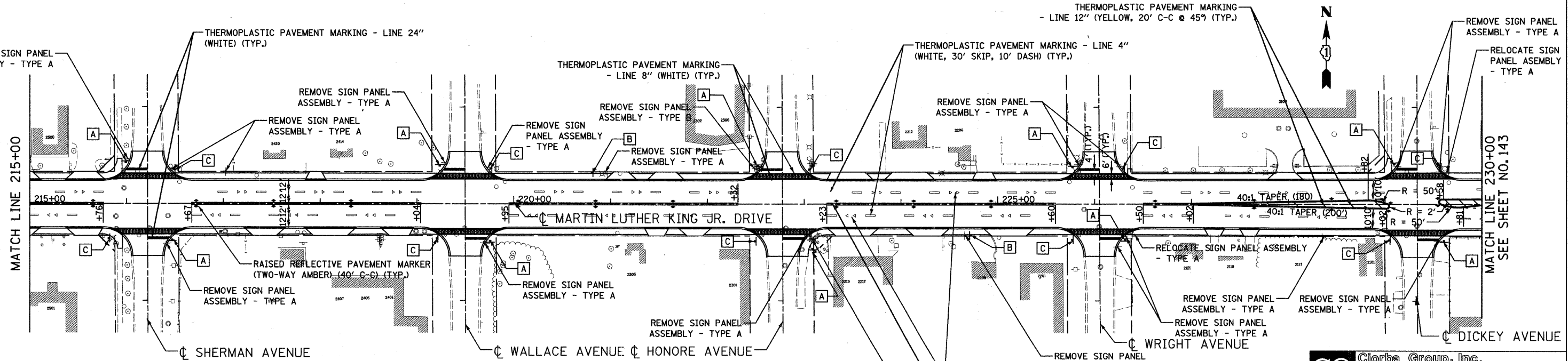
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	142
STA. 200+00		TO STA. 230+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



MATCH LINE 215+00



NOTES:
 STREET NAMES PANELS INCLUDE CROSS STREETS.
 (E.G. PROSPECT AVE AND MLK DR.)



NOTES:
 STREET NAMES PANELS INCLUDE CROSS STREETS.
 (E.G. PROSPECT AVE AND MLK DR.)

REVISIONS	
NAME	DATE

Clorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@clorba.com

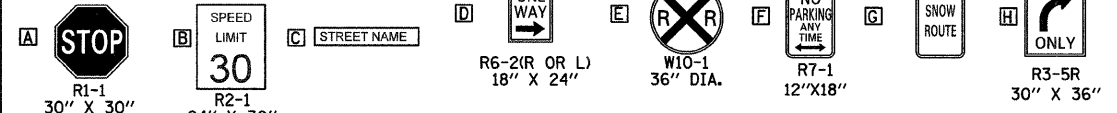
CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 PERMANENT PAVEMENT MARKING AND SIGNING
 STA. 200+00 TO STA. 230+00

SCALE: 1"=50'
 DATE: APRIL, 2008

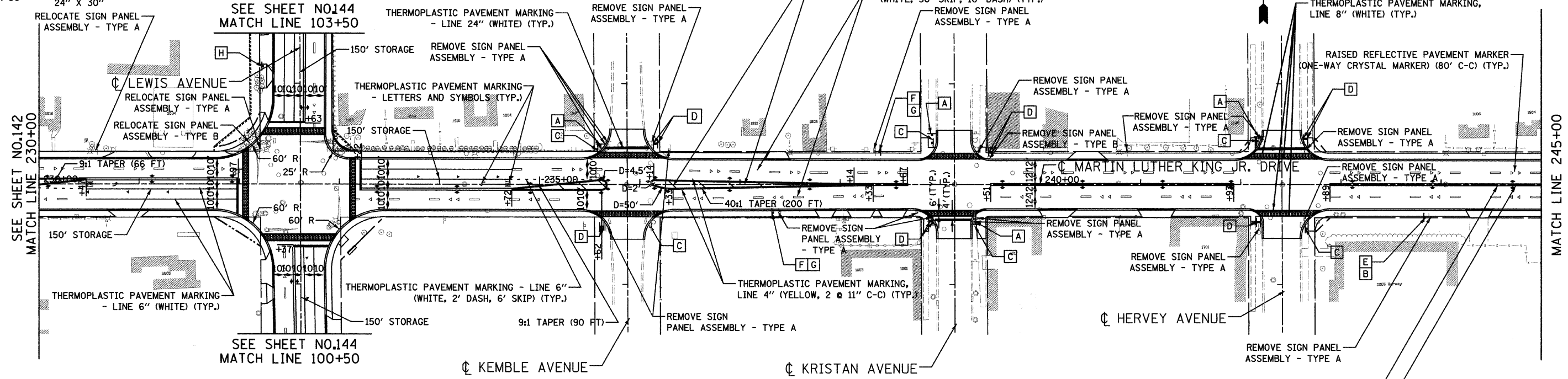
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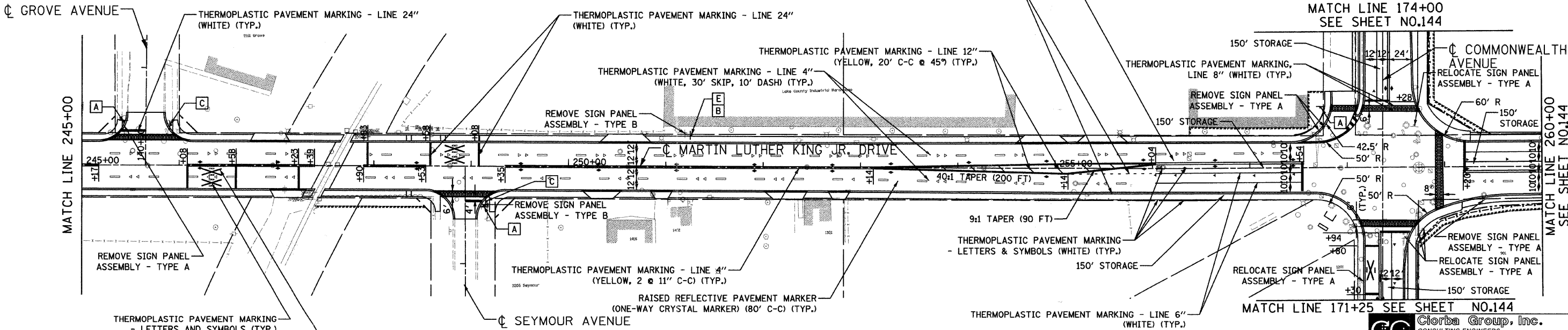
SIGN LEGEND



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	143
STA. 230+00		TO STA. 260+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT: 83828				



NOTES:
STREET NAMES PANELS INCLUDE CROSS STREETS.
(E.G. PROSPECT AVE AND MLK DR.)



NOTES:
STREET NAMES PANELS INCLUDE CROSS STREETS.
(E.G. PROSPECT AVE AND MLK DR.)

REVISIONS	
NAME	DATE

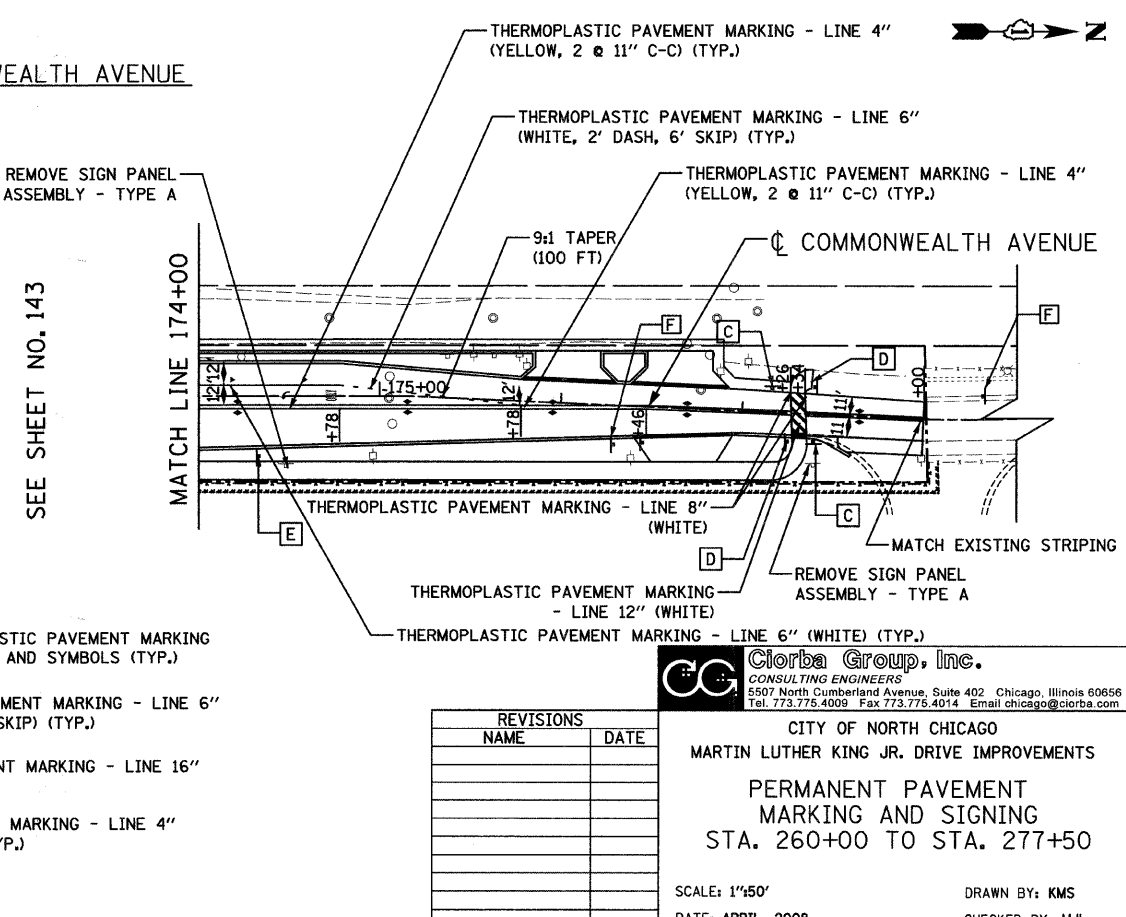
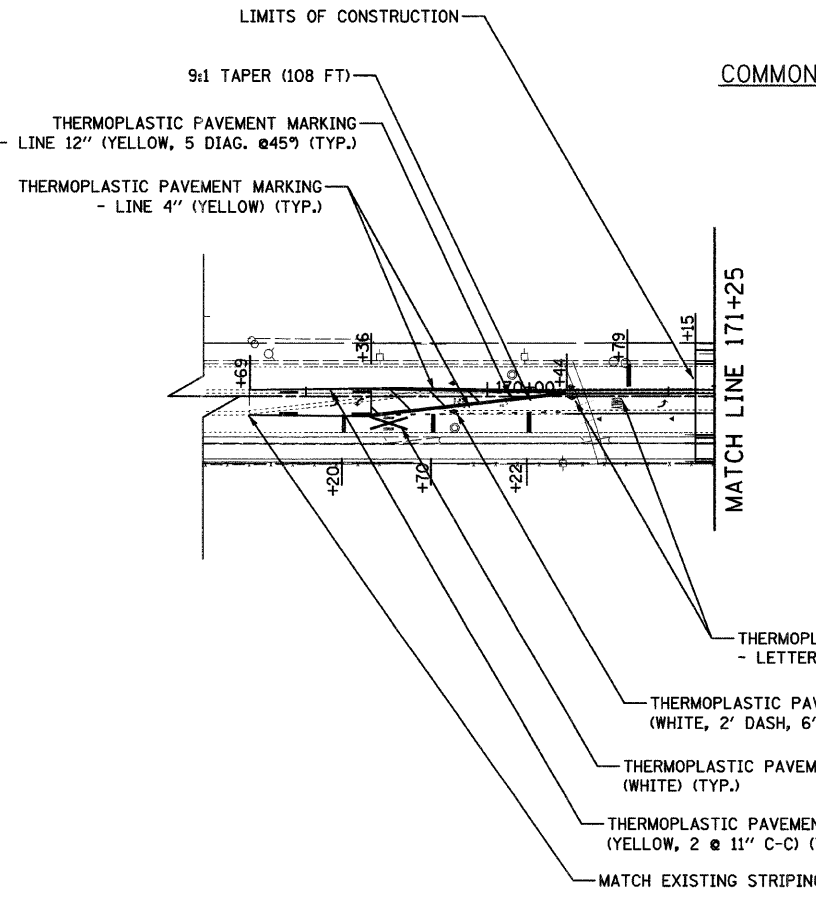
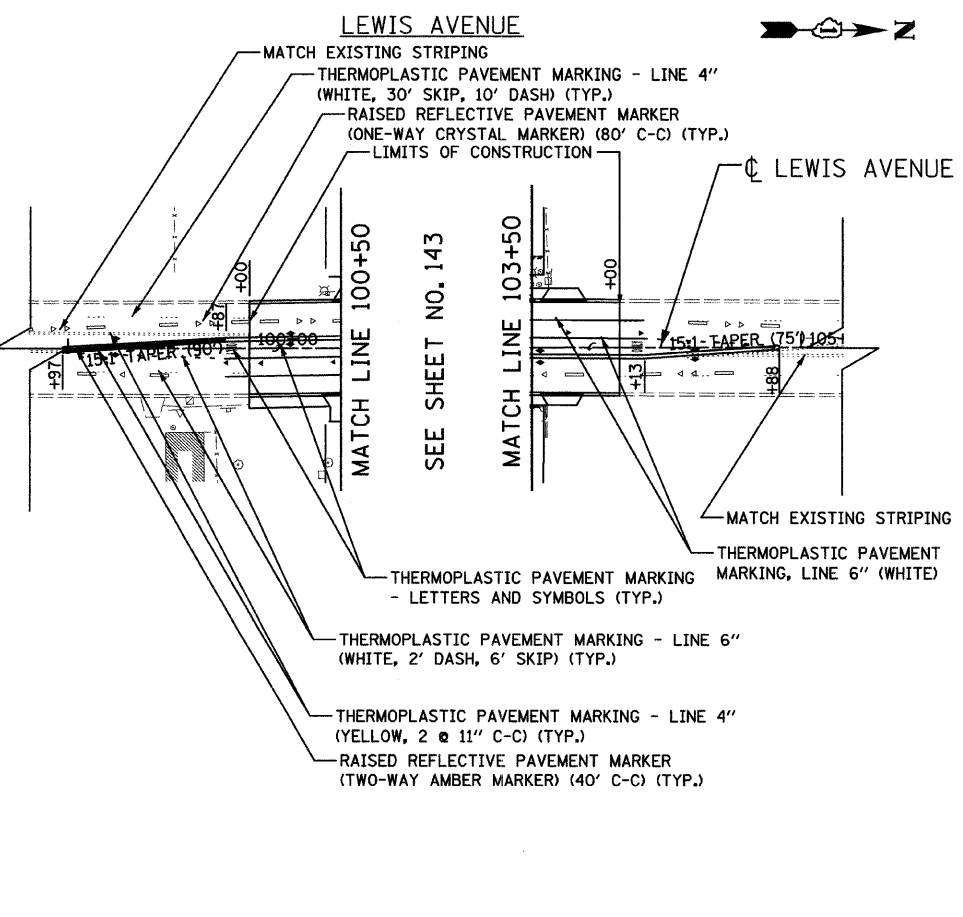
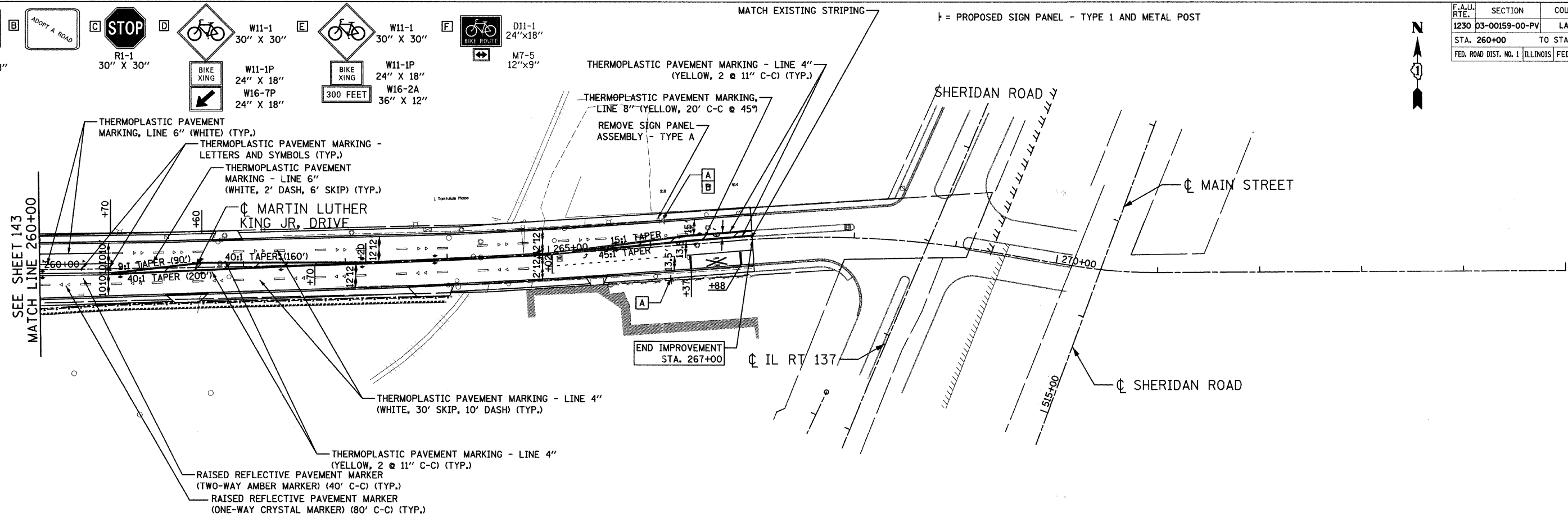
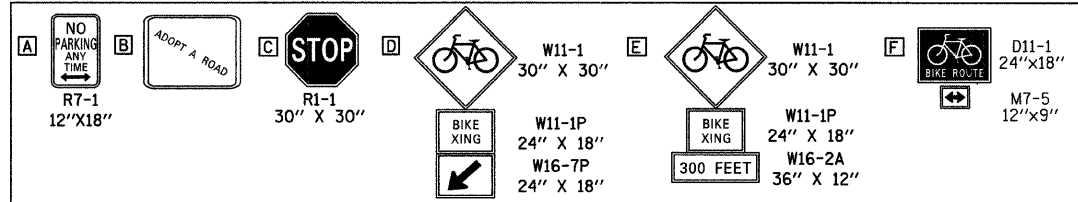
Clorba Group, Inc.
CONSULTING ENGINEERS
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Tel. 773.775.4009 Fax. 773.775.4014 Email. chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
PERMANENT PAVEMENT MARKING AND SIGNING
STA. 230+00 TO STA. 260+00

SCALE: 1"=50'
DATE: APRIL, 2008
DRAWN BY: KMS
CHECKED BY: MJL

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	144
STA. 260+00		TO STA. 277+50		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT
CONTRACT# 83828				



DATE: 7/1/2008
 TIME: 8:15:31 AM
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REVISIONS	
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CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 PERMANENT PAVEMENT MARKING AND SIGNING
 STA. 260+00 TO STA. 277+50

SCALE: 1"=50'
 DATE: APRIL, 2008

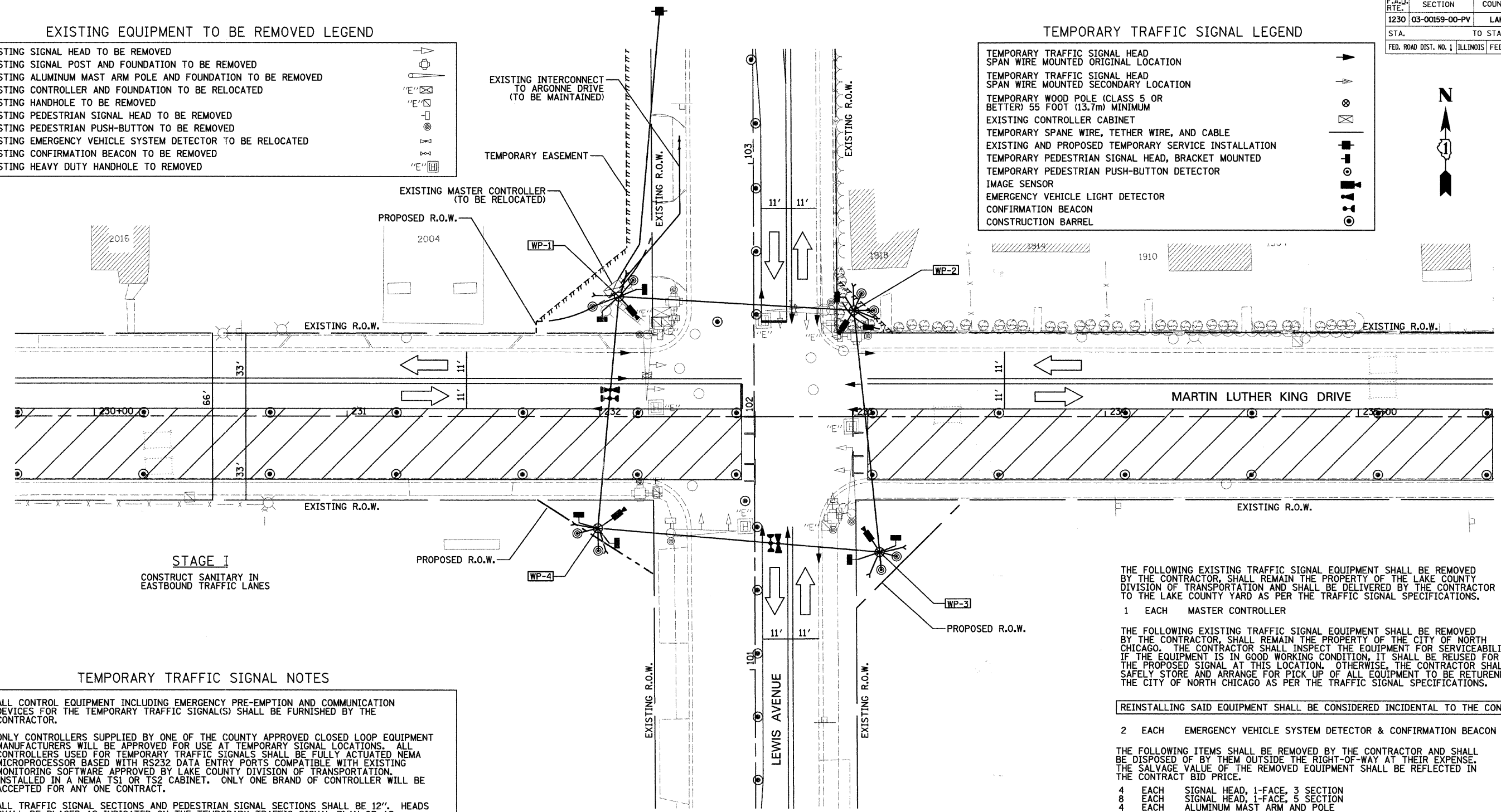
DRAWN BY: KMS
 CHECKED BY: MJL

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE RELOCATED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR TO BE RELOCATED
- EXISTING CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD
- SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD
- SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 55 FOOT (13.7m) MINIMUM
- EXISTING CONTROLLER CABINET
- TEMPORARY SPANE WIRE, TETHER WIRE, AND CABLE
- EXISTING AND PROPOSED TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- TEMPORARY PEDESTRIAN PUSH-BUTTON DETECTOR
- IMAGE SENSOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- CONSTRUCTION BARREL



STAGE I
CONSTRUCT SANITARY IN EASTBOUND TRAFFIC LANES

TEMPORARY TRAFFIC SIGNAL NOTES

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE COUNTY APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY LAKE COUNTY DIVISION OF TRANSPORTATION. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE VIDEO VEHICLE DETECTION CAMERAS SHALL BE MOUNTED ON THE TEMPORARY WOOD POLES AT A NOMINAL MOUNTING HEIGHT OF FORTY (40) FEET.
- UPON COMPLETION OF THE PERMANENT TRAFFIC SIGNAL INSTALLATION THE VIDEO VEHICLE DETECTION SYSTEM, COMPLETE, SHALL BE RELOCATED FROM THE TEMPORARY TRAFFIC SIGNAL INSTALLATION TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION. THE VIDEO VEHICLE DETECTION SYSTEM AND THE RELOCATION OF THIS EQUIPMENT SHALL BE PAID FOR EACH AS "VIDEO DETECTION SYSTEM COMPLETE INTERSECTION".

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE LAKE COUNTY DIVISION OF TRANSPORTATION AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE LAKE COUNTY YARD AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH MASTER CONTROLLER

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE CITY OF NORTH CHICAGO. THE CONTRACTOR SHALL INSPECT THE EQUIPMENT FOR SERVICEABILITY. IF THE EQUIPMENT IS IN GOOD WORKING CONDITION, IT SHALL BE REUSED FOR THE PROPOSED SIGNAL AT THIS LOCATION. OTHERWISE, THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE CITY OF NORTH CHICAGO AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

REINSTALLING SAID EQUIPMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

- 2 EACH EMERGENCY VEHICLE SYSTEM DETECTOR & CONFIRMATION BEACON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH SIGNAL HEAD, 1-FACE, 3 SECTION
- 8 EACH SIGNAL HEAD, 1-FACE, 5 SECTION
- 4 EACH ALUMINUM MAST ARM AND POLE
- 4 EACH SIGNAL POST
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER CABINET

STRUCTURE STATION OFFSET POSSIBLE UTILITY CONFLICTS

STRUCTURE	STATION	OFFSET	POSSIBLE UTILITY CONFLICTS
WP-1	232+08	47' LT	NONE
WP-2	232+95	40' LT	EXISTING WATER MAIN
WP-3	233+11	54' RT	NONE
WP-4	232+99	44' RT	NONE

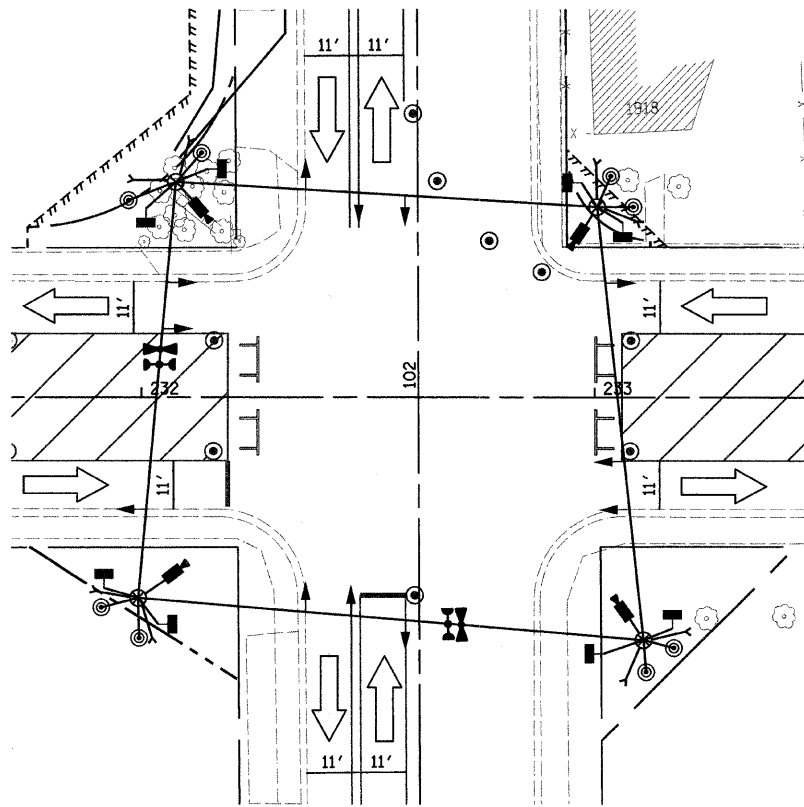


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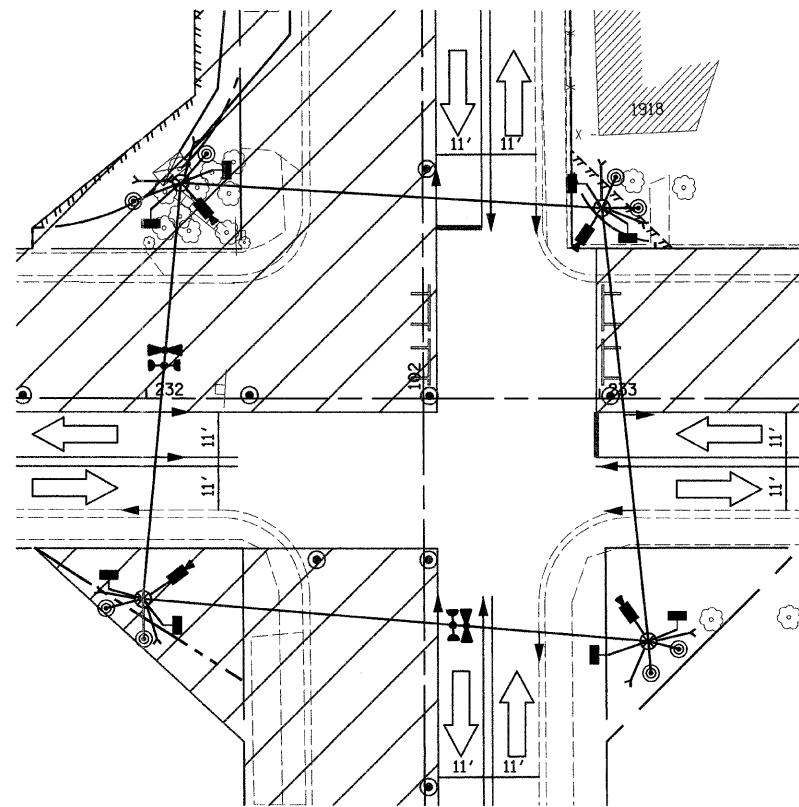
REVISIONS	
NAME	DATE

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
TEMPORARY TRAFFIC SIGNAL
INSTALLATION PLAN AND REMOVAL PLAN
MARTIN LUTHER KING JR. DRIVE
AND LEWIS AVENUE
STAGE I

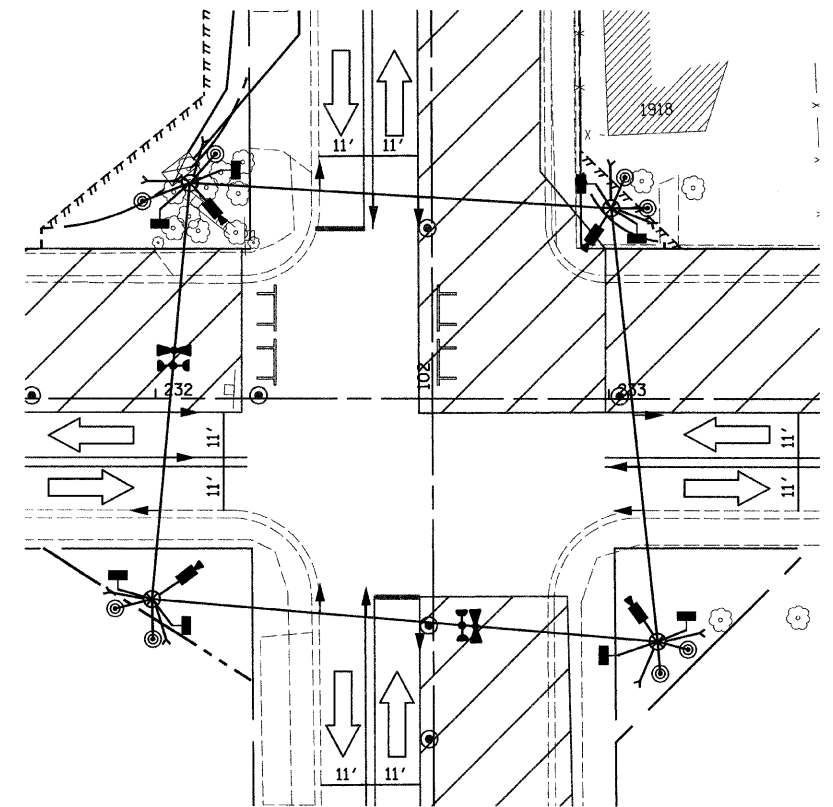
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DRAWN BY: KDM
CHECKED BY: MJL



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE IA
(CONSTRUCT STORM SEWER ALONG CENTERLINE)



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE II
(CONSTRUCT WATERMAIN AND PAVEMENT IN NW QUADRANT)



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE IIA
(CONSTRUCT WATERMAIN AND PAVEMENT IN NE QUADRANT)

DATE: 7/1/08
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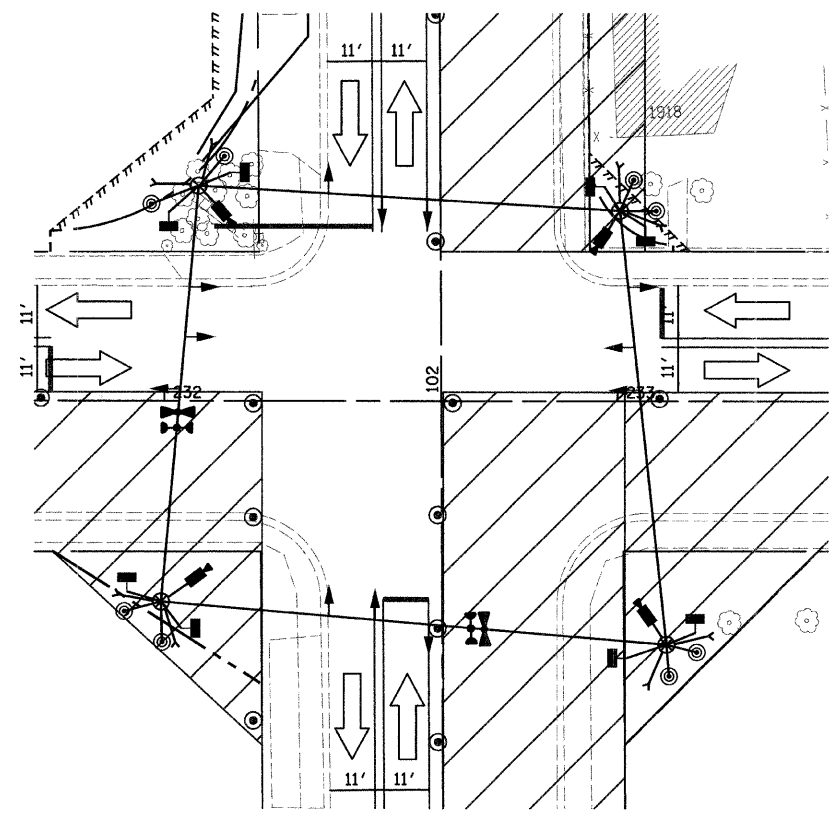
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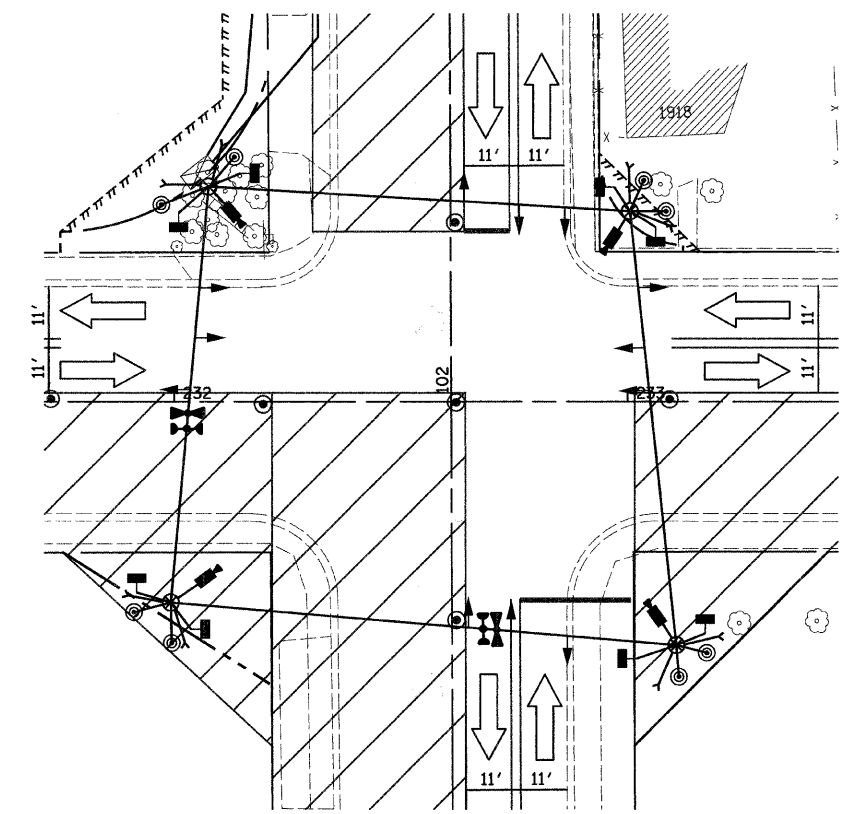
CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 TEMPORARY TRAFFIC SIGNAL
 HEAD LOCATIONS FOR
 CONSTRUCTION STAGING
 MARTIN LUTHER KING JR. DRIVE
 AND LEWIS AVENUE

SCALE: 1"=20'
 DATE: APRIL, 2008
 DRAWN BY: KDM
 CHECKED BY: MJL

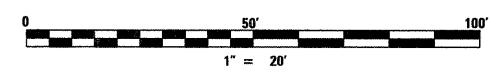
1" = 20'



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE III
(CONSTRUCT PAVEMENT IN SE QUADRANT)



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE IIIA
(CONSTRUCT PAVEMENT IN SW QUADRANT)



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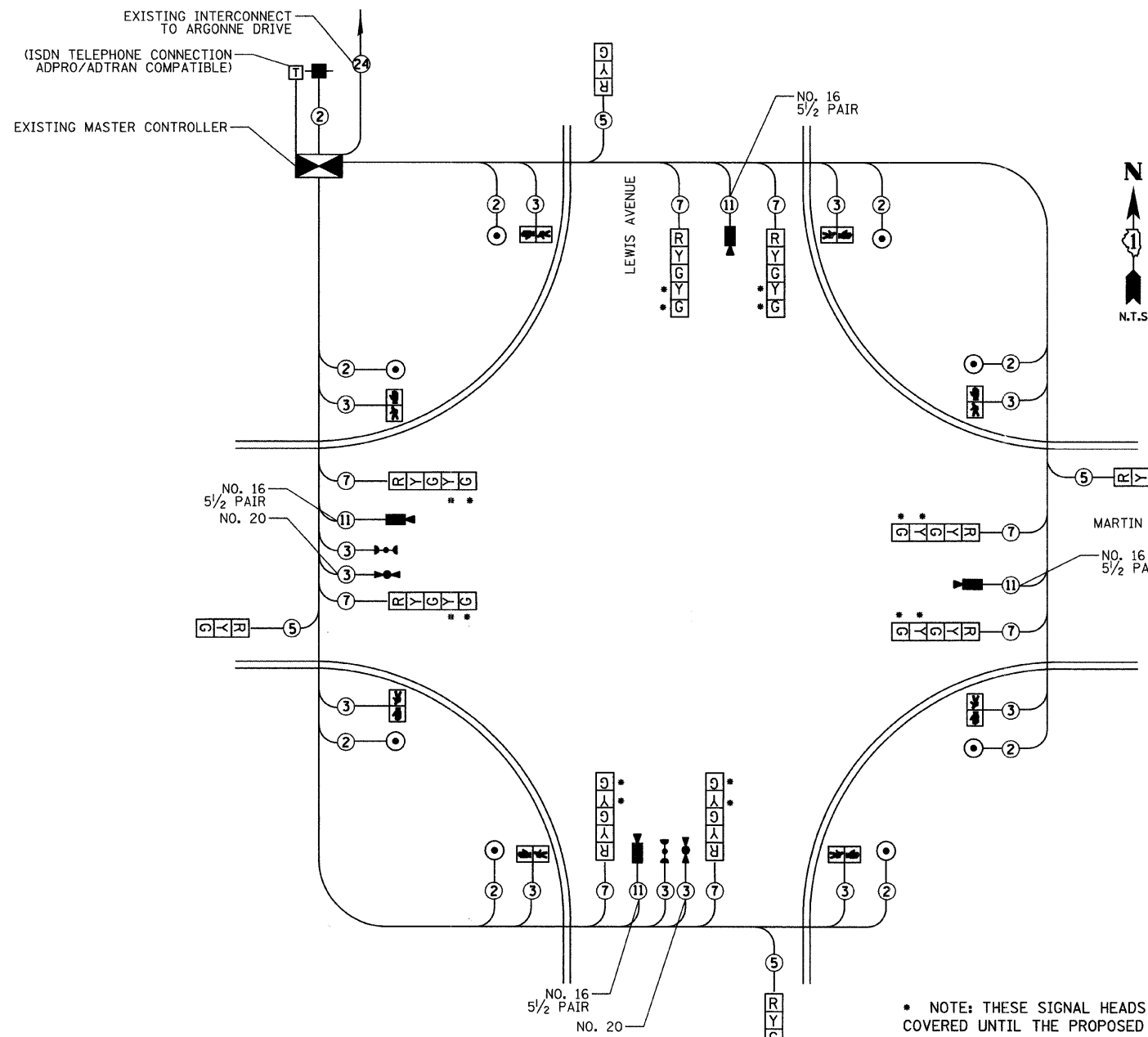
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CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 TEMPORARY TRAFFIC SIGNAL
 HEAD LOCATIONS FOR
 CONSTRUCTION STAGING
 MARTIN LUTHER KING JR. DRIVE
 AND LEWIS AVENUE

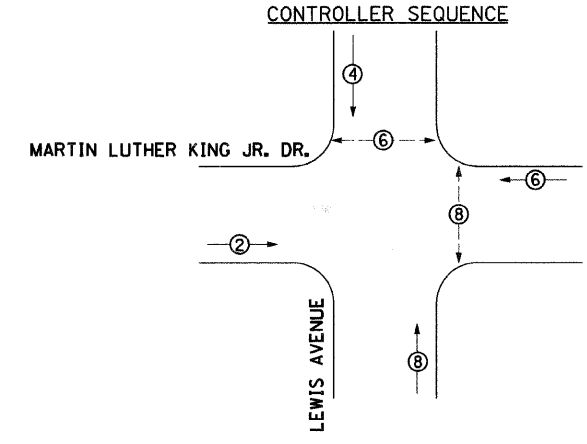
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 DATE: APRIL, 2008 CHECKED BY: MJL

DURING CONSTRUCTION STAGES 1, 2, & 3 DURING CONSTRUCTION STAGE 4



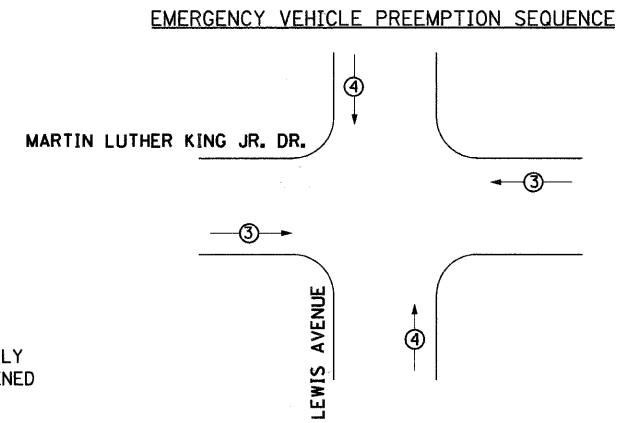
TEMPORARY CABLE PLAN

* NOTE: THESE SIGNAL HEADS SHALL BE TEMPORARILY COVERED UNTIL THE PROPOSED TURN LANES ARE OPENED TO TRAFFIC.

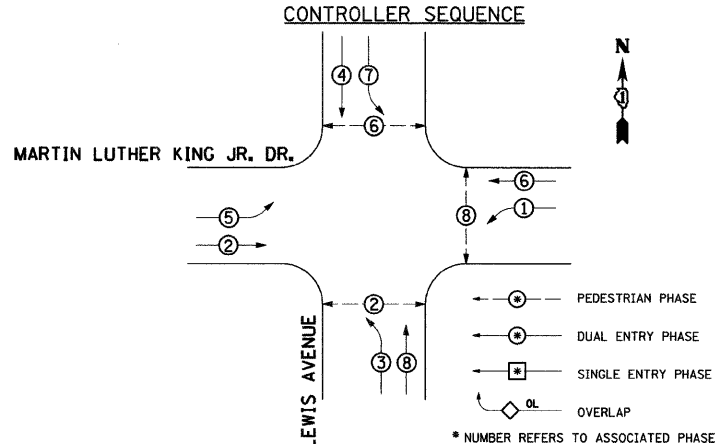


TEMPORARY PHASE DESIGNATION DIAGRAM (ALL STAGES)

PEDESTRIAN PHASE
DUAL ENTRY PHASE
* NUMBER REFERS TO ASSOCIATED PHASE

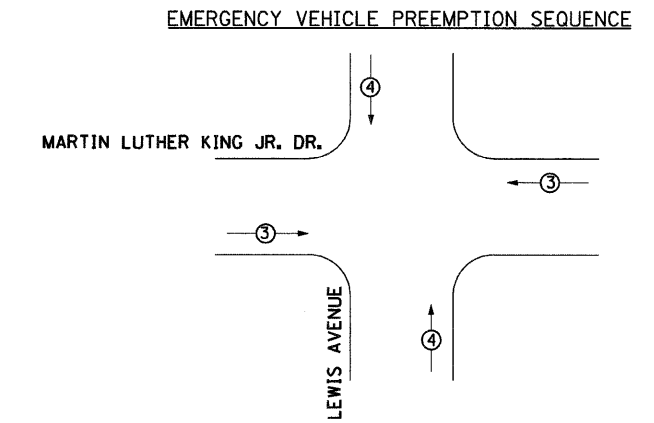


PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓



TEMPORARY PHASE DESIGNATION DIAGRAM (AFTER CONSTRUCTION)

PEDESTRIAN PHASE
DUAL ENTRY PHASE
* NUMBER REFERS TO ASSOCIATED PHASE



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	17	0.50	102	
(YELLOW)	12	25	0.25	75	
(GREEN)	12	15	0.25	45	
ARROW	8	12	0.10	10	
PED. SIGNAL	8	25	1.00	200	
CONTROLLER	1	100	1.00	100	
VIDEO SYSTEMS	1	150	1.00	150	
ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION 600 WEST WINCHESTER ROAD LIBERTYVILLE, IL 60048					TOTAL = 682
ENERGY SUPPLY CONTACT: MS. TERRI BLECK. PHONE: 1-847-816-5293 COMPANY: COM. ED.					

TEMPORARY CABLE PLAN LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm) [R]
- CONTROLLER CABINET [Symbol]
- SERVICE INSTALLATION [Symbol]
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED [Symbol]
- CONFIRMATION BEACON [Symbol]
- EMERGENCY VEHICLE LIGHT DETECTOR [Symbol]
- PEDESTRIAN PUSHBUTTON DETECTOR [Symbol]
- 12" (300mm) PEDESTRIAN SIGNAL SECTION [Symbol]
- TELEPHONE CONNECTION [Symbol]

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
TEMPORARY CABLE PLAN AND
PHASE DESIGNATION DIAGRAM
MARTIN LUTHER KING JR. DRIVE
AND LEWIS AVENUE

SCALE: N.T.S. DRAWN BY: KDM
DATE: APRIL, 2008 CHECKED BY: MJL

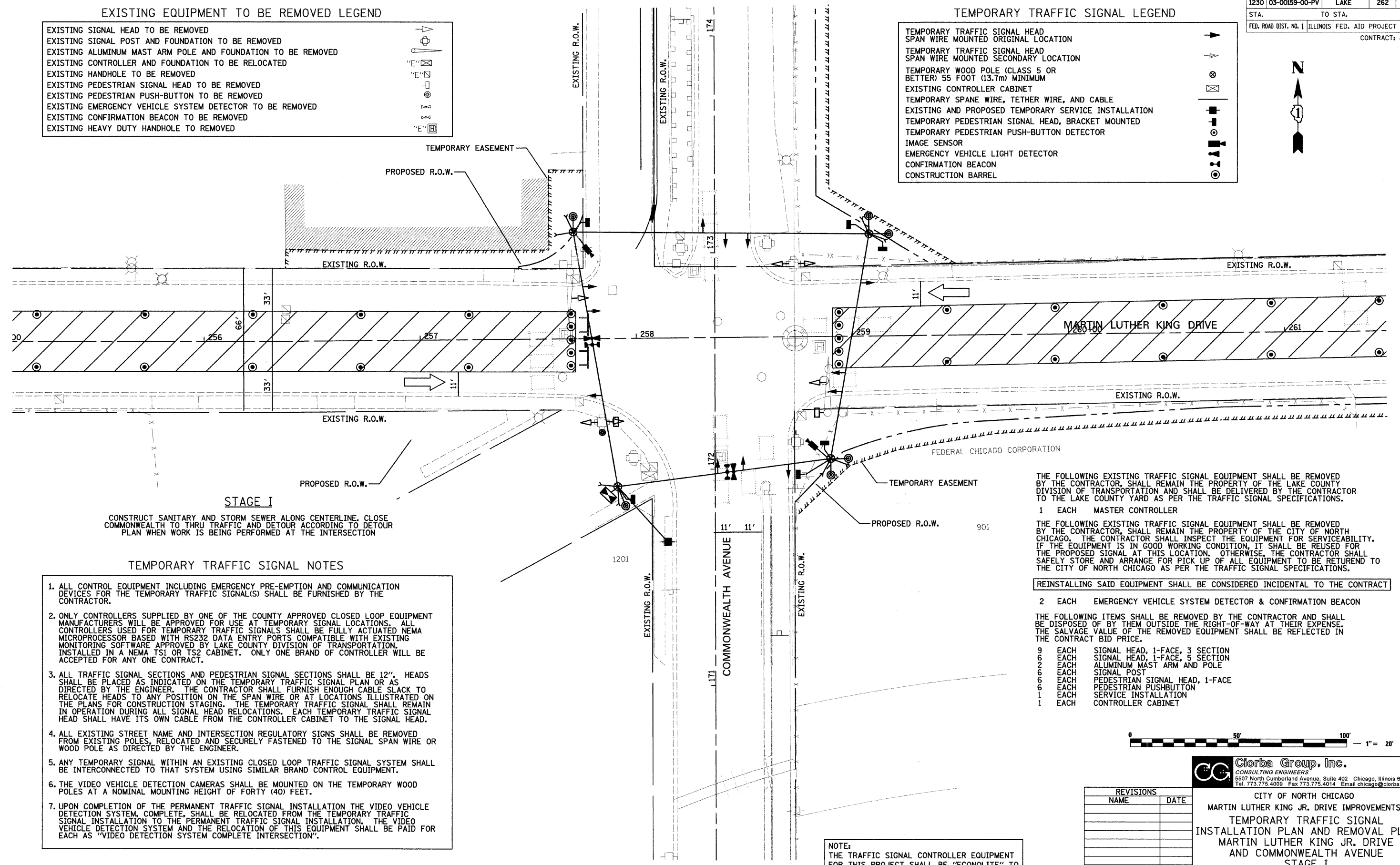
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EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE RELOCATED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR TO BE REMOVED
- EXISTING CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD
- SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD
- SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 55 FOOT (13.7m) MINIMUM
- EXISTING CONTROLLER CABINET
- TEMPORARY SPANE WIRE, TETHER WIRE, AND CABLE
- EXISTING AND PROPOSED TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- TEMPORARY PEDESTRIAN PUSH-BUTTON DETECTOR
- IMAGE SENSOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- CONSTRUCTION BARREL



STAGE I
 CONSTRUCT SANITARY AND STORM SEWER ALONG CENTERLINE. CLOSE COMMONWEALTH TO THRU TRAFFIC AND DETOUR ACCORDING TO DETOUR PLAN WHEN WORK IS BEING PERFORMED AT THE INTERSECTION

TEMPORARY TRAFFIC SIGNAL NOTES

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
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3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE VIDEO VEHICLE DETECTION CAMERAS SHALL BE MOUNTED ON THE TEMPORARY WOOD POLES AT A NOMINAL MOUNTING HEIGHT OF FORTY (40) FEET.
7. UPON COMPLETION OF THE PERMANENT TRAFFIC SIGNAL INSTALLATION THE VIDEO VEHICLE DETECTION SYSTEM, COMPLETE, SHALL BE RELOCATED FROM THE TEMPORARY TRAFFIC SIGNAL INSTALLATION TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION. THE VIDEO VEHICLE DETECTION SYSTEM AND THE RELOCATION OF THIS EQUIPMENT SHALL BE PAID FOR EACH AS "VIDEO DETECTION SYSTEM COMPLETE INTERSECTION".

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1 EACH MASTER CONTROLLER

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REINSTALLING SAID EQUIPMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

2 EACH EMERGENCY VEHICLE SYSTEM DETECTOR & CONFIRMATION BEACON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 9 EACH SIGNAL HEAD, 1-FACE, 3 SECTION
- 6 EACH SIGNAL HEAD, 1-FACE, 5 SECTION
- 2 EACH ALUMINUM MAST ARM AND POLE
- 6 EACH SIGNAL POST
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER CABINET



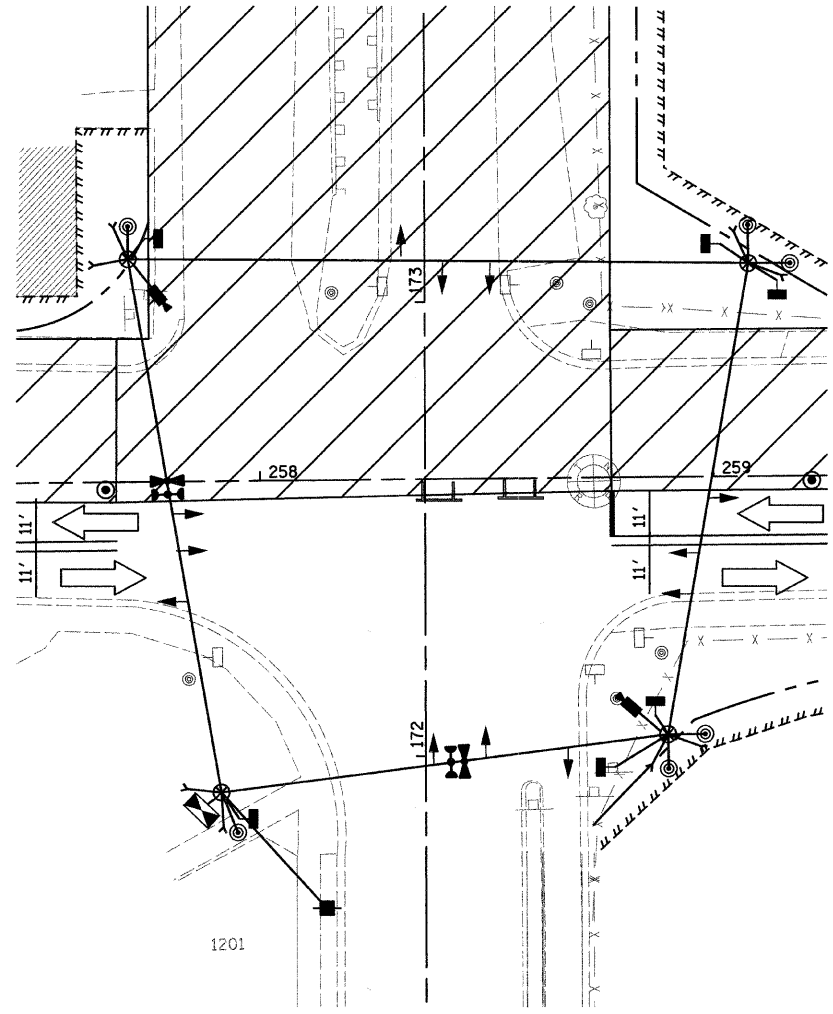
NOTE:
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REVISIONS	
NAME	DATE

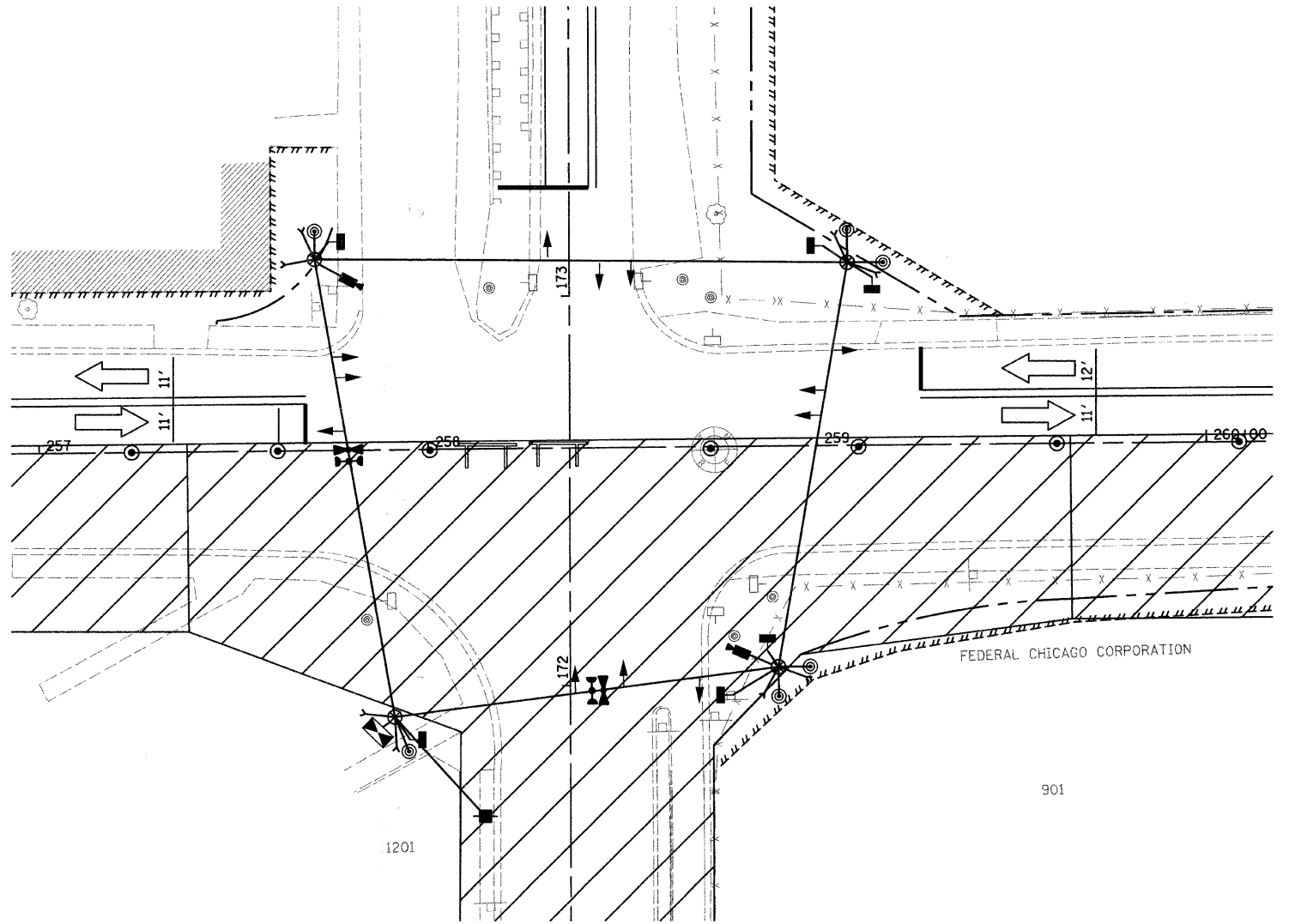
Clorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 TEMPORARY TRAFFIC SIGNAL
 INSTALLATION PLAN AND REMOVAL PLAN
 MARTIN LUTHER KING JR. DRIVE
 AND COMMONWEALTH AVENUE
 STAGE I

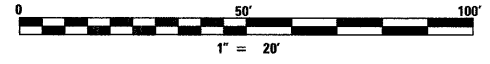
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 DATE: APRIL, 2008
 DRAWN BY: KDM
 CHECKED BY: MJL



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE II
(CONSTRUCT WESTBOUND PAVEMENT)



TEMPORARY TRAFFIC
SIGNAL HEAD LOCATIONS
M.O.T. STAGE III
(CONSTRUCT EASTBOUND PAVEMENT)



DATE: 7/1/2008
 TIME: 8:33:14 AM
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REVISIONS	
NAME	DATE

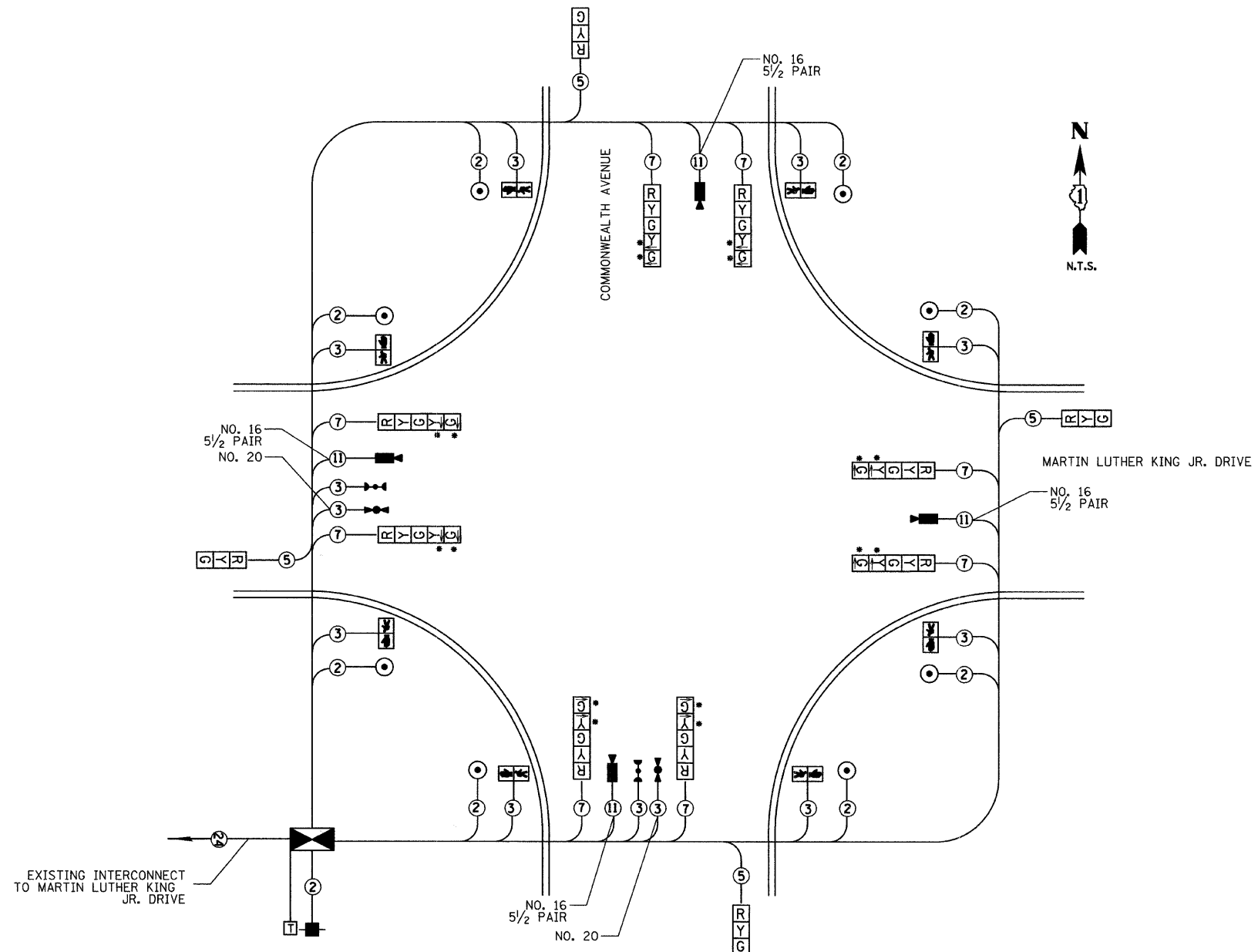
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 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 TEMPORARY TRAFFIC SIGNAL
 HEAD LOCATIONS FOR
 CONSTRUCTION STAGING
 MARTIN LUTHER KING JR. DRIVE
 AND COMMONWEALTH AVENUE

SCALE: 1"=20'
 DATE: APRIL, 2008

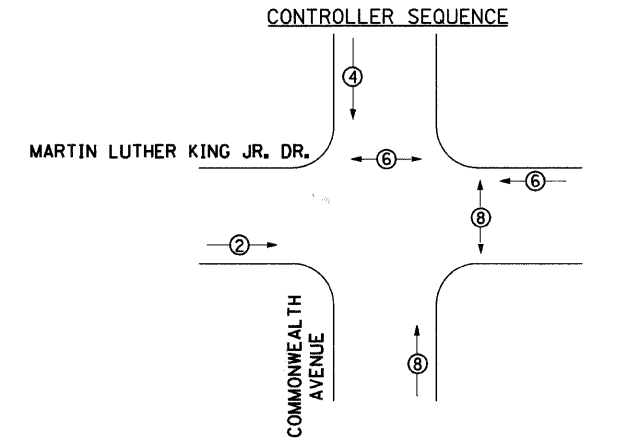
DRAWN BY: KDM
 CHECKED BY: MJL

DURING CONSTRUCTION STAGES 1, 2 & 3 DURING CONSTRUCTION STAGE 4



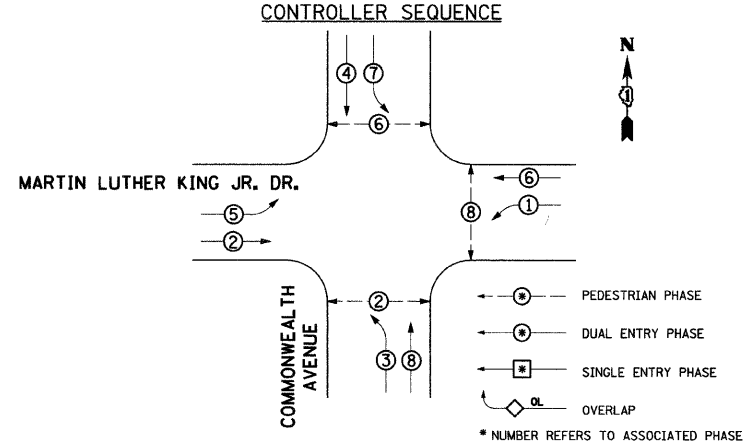
TEMPORARY CABLE PLAN

* NOTE: THESE SIGNAL HEADS SHALL BE TEMPORARILY COVERED UNTIL THE PROPOSED TURN LANES ARE OPENED TO TRAFFIC



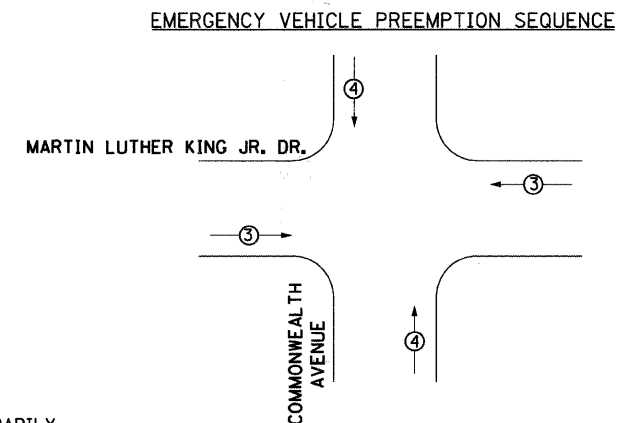
TEMPORARY PHASE DESIGNATION DIAGRAM (ALL STAGES)

PEDESTRIAN PHASE
DUAL ENTRY PHASE
* NUMBER REFERS TO ASSOCIATED PHASE



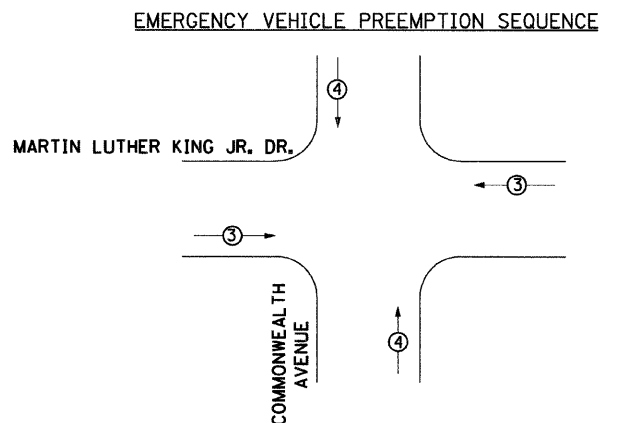
TEMPORARY PHASE DESIGNATION DIAGRAM (AFTER CONSTRUCTION)

PEDESTRIAN PHASE
DUAL ENTRY PHASE
* NUMBER REFERS TO ASSOCIATED PHASE



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

DATE: 7/1/2008 TIME: 8:33:28 AM FILENAME: N:\PROJ\05161\Design\Signals\Plan Sheets\161-07-Commonwealth-Temp-Cable-Plan.dgn

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12	17	0.50	102	
(YELLOW)	12	25	0.25	75	
(GREEN)	12	15	0.25	45	
ARROW	8	12	0.10	10	
PED. SIGNAL	8	25	1.00	200	
CONTROLLER	1	100	1.00	100	
VIDEO SYSTEMS	1	150	1.00	150	
ENERGY COSTS TO: CITY OF NORTH CHICAGO PUBLIC WORKS DEPARTMENT 1850 LEWIS AVENUE NORTH CHICAGO, IL 60064 1-847-596-8690				TOTAL =	682
ENERGY SUPPLY CONTACT: MS. TERRI BLECK. PHONE: 1-847-816-5293 COMPANY: COM. ED.					

TEMPORARY CABLE PLAN LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- CONTROLLER CABINET
- SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED
- CONFIRMATION BEACON
- EMERGENCY VEHICLE LIGHT DETECTOR
- PEDESTRIAN PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- TELEPHONE CONNECTION



THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

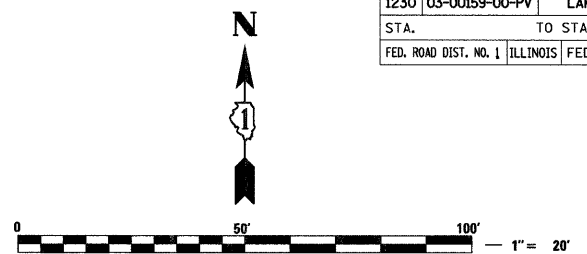
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CONSULTING ENGINEERS
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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
MARTIN LUTHER KING JR. DRIVE AND COMMONWEALTH AVENUE

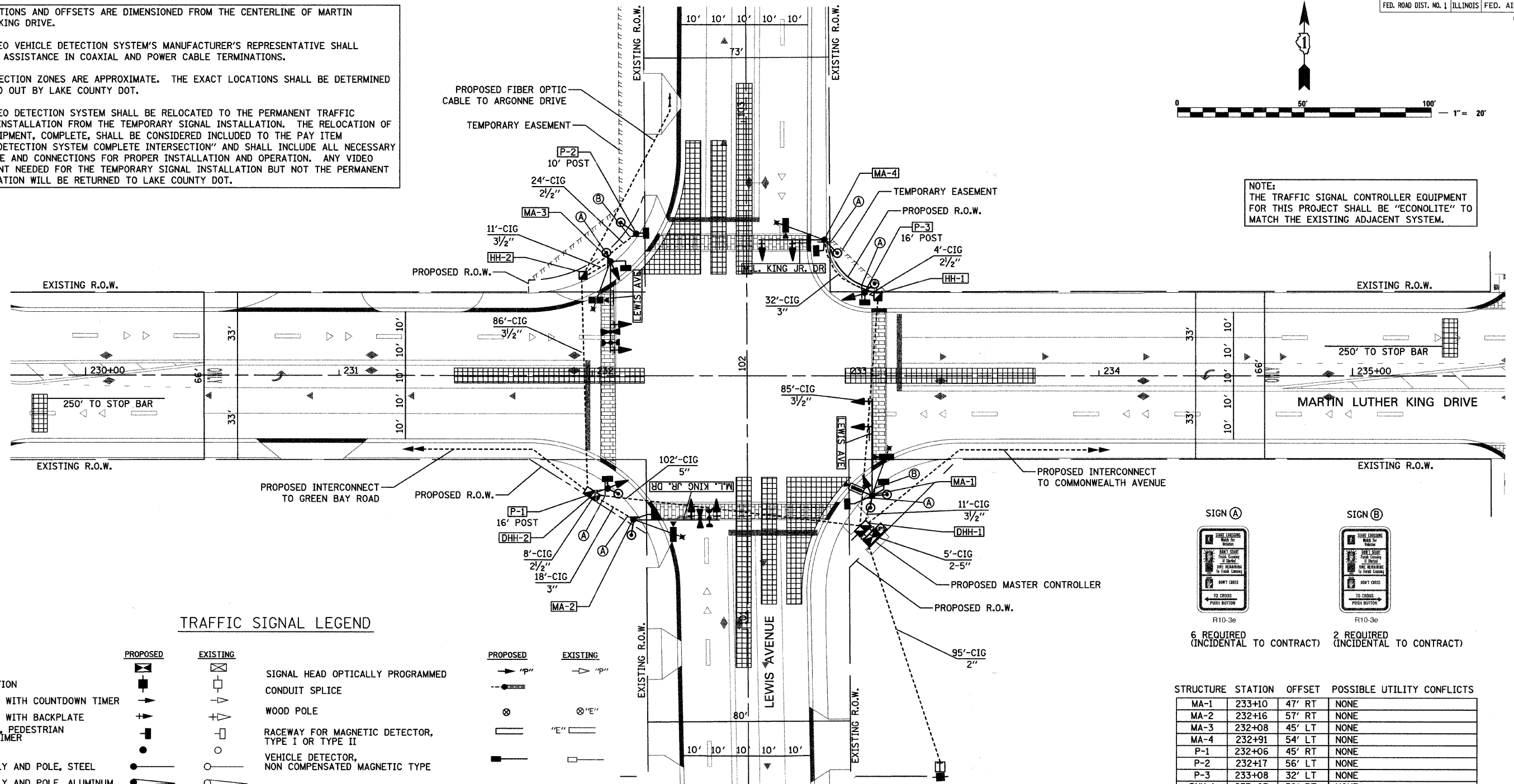
SCALE: N.T.S. DRAWN BY: KDM
DATE: APRIL, 2008 CHECKED BY: MJL

TRAFFIC SIGNAL NOTES

- ALL STATIONS AND OFFSETS ARE DIMENSIONED FROM THE CENTERLINE OF MARTIN LUTHER KING DRIVE.
- THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN COAXIAL AND POWER CABLE TERMINATIONS.
- ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT BY LAKE COUNTY DOT.
- THE VIDEO DETECTION SYSTEM SHALL BE RELOCATED TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION. THE RELOCATION OF THE EQUIPMENT, COMPLETE, SHALL BE CONSIDERED INCLUDED TO THE PAY ITEM "VIDEO DETECTION SYSTEM COMPLETE INTERSECTION" AND SHALL INCLUDE ALL NECESSARY HARDWARE AND CONNECTIONS FOR PROPER INSTALLATION AND OPERATION. ANY VIDEO EQUIPMENT NEEDED FOR THE TEMPORARY SIGNAL INSTALLATION BUT NOT THE PERMANENT INSTALLATION WILL BE RETURNED TO LAKE COUNTY DOT.

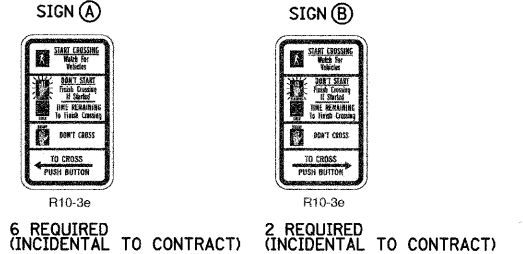


NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING	DESCRIPTION
		CONTROLLER
		SERVICE INSTALLATION
		L.E.D. SIGNAL HEAD WITH COUNTDOWN TIMER
		L.E.D. SIGNAL HEAD WITH BACKPLATE
		L.E.D. SIGNAL HEAD, PEDESTRIAN WITH COUNTDOWN TIMER
		SIGNAL POST
		MAST ARM ASSEMBLY AND POLE, STEEL
		MAST ARM ASSEMBLY AND POLE, ALUMINUM
		DECORATIVE COMB, MAST ARM ASSEMBLY AND POLE STEEL WITH LUMINAIRE
		UNIT DUCT
		COMMON TRENCH
		HANDHOLE
		HEAVY DUTY HANDHOLE
		DOUBLE HANDHOLE
		G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		PEDESTRIAN PUSHBUTTON DETECTOR
		DETECTOR LOOP
		CAST IRON JUNCTION BOX
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		SIGNAL HEAD OPTICALLY PROGRAMMED
		CONDUIT SPLICE
		WOOD POLE
		RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
		VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
		RAILROAD CONTROL CABINET
		TELEPHONE CONNECTION
		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		IMAGE SENSOR
		APPROXIMATE DETECTION ZONE
		STREET LIGHT LUMINAIRE
		DOME PAN/TILT/ZOOM (PTZ) CAMERA
		L.E.D. ILLUMINATED STREET NAME SIGN



STRUCTURE	STATION	OFFSET	POSSIBLE UTILITY CONFLICTS
MA-1	233+10	47' RT	NONE
MA-2	232+16	57' RT	NONE
MA-3	232+08	45' LT	NONE
MA-4	232+91	54' LT	NONE
P-1	232+06	45' RT	NONE
P-2	232+17	56' LT	NONE
P-3	233+08	32' LT	NONE
DHH-1	233+03	58' RT	NONE
DHH-2	231+97	50' RT	NONE
HH-1	233+13	30' LT	NONE
HH-2	231+97	41' LT	NONE

SCHEDULE OF COMBINATION MAST ARM ASSEMBLY AND POLES

MA	MAST ARM	LUMINAIRE ARM	AUTOSCOPE MOUNTING HEIGHT
MA-1	38' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT
MA-2	34' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT
MA-3	36' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT
MA-4	26' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT

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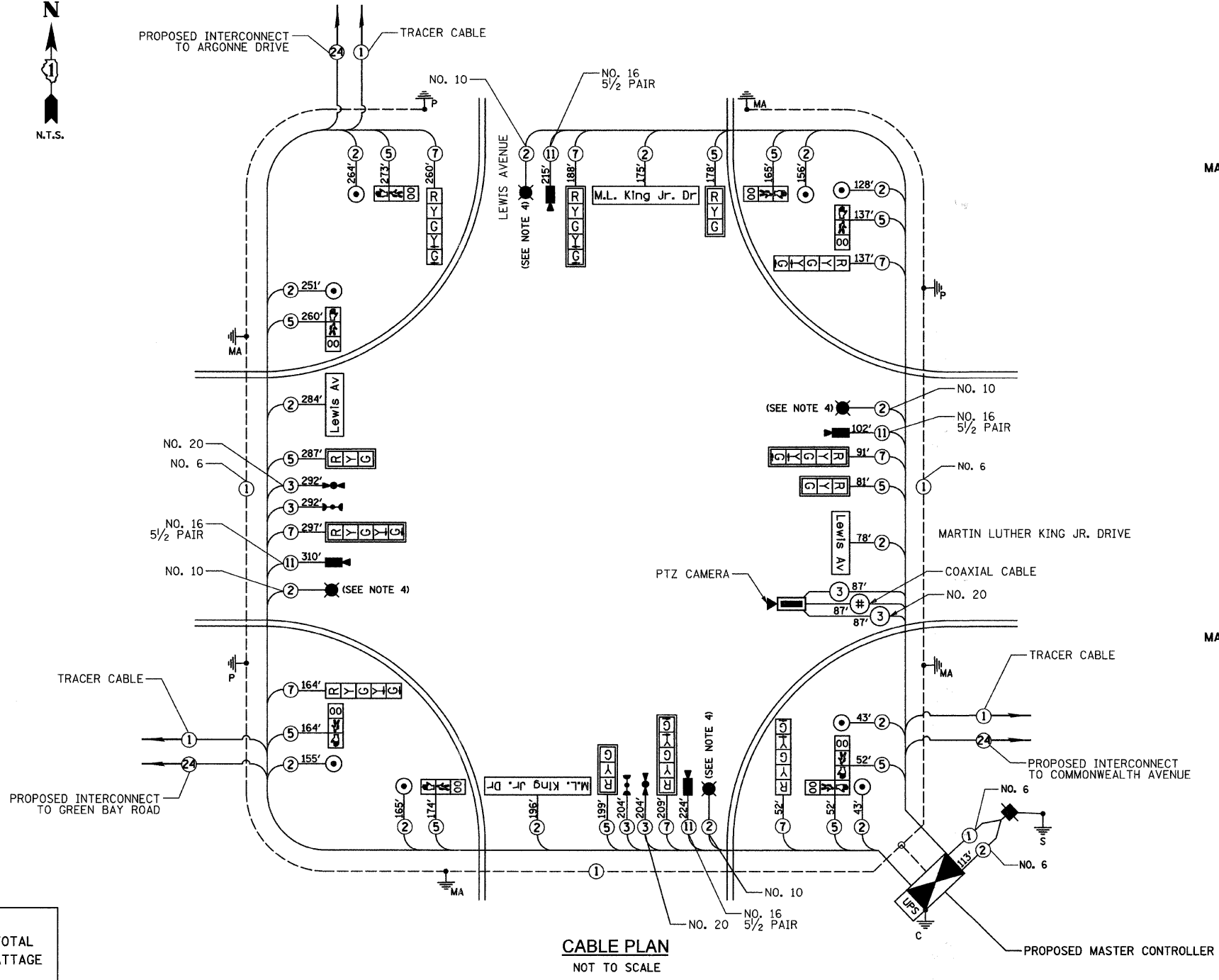
CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
TRAFFIC SIGNAL INSTALLATION PLAN
MARTIN LUTHER KING JR. DRIVE
AND LEWIS AVENUE

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: MJL

DATE: 7/11/2008
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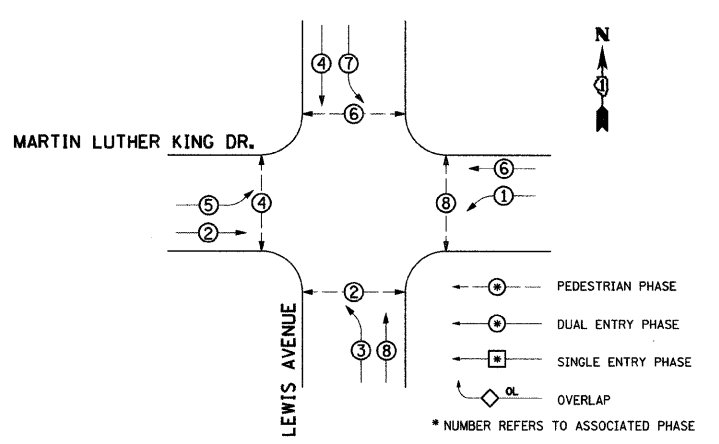
CABLE PLAN LEGEND

- | | | | |
|--|-----------------|--|---|
| | EXISTING | | PROPOSED |
| | | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | | CONTROLLER CABINET (NTCIP COMPATIBLE) |
| | | | SERVICE INSTALLATION |
| | | | TELEPHONE CONNECTION |
| | | | MAGNETIC DETECTOR |
| | | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | | CONFIRMATION BEACON |
| | | | PUSHBUTTON DETECTOR |
| | | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | | 2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | | MICROWAVE VEHICLE SENSOR |
| | | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | | RAILROAD CONTROL CABINET |
| | | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
| | | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA). |
| | | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F |
| | | | # BELDEN 8281 RG-59U COAXIAL CABLE |
| | | | PROPOSED IMAGE SENSOR |
| | | | PROPOSED STREET LIGHT LUMINAIRE |
| | | | PROPOSED DOME PAN/TILT/ZOOM (PTZ) CAMERA |
| | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | | | UPS PROPOSED BACKUP BATTERY |
| | | | 1st Av PROPOSED L.E.D. ILLUMINATED STREET NAME SIGN |
| | | | T PROPOSED TELEPHONE CONNECTION |



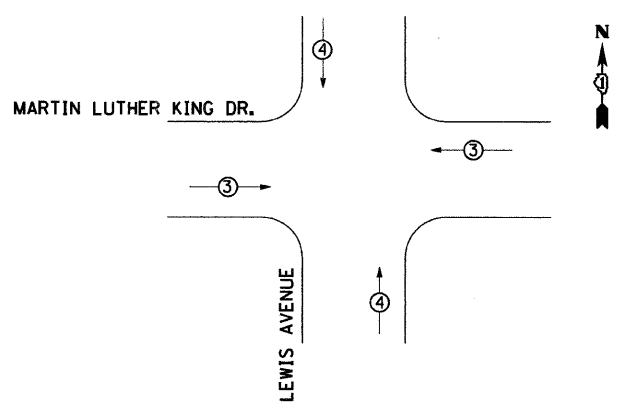
CABLE PLAN
NOT TO SCALE

CONTROLLER SEQUENCE



PROPOSED PHASE DESIGNATION DIAGRAM

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↓

- NOTES:**
1. VIDEO FROM LEWIS AVENUE TO BE TRANSMITTED ALONG FIBER TO ISDN TELEPHONE CONNECTION AT ARGONNE DRIVE.
 2. THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.
 3. THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.
 4. LIGHTING CONDUIT AND LUMINAIRE QUANTITIES TO BE INCLUDED IN LIGHTING QUANTITIES.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12	10	0.50	60	
(YELLOW)	12	19	0.25	57	
(GREEN)	12	11	0.25	33	
ARROW	8	9	0.10	7.2	
PED. SIGNAL	8	9	1.00	72	
CONTROLLER	1	100	1.00	100	
VIDEO SYSTEMS	1	150	1.00	150	
ILLUM. ST. SIGN	4	60	0.50	120	
LUMINAIRE	4	250	0.50	500	
BATTERY BACK UP	1	25	1.00	25	
ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION 600 WEST WINCHESTER ROAD LIBERTYVILLE, IL 60048				TOTAL =	1,124.2
ENERGY SUPPLY CONTACT: MS. TERRI BLECK, PHONE: 1-847-816-5239 COMPANY: COM ED					

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'=(6m+L-0.6m)=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

REVISIONS	
NAME	DATE

Clorba Group, Inc.
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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

TRAFFIC SIGNAL CABLE PLAN
MARTIN LUTHER KING JR. DRIVE
AND LEWIS AVENUE

SCALE: N.T.S. DRAWN BY: KDM
DATE: APRIL, 2008 CHECKED BY: MJL


DATE: 7/1/08
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SCHEDULE OF QUANTITIES

CODE NUMBER	DESCRIPTION	UNIT	QUANTITY
81400100	HANDHOLE	EACH	2
81400300	DOUBLE HANDHOLE	EACH	2
85700305	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
86000105	MASTER CONTROLLER (SPECIAL)	EACH	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,959
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	593
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,042
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,421
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	113
87704060	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1
87704100	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)	EACH	1
87708110	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)	EACH	1
87704120	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL)	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
88800100	PEDESTRIAN PUSH-BUTTON	EACH	8
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,366

CODE NUMBER	DESCRIPTION	UNIT	QUANTITY
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	9
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
X0301576	COAXIAL CABLE IN CONDUIT	FOOT	87
X0321760	DOUBLE HANDHOLE REMOVAL	EACH	1
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	628
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	496
X8950115	RELOCATE LIGHT DETECTOR	EACH	2
X8950120	RELOCATE LIGHT DETECTOR AMPLIFIER	EACH	2
XX003553	VIDEO TRANSMISSION SYSTEM	EACH	1
XX003662	ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	87
XX004680	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
XX005922	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 5-1/2 PAIR	FOOT	851
XX005928	TRAFFIC SIGNAL POST, 10 FOOT, (SPECIAL)	EACH	1
XX005931	TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	2
XX005937	L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
	CONDUIT IN GROUND 2" DIA., GALVANIZED STEEL	FOOT	95
	CONDUIT IN GROUND 2 1/2" DIA., GALVANIZED STEEL	FOOT	36
	CONDUIT IN GROUND 3" DIA., GALVANIZED STEEL	FOOT	50
	CONDUIT IN GROUND 3 1/2" DIA., GALVANIZED STEEL	FOOT	193
	CONDUIT IN GROUND 5" DIA., GALVANIZED STEEL	FOOT	112

DATE: 7/17/08
TIME: 8:34:45 AM
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 Clorba Group, Inc. <small>CONSULTING ENGINEERS 5607 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656 Tel: 773.775.4009 Fax: 773.775.4014 Email: chicago@clorba.com</small>																			
CITY OF NORTH CHICAGO MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS TRAFFIC SIGNAL SEQUENCES AND SCHEDULE OF QUANTITIES MARTIN LUTHER KING JR. DRIVE AND LEWIS AVENUE																			
<table border="1"> <tr><th colspan="2">REVISIONS</th></tr> <tr><th>NAME</th><th>DATE</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	REVISIONS		NAME	DATE															SCALE: N.T.S. DATE: APRIL, 2008 DRAWN BY: KDM CHECKED BY: MJL
REVISIONS																			
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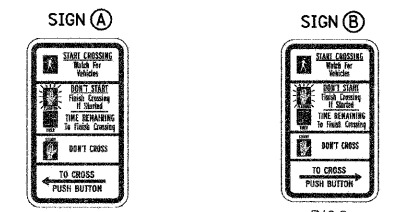
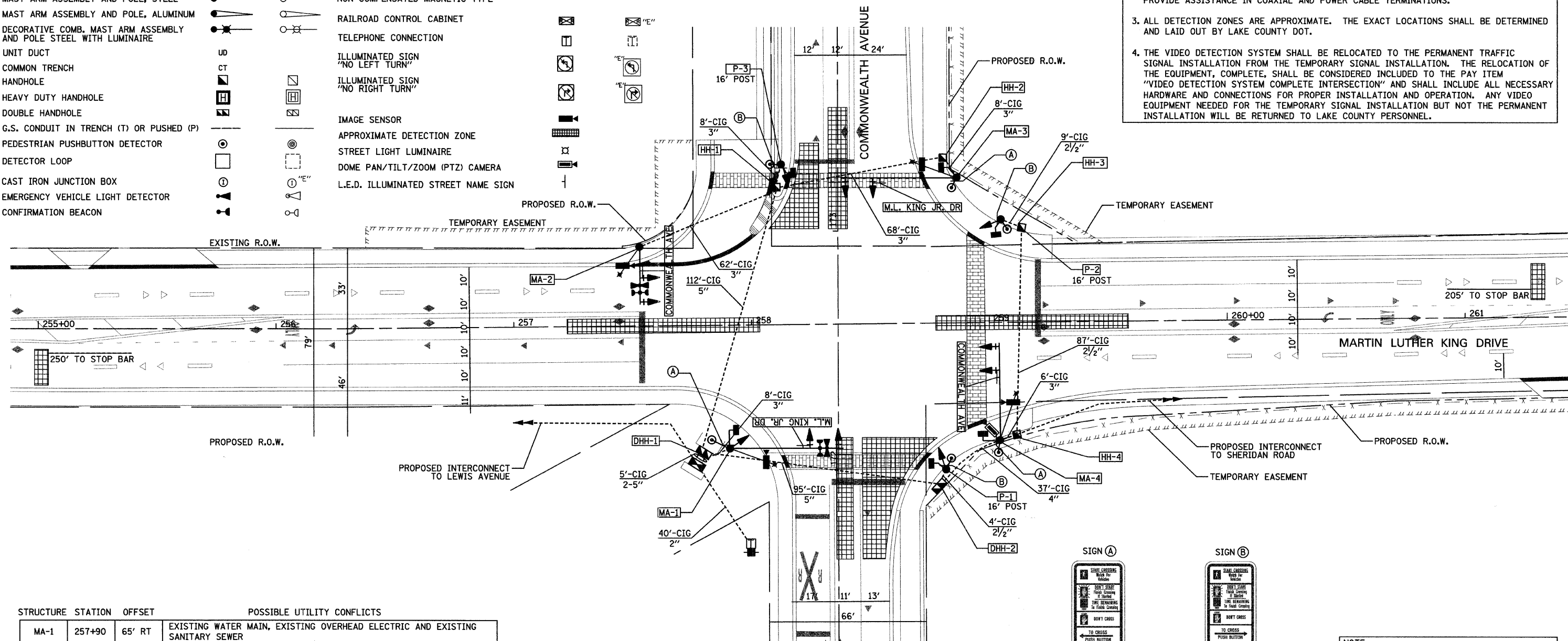
TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			SIGNAL HEAD OPTICALLY PROGRAMMED		
SERVICE INSTALLATION			CONDUIT SPLICE		
L.E.D. SIGNAL HEAD			WOOD POLE		
L.E.D. SIGNAL HEAD WITH BACKPLATE			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
L.E.D. SIGNAL HEAD, PEDESTRIAN			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
SIGNAL POST			RAILROAD CONTROL CABINET		
MAST ARM ASSEMBLY AND POLE, STEEL			TELEPHONE CONNECTION		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			ILLUMINATED SIGN "NO LEFT TURN"		
DECORATIVE COMB. MAST ARM ASSEMBLY AND POLE STEEL WITH LUMINAIRE			ILLUMINATED SIGN "NO RIGHT TURN"		
UNIT DUCT			IMAGE SENSOR		
COMMON TRENCH			APPROXIMATE DETECTION ZONE		
HANDHOLE			STREET LIGHT LUMINAIRE		
HEAVY DUTY HANDHOLE			DOME PAN/TILT/ZOOM (PTZ) CAMERA		
DOUBLE HANDHOLE			L.E.D. ILLUMINATED STREET NAME SIGN		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)					
PEDESTRIAN PUSHBUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					
EMERGENCY VEHICLE LIGHT DETECTOR					
CONFIRMATION BEACON					

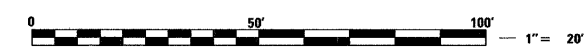
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	155
STA.	TO STA.		FED. AID PROJECT	
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT: 83828		

TRAFFIC SIGNAL NOTES

- ALL STATIONS AND OFFSETS ARE DIMENSIONED FROM THE CENTERLINE OF MARTIN LUTHER KING DRIVE.
- THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN COAXIAL AND POWER CABLE TERMINATIONS.
- ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT BY LAKE COUNTY DOT.
- THE VIDEO DETECTION SYSTEM SHALL BE RELOCATED TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION FROM THE TEMPORARY SIGNAL INSTALLATION. THE RELOCATION OF THE EQUIPMENT, COMPLETE, SHALL BE CONSIDERED INCLUDED TO THE PAY ITEM "VIDEO DETECTION SYSTEM COMPLETE INTERSECTION" AND SHALL INCLUDE ALL NECESSARY HARDWARE AND CONNECTIONS FOR PROPER INSTALLATION AND OPERATION. ANY VIDEO EQUIPMENT NEEDED FOR THE TEMPORARY SIGNAL INSTALLATION BUT NOT THE PERMANENT INSTALLATION WILL BE RETURNED TO LAKE COUNTY PERSONNEL.



R10-3e
3 REQUIRED (INCIDENTAL TO CONTRACT) 3 REQUIRED (INCIDENTAL TO CONTRACT)



STRUCTURE	STATION	OFFSET	POSSIBLE UTILITY CONFLICTS
MA-1	257+90	65' RT	EXISTING WATER MAIN, EXISTING OVERHEAD ELECTRIC AND EXISTING SANITARY SEWER
MA-2	258+13	67' LT	EXISTING GAS EXISTING OVERHEAD ELECTRIC
MA-3	258+87	61' LT	EXISTING OVERHEAD ELECTRIC
MA-4	259+19	44' RT	NONE
P-2	259+28	35' LT	EXISTING OVERHEAD ELECTRIC
P-1	258+81	61' RT	NONE
DHH-1	257+79	53' RT	NONE
DHH-2	258+79	67' RT	NONE
HH-1	258+11	58' LT	EXISTING GAS LINE
HH-2	258+81	69' LT	NONE
HH-3	259+17	32' LT	EXISTING GAS LINE
HH-4	259+27	43' RT	EXISTING SANITARY SEWER

SCHEDULE OF COMBINATION MAST ARM ASSEMBLY AND POLES			
MA-1	48' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT
MA-2	26' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT
MA-3	48' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT
MA-4	40' MAST ARM	15' LUMINAIRE ARM	45' AUTOSCOPE MOUNTING HEIGHT

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS	
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Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

TRAFFIC SIGNAL INSTALLATION PLAN
MARTIN LUTHER KING JR. DRIVE
AND COMMONWEALTH AVENUE

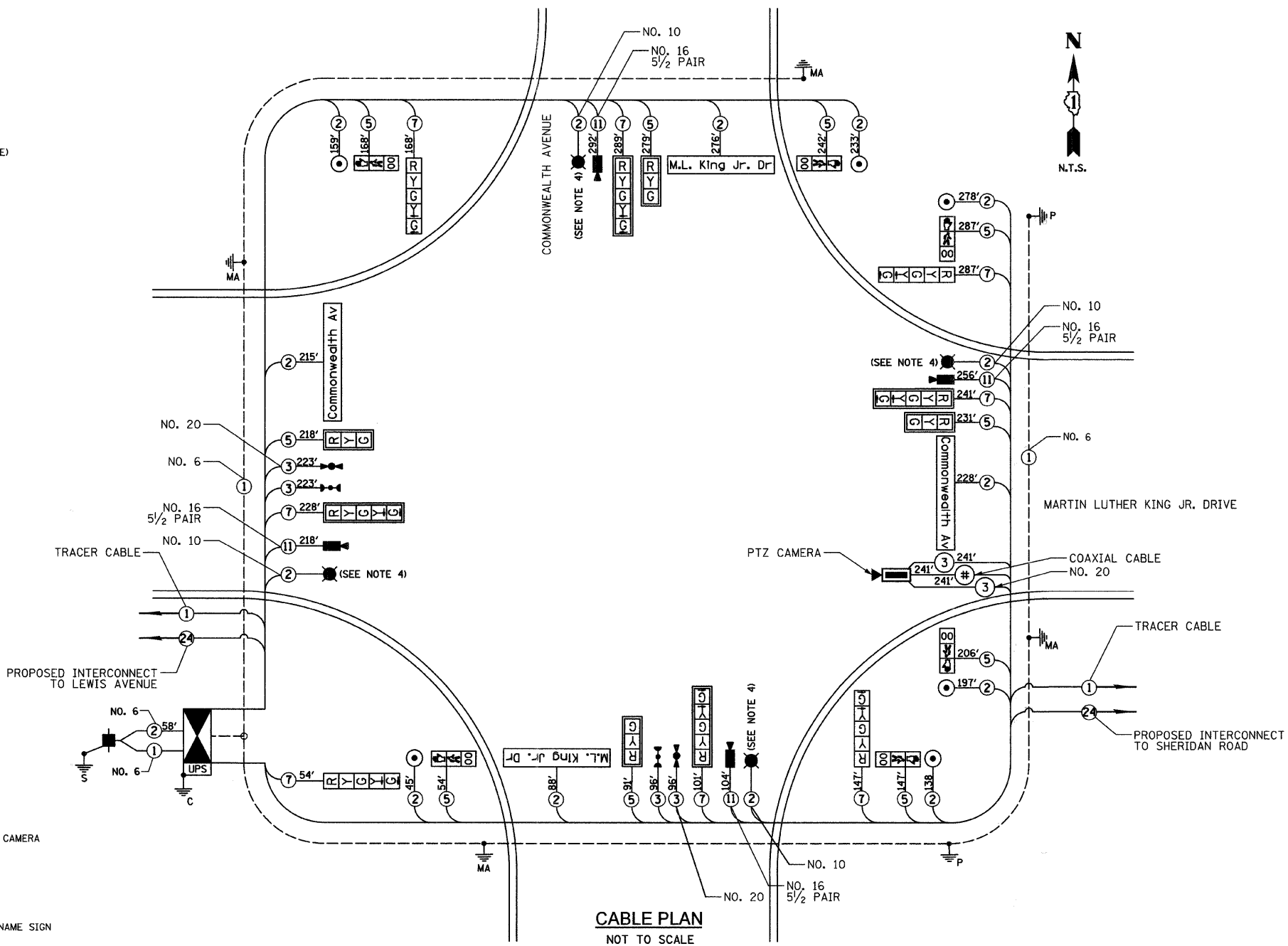
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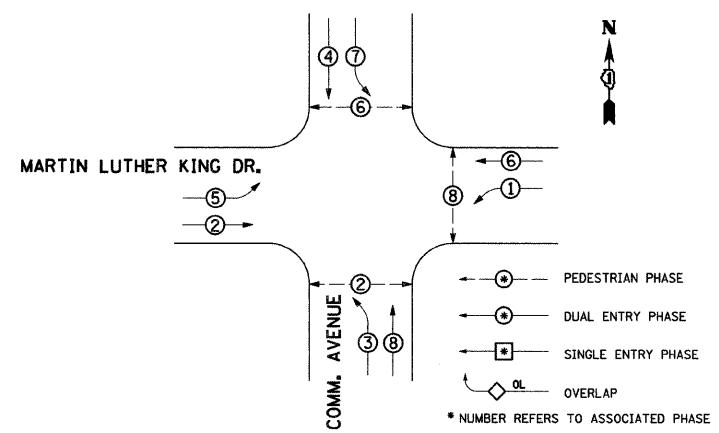
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CABLE PLAN LEGEND

- | | |
|--|---|
| | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | CONTROLLER CABINET (NTCIP COMPATIBLE) |
| | SERVICE INSTALLATION |
| | TELEPHONE CONNECTION |
| | MAGNETIC DETECTOR |
| | EMERGENCY VEHICLE LIGHT DETECTOR |
| | CONFIRMATION BEACON |
| | PUSHBUTTON DETECTOR |
| | VEHICLE DETECTOR, INDUCTION LOOP |
| | MICROWAVE VEHICLE SENSOR |
| | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | RAILROAD CONTROL CABINET |
| | ILLUMINATED SIGN "NO LEFT TURN" |
| | ILLUMINATED SIGN "NO RIGHT TURN" |
| | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
| | GROUND ROD AT POST (P), OR MAST ARM POLE (MA). |
| | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F |
| | # BELDEN 8281 RG-59U COAXIAL CABLE |
| | PROPOSED IMAGE SENSOR |
| | PROPOSED STREET LIGHT LUMINAIRE |
| | PROPOSED DOME PAN/TILT/ZOOM (PTZ) CAMERA |
| | 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | UPS PROPOSED BACKUP BATTERY |
| | 1st-4v PROPOSED TELEPHONE CONNECTION |



CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		10	0.50	60
(YELLOW)	12		19	0.25	57
(GREEN)	12		11	0.25	33
ARROW	8		9	0.10	7.2
PED. SIGNAL	6		9	1.00	54
CONTROLLER	1		100	1.00	100
VIDEO SYSTEMS	1		150	1.00	150
ILLUM. ST. SIGN	4		60	0.50	120
LUMINAIRE	4		250	0.50	500
BATTERY BACKUP	1		25	1.00	25
ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION 600 WEST WINCHESTER ROAD LIBERTYVILLE, IL 60048					TOTAL = 1,106.2
ENERGY SUPPLY CONTACT: MS. TERRI BLECK. PHONE: 1-847-816-5239 COMPANY: COM ED					

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

- NOTES:**
- VIDEO FROM LEWIS AVENUE TO BE TRANSMITTED ALONG FIBER TO ISDN TELEPHONE CONNECTION AT ARGONNE DRIVE.
 - THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.
 - THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.
 - LIGHTING CONDUIT AND LUMINAIRE QUANTITIES TO BE INCLUDED IN LIGHTING QUANTITIES.

REVISIONS	
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Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

TRAFFIC SIGNAL CABLE PLAN
MARTIN LUTHER KING JR. DRIVE
AND COMMONWEALTH AVENUE

SCALE: N.T.S. DRAWN BY: KDM
DATE: APRIL, 2008 CHECKED BY: MJL

DATE: 7/1/2008 TIME: 8:35:11 AM FILENAME: N:\PROJ\05161\Design\Signals\Plan Sheets\05161-12-Comm-pr-cable-plan.dgn

SCHEDULE OF QUANTITIES

CODE NUMBER	DESCRIPTION	UNIT	QUANTITY
81400100	HANDHOLE	EACH	4
81400300	DOUBLE HANDHOLE	EACH	2
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,881
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	567
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,908
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,542
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	58
87704060	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1
87704130	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. (SPECIAL)	EACH	1
87704170	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT. (SPECIAL)	EACH	2
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
88700200	LIGHT DETECTOR	EACH	2
88700300	LIGHT DETECTOR AMPLIFIER	EACH	2
88800100	PEDESTRIAN PUSH-BUTTON	EACH	6
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1

CODE NUMBER	DESCRIPTION	UNIT	QUANTITY
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,851
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	11
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
X0301576	COAXIAL CABLE IN CONDUIT	FOOT	241
X0321760	DOUBLE HANDHOLE REMOVAL	EACH	1
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	694
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	336
XX003553	VIDEO TRANSMISSION SYSTEM	EACH	1
XX003662	ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	227
XX004680	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
XX005922	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 5-1/2 PAIR	FOOT	874
XX005931	TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	3
XX005937	L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
	CONDUIT IN GROUND 2" DIA., GALVANIZED STEEL	FOOT	40
	CONDUIT IN GROUND 2 1/2" DIA., GALVANIZED STEEL	FOOT	100
	CONDUIT IN GROUND 3" DIA., GALVANIZED STEEL	FOOT	99
	CONDUIT IN GROUND 4" DIA., GALVANIZED STEEL	FOOT	37
	CONDUIT IN GROUND 5" DIA., GALVANIZED STEEL	FOOT	217

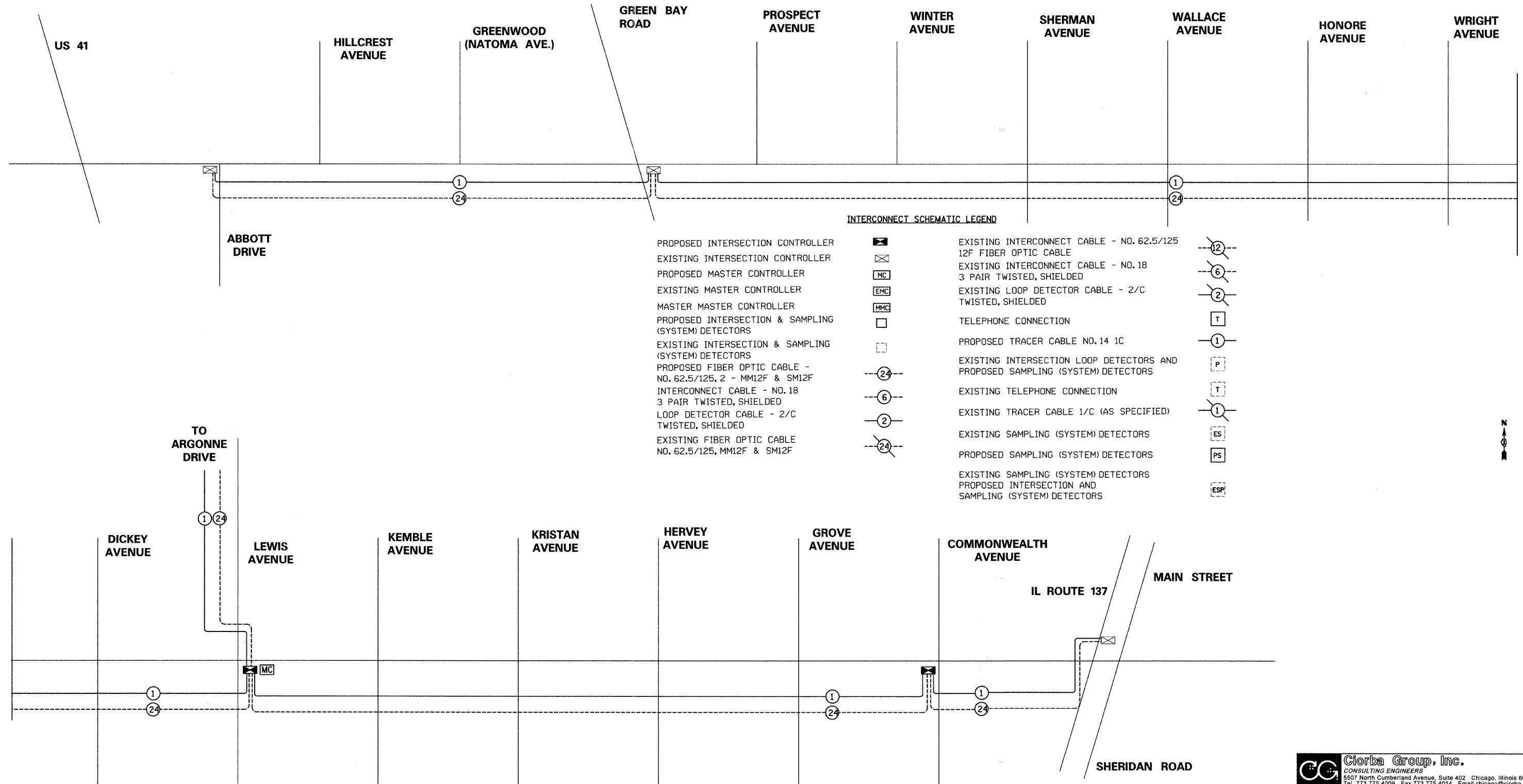
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REVISIONS	
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Clorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 TRAFFIC SIGNAL SEQUENCES
 AND SCHEDULE OF QUANTITIES
 MARTIN LUTHER KING JR. DRIVE
 AND COMMONWEALTH AVENUE

SCALE: N.T.S. DRAWN BY: KDM
 DATE: APRIL, 2008 CHECKED BY: MJL



INTERCONNECT SCHEMATIC LEGEND

- | | | | |
|--|--|--|--|
| PROPOSED INTERSECTION CONTROLLER | | EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE | |
| EXISTING INTERSECTION CONTROLLER | | EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED | |
| PROPOSED MASTER CONTROLLER | | EXISTING LOOP DETECTOR CABLE - 2/C TWISTED, SHIELDED | |
| EXISTING MASTER CONTROLLER | | TELEPHONE CONNECTION | |
| MASTER MASTER CONTROLLER | | PROPOSED TRACER CABLE NO. 14 1C | |
| PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | | EXISTING INTERSECTION LOOP DETECTORS AND PROPOSED SAMPLING (SYSTEM) DETECTORS | |
| EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS | | EXISTING TELEPHONE CONNECTION | |
| PROPOSED FIBER OPTIC CABLE - NO. 62.5/125, 2 - MM12F & SM12F | | EXISTING TRACER CABLE 1/C (AS SPECIFIED) | |
| INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED | | EXISTING SAMPLING (SYSTEM) DETECTORS | |
| LOOP DETECTOR CABLE - 2/C TWISTED, SHIELDED | | PROPOSED SAMPLING (SYSTEM) DETECTORS | |
| EXISTING FIBER OPTIC CABLE NO. 62.5/125, MM12F & SM12F | | EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS | |

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REVISIONS	
NAME	DATE

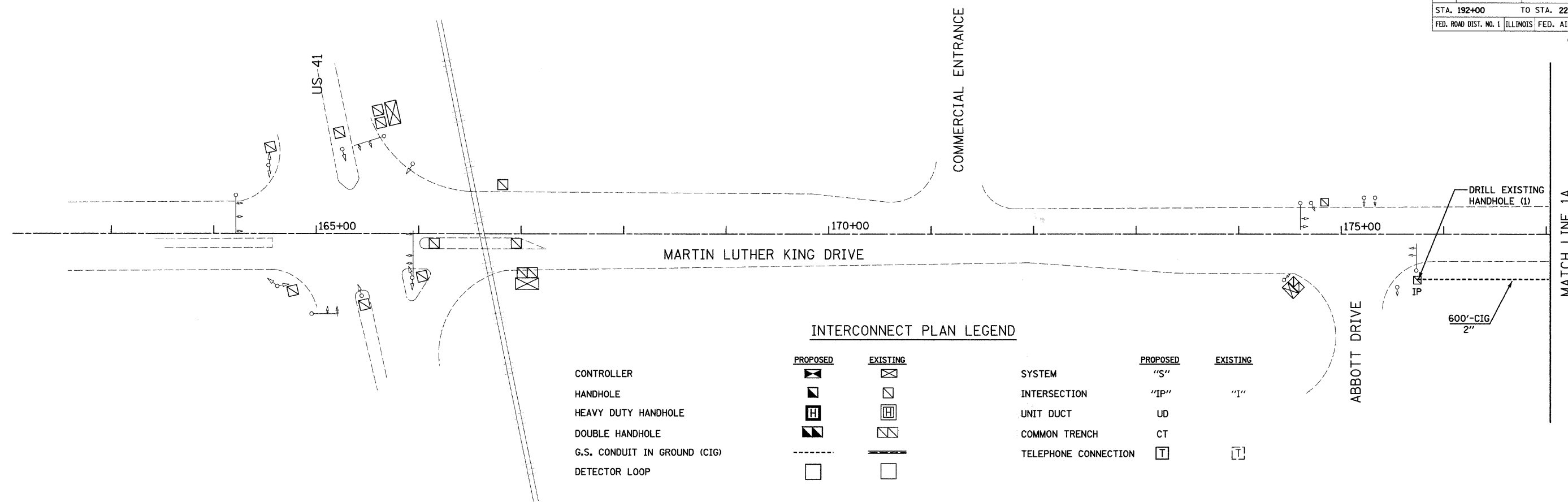
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 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 INTERCONNECT SCHEMATIC

SCALE: N.T.S.
 DATE: APRIL, 2008
 DRAWN BY: EAB
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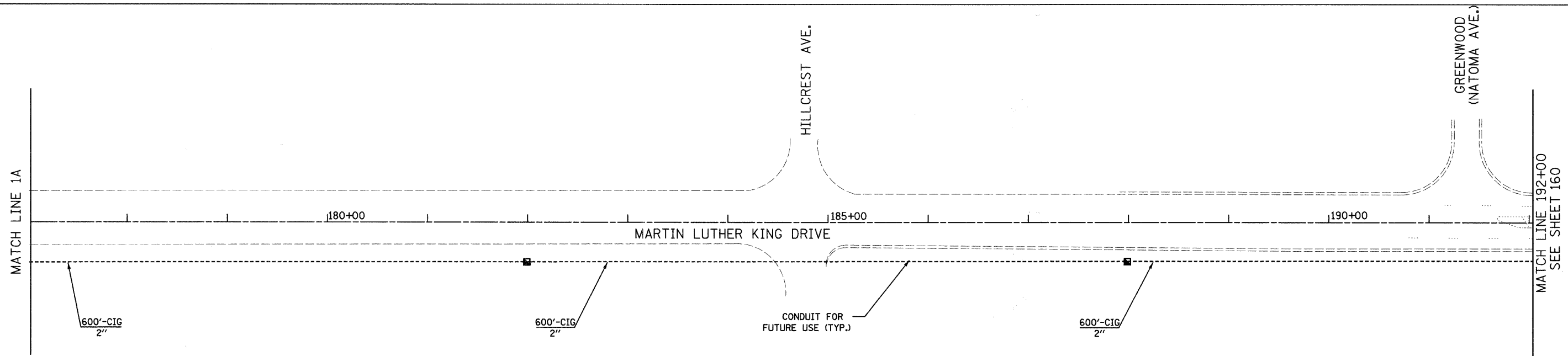
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1230	03-00159-00-PV	LAKE	262	159
STA. 192+00		TO STA. 222+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT: 83828



INTERCONNECT PLAN LEGEND

CONTROLLER			SYSTEM	<u>PROPOSED</u>	<u>EXISTING</u>
HANDHOLE			INTERSECTION	"IP"	"I"
HEAVY DUTY HANDHOLE			UNIT DUCT	UD	
DOUBLE HANDHOLE			COMMON TRENCH	CT	
G.S. CONDUIT IN GROUND (CIG)			TELEPHONE CONNECTION		
DETECTOR LOOP					



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REVISIONS	
NAME	DATE

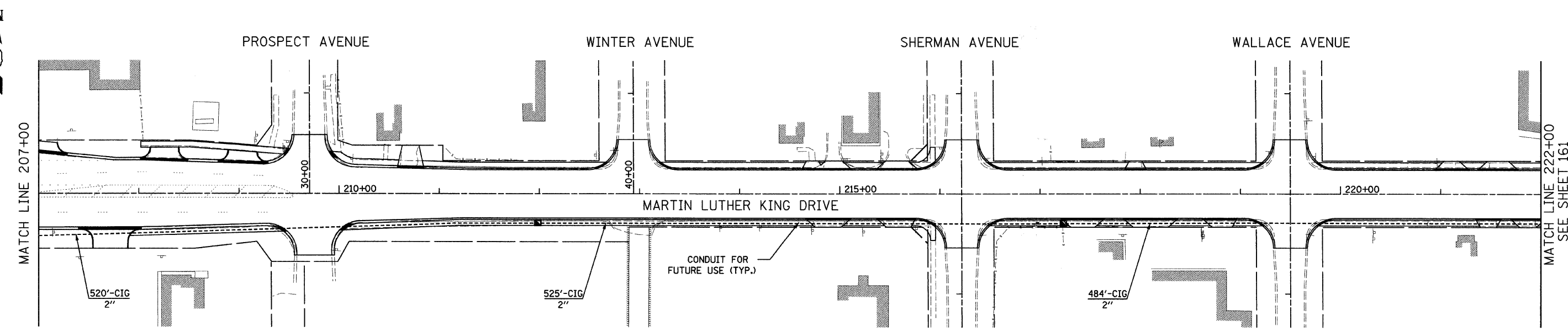
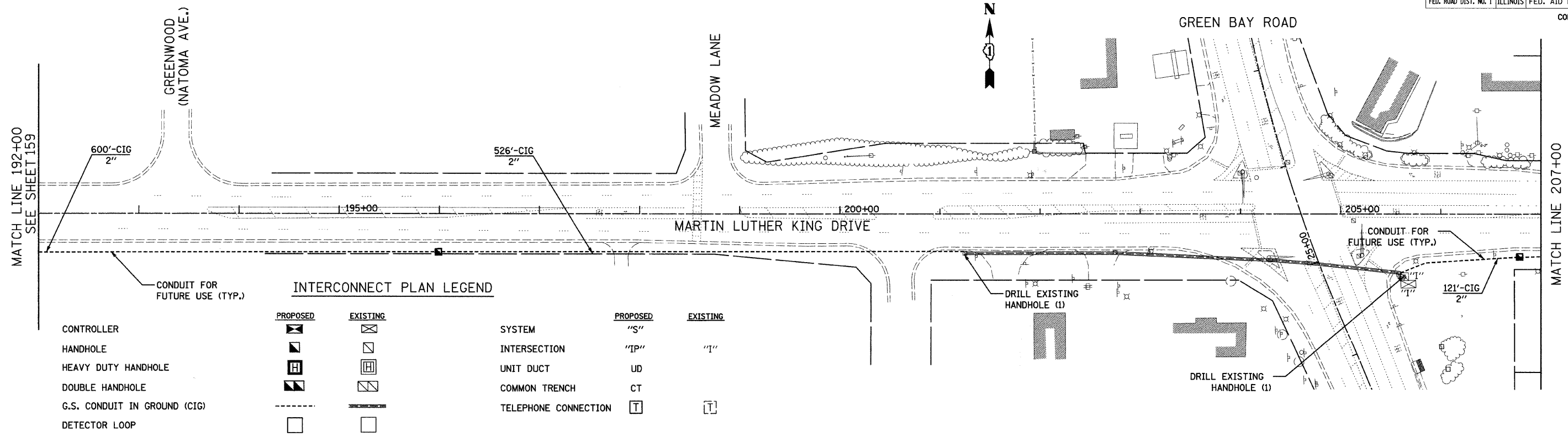
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5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.776.4009 Fax 773.776.4014 Email: chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
TRAFFIC SIGNAL INTERCONNECT PLAN
MARTIN LUTHER KING DRIVE

SCALE: 1"=50'
DATE: APRIL, 2008
DRAWN BY: KDM
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F.A.U. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	160
STA. 192+00		TO STA. 222+00		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT: 83828



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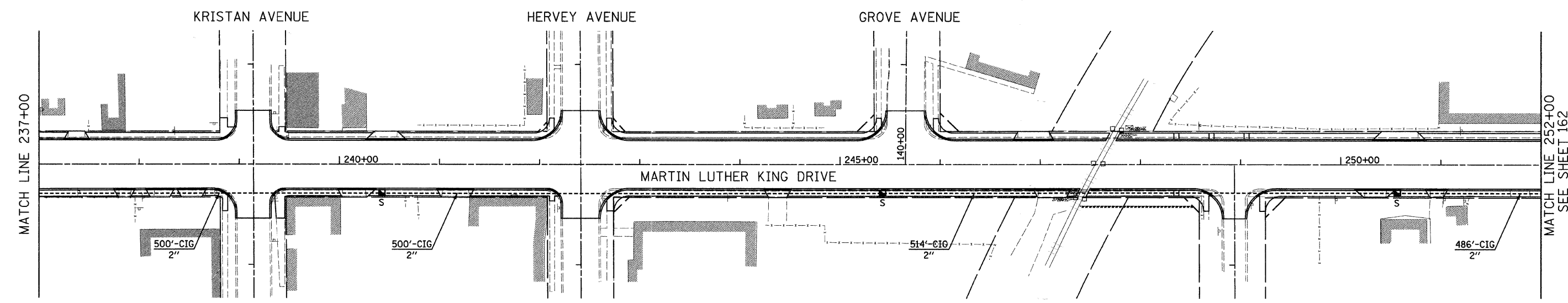
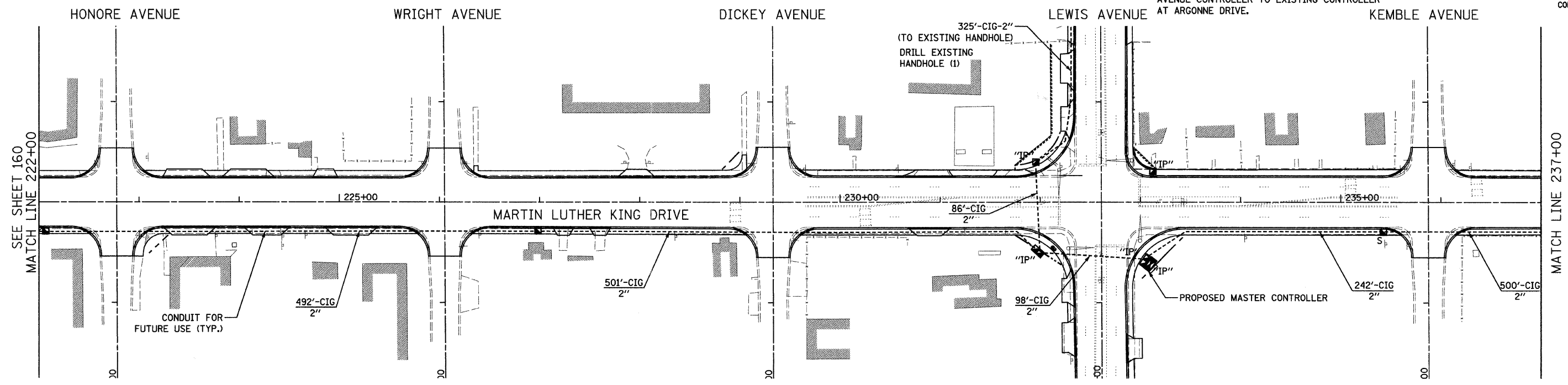
REVISIONS	
NAME	DATE

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 TRAFFIC SIGNAL INTERCONNECT PLAN
 MARTIN LUTHER KING DRIVE

SCALE: 1"=50'
 DATE: APRIL, 2008
 DRAWN BY: KDM
 CHECKED BY: MJL

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	161
STA. 222+00		TO STA. 252+00		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
				CONTRACT: 83828

NOTE: EXISTING FIBER OPTIC CABLE FROM LEWIS AVENUE TO ARGONNE DRIVE TO BE REMOVED FROM EXISTING CONDUIT. PROPOSED FIBER OPTIC CABLE WILL RUN FROM PROPOSED LEWIS AVENUE CONTROLLER TO EXISTING CONTROLLER AT ARGONNE DRIVE.



INTERCONNECT PLAN LEGEND

CONTROLLER		EXISTING		SYSTEM	PROPOSED	"S"	EXISTING	"I"
HANDHOLE		EXISTING		INTERSECTION	PROPOSED	"IP"	EXISTING	"I"
HEAVY DUTY HANDHOLE		EXISTING		UNIT DUCT	PROPOSED	UD	EXISTING	
DOUBLE HANDHOLE		EXISTING		COMMON TRENCH	PROPOSED	CT	EXISTING	
G.S. CONDUIT IN GROUND (CIG)		EXISTING		TELEPHONE CONNECTION	PROPOSED		EXISTING	
DETECTOR LOOP		EXISTING						

REVISIONS	
NAME	DATE

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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

TRAFFIC SIGNAL INTERCONNECT PLAN
MARTIN LUTHER KING DRIVE

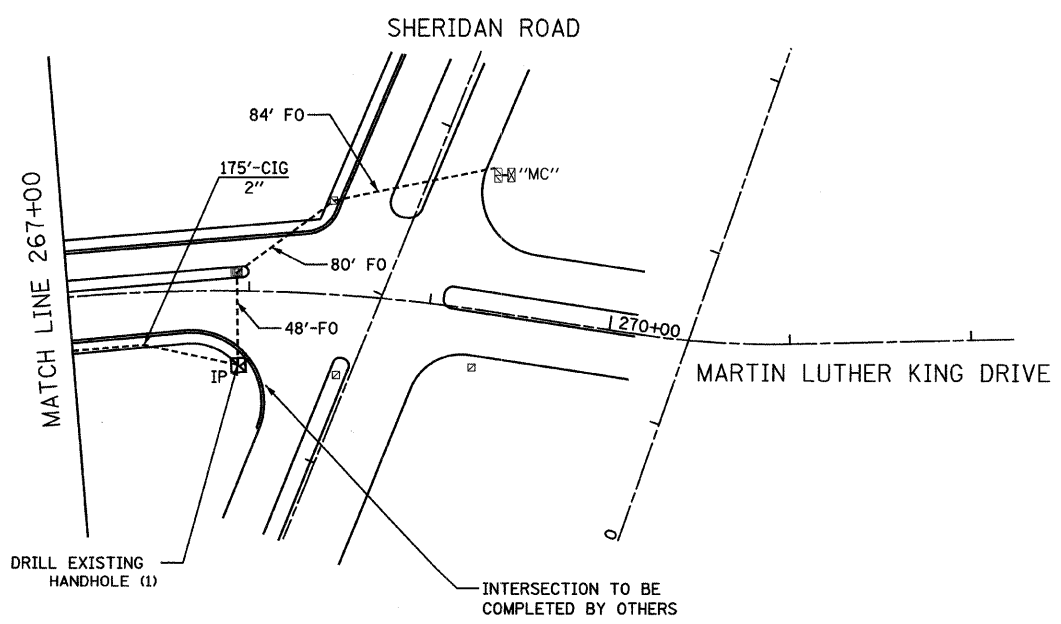
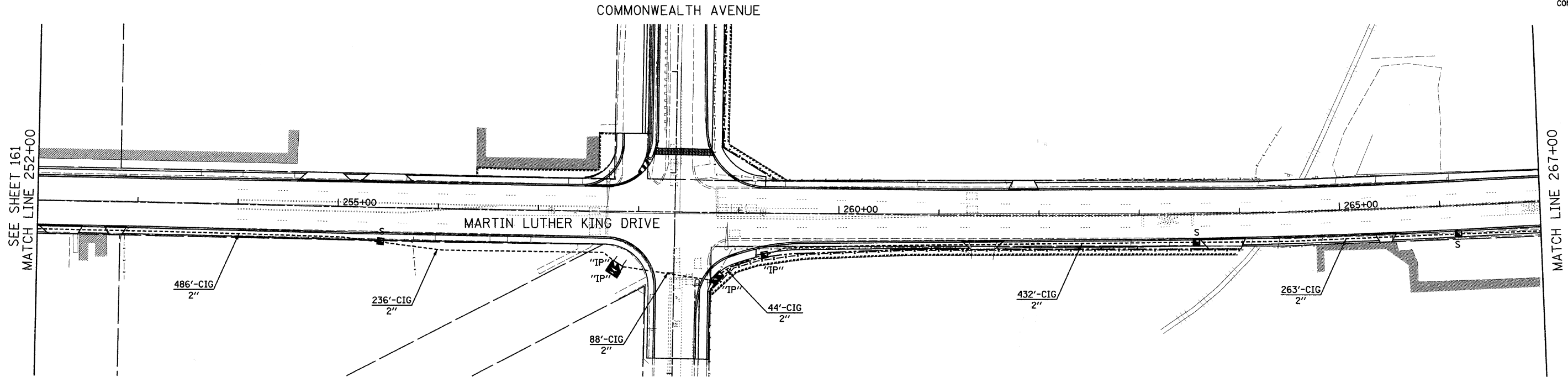
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	162
STA. 252+00	TO STA. 277+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT: 83828



SCHEDULE OF QUANTITIES

CODE NUMBER	DESCRIPTION	UNIT	QUANTITY
81400100	HANDHOLE	EACH	15
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
87900200	DRILL EXISTING HANDHOLE	EACH	5
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2040
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	17917
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	17917
	CONDUIT IN GROUND 2" DIA., GALVANIZED STEEL	FOOT	10304

INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN GROUND (CIG)		
DETECTOR LOOP		
SYSTEM	"S"	
INTERSECTION	"IP"	"I"
UNIT DUCT	UD	
COMMON TRENCH	CT	
TELEPHONE CONNECTION		
MASTER CONTROLLER		"MC"

DATE: 7/1/2008
TIME: 8:37:09 AM
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Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@clorba.com

REVISIONS	
NAME	DATE

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

TRAFFIC SIGNAL INTERCONNECT PLAN
MARTIN LUTHER KING JR. DRIVE

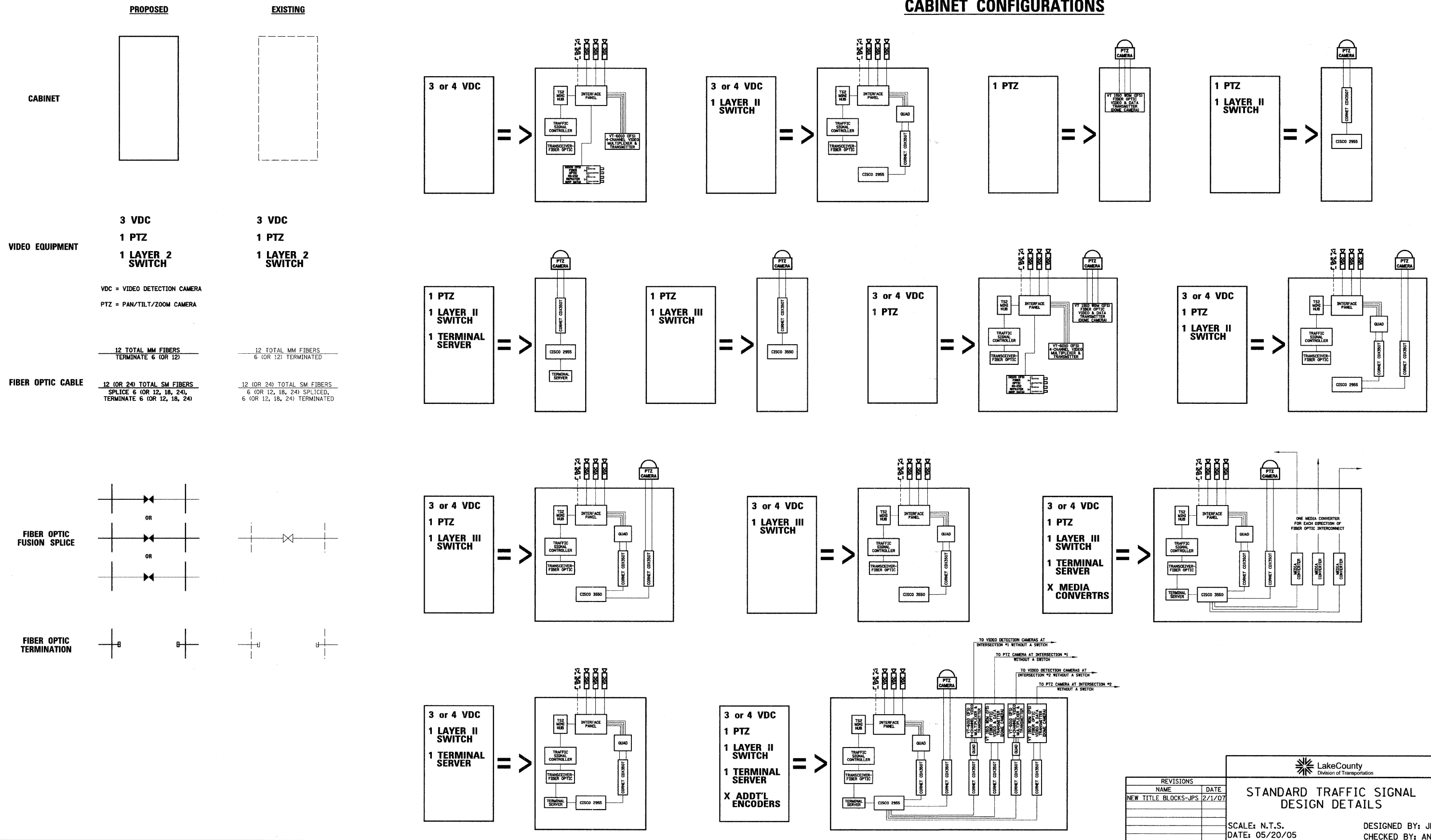
SCALE: 1"=50'
DATE: APRIL, 2008

DRAWN BY: KDM
CHECKED BY: M.J.L.

VIDEO SYSTEM SCHEMATIC LEGEND

F.A.U. ROUTE	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
		LAKE	262	163
LCDOT TS DESIGN DETAILS SHT 1 OF 2				
ILLINOIS				
CONTRACT 83828				

CABINET CONFIGURATIONS



REVISIONS		
NAME	DATE	
NEW TITLE BLOCKS-JPS	2/1/07	

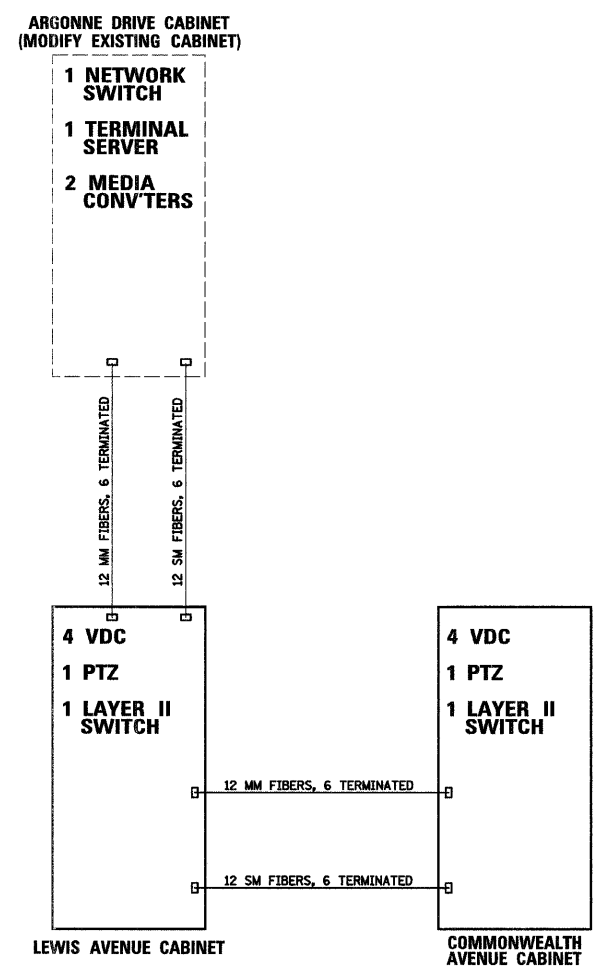
LakeCounty
Division of Transportation

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: N.T.S.
DATE: 05/20/05

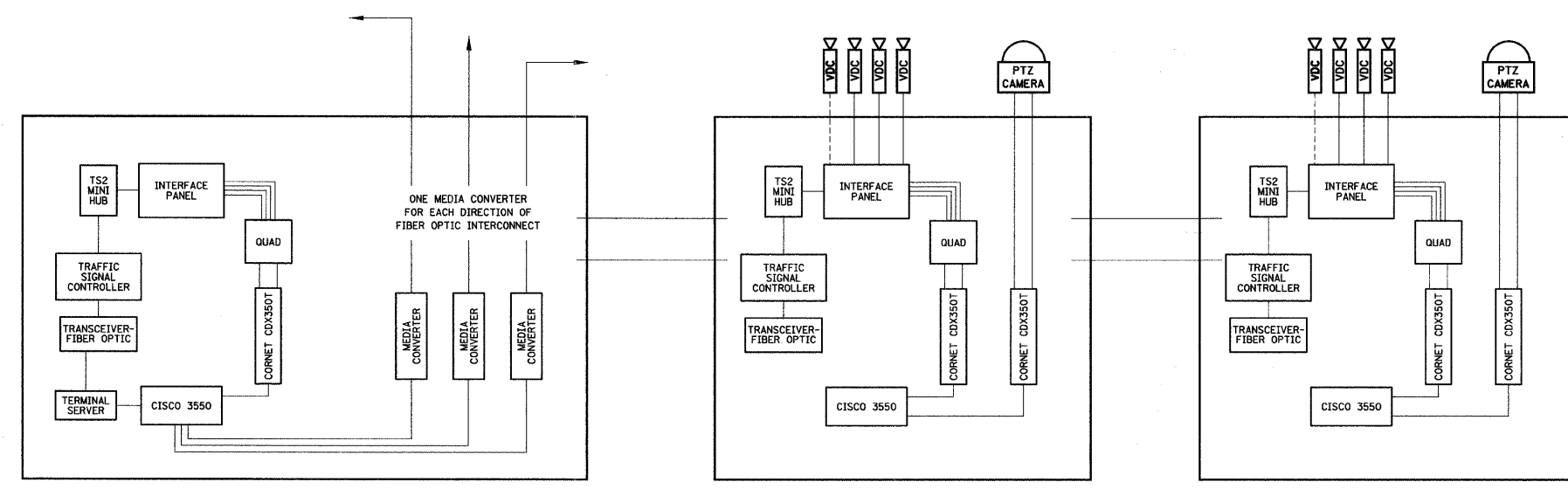
DESIGNED BY: JPS
CHECKED BY: ANK

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	164
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT: 83828				



CLIENT:	NO.	DATE	NATURE OF REVISION	CHKD.	DSGN.	KDM	TITLE: VIDEO SYSTEM SCHEMATIC MARTIN LUTHER KING DRIVE FROM GREEN BAY ROAD TO SHERIDAN ROAD LAKE COUNTY, ILLINOIS	PROJECT NO.
					DWN.	KDM		SHEET OF
					CHKD.	MJL		DRAWING NO.
					SCALE:	N.T.S.		
	FILE NAME: N:\PROJ\5161\Design\Signals\Signal Detail Sheets\5161-01A-Signal Detail.dgn				DATE:	APRIL, 2008		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	165
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT: 83828				

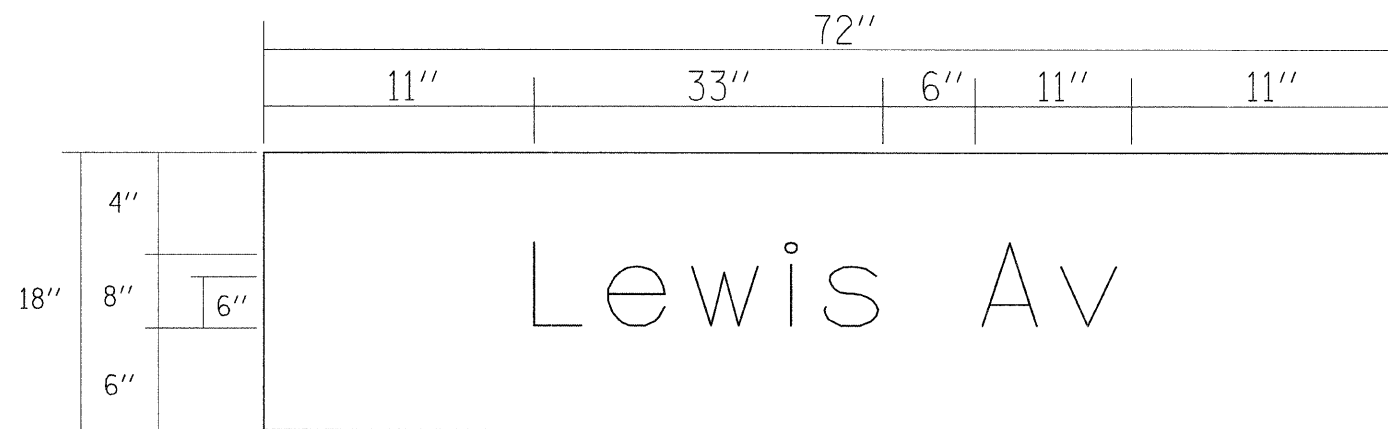


CLIENT:	NO.	DATE	NATURE OF REVISION	CHKD.	DSGN.	ABR.	TITLE: VIDEO TRANSMISSION SYSTEM SCHEMATIC MARTIN LUTHER KING DRIVE GREEN BAY ROAD TO SHERIDAN ROAD NORTH CHICAGO, ILLINOIS	PROJECT NO.
					DWN.	FPB		SHEET OF
					CHKD.	GMZ		DRAWING NO.
					SCALE:	N.T.S.		
					DATE:	7/2/008		
	FILE NAME: N:\PROJ\5161\Design\Signal\Signal Detail Sheets\5161-02-Signal Detail.dgn							

PANEL DESIGN TYPE 1

ROUTE	SECTION	COUNTY	SHEET	SHEETS
1230	03-00159-00-PV	LAKE	262	166
STREET NAME PLAN				
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

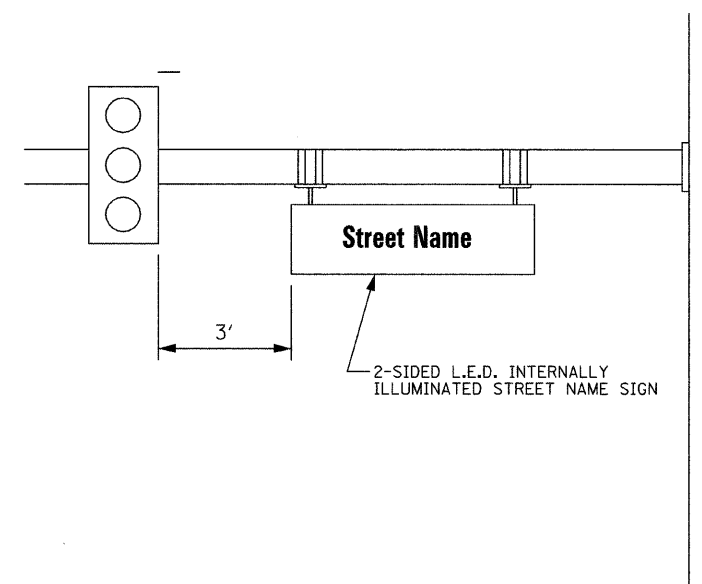
CONTRACT 83828



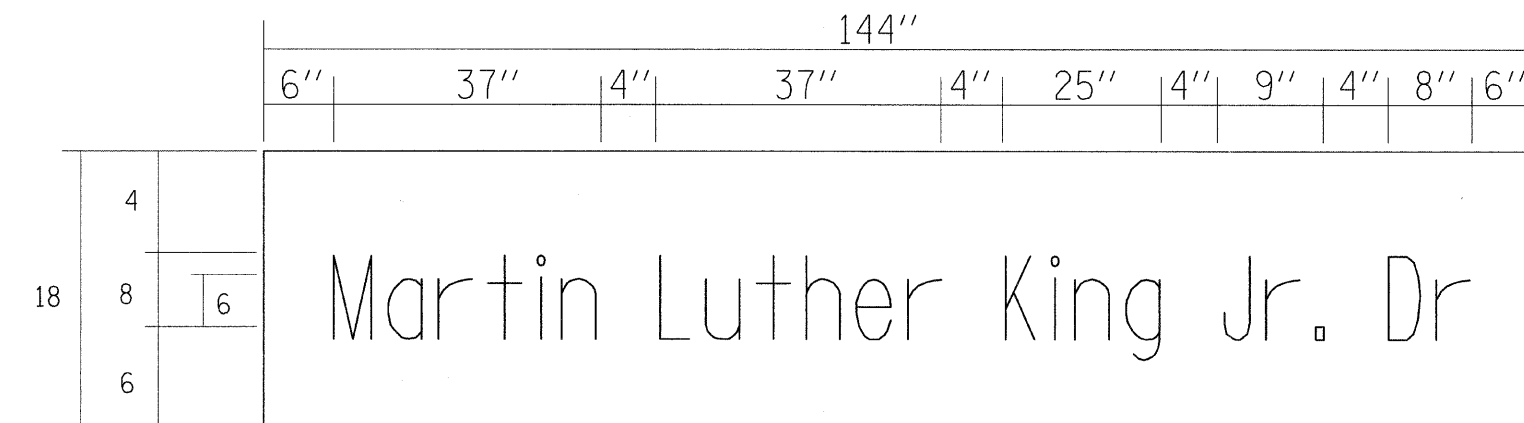
ALL DIMENSIONS SHOWN IN INCHES

9.00 SQ. FT. EACH

1 REQUIRED
X SINGLE SIDED REQUIRED
 _____ DOUBLE SIDED REQUIRED
 DESIGN SERIES D
 CLEARVIEW FONT



REGULAR STEEL MAST ARM ASSEMBLY AND POLE

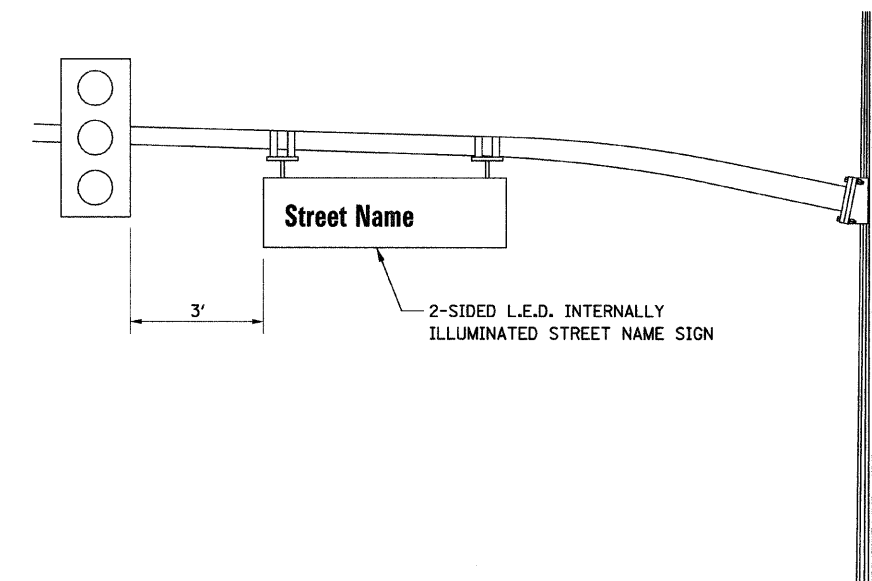


ALL DIMENSIONS SHOWN IN INCHES

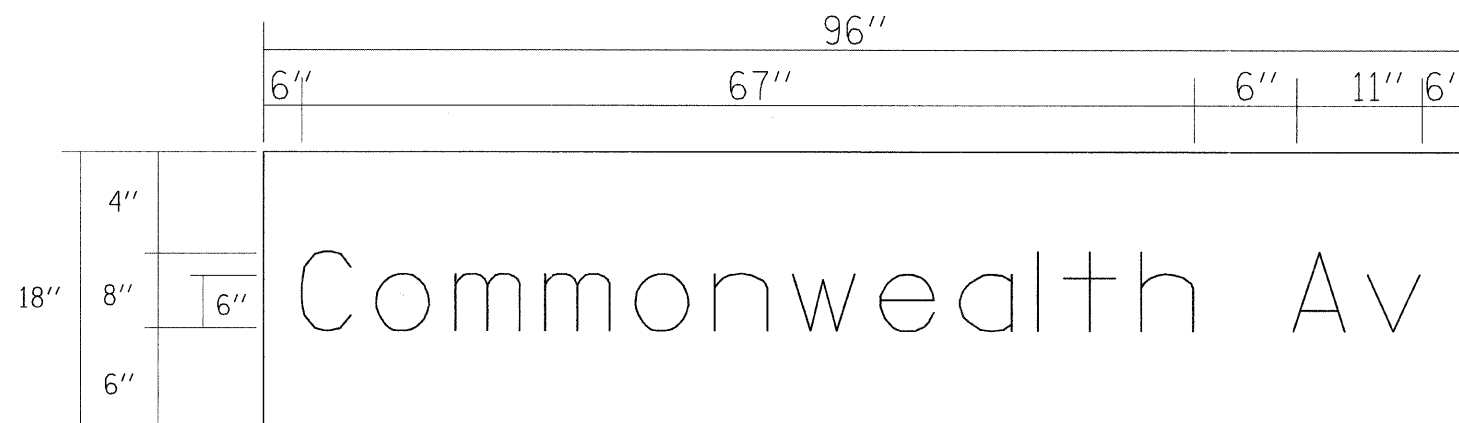
18.00 SQ. FT. EACH

2 REQUIRED
 _____ SINGLE SIDED REQUIRED
X DOUBLE SIDED REQUIRED
 DESIGN SERIES D
 CLEARVIEW FONT

NOTE: L.E.D. ILLUMINATED STREET NAME SIGNS
 AVAILABLE ONLY IN 2 FOOT INCREMENTS.



DECORATIVE STEEL MAST ARM ASSEMBLY AND POLE



ALL DIMENSIONS SHOWN IN INCHES

12.00 SQ. FT. EACH

2 REQUIRED
 _____ SINGLE SIDED REQUIRED
X DOUBLE SIDED REQUIRED
 DESIGN SERIES D
 CLEARVIEW FONT

NOTE: L.E.D. ILLUMINATED STREET NAME SIGNS
 AVAILABLE ONLY IN 2 FOOT INCREMENTS.

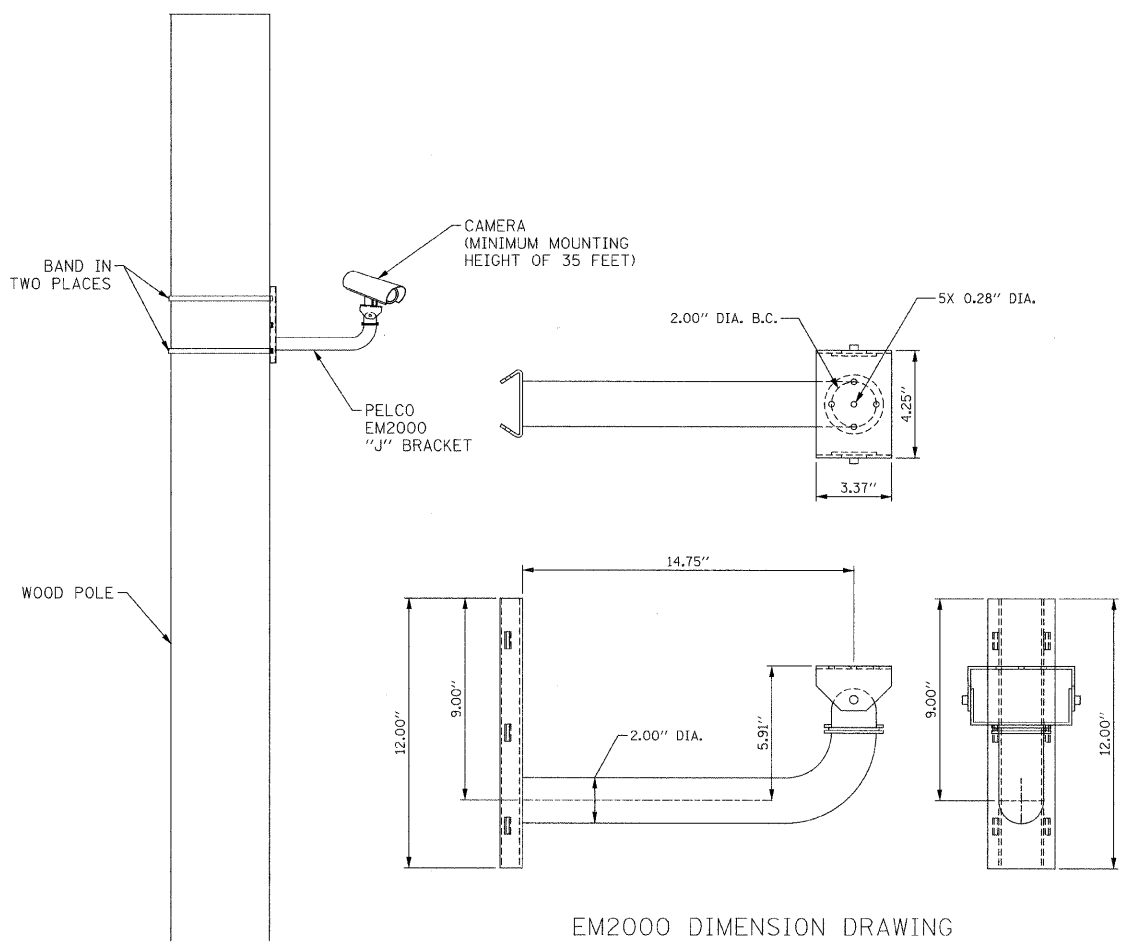
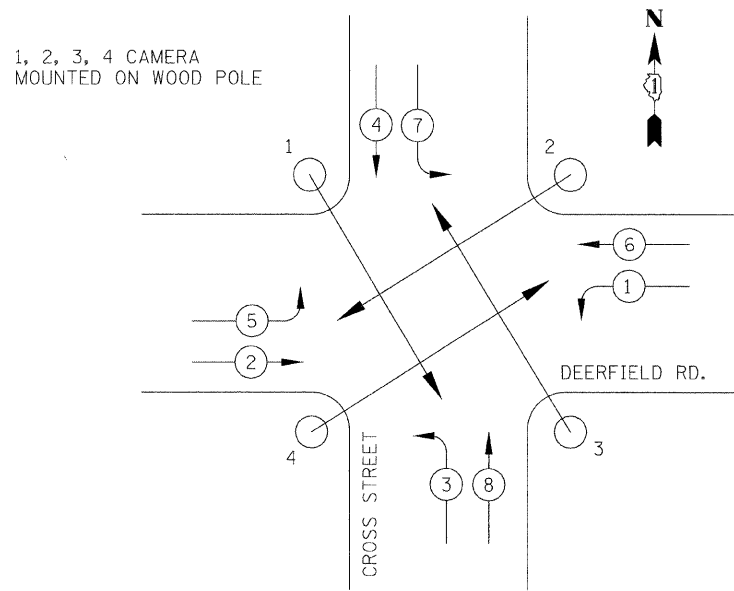
REVISION	
NAME	DATE
COMBINED SHEETS	2/1/07



**MAST ARM MOUNTED
 STREET NAME SIGNS**
 ROAD NAME AT ROAD NAME

SCALE: NONE
 DATE 7/26/06

DESIGNED BY JPS
 CHECKED BY ANK



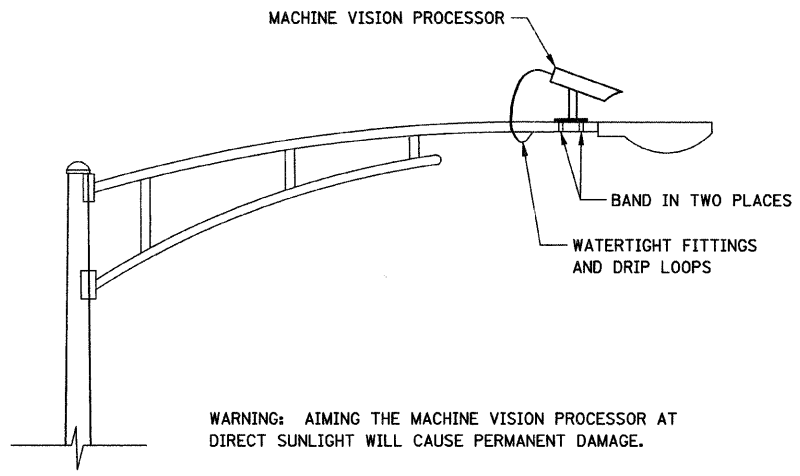
EM2000 DIMENSION DRAWING

TEMPORARY CAMERA MOUNTING DETAILS
N.T.S.

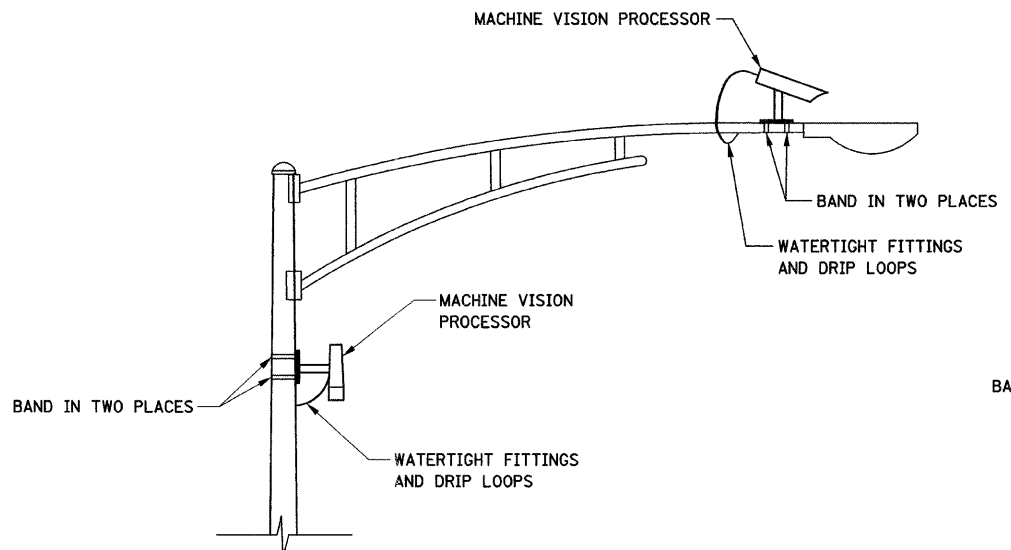
REVISIONS	
NAME	DATE

**TEMPORARY
AUTOSCOPE INSTALLATION**

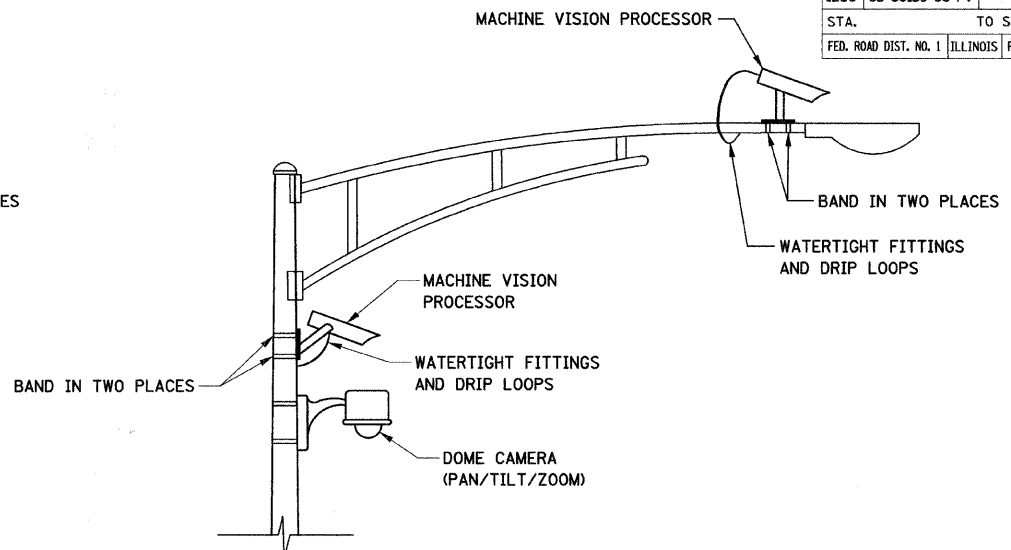
SCALE: N.T.S. DESIGNED BY:
DATE: 02/15/00 CHECKED BY:



MACHINE VISION PROCESSOR MOUNTING DETAIL
(NOT TO SCALE)

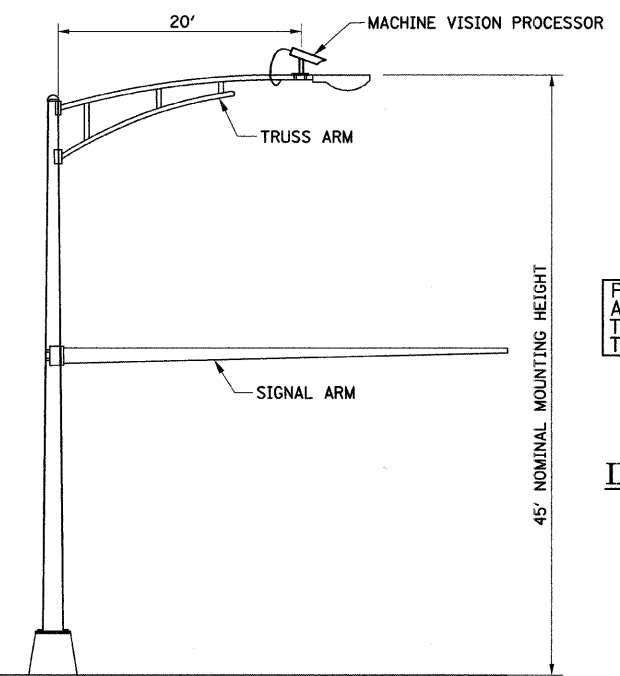


DUAL MACHINE VISION PROCESSORS MOUNTING DETAIL
(NOT TO SCALE)



DUAL MACHINE VISION PROCESSORS AND DOME (PTZ) CAMERA MOUNTING DETAIL
(NOT TO SCALE)

- NOTES FOR SINGLE, DUAL AND MULTIPLE MVP MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
 - AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
 - MOUNT MACHINE VISION PROCESSOR AIMING DOWN AT 30 DEGREE ANGLE.



COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS
(NOT TO SCALE)

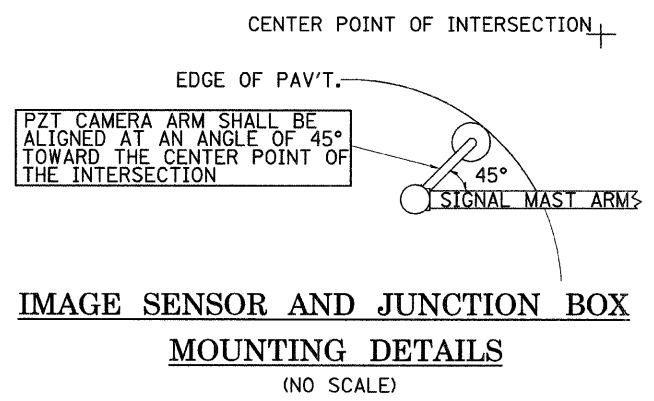
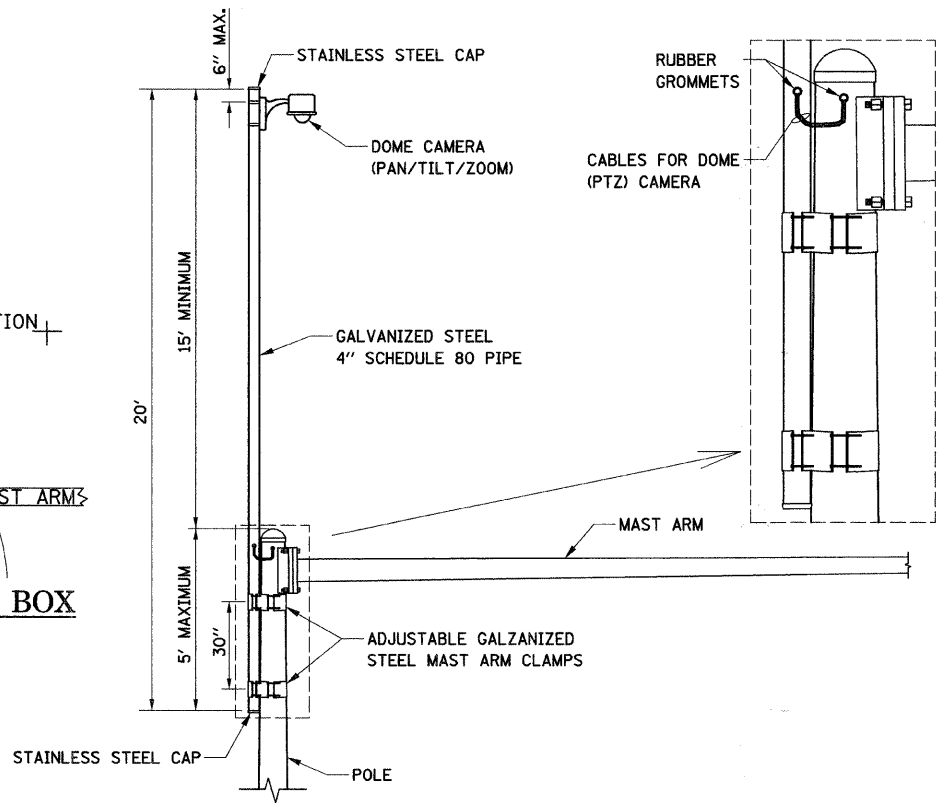
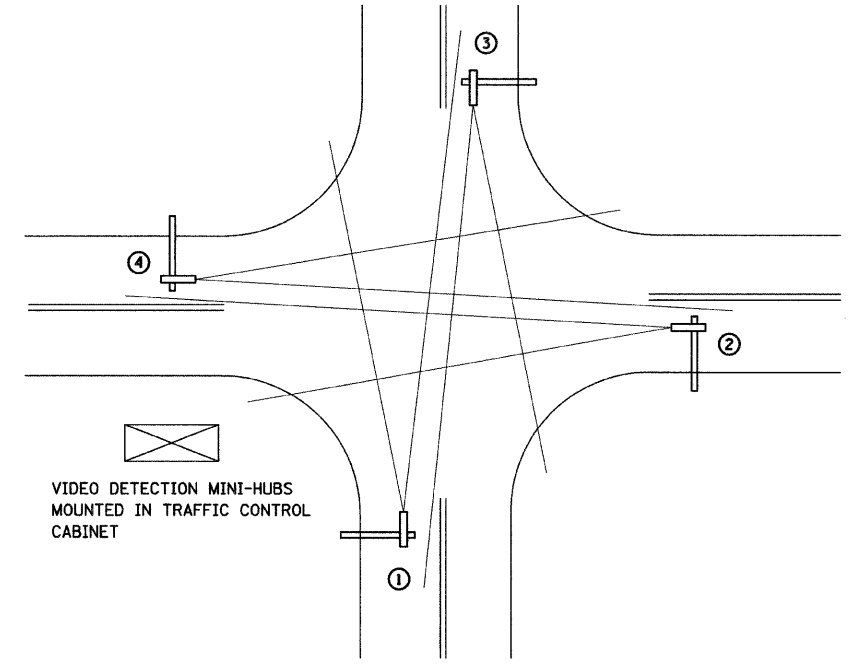


IMAGE SENSOR AND JUNCTION BOX MOUNTING DETAILS
(NO SCALE)



CAMERA MOUNTING ASSEMBLY DETAIL
(NOT TO SCALE)



TYPICAL VIDEO VEHICLE DETECTION SYSTEM
(NOT TO SCALE)

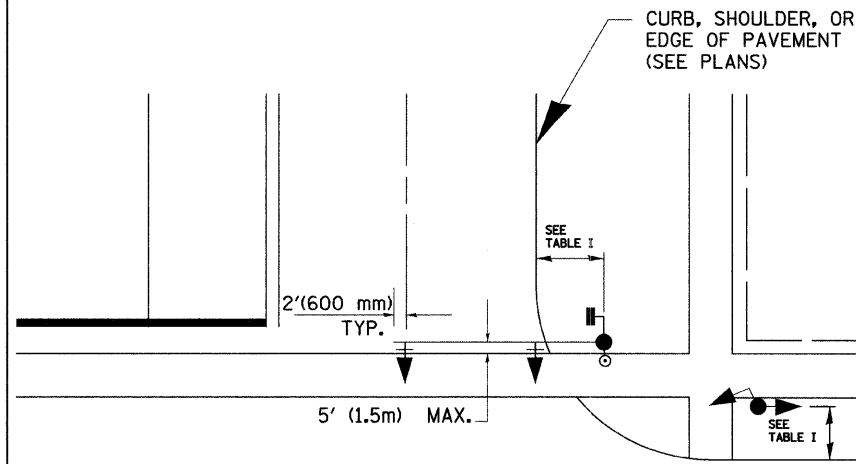
(4) MACHINE VISION PROCESSOR ASSEMBLIES AND BRACKETS ① ② ③ ④
POWER CABLE TO EACH MACHINE VISION PROCESSOR (24 VAC)

REVISIONS	
NAME	DATE

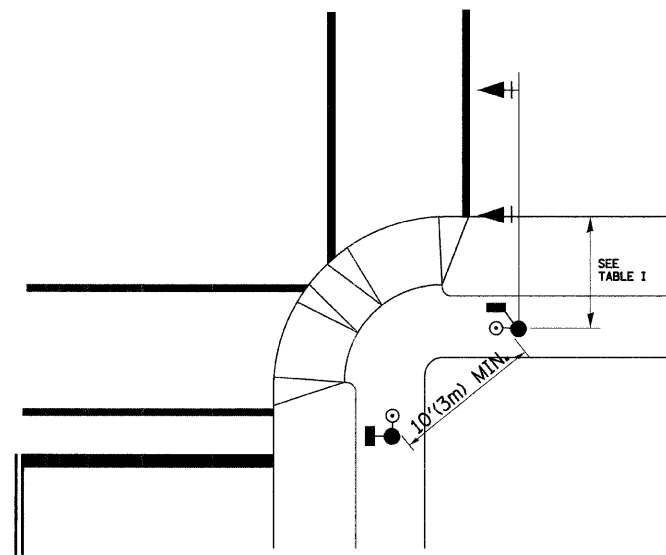
VIDEO DETECTION DETAILS
 SCALE: NONE
 DATE: 03/03/04
 DESIGNED BY: JPS
 CHECKED BY: ANK

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 - A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 - B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 - C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 - D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 - E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

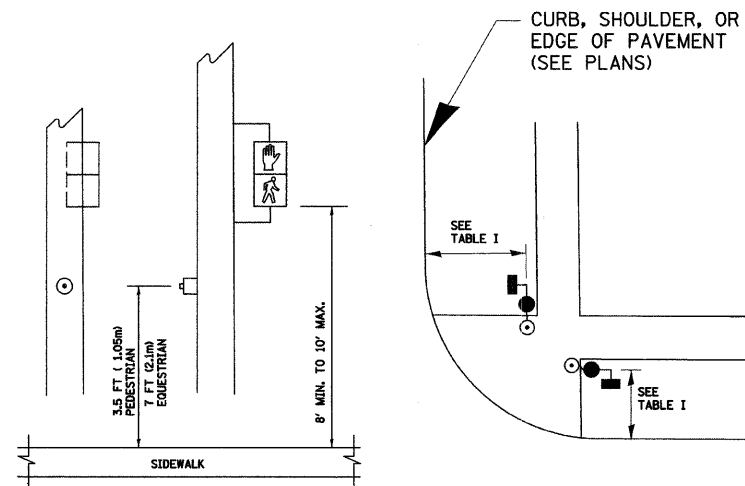


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ. NONE
DATE 1-01-02

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

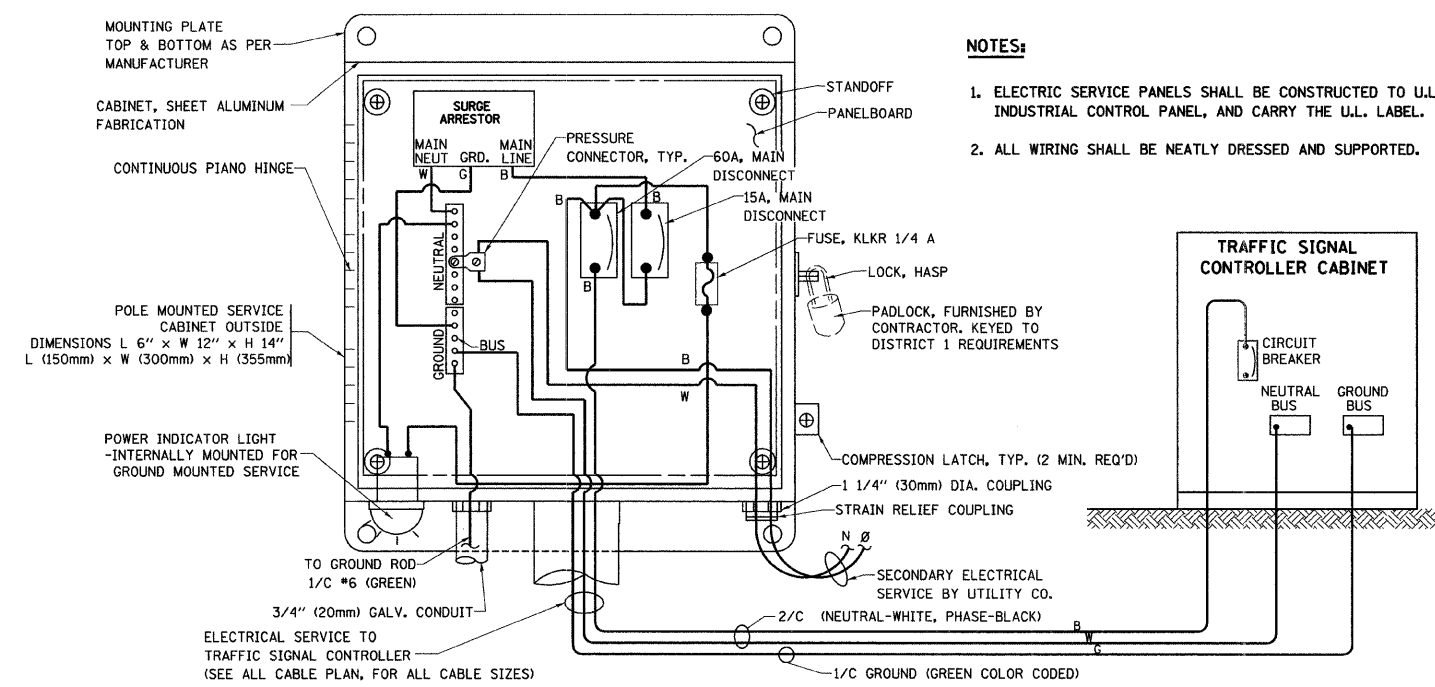
F.A.U. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	170
STA.	TO STA.			
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

NOTES:

GROUNDING SYSTEM

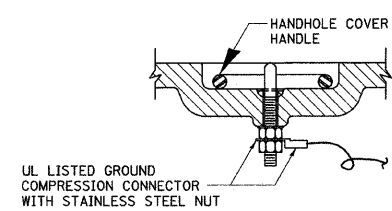
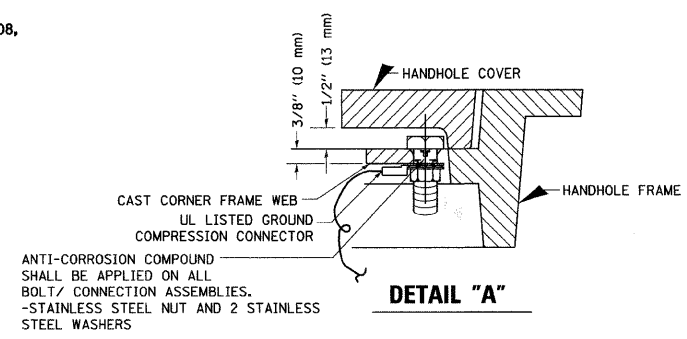
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

CONTRACT: 83828

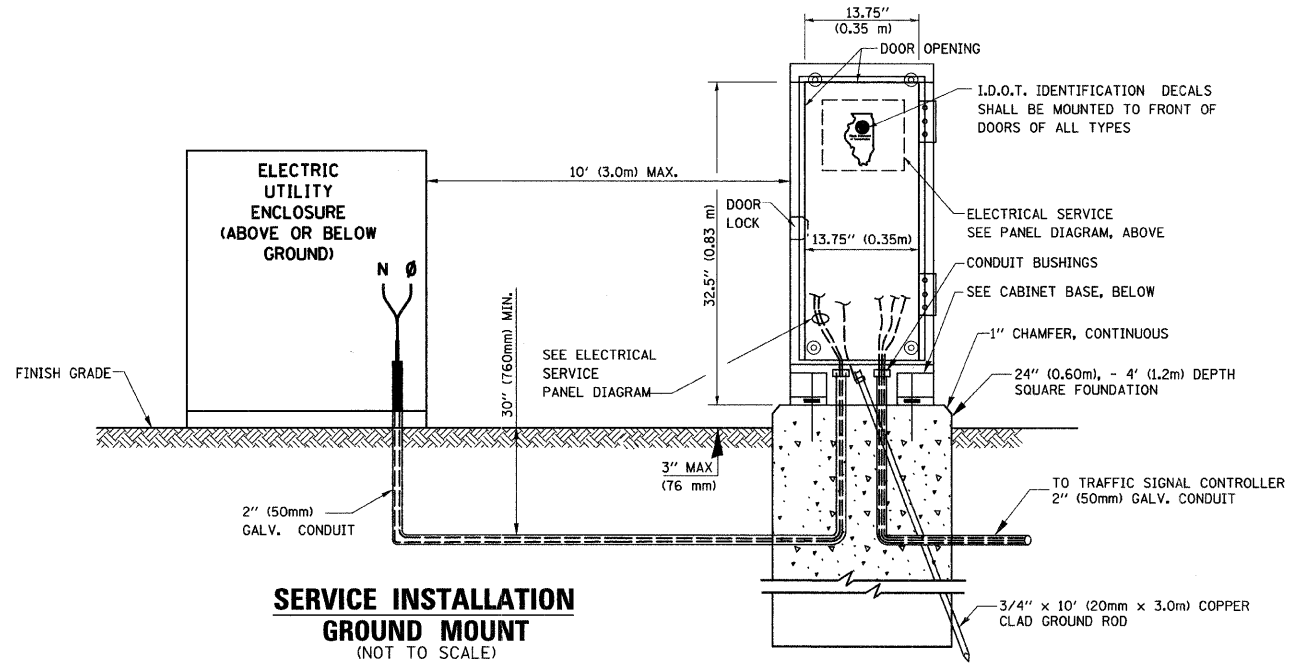


NOTES:

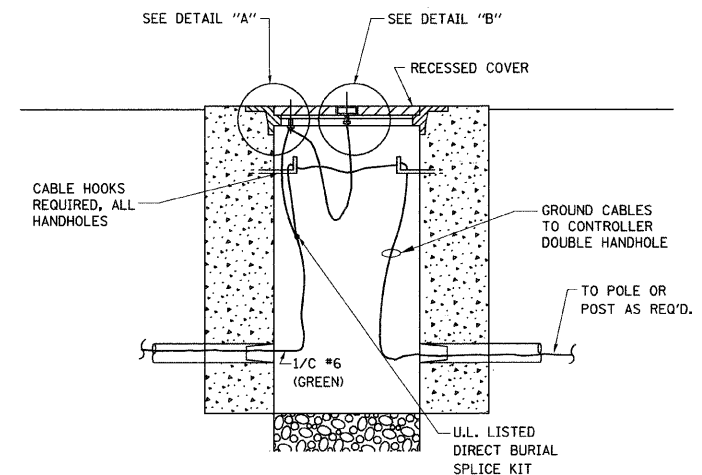
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



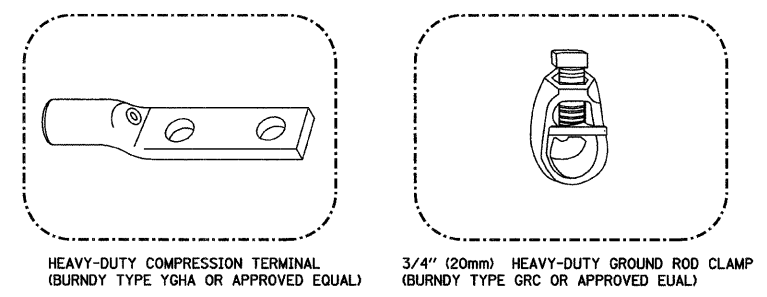
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

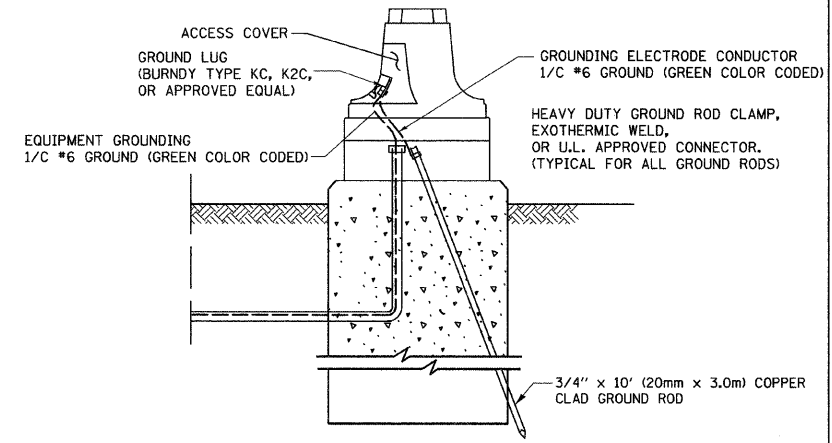


HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)

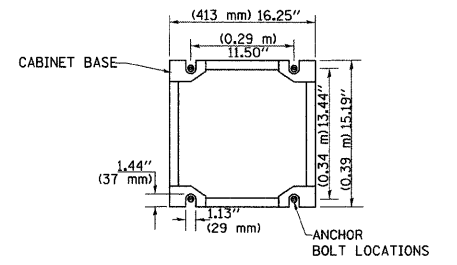


NOTES:

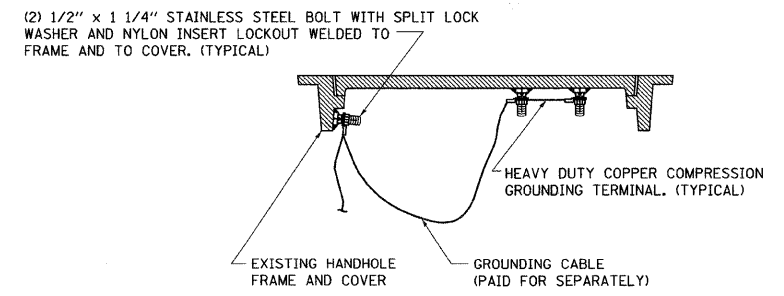
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
- 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
- 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
- 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)



CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)

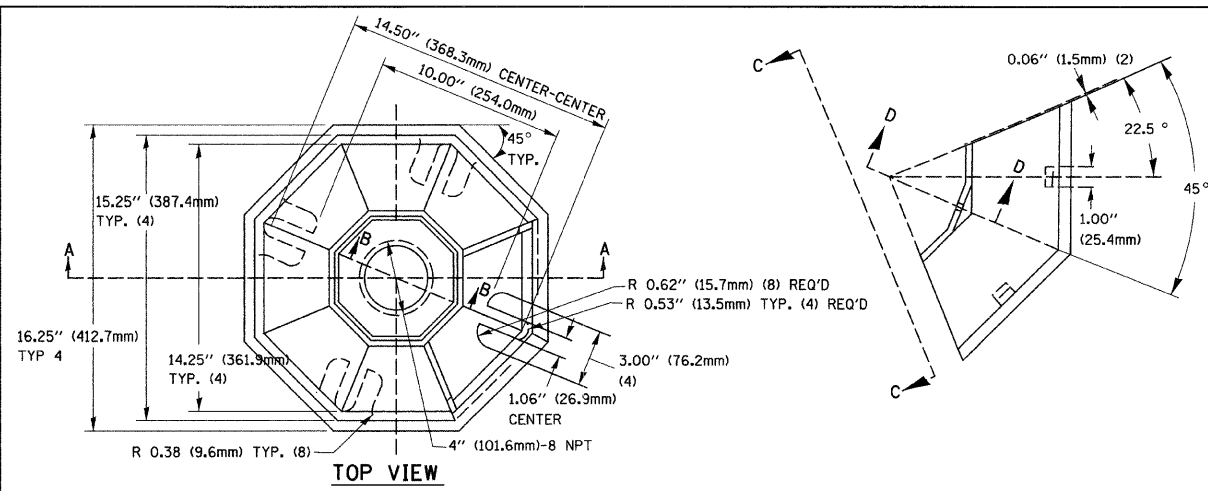


EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)

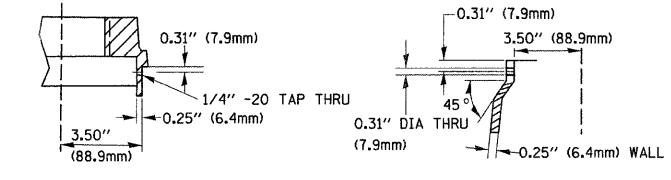
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS
 SCALE: VERT. NONE
 HORIZ.
 DATE 1-01-02
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

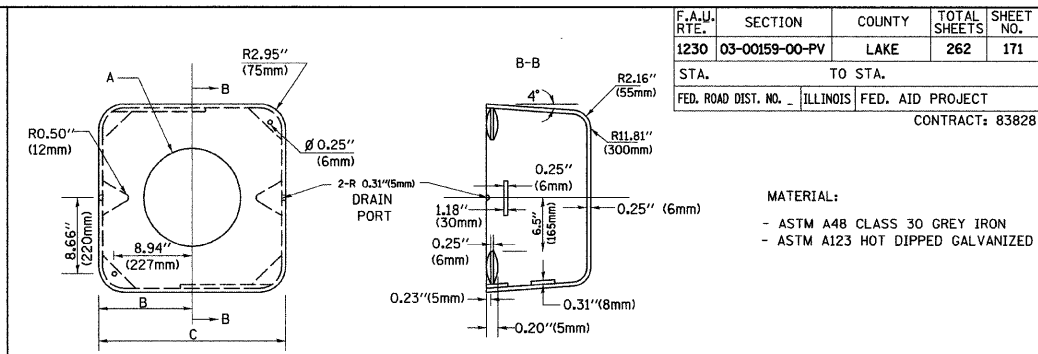
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SECTION B-B



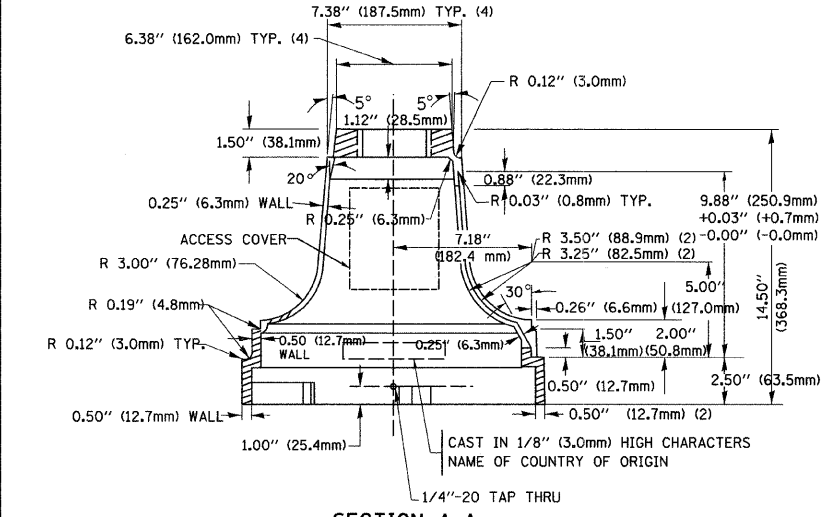
SECTION D-D



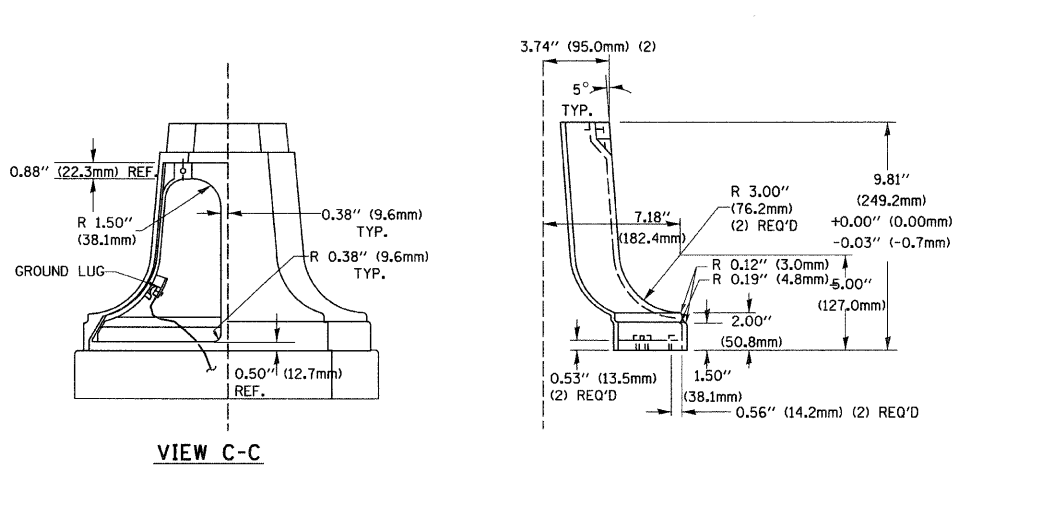
TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125\"(257mm)	9.5\"(241mm)	19\"(483mm)	12\"(300mm)	24kg
II	∅ 11.125\"(283mm)	10.75\"(273mm)	21.5\"(546mm)	12\"(300mm)	26kg

SHROUD DETAIL

MATERIAL:
 - ASTM A48 CLASS 30 GREY IRON
 - ASTM A123 HOT DIPPED GALVANIZED

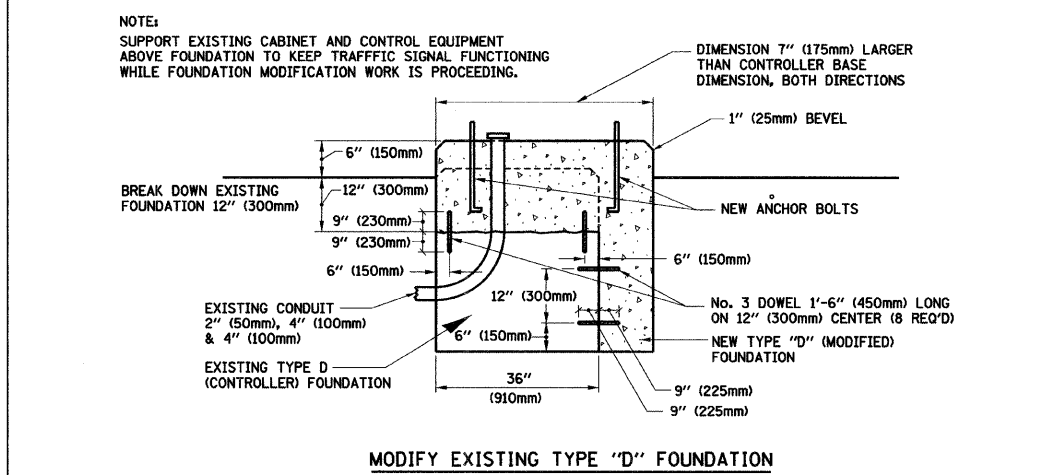


SECTION A-A



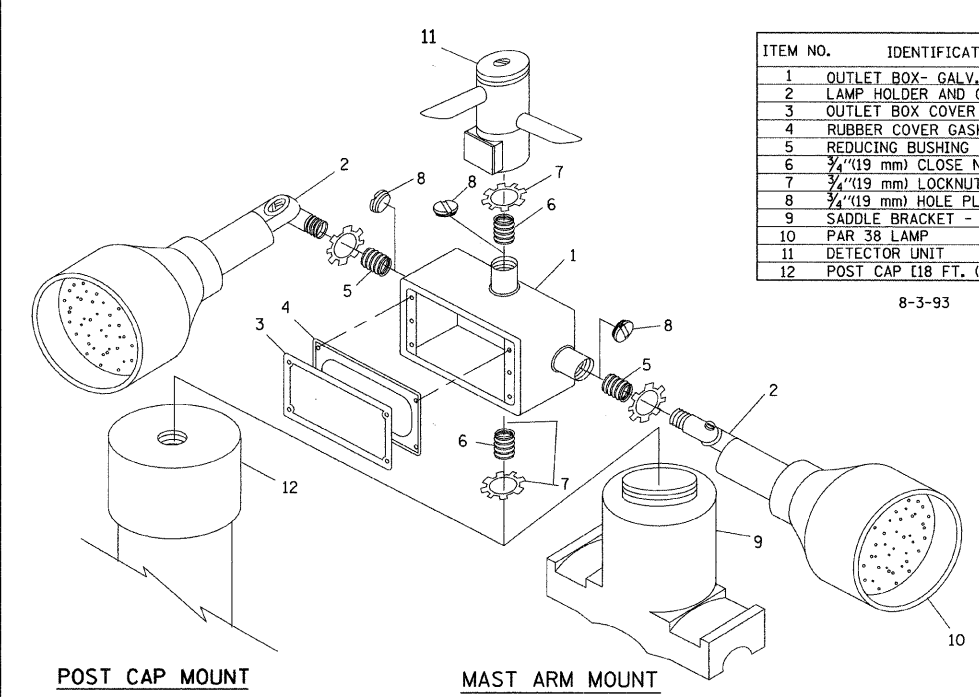
VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



MODIFY EXISTING TYPE "D" FOUNDATION

NOTE:
 SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.

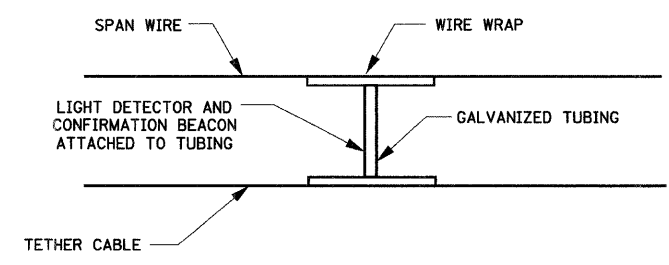


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV, 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

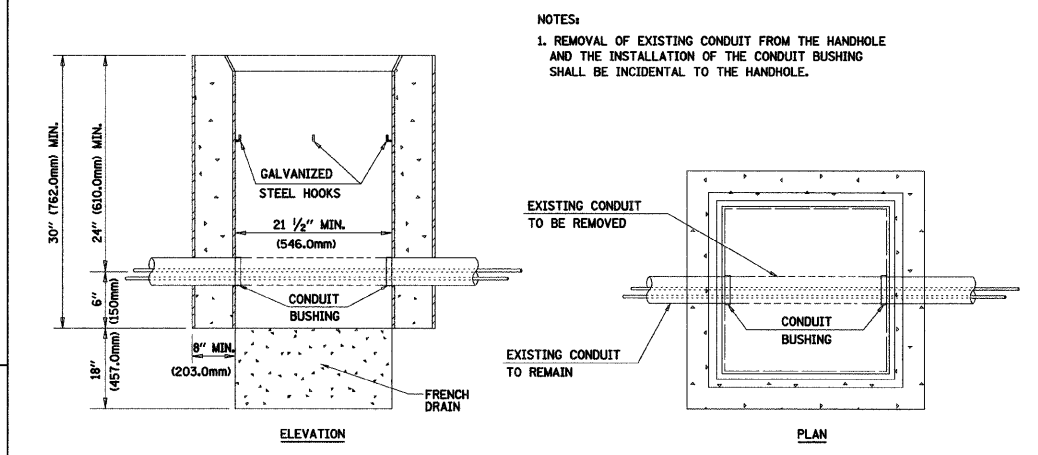
NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT

NOTES:

- REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
 HORIZ. 1-01-02
 DATE 1-01-02
 DRAWN BY: RWP
 DESIGNED BY: DAZ
 CHECKED BY: DAZ
 SHEET 4 OF 4

N:\PROJ\B5161-08-Signal-Detail.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	172
STA. 192+00		TO STA. 222+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT: 83828

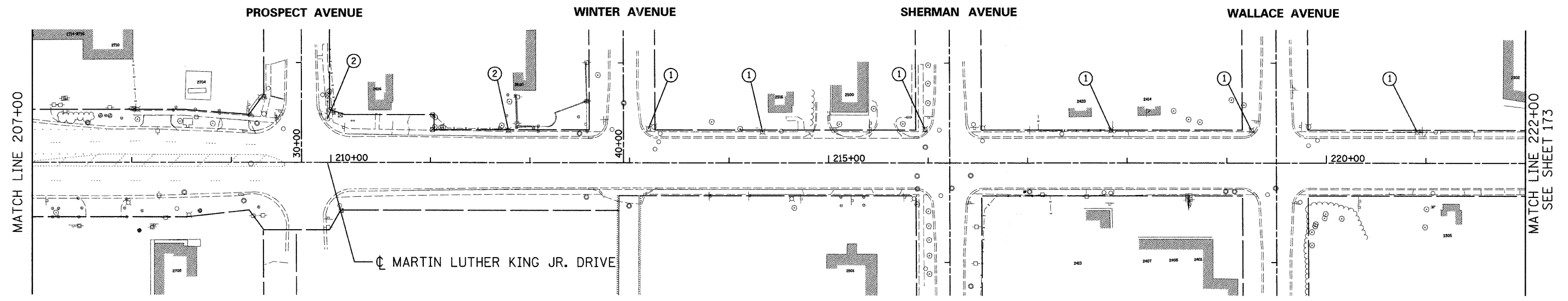
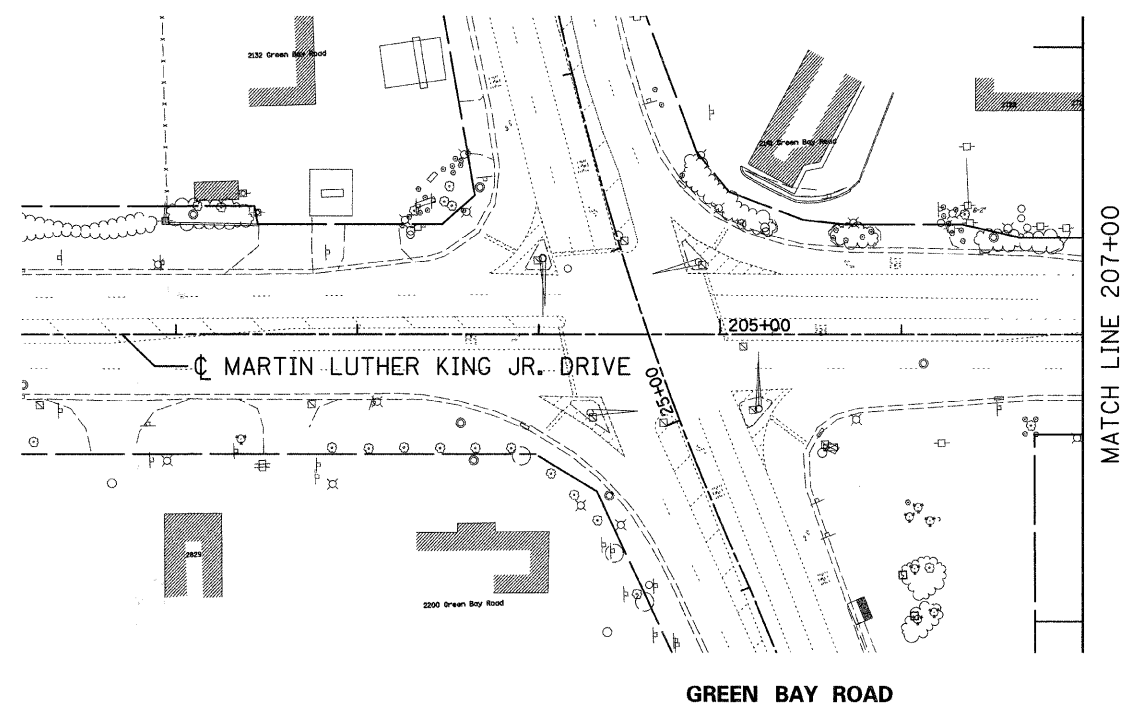
LIGHTING GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AS WELL AS:
ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS ADOPTED JANUARY 1, 2007.
ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2008.
ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (LATEST EDITION IN EFFECT ON THE DATE OF INVITATION FOR BIDS).
NATIONAL ELECTRIC CODE, 2005 EDITION.
 - DISTRICT ONE RECURRING SPECIAL PROVISIONS FOR ROADWAY LIGHTING, LATEST EDITION.
- THE CONTRACTOR SHALL MAINTAIN A SET OF CONSTRUCTION RECORD DRAWINGS NOTING ALL CHANGES TO THE PLANS AND THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES ENCOUNTERED. A MYLAR REPRODUCIBLE AS-BUILT DRAWING AND TWO (2) PAPER SETS MUST BE SUBMITTED TO THE CITY OF NORTH CHICAGO DEPARTMENT OF ENGINEERING FOR REVIEW AND APPROVAL UPON COMPLETION OF THE PROJECT.
- NOMINAL QUANTITIES FOR THE FOLLOWING PAY ITEMS HAVE BEEN INCLUDED IN THE PLANS AND SHALL BE UTILIZED AS DIRECTED BY THE ENGINEER:

LIGHT POLE FOUNDATION, 24" DIA., OFFSET	440 L. F.
TEST HOLE	65 EACH
BOLLARDS	2 EACH
 - WITHIN THIRTY (30) DAYS AFTER THE CONTRACT IS SIGNED AND BEFORE ANY WORK IS AUTHORIZED BY THE ENGINEER, THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S LITERATURE PERTAINING TO LIGHTING WORK FOR THE ELECTRICAL ENGINEER'S REVIEW AND APPROVAL.
 - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LUMINAIRES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRE-CONSTRUCTION INSPECTION.
 - THE ENGINEER SHALL APPROVE THE LOCATIONS OF ALL PUSH PITS.
 - NO CONSTRUCTION MATERIALS OR EQUIPMENT SHALL BE STORED IN OR MOVED THROUGH THE DRIPLINE OF ANY PARKWAY TREE.

- THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO ARTICLE 801.04 OF THE STANDARD SPECIFICATIONS REGARDING THE PROPOSED LOCATIONS OF THE LIGHTING SYSTEM. ADDITIONALLY, THE UNIT DUCT ROUTING SHOWN ON THE PLANS IS MAINLY INTENDED TO SHOW ELECTRICAL CIRCUITRY. AN EFFORT HAS BEEN MADE TO AVOID UTILITY CONFLICTS BUT THE EXACT LOCATION OF ELECTRICAL CABLES AND CONDUITS SHOULD BE APPROVED BY THE ENGINEER AFTER THE UNDERGROUND UTILITIES HAVE BEEN LOCATED BY THEIR OWNERS. QUANTITIES SHOWN FOR UNIT DUCT AND CONDUIT SHALL BE CONFIRMED IN THE FIELD. THE ENGINEER SHALL APPROVE THE LOCATIONS OF ALL PUSH PITS.

THE CONTRACTOR SHALL KEEP DEVIATIONS FROM THE UNIT DUCT ROUTING SHOWN ON THE PLANS TO A MINIMUM. MAJOR DEVIATIONS SHALL BE REPORTED TO AND APPROVED BY THE ENGINEER BEFORE INSTALLATION.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHT SHALL REMAIN WITH THE CONTRACTOR.
- NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS ACCORDINGLY.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR SPLICING ELECTRICAL CABLE. SEE "GENERAL ELECTRICAL REQUIREMENTS" AND SPLICING DETAIL ON SHEET 191.
- THE CONTRACTOR SHALL MAKE NOTE OF THE REQUIREMENTS FOR GROUNDING.
A. GROUNDING CONNECTIONS AT THE FOUNDATION STEEL AND AT THE GROUND ROD SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- THE CONTRACTOR SHALL DISPOSE OF THE EXISTING ELECTRICAL MATERIAL AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE RESPECTIVE PAY ITEM.



- LEGEND**
- ① REMOVE WOOD POLE, MAST ARM AND LUMINAIRE (BY OTHERS)
 - ② REMOVE MAST ARM AND LUMINAIRE (BY OTHERS)

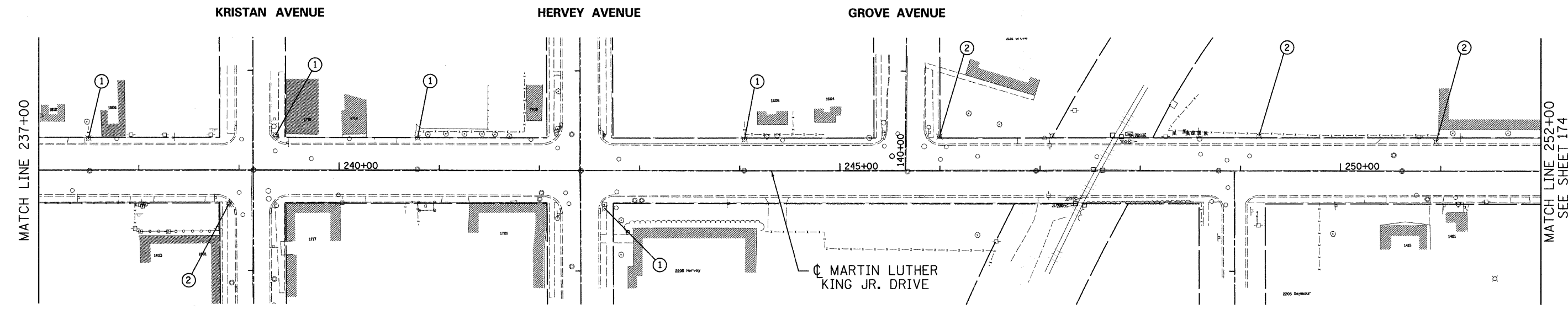
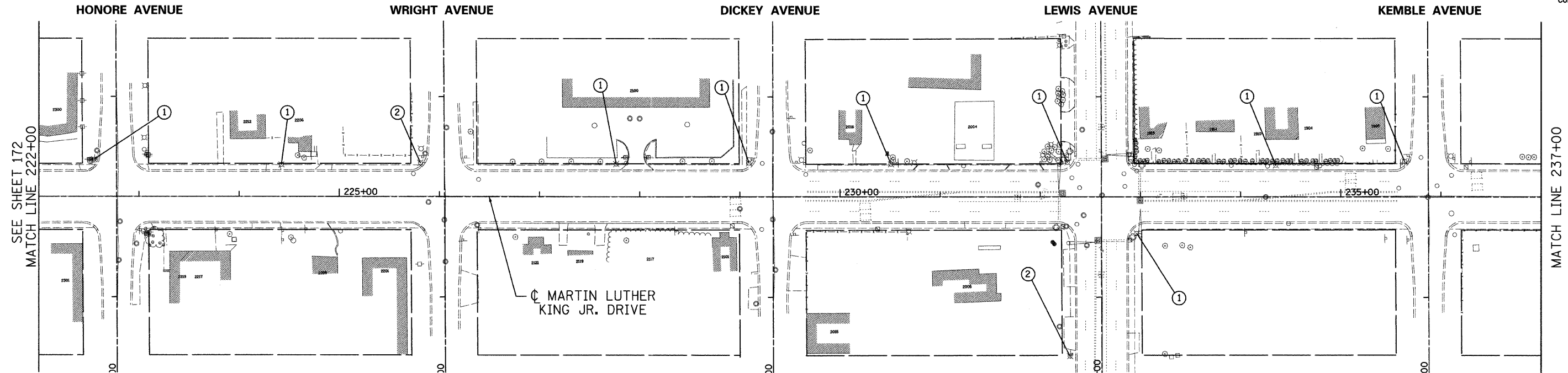
REVISIONS	
NAME	DATE

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
EXISTING LIGHTING
REMOVAL PLAN

SCALE: 1"=50'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/1/2008
TIME: 10:33:33 AM
FILENAME: N:\PROJ\05161\Design\Lighting\5161_LgtRemoval01.dgn



LEGEND

- ① REMOVE WOOD POLE, MAST ARM, AND LUMINAIRE (BY OTHERS)
- ② REMOVE MAST ARM, AND LUMINAIRE (BY OTHERS)

REVISIONS	
NAME	DATE

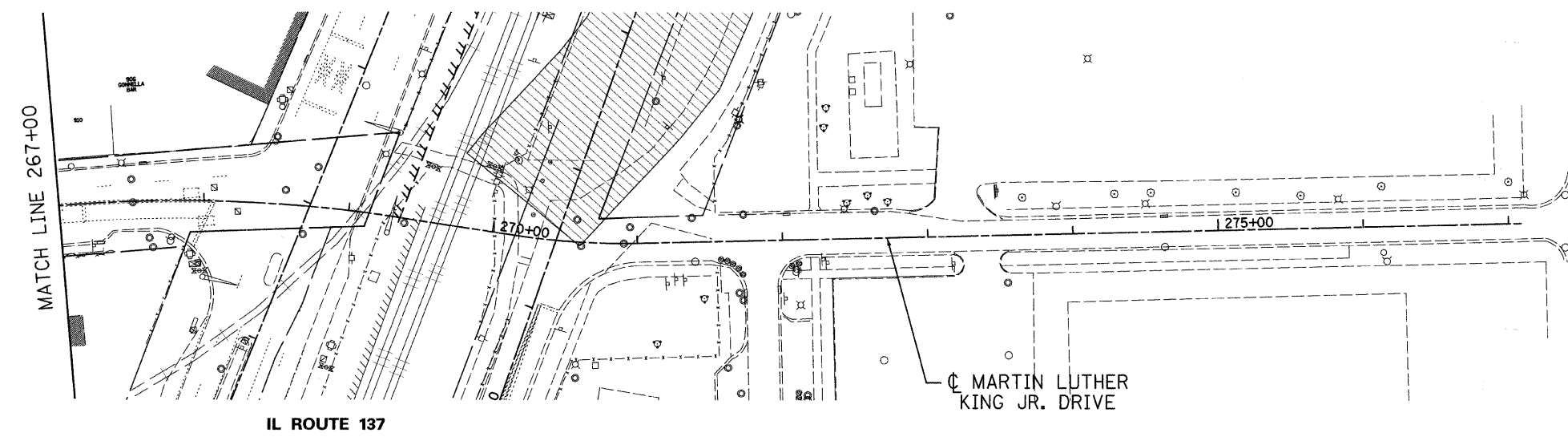
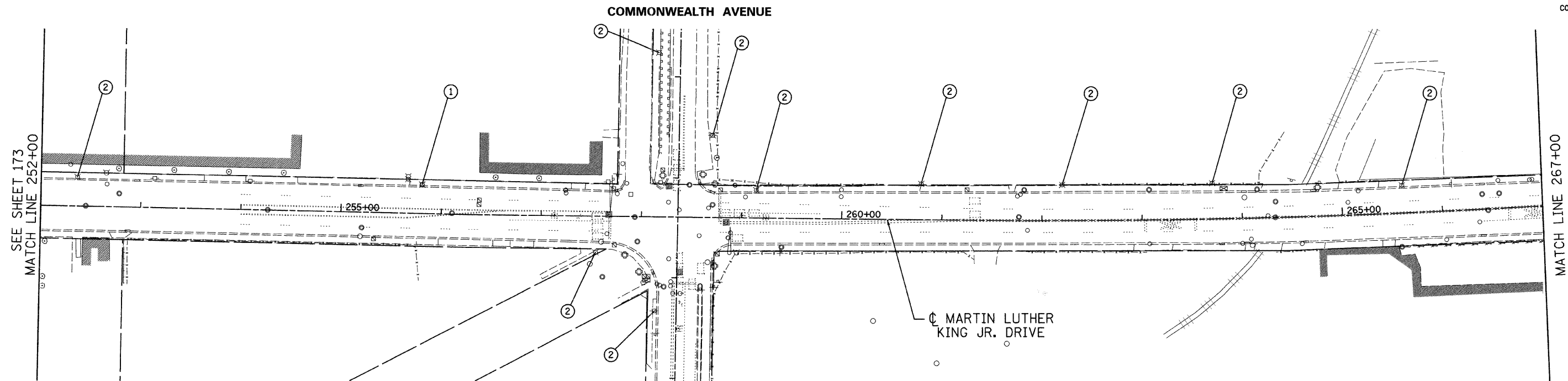
Ciorba Group, Inc.
CONSULTING ENGINEERS
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Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@ciorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
EXISTING LIGHTING
REMOVAL PLAN

SCALE: 1"=50'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	174
STA. 252+00	TO STA. 277+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT: 83828



LEGEND

- ① REMOVE WOOD POLE, MAST ARM, AND LUMINAIRE (BY OTHERS)
- ② REMOVE MAST ARM AND LUMINAIRE (BY OTHERS)

DATE: 7/12/08 PM
 FILENAME: N:\PROJECTS\1611\Design\Lighting\51611_LgtRemoval03.dgn

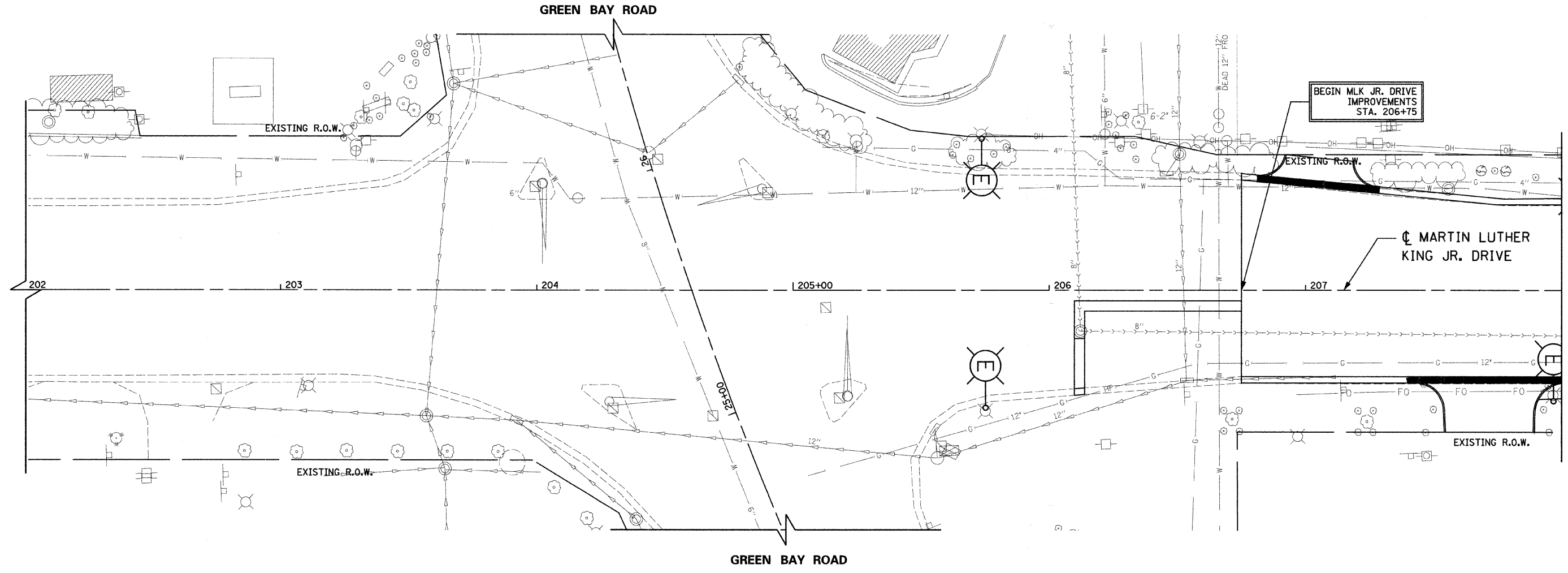
REVISIONS	
NAME	DATE


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 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

CITY OF NORTH CHICAGO
 MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
 MARTIN LUTHER KING JR. DRIVE
 EXISTING LIGHTING
 REMOVAL PLAN

SCALE: 1"=50'
 DATE: APRIL, 2008
 DRAWN BY: KDM
 CHECKED BY: JMW

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	175
STA. 202+00	TO STA. 208+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT: 83828				



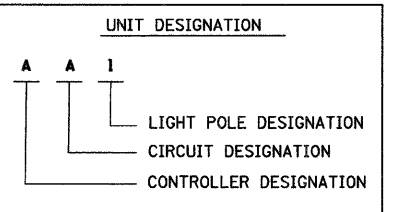
MATCHLINE STA. 208+00
SEE SHEET NO. 176

LEGEND

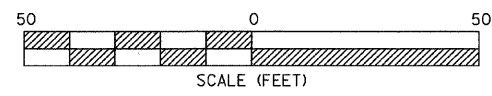
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND
SPLICING ALLOWED



REVISIONS	
NAME	DATE

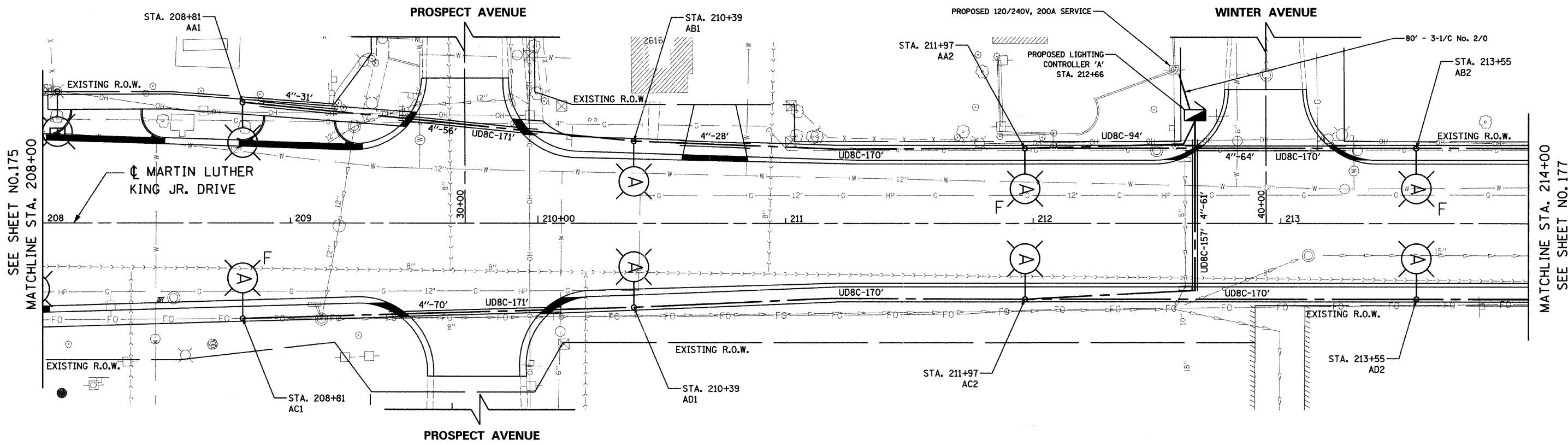
Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 202+00 TO 208+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/1/2008
TIME: 12:34:36 PM
FILENAME: N:\PROJ\05161\Design\Lighting\5161_LgtPlan01.dgn

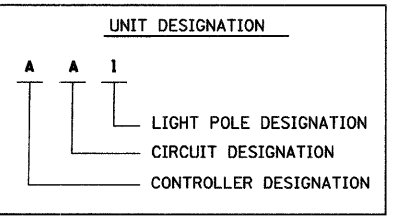
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	176
STA. 208+00	TO STA. 214+00			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT: 83828				



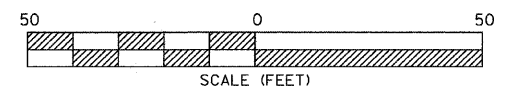
- LEGEND**
- (E)-o - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
 - (A)-o - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
 - (B)-o - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
 - (C)-o - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
 - UD8C-10' - UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
 - 4"-10' - GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
 - [Symbol] - INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
 - F - INSTALL OFFSET FOUNDATION SEE SHEET 193
 - - BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

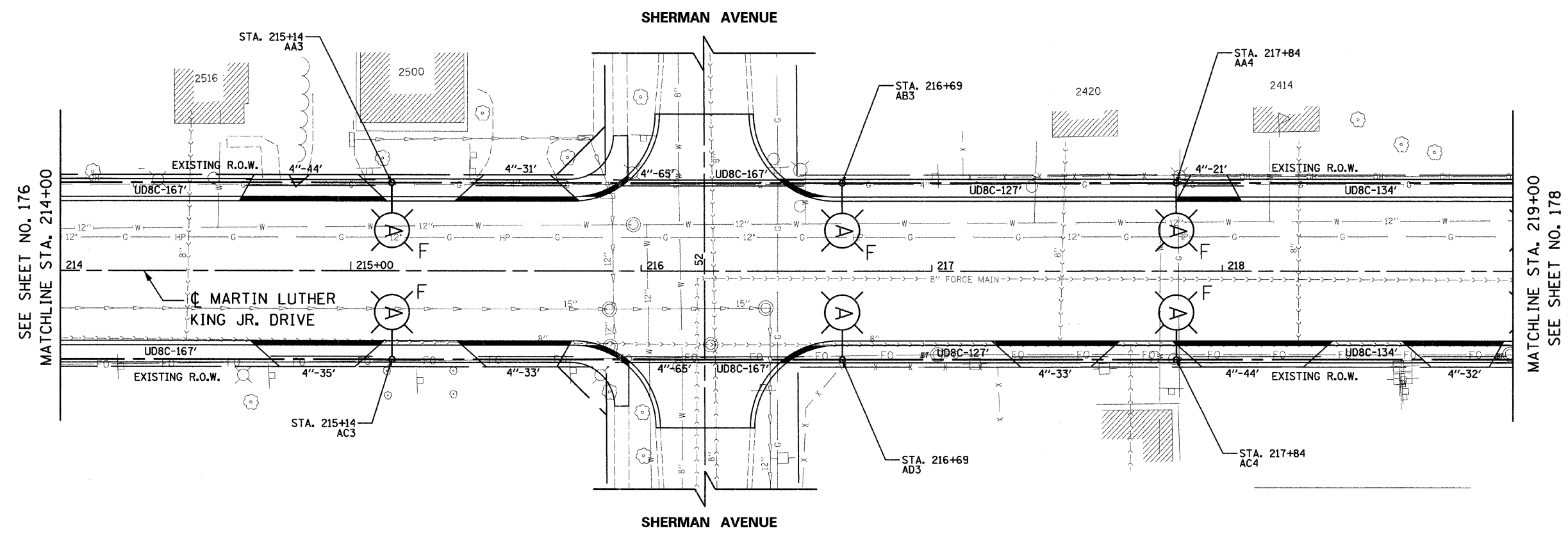
Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 208+00 TO 214+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW

DATE: 7/1/2008 PM 1:17:11
FILENAME: N:\PROJECTS\161\Design\Lighting\161_LightPlan02.dgn

F.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	177
STA. 214+00	TO STA. 219+00			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT: 83828				



SEE SHEET NO. 176
MATCHLINE STA. 214+00

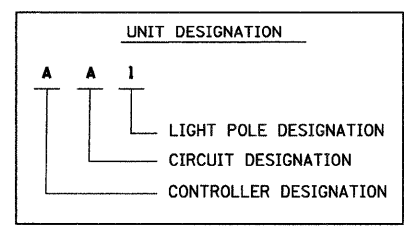
MATCHLINE STA. 219+00
SEE SHEET NO. 178

LEGEND

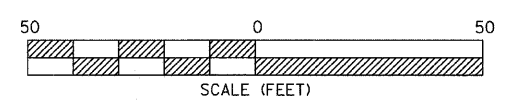
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- ▢ INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

MLK JR. DRIVE

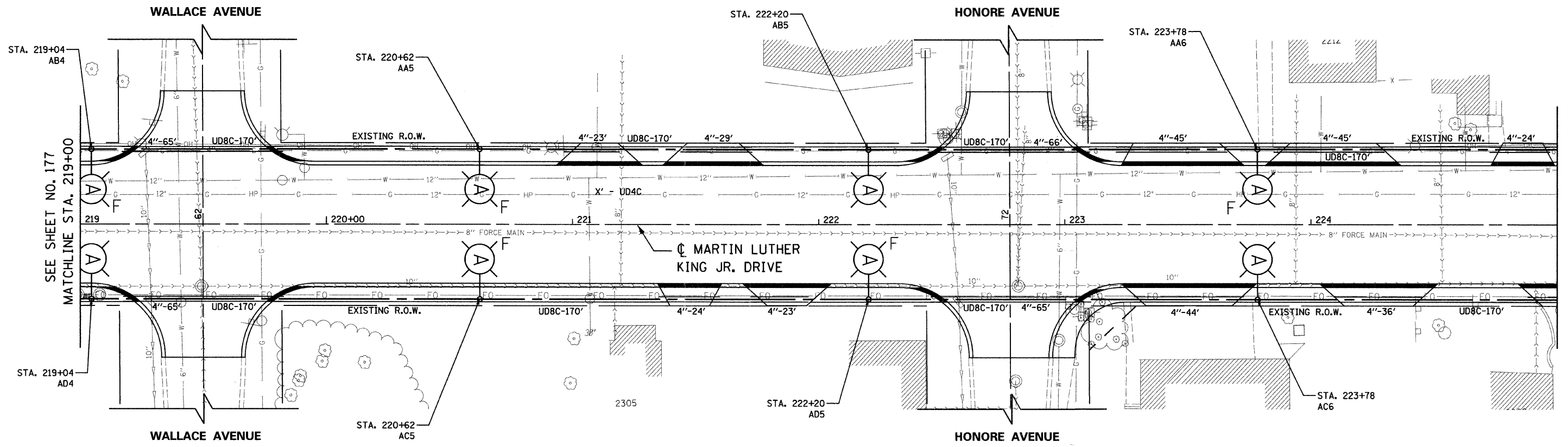
Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 214+00 TO 219+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW

DATE: 7/1/2008
TIME: 10:51 AM
FILENAME: N:\PROJ\05161\Design\Lighting\5161_LgtPlan03.dgn

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	178
STA. 219+00		TO STA. 225+00		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT: 83828				



SEE SHEET NO. 177
MATCHLINE STA. 219+00

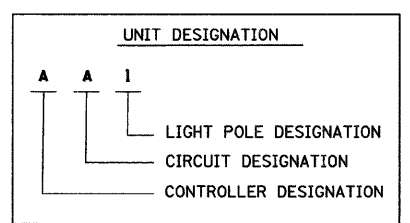
MATCHLINE STA. 225+00
SEE SHEET NO. 179

LEGEND

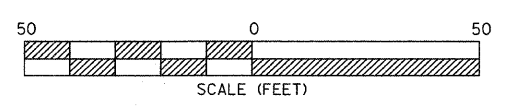
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' - UNIT DUCT WITH 7-1/2" NO. 4 AND 1/2" NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' - GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- [Symbol] - INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F - INSTALL OFFSET FOUNDATION SEE SHEET 193
- - BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND
SPLICING ALLOWED



REVISIONS	
NAME	DATE

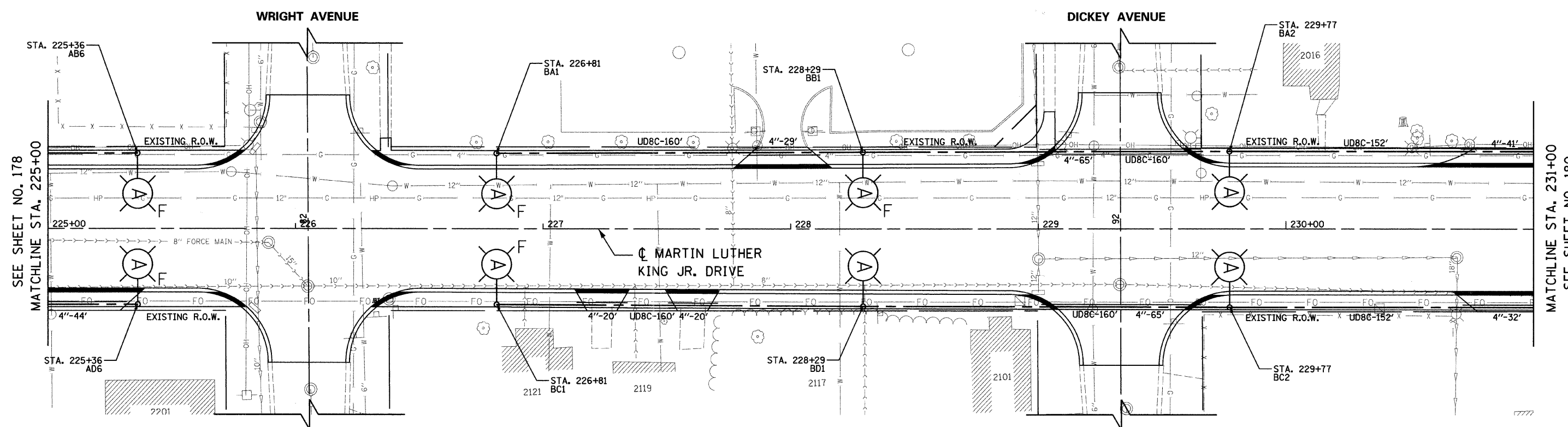
MLK JR. DRIVE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 219+00 TO 225+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW

DATE: 7/1/2008
TIME: 12:35:12 PM
FILENAME: N:\PROJ\05161\Design\Lighting\5161-LgtPlan04.dgn

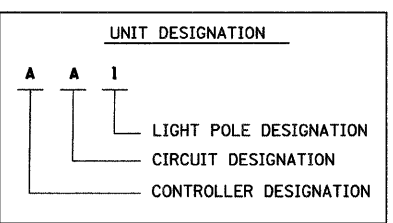


LEGEND

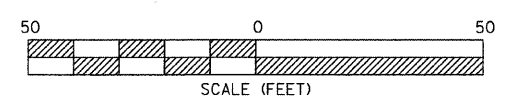
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- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

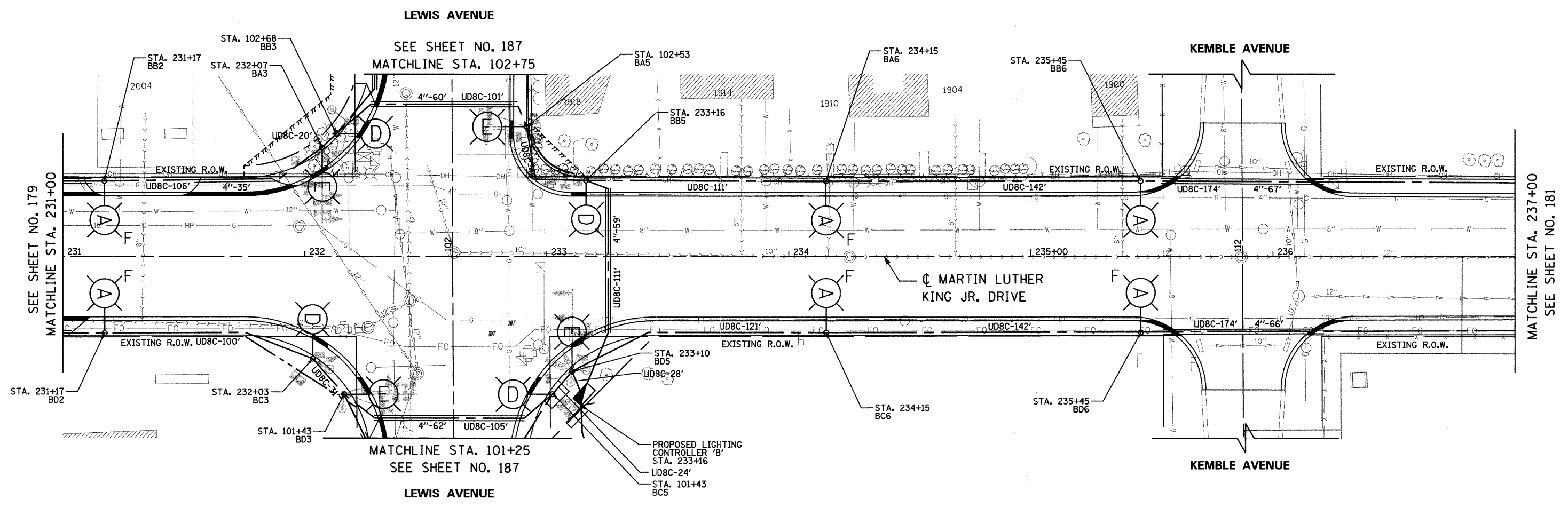
Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60658
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 225+00 TO 231+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/1/2008
TIME: 10:53 AM
FILENAME: N:\PROJECTS\161\Design\Lighting\161_LightPlan05.dgn

F.A.I. R/F.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	180
STA. 231+00		TO STA. 237+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT: 83828				

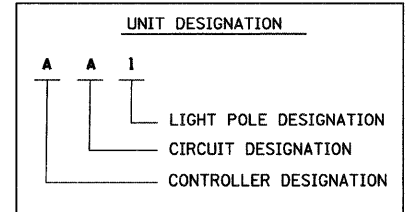
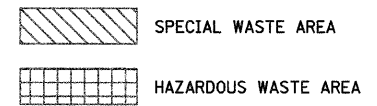


LEGEND

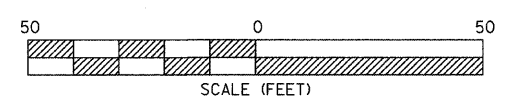
- EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 310W COBRA-HEAD LUMINAIRE
- INSTALL 310W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' - UNIT DUCT WITH 7-1/8 NO. 4 AND 1/8 NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' - GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F - INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

MLK JR. DRIVE

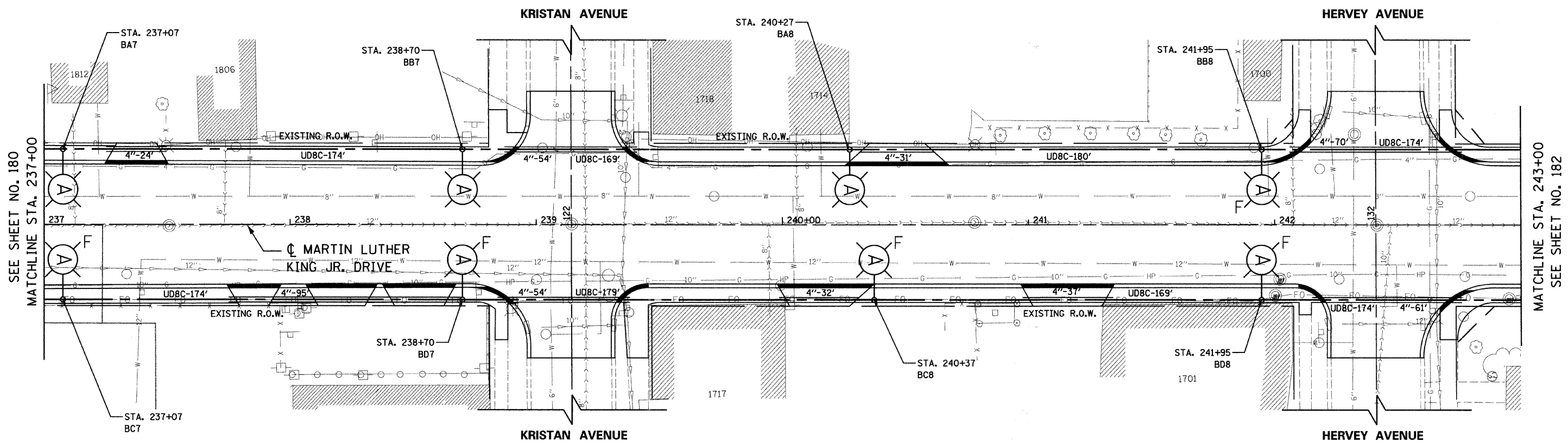
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5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 231+00 TO 237+00

SCALE: 1"=20'
DATE: APRIL, 2008

DRAWN BY: KDM
CHECKED BY: JMW

DATE: 7/1/2008
TIME: 10:00 AM
FILENAME: N:\PROJECTS\161\Design\Lighting\161_LgtPlan06.dgn



SEE SHEET NO. 180
MATCHLINE STA. 237+00

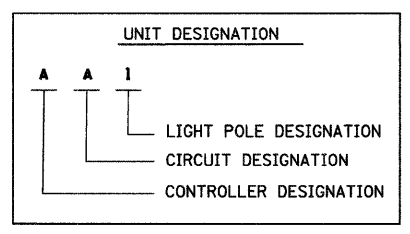
MATCHLINE STA. 243+00
SEE SHEET NO. 182

LEGEND

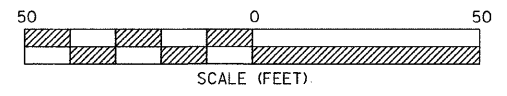
- EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



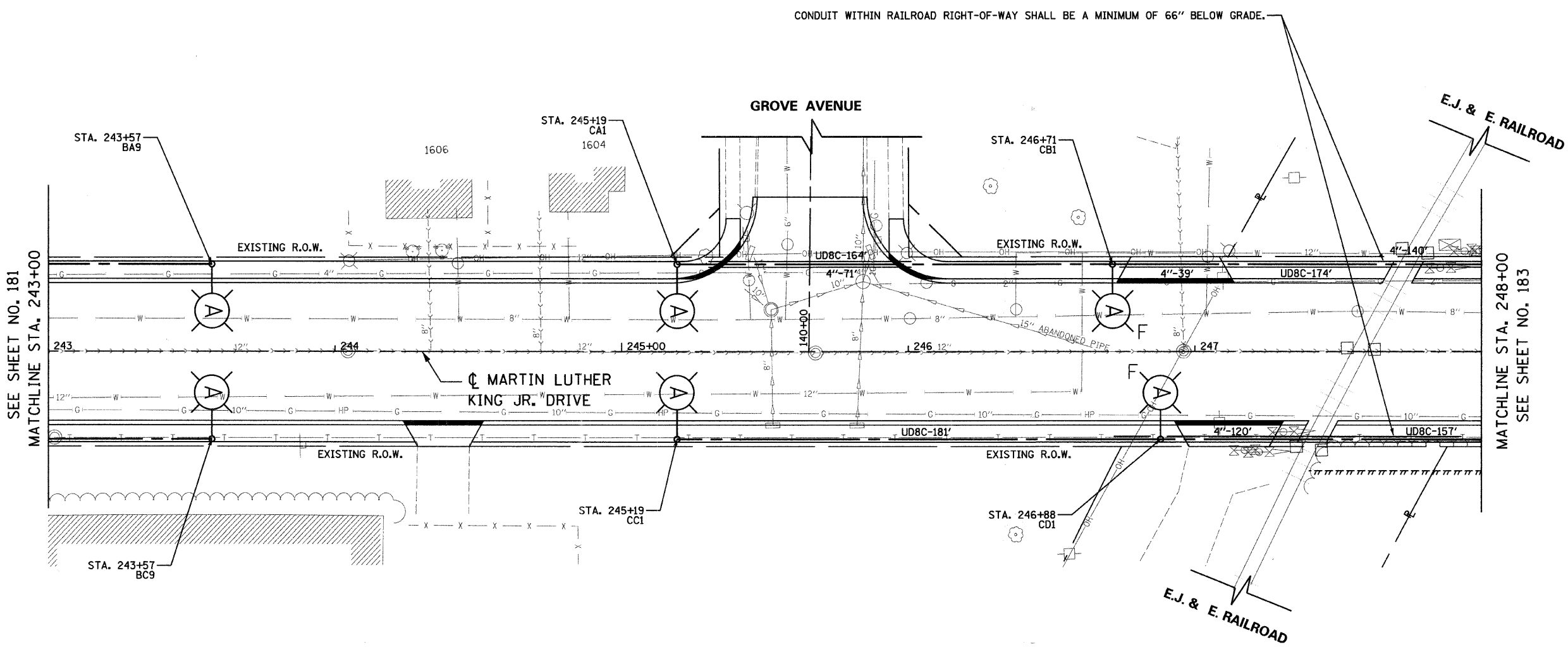
REVISIONS	
NAME	DATE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 237+00 TO 243+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW

DATE: 7/17/08
TIME: 12:38:15 PM
FILENAME: N:\PROJ\5161\Design\Lighting\5161-LightPlan07.dgn

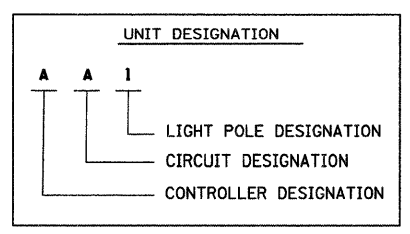


LEGEND

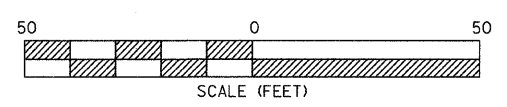
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' - UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHV) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' - GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- [Symbol] - INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F - INSTALL OFFSET FOUNDATION SEE SHEET 193
- - BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

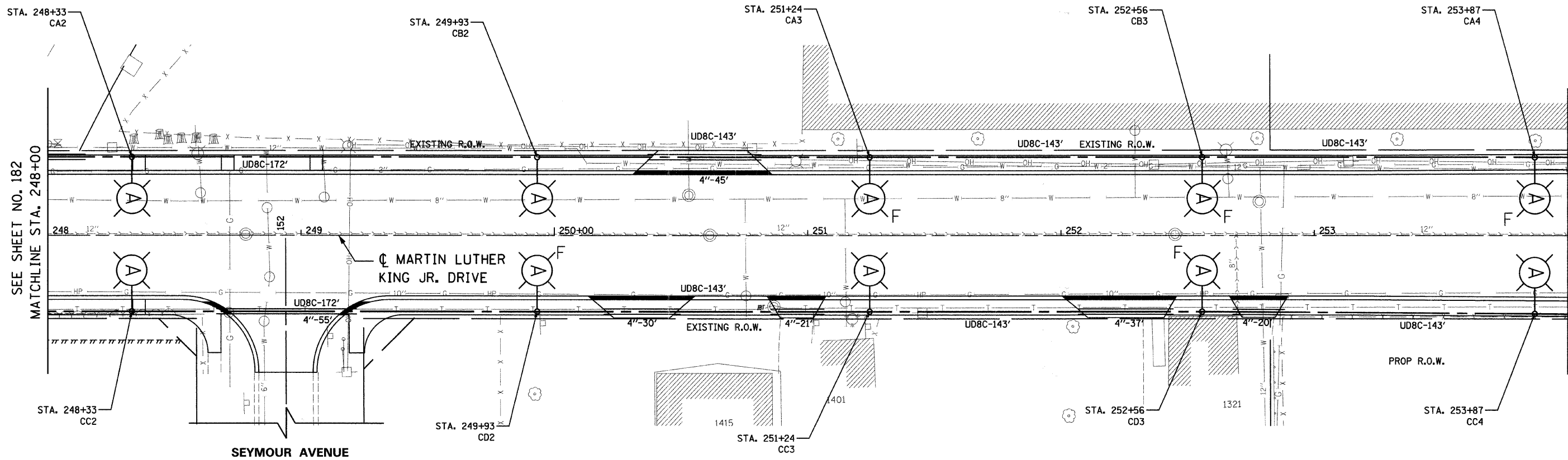
Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax. 773.775.4014 Email. chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 243+00 TO 248+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW

DATE: 7/1/2008
TIME: 12:36:24 PM
FILENAME: N:\PROJ\5161\Design\Lighting\5161-LgtPlan08.dgn

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	183
STA. 248+00		TO STA. 254+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT: 83828				



SEE SHEET NO. 182
MATCHLINE STA. 248+00

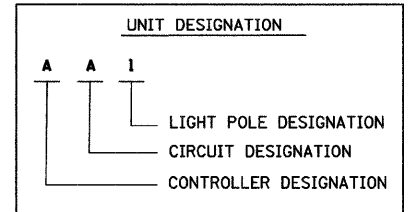
MATCHLINE STA. 254+00
SEE SHEET NO. 184

LEGEND

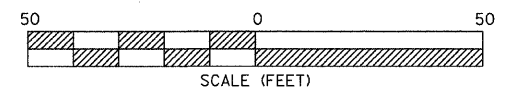
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & TOW PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/2" NO. 4 AND 1/2" NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND
SPLICING ALLOWED



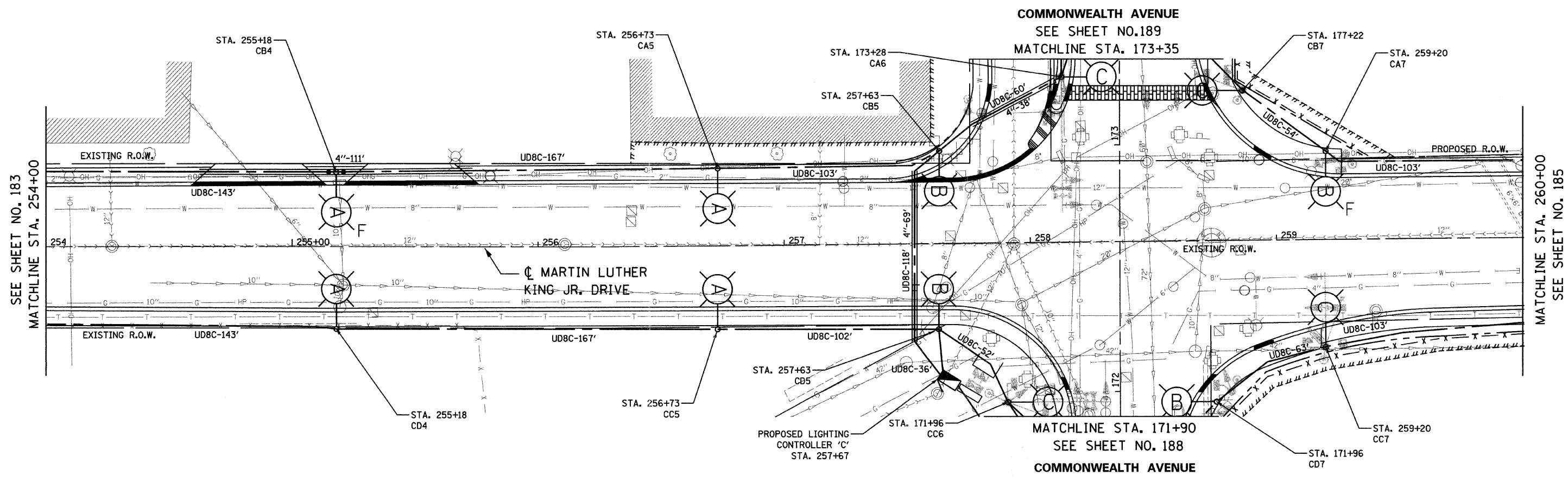
REVISIONS	
NAME	DATE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 248+00 TO 254+00

SCALE: 1"=20' DRAWN BY: KDM
DATE: APRIL, 2008 CHECKED BY: JMW

DATE: 7/1/2008 PM
FILENAME: N:\PROJ\05161\Design\Lighting\05161_LightPlan09.dgn

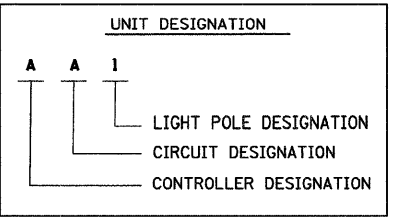
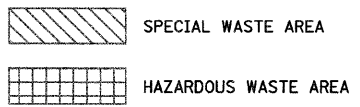


LEGEND

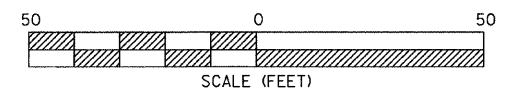
- ⊙ - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- Ⓐ - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- Ⓑ - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- Ⓒ - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- ▢ INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



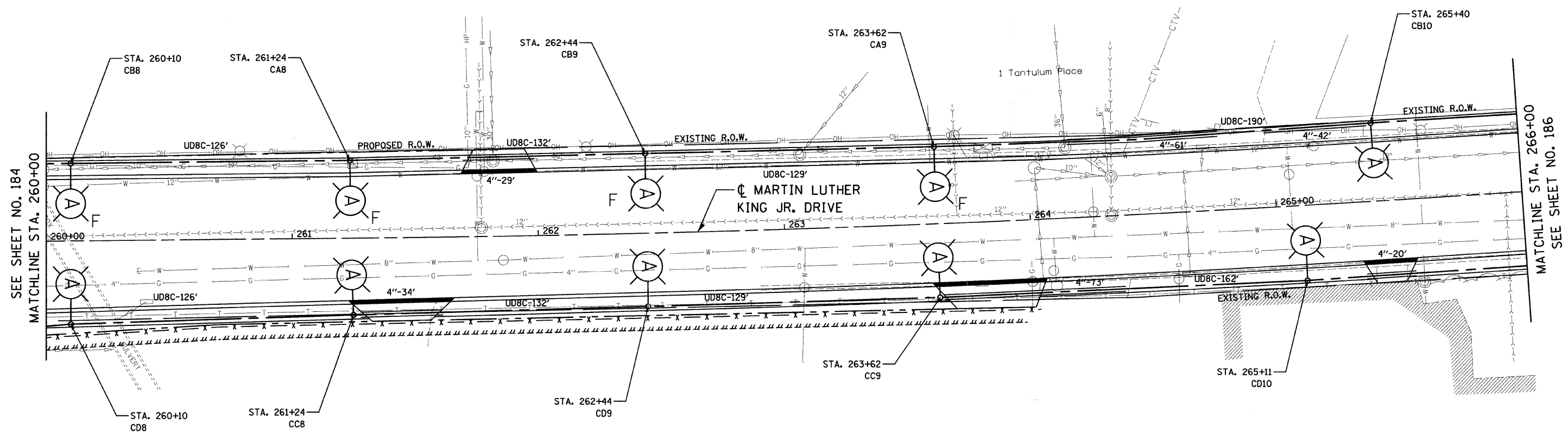
REVISIONS	
NAME	DATE

CC Giorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@giorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 254+00 TO 260+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/1/2008 TIME: 2:35:45 PM FILENAME: N:\PROJECTS\15181\Design\Lighting\5181_LightPlan10.dgn



SEE SHEET NO. 184
MATCHLINE STA. 260+00

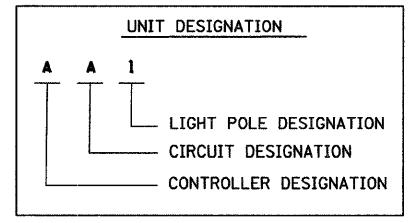
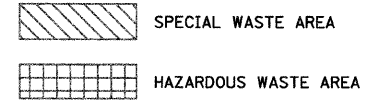
MATCHLINE STA. 266+00
SEE SHEET NO. 186

LEGEND

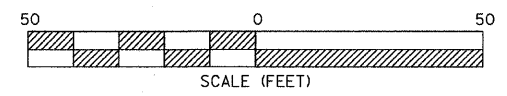
- ⊖ - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- ⊖ - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- ⊖ - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- ⊖ - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- ⊖ INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

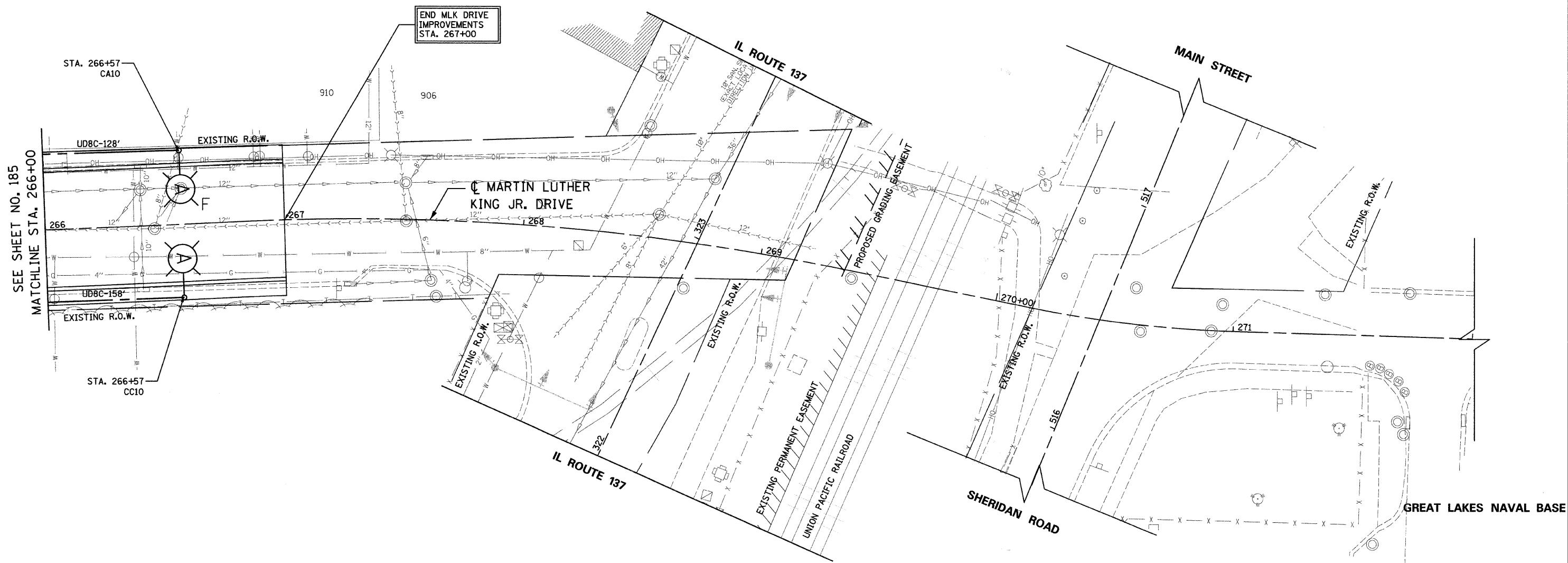
MLK JR. DRIVE

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 260+00 TO 266+00

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/12/08 PM
FILENAME: N:\PROJECTS\051\Design\Lighting\51611_LgtPlan1.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	186
STA. 266+00		TO STA. 272+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT: 83828				

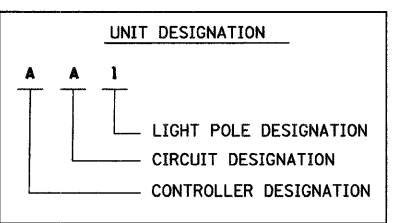
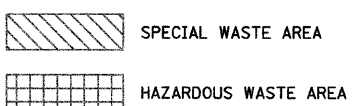


LEGEND

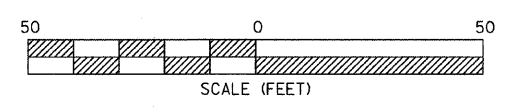
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



MLK JR. DRIVE

Ciorba Group, Inc.
CONSULTING ENGINEERS
9507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

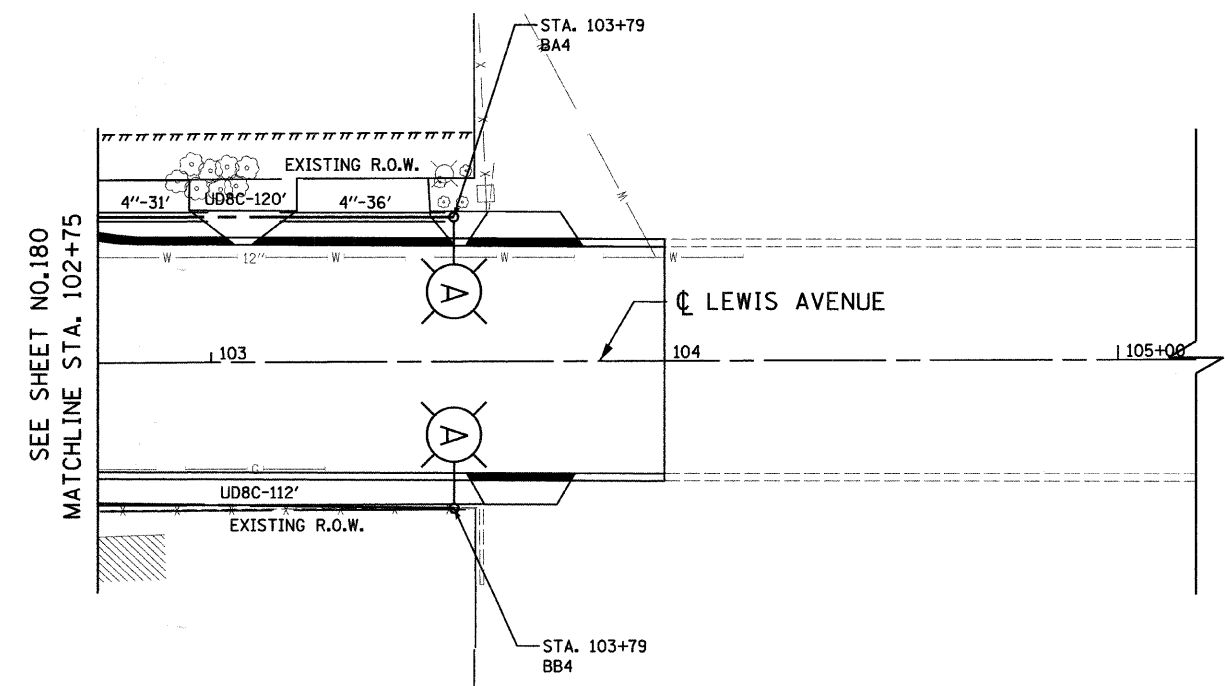
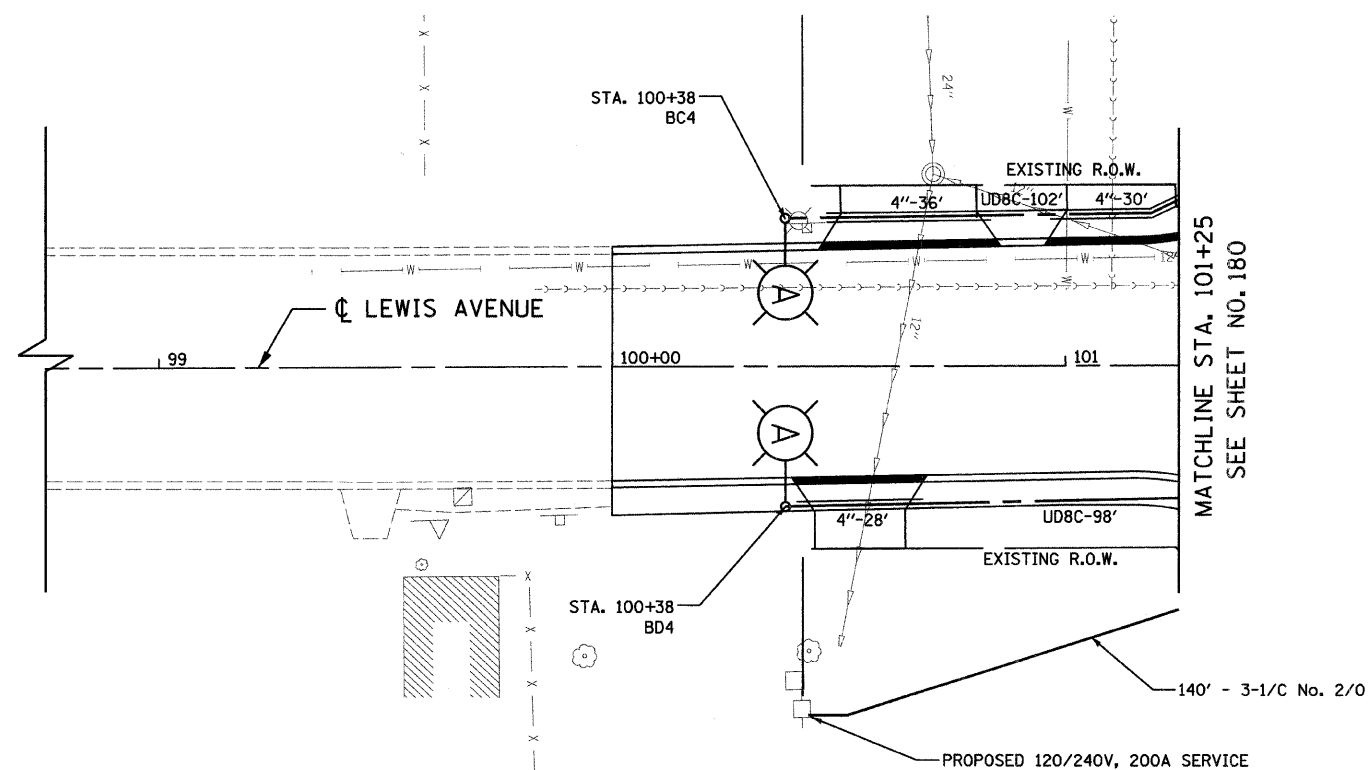
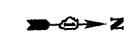
CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
PROPOSED LIGHTING PLAN
STA. 266+00 TO STA. 272+00

REVISIONS	
NAME	DATE

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/17/08
DRAWN BY: JMV
FILENAME: N:\PROJECTS\161\Design\Lighting\161_LgtPlan12.dgn

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	187
STA. 98+75 TO STA. 104+25 AND STA. 102+75 TO STA. 105+00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT: 83828				

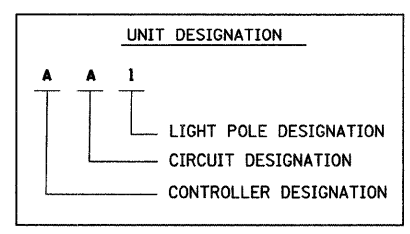


LEGEND

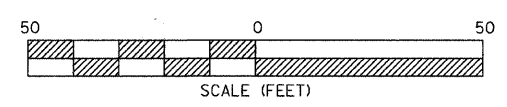
- (E) - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A) - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & TOW PEDESTRIAN LUMINAIRE
- (B) - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C) - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



REVISIONS	
NAME	DATE

LEWIS AVENUE

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

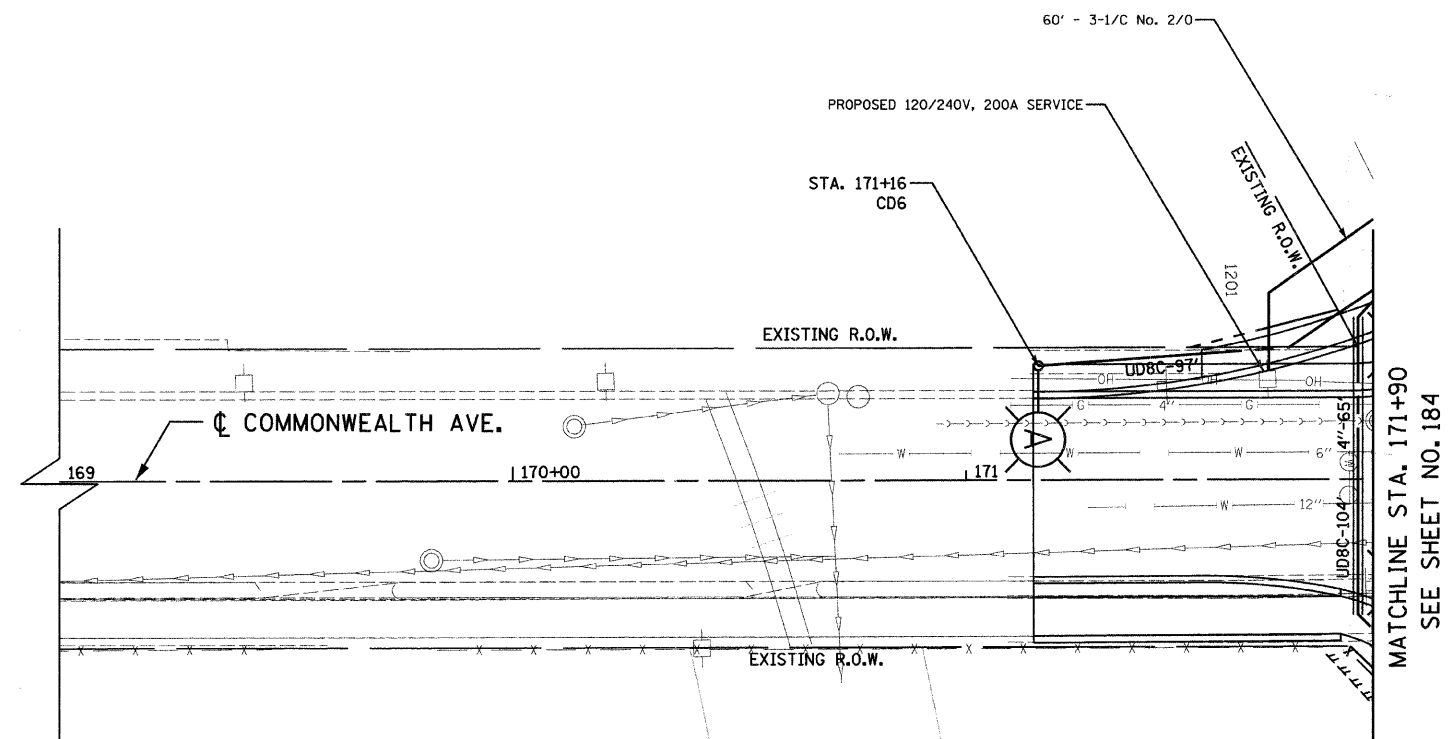
**LEWIS AVENUE
PROPOSED LIGHTING PLAN
STA. 98+75 TO 105+00**

SCALE: 1"=20'
DATE: APRIL, 2008

DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/1/2008
DRAWN BY: JMV
FILENAME: N:\PROJ\05161\Design\Lighting\161_LgtPlan13.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	188
STA. 169+00		TO STA. 171+90		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT: 83828				

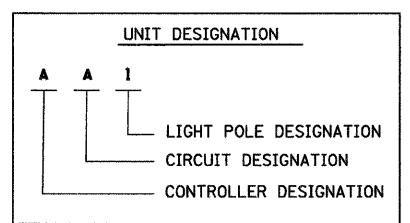


LEGEND

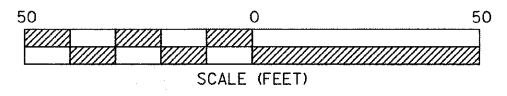
- ⓔ-○ - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- ⓐ-○ - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- ⓑ-○ - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- ⓒ-○ - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- ▭ INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F INSTALL OFFSET FOUNDATION SEE SHEET 193
- BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND SPLICING ALLOWED



COMMONWEALTH AVENUE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email: chicago@clorba.com

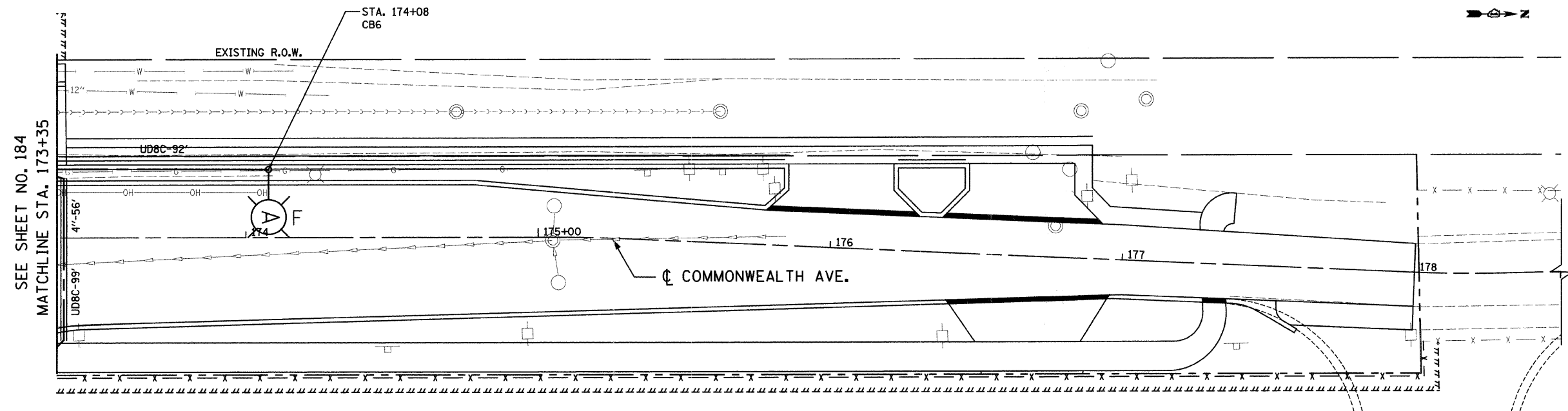
CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

COMMONWEALTH AVENUE
PROPOSED LIGHTING PLAN
STA. 169+00 TO 171+90

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW

REVISIONS	
NAME	DATE

DATE: 7/1/2008
TIME: 12:37:47 PM
FILENAME: N:\PROJ\5161\Design\Lighting\5161-LightPlan14.dgn



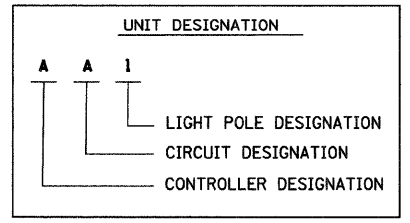
SEE SHEET NO. 184
MATCHLINE STA. 173+35

LEGEND

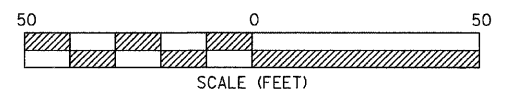
- (E)-○ - EXISTING LIGHT POLE, SIZE AND TYPE AS NOTED
- (A)-○ - INSTALL LIGHT POLE, 30' M.H., 6' M.A., 310W DECORATIVE LUMINAIRE & 70W PEDESTRIAN LUMINAIRE
- (B)-○ - INSTALL LIGHT POLE, 45' M.H., 15' M.A. AND 400W COBRA-HEAD LUMINAIRE
- (C)-○ - INSTALL 400W COBRA-HEAD LUMINAIRE ON STEEL COMBINATION MAST ARM AND ASSEMBLY POLE
- UD8C-10' - UNIT DUCT WITH 7-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW) 2" POLYETHYLENE AND LENGTH AS NOTED
- 4"-10' - GALVANIZED STEEL CONDUIT, PUSHED, DIAMETER AND LENGTH AS NOTED
- ▭ - INSTALL LIGHTING CONTROLLER, 120/240 VOLT, 100 AMP
- F - INSTALL OFFSET FOUNDATION SEE SHEET 193
- - BOLLARD

NOTE

1. POLES SHALL BE OFFSET 6.5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED



NO UNDERGROUND
SPLICING ALLOWED



COMMONWEALTH AVENUE

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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

COMMONWEALTH AVENUE
PROPOSED LIGHTING PLAN
STA. 173+35 TO STA. 178+50

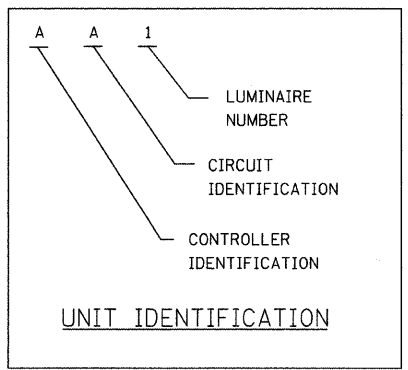
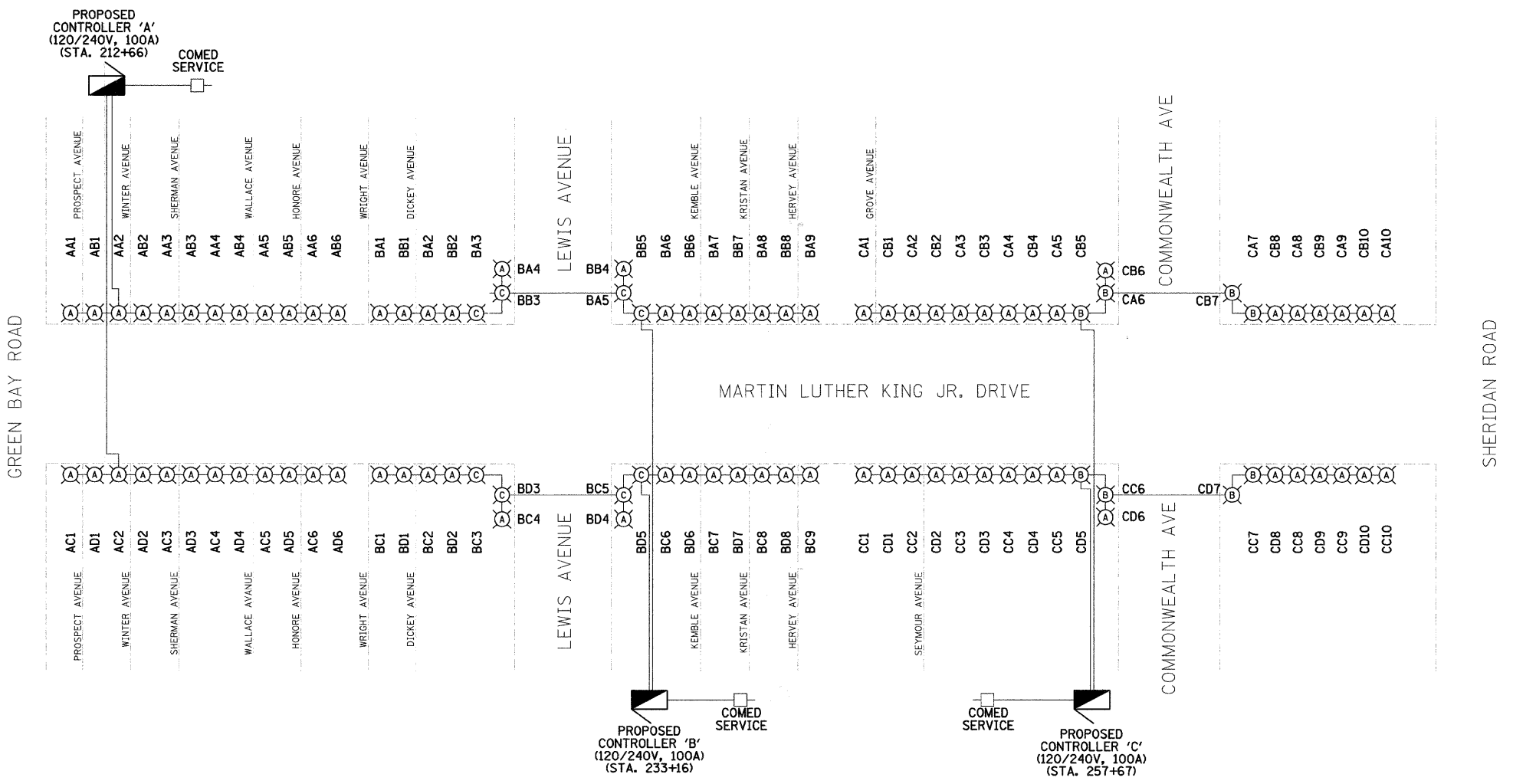
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NAME	DATE

SCALE: 1"=20'
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

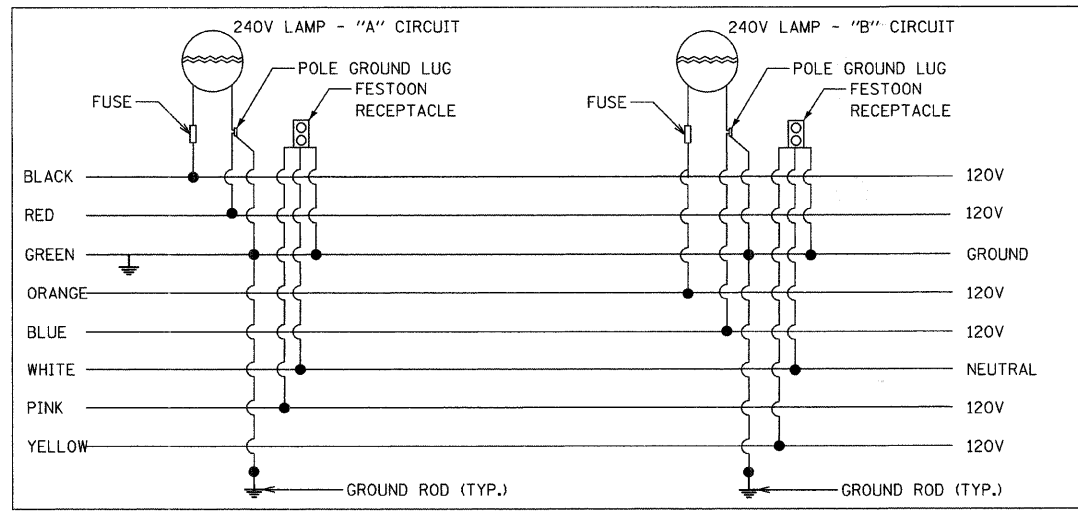
Ckt. #	Description	Phase A (Red) (watts)	Phase B (Black) (watts)
A	0-FESTOON, 6-70W, 6-310W, 0-400W	1368	1368
B	0-FESTOON, 6-70W, 6-310W, 0-400W	1368	1368
C	0-FESTOON, 6-70W, 6-310W, 0-400W	1368	1368
D	0-FESTOON, 6-70W, 6-310W, 0-400W	1368	1368
E	6-FESTOON, 0-70W, 0-310W, 0-400W	1080	
F	6-FESTOON, 0-70W, 0-310W, 0-400W		1080
G	6-FESTOON, 0-70W, 0-310W, 0-400W	1080	
H	6-FESTOON, 0-70W, 0-310W, 0-400W		1080
Totals		7632	7632

Ckt. #	Description	Phase A (Red) (watts)	Phase B (Black) (watts)
A	0-FESTOON, 7-70W, 9-310W, 0-400W	1956	1956
B	0-FESTOON, 6-70W, 8-310W, 0-400W	1728	1728
C	0-FESTOON, 7-70W, 9-310W, 0-400W	1956	1956
D	0-FESTOON, 6-70W, 8-310W, 0-400W	1728	1728
E	9-FESTOON, 0-70W, 0-310W, 0-400W	1620	
F	8-FESTOON, 0-70W, 0-310W, 0-400W		1440
G	9-FESTOON, 0-70W, 0-310W, 0-400W	1620	
H	8-FESTOON, 0-70W, 0-310W, 0-400W		1440
Totals		10608	10248

Ckt. #	Description	Phase A (Red) (watts)	Phase B (Black) (watts)
A	0-FESTOON, 8-70W, 8-310W, 2-400W	2304	2304
B	0-FESTOON, 8-70W, 8-310W, 2-400W	2304	2304
C	0-FESTOON, 8-70W, 8-310W, 2-400W	2304	2304
D	0-FESTOON, 8-70W, 8-310W, 2-400W	2304	2304
E	10-FESTOON, 0-70W, 0-310W, 0-400W	1800	
F	10-FESTOON, 0-70W, 0-310W, 0-400W		1800
G	10-FESTOON, 0-70W, 0-310W, 0-400W	1800	
H	10-FESTOON, 0-70W, 0-310W, 0-400W		1800
Totals		12816	12816



- LEGEND:**
- 310W HPS LUMINAIRE WITH 70W HPS PED LUMINAIRE
 - 400W HPS LUMINAIRE
 - 310W HPS LUMINAIRE



POLE WIRING (TYPICAL)

MLK JR. DRIVE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

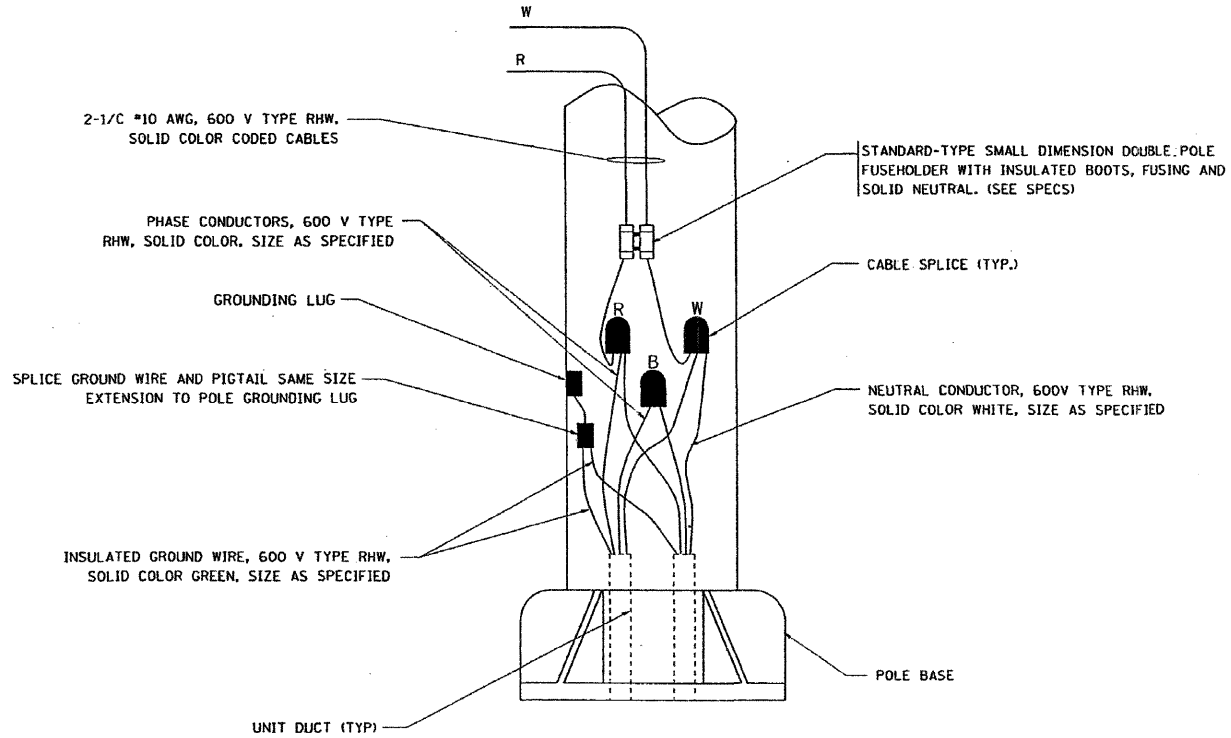
CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE LIGHTING IMPROVEMENTS
LIGHTING ONE LINE DIAGRAM

REVISIONS	
NAME	DATE

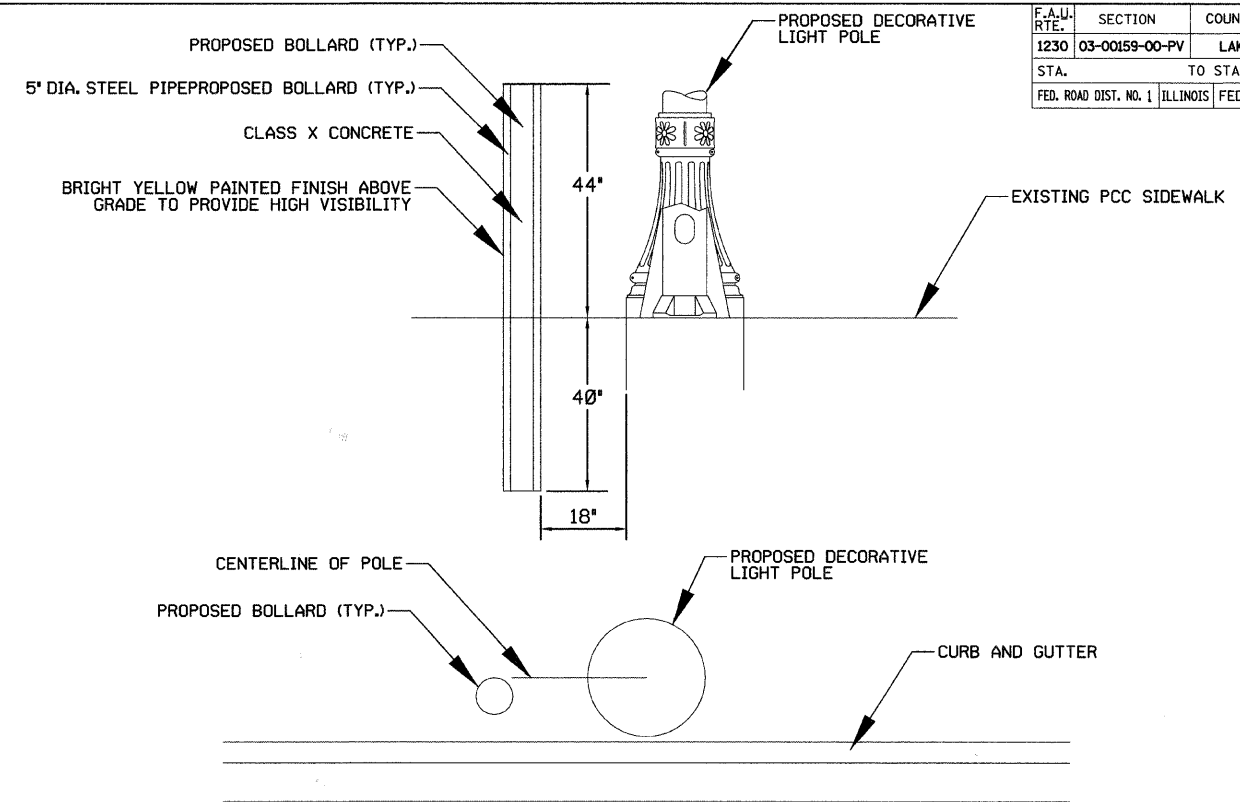
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DRAWN BY: KDM
CHECKED BY: JMV

DATE: 7/1/2008
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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT: 83828				

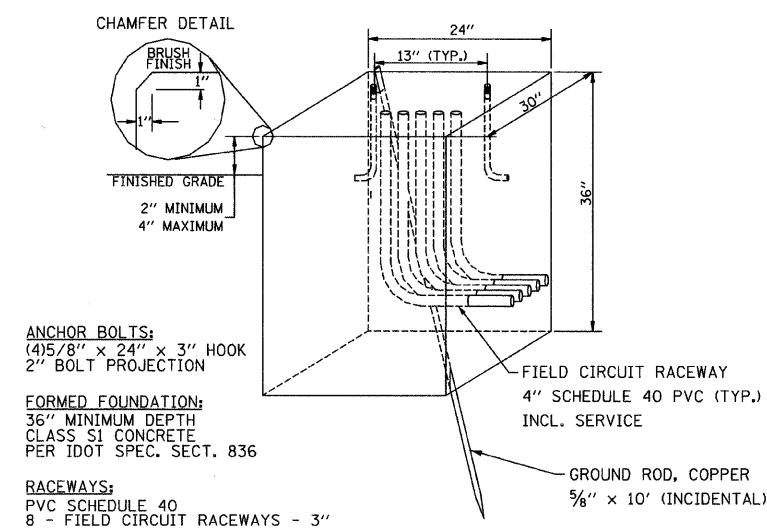


POLE WIRING DETAIL
N.T.S.

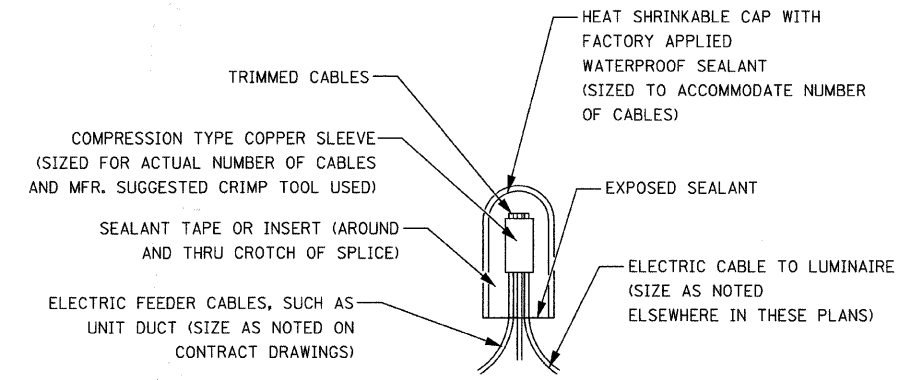


BOLLARD DETAILS
NOT TO SCALE

PROPOSED BOLLARD LOCATION DETERMINED BY ENGINEER IN FIELD.



LIGHTING CONTROLLER CABINET FOUNDATION
NOT TO SCALE



ELECTRIC CABLE SPLICE DETAIL

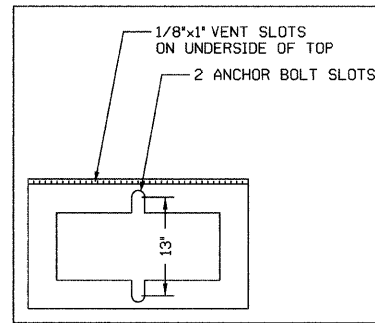
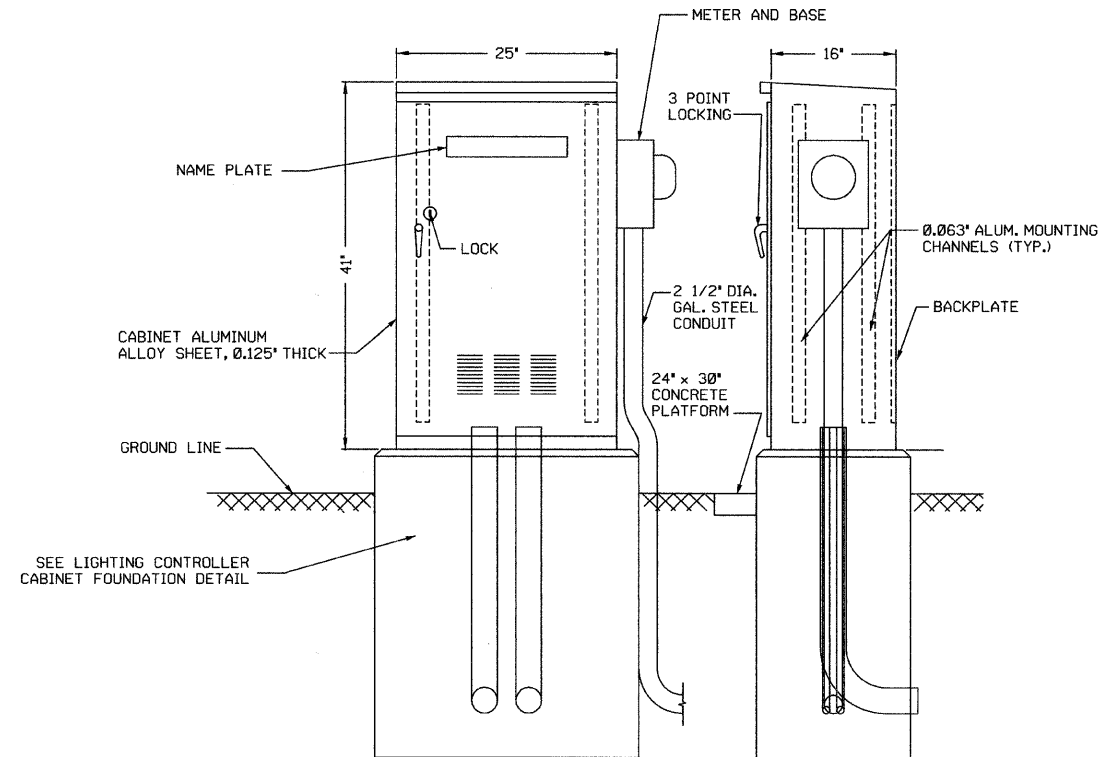
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CONSULTING ENGINEERS
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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
LIGHTING IMPROVEMENTS
LIGHTING DETAILS

SCALE: NTS
DATE: APRIL, 2008
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DATE: 7/1/2008
FILENAME: N:\PROJECTS\151\Design\Lighting\151-1.dwg



BOTTOM VIEW - MOUNTING PATTERN

LIGHTING CONTROLLER CABINET
NOT TO SCALE

LIGHTING CONTROLLER CABINET NOTES

- PERFORMANCE - THE ENCLOSURE WILL MEET OR EXCEED THE REQUIREMENTS OF A NEMA 3R RATING AND SHALL BE U.L. LISTED.
- MATERIAL - CABINET AND DOOR TO BE CONSTRUCTED FROM 5052 H32 SHEET ALUMINUM ALLOY WITH A THICKNESS OF .125". ALL WELDS TO BE HELIARC AND SHALL BE FORMED AND FREE OF CRACKS, BLOW HOLES, AND OTHER DEFECTS. ALL EDGES TO BE FREE OF BURRS.
- CABINET FEATURES - CABINET TOP SLOPES 1/2" TO THE REAR, WITH 1/8" x 1" SLOTS UNDER FRONT OVERHANG.
- DOOR AND HARDWARE - THE CABINET DOOR SHALL BE HINGED ON THE RIGHT SIDE WHEN FACING THE FRONT OF THE CABINET AND HAS A CELLULAR NEOPRENE GASKET, WHICH IS WEATHER TIGHT. THE DOOR IS ALSO EQUIPPED WITH A TWO POSITION DOOR STOP, ONE AT 90 DEGREES AND ONE AT 120 DEGREES. HINGE IS 2" OPEN AND IS CONTINUOUS 14 GAUGE STAINLESS STEEL WITH A 1/4" DIA. PIN AND IS CAPPED AT THE TOP TO RENDER IT TAMPER PROOF. THE HINGE IS SECURED WITH 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND ESNA LOCK NUTS. THE LATCHING MECHANISM IS A THREE POINT DRAW ROLLER TYPE WHICH SECURES THE DOOR AT THE TOP, CENTER, AND BOTTOM. LOCKING RODS ARE 1/4" x 3/4" ALUMINUM TURNED EDGEWISE WITH 1" NYLON ROLLERS AND THE CENTER CATCH IS STAINLESS STEEL. THE DOOR HANDLE IS 3/4" DIA. STAINLESS STEEL AND HAS A PADLOCK HASP. AN ALL BRASS CORBIN LOCK WITH TWO KEYS IS ALSO FURNISHED. LOUVER INCLUDED IN LOWER HALF OF THE DOOR FOR VENTILATION.
- EQUIPMENT MOUNTING - THE CABINET SHALL BE EQUIPPED WITH TWO ADJUSTABLE "L" MOUNTING CHANNELS WELDED TO EACH SIDE WALL AND THE BACK WALL ALLOWING FULL ADJUSTMENT OF SHELVES OR PANELS.
- CABINET FINISH - THE OUTSIDE SURFACE OF THE CABINET SHALL HAVE A BLACK POWDER COAT FINISH.
- ORIENTATION - THE CONTROLLER CABINET DOOR SHOULD OPEN AWAY FROM THE STREET (TO THE SOUTH) SO THE MAINTENANCE PERSONNEL CAN OBSERVE THE LIGHTING CIRCUITS WHILE OPERATING THE CABINET CONTROLS.

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Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel: 773.775.4009 Fax: 773.775.4014 Email: chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
LIGHTING IMPROVEMENTS
LIGHTING DETAILS

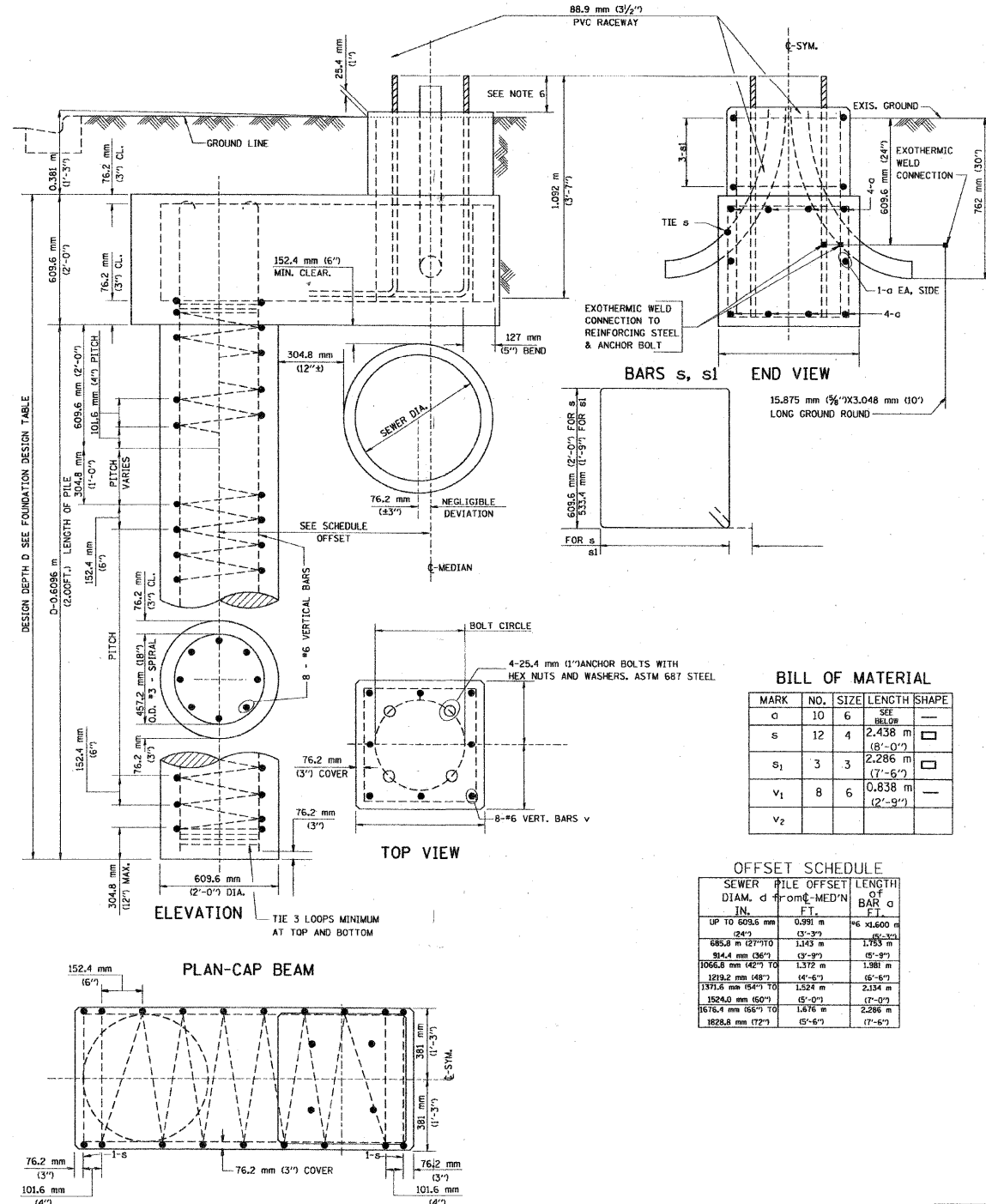
SCALE: NTS
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	3.962 m (13'-0")	4.572 m (15'-0")	8-#6X3.810 m (12'-6")	*3X37.186 m (122')	8-#6X4.343 m (14'-3")	*3X42.977 m (141')
MEDIUM CLAY	2.896 m (9'-6")	3.277 m (10'-9")	8-#6X2.743 m (9'-0")	*3X27.432 m (90')	8-#6X3.048 m (10'-0")	*3X30.480 m (100')
STIFF CLAY	2.134 m (7'-0")	2.438 m (8'-0")	8-#6X1.981 m (6'-6")	*3X20.112 m (66')	8-#6X2.286 m (7'-6")	*3X23.165 m (76')
LOOSE SAND	2.743 m (9'-0")	3.048 m (10'-0")	8-#6X2.591 m (8'-6")	*3X25.908 m (85')	8-#6X2.896 m (9'-6")	*3X28.651 m (94')
MEDIUM SAND	2.515 m (8'-3")	2.743 m (9'-0")	8-#6X2.438 m (8'-0")	*3X23.774 m (78')	8-#6X2.591 m (8'-6")	*3X25.908 m (85')
DENSE SAND	2.362 m (7'-9")	2.743 m (9'-0")	8-#6X2.286 m (7'-6")	*3X22.250 m (73')	8-#6X2.591 m (8'-6")	*3X25.908 m (85')
ROCK OR SOLIDIFIED SLAG	1.524 m (5'-0")	1.524 m (5'-0")	NONE	NONE	NONE	NONE

NOTES

- THE ENGINEER WILL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF THE FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION MUST BE MADE WITH AN AUGER, 24" OR 30" IN DIAMETER.
- THE ANCHOR MUST BE A TACK WELDED TYPE BOLT OR HOOK TYPE BOLT. COLD BENDING OF THE HOOK BOLT IS NOT ALLOWED.
- THE ANCHOR BOLTS AND RACEWAYS MUST BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ENTIRE LENGTH OF THE ANCHOR BOLTS, AS WELL AS THE NUTS AND WASHERS, MUST BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM DESIGNATION A 153.
- THE CONTRACTOR MUST COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE THE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT A BREAKAWAY DEVICE, ANCHOR BOLTS MUST COORDINATE WITH THE POLE MANUFACTURER'S REQUIREMENTS.
- THE CONTRACTOR MUST COORDINATE THE ANCHOR BOLT CIRCLE WITH THE LIGHT POLE MANUFACTURER'S RECOMMENDATIONS.
- RACEWAYS MUST PROJECT 1" ABOVE THE TOP OF FOUNDATION.
- CONCRETE SHALL BE CLASS "SI". CONCRETE FOUNDATIONS MUST BE CURED FOR TEN (10) DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT STANDARD IS ERECTED.



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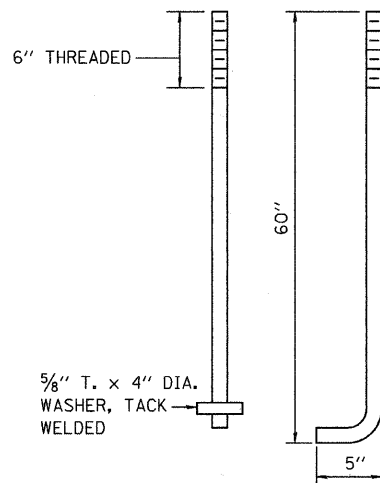
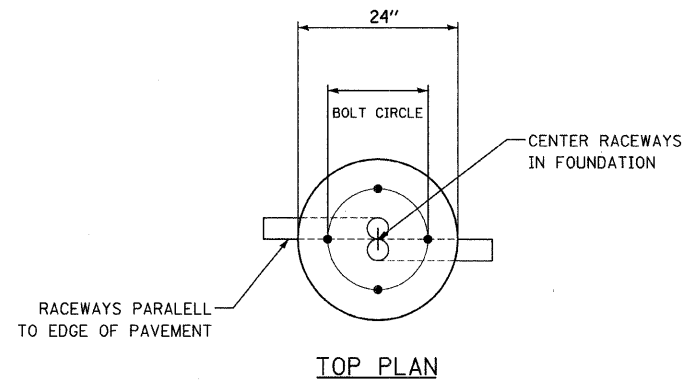
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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS

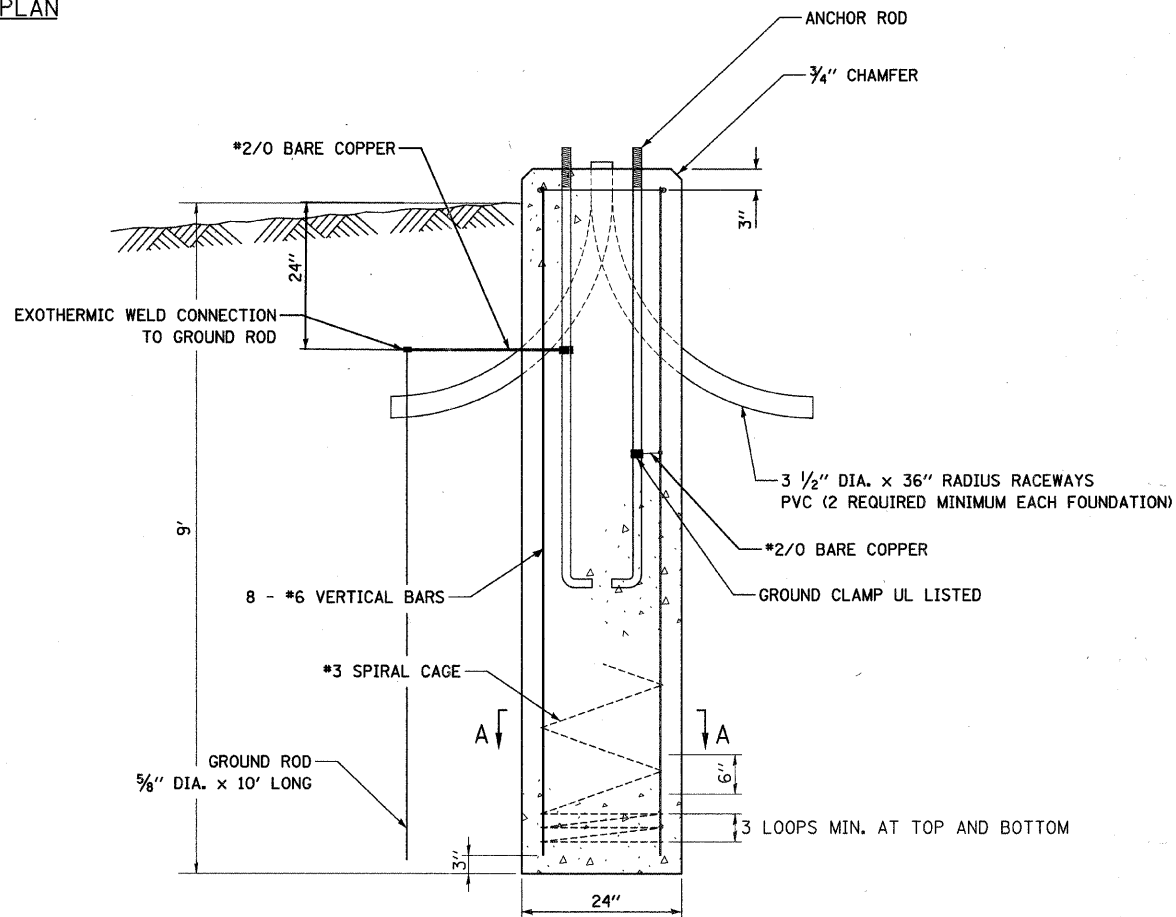
MARTIN LUTHER KING JR. DRIVE
LIGHTING IMPROVEMENTS
LIGHTING DETAILS

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DATE: APRIL, 2008

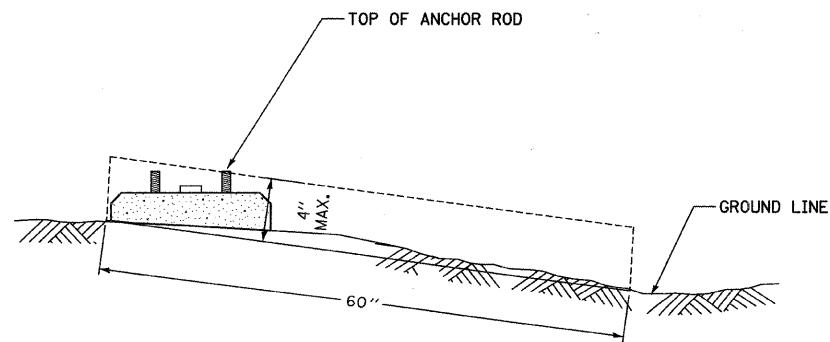
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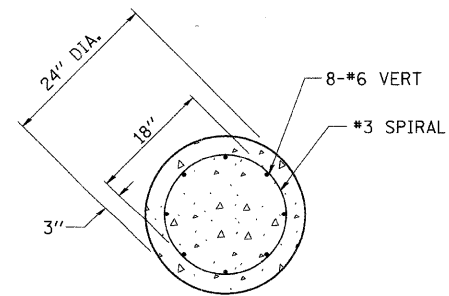
ANCHOR BOLT DETAIL



ROADWAY LIGHT POLE FOUNDATION



FOUNDATION EXTENSION DETAIL



SECTION A-A

NOTES:

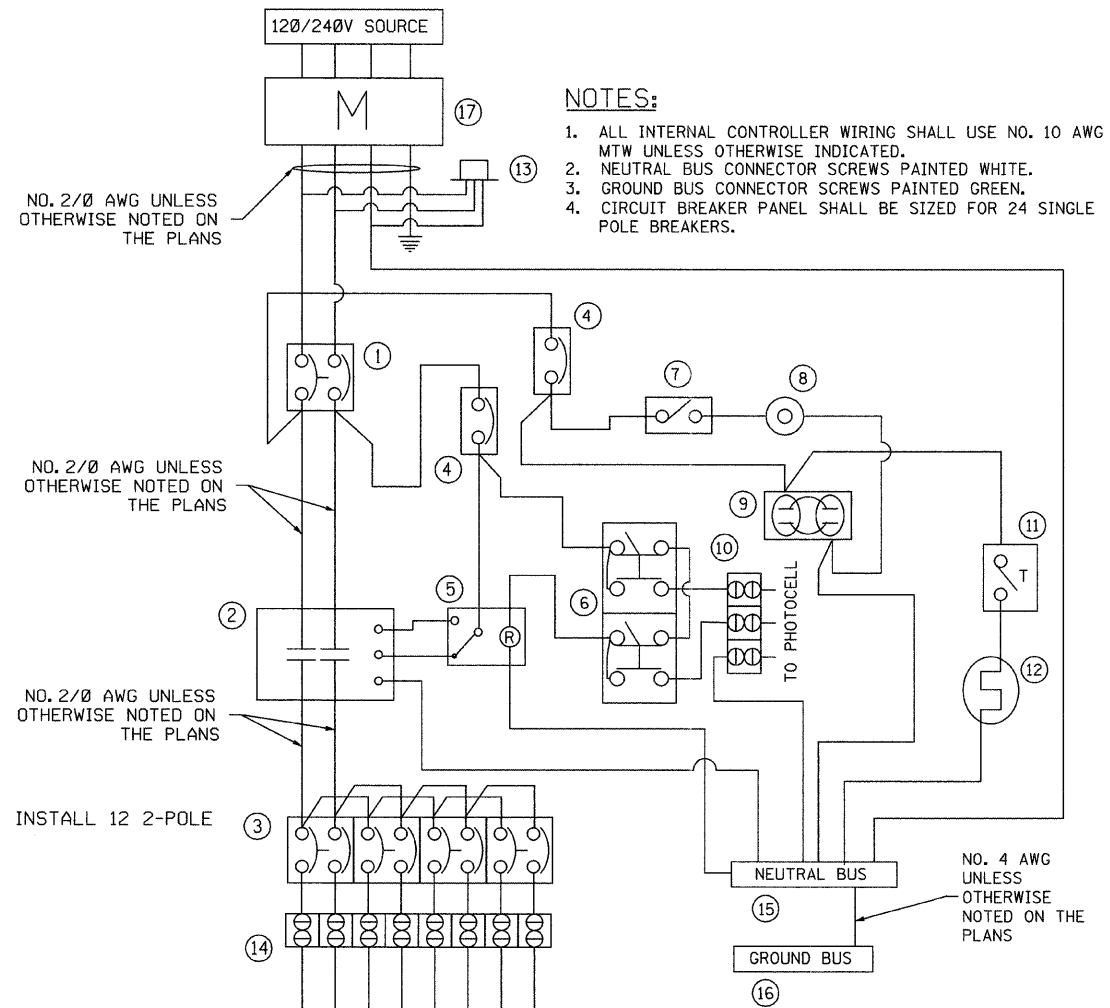
- ALL DIMENSIONS ARE SHOWN IN INCHES, UNLESS NOTED OTHERWISE.
- THE ANCHOR RODS AND RACEWAYS SHALL BE SECURED IN THE PROPER LOCATION BEFORE PLACEMENT OF THE CONCRETE.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 INCHES ABOVE THE FINISHED GRADE WITHIN A 60 INCH CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER OF THE SAME DIAMETER OF THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4 INCH.
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN FOUR TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F 1554 GRADE 105. NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER HOT-DIPPED PROCESS CONFORMING TO AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 6 MILS, OR THE ELECTROLYTIC PROCESS ACCORDING TO AASHTO F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES WITH A MINIMUM OF 3 INCHES OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR ROD PROJECTION ABOVE THE TOP OF THE FOUNDATION SHALL BE COORDINATED WITH THE POLE MANUFACTURER'S RECOMMENDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" PITCH OR MAY SUBSTITUTE #3 TIES AT 12" ON CENTER WITH APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATIONS SHALL BE BACKFILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
- THE CONTRACTOR SHALL VERIFY THE ANCHOR BOLT DIMENSIONS AND THE BOLT CIRCLE WITH THE LIGHT POLE MANUFACTURER.

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Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
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CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
MARTIN LUTHER KING JR. DRIVE
LIGHTING IMPROVEMENTS
LIGHT POLE FOUNDATION DETAIL

SCALE: NTS
DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMV



SCHEDULE OF DEVICES

1. MAIN BREAKER 2P, 100A
2. CONTACTOR 2P, 100A, 120V
3. BRANCH BREAKERS, 2P, 30A, 240V
4. CONTROL BREAKER 1P, 20A, 120V
5. CONTROL RELAY 20A, 120V, ON-DELAY
6. H-O-A SWITCH, 120V
7. LIGHT SWITCH
8. LIGHT FIXTURE
9. DUPLEX RECEPTACLE, 20A, GFCI
10. TERMINAL BLOCK
11. THERMOSTAT
12. HEATER STRIP, 150W
13. SURGE SUPPRESSOR
14. TERMINAL BLOCK
15. NEUTRAL BUS
16. GROUND BUS
17. CECHA APPROVED METER HOUSING. CONTRACTOR SHALL COORDINATE WITH COMED FOR PROPER LOCATION AND SIZING.

LIGHTING CONTROLLER SPECIAL WIRING DIAGRAM
NOT TO SCALE

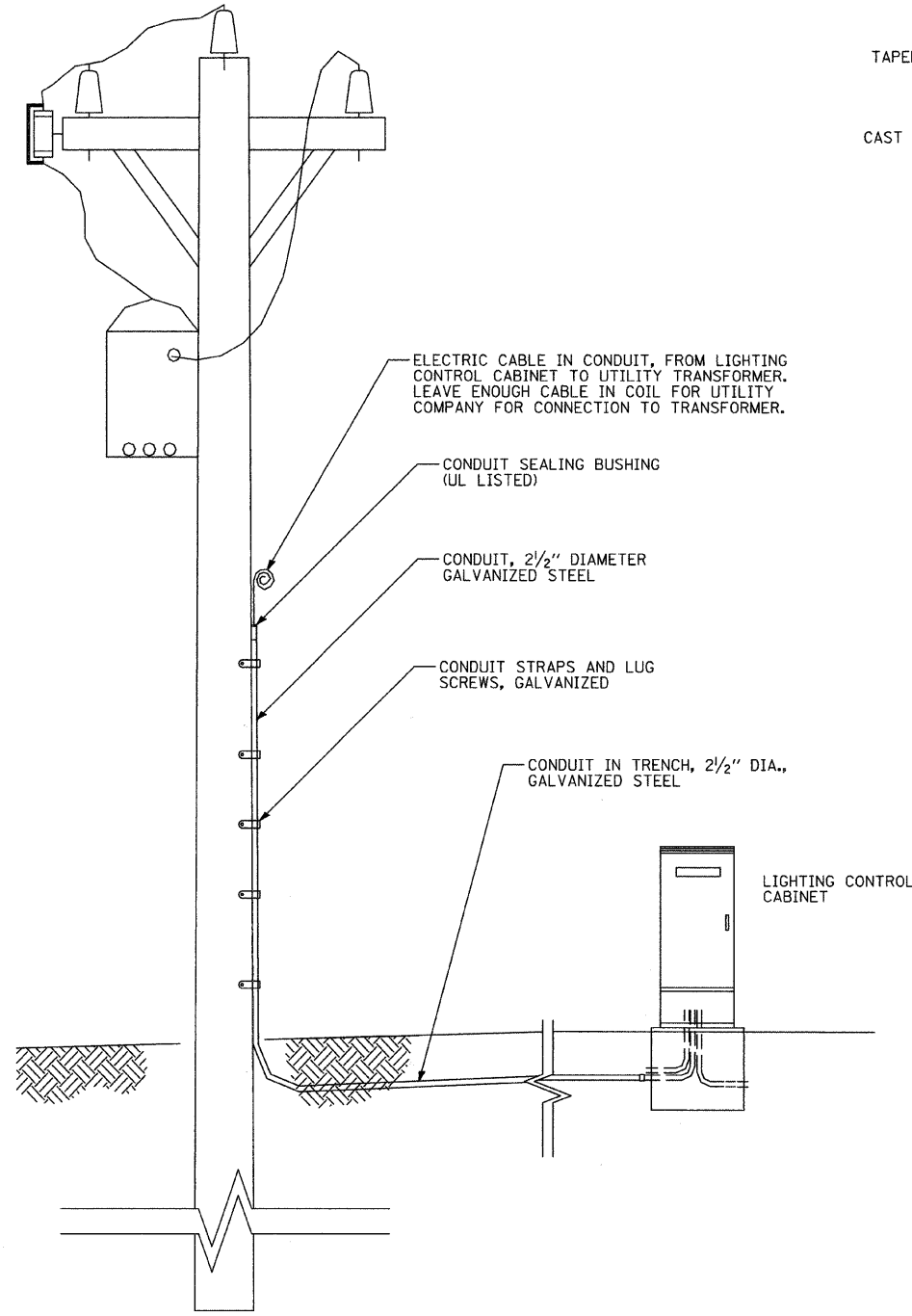
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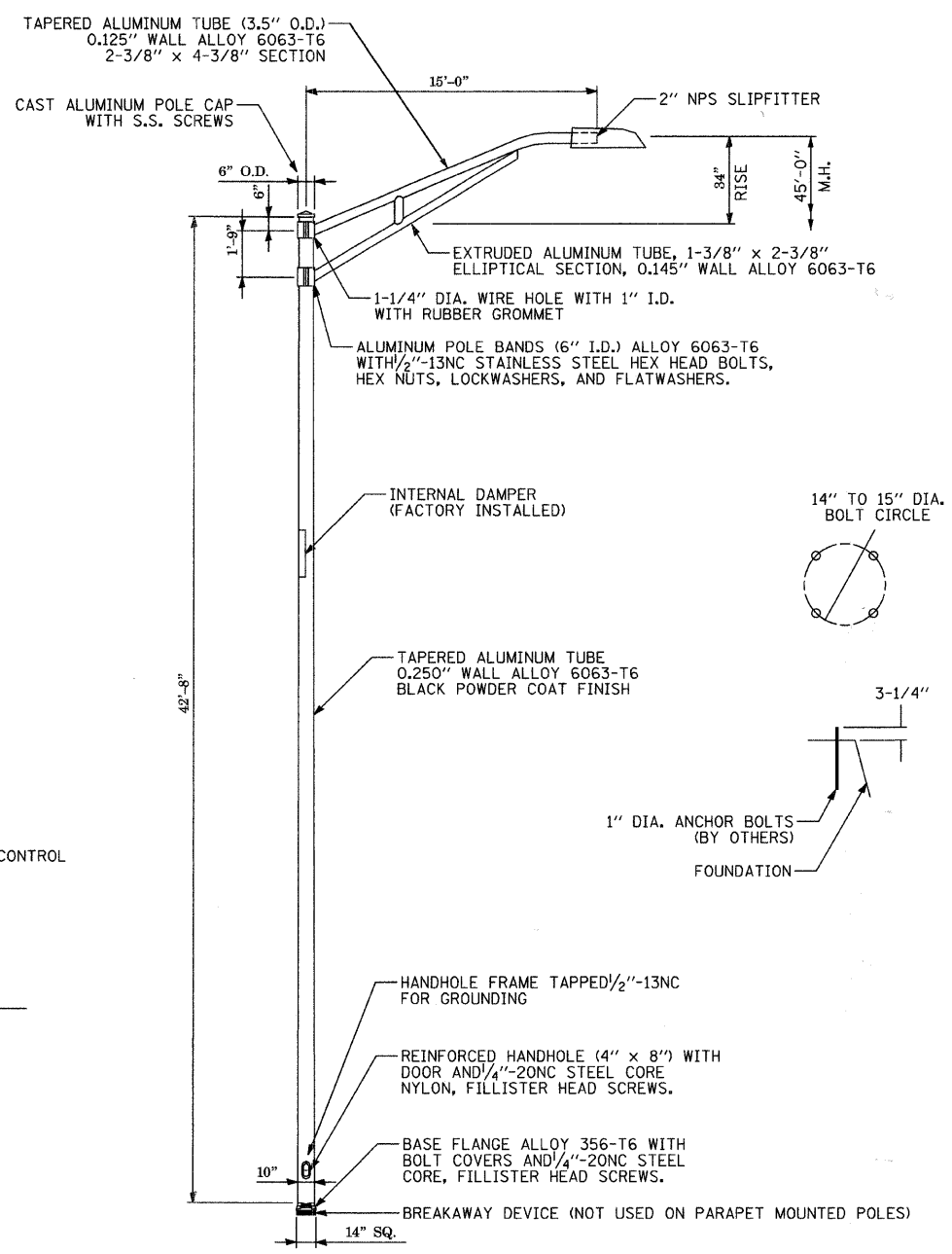
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MARTIN LUTHER KING JR. DRIVE
LIGHTING IMPROVEMENTS
LIGHTING DETAILS

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NOTE:
COMMONWEALTH EDISON SHALL BE CONTACTED BEFORE THE INSTALLATION WORK BEGINS FOR THE ELECTRIC POWER SUPPLY.

ELECTRIC SERVICE INSTALLATION
NOT TO SCALE



NOTES:
1. DESIGN SHALL MEET 1994 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS FOR 80 MPH WIND LOADINGS WITH A 1.3 GUST LOAD FACTOR WITH A 75 POUND LUMINAIRE WITH 1.6 SQ. FT. E.P.A.

LIGHT POLE ALUMINUM, 45 FT. M.H., 15 FT. MAST ARM
NOT TO SCALE

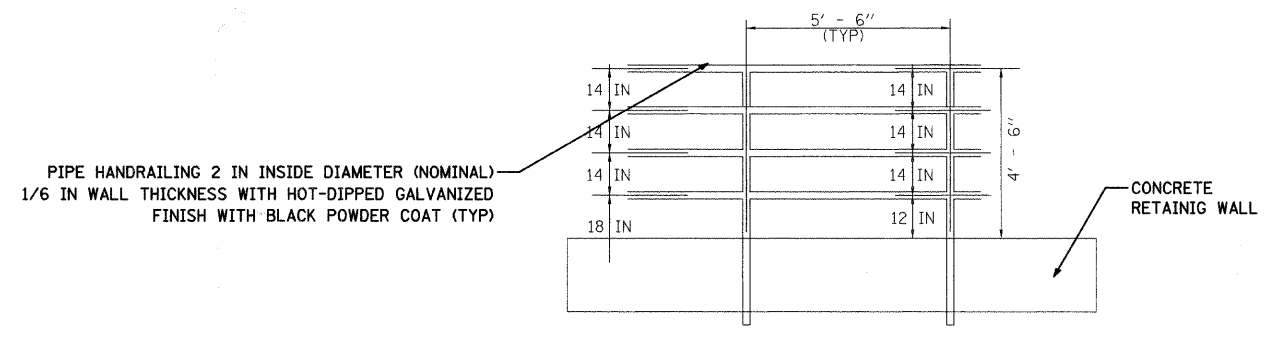
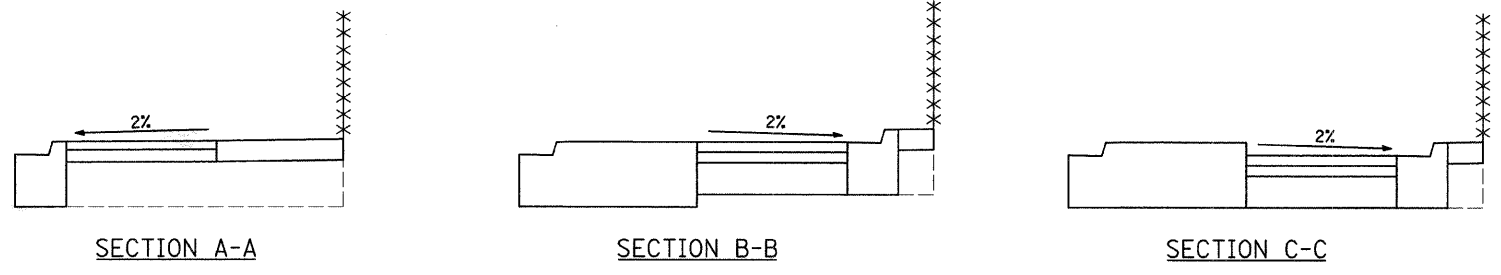
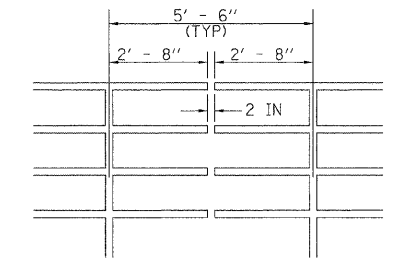
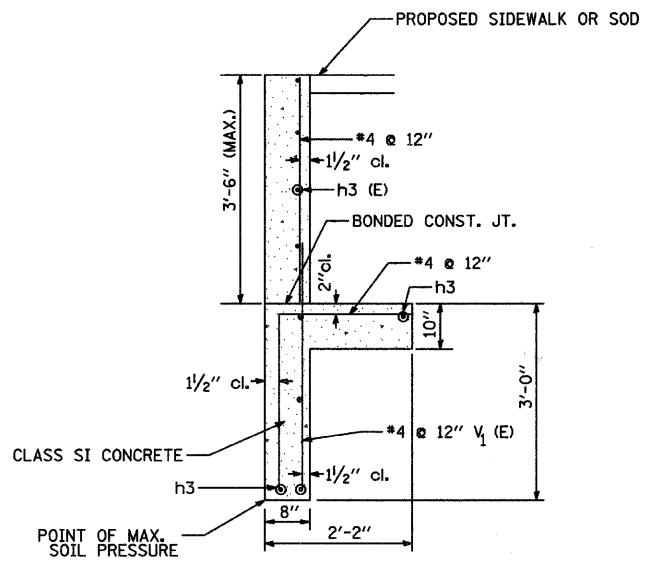
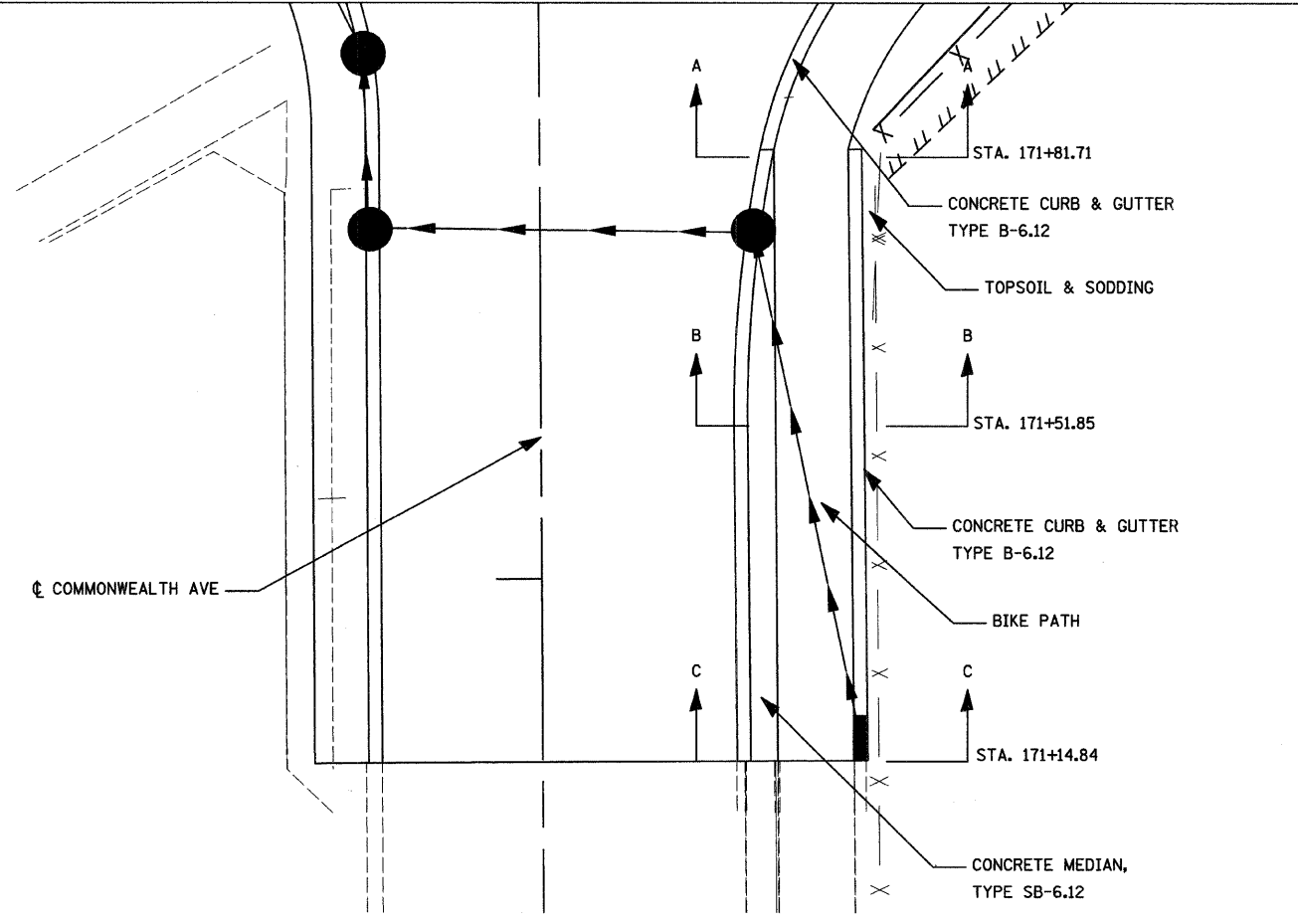
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CONSULTING ENGINEERS
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LIGHTING DETAILS

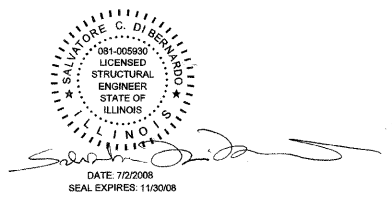
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DATE: APRIL, 2008
DRAWN BY: KDM
CHECKED BY: JMW



THE HANDRAIL AND POST COMBINATION SHALL BE CAPABLE OF WITH STANDING A MINIMUM LOAD OF 200 LBS. APPLIED IN ANY DIRECTION AT ANY POINT ON THE RAIL.

PEDESTRIAN RAIL DETAIL

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TIME: 11:41 AM
FILENAME: N:\PROJ\5161\Design\Details\5161-RetWallDetail.dgn



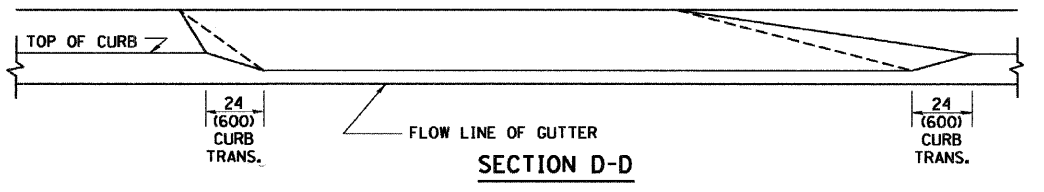
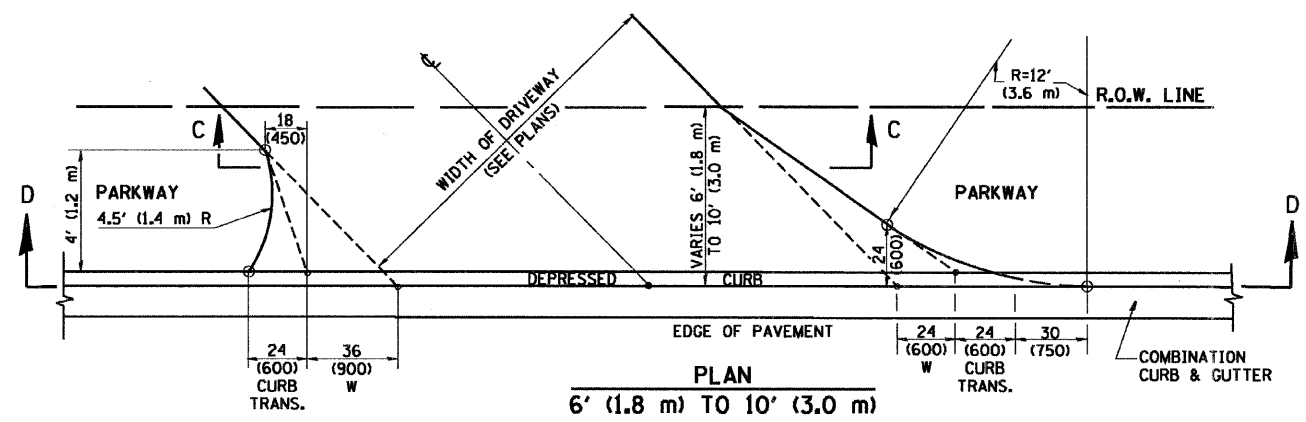
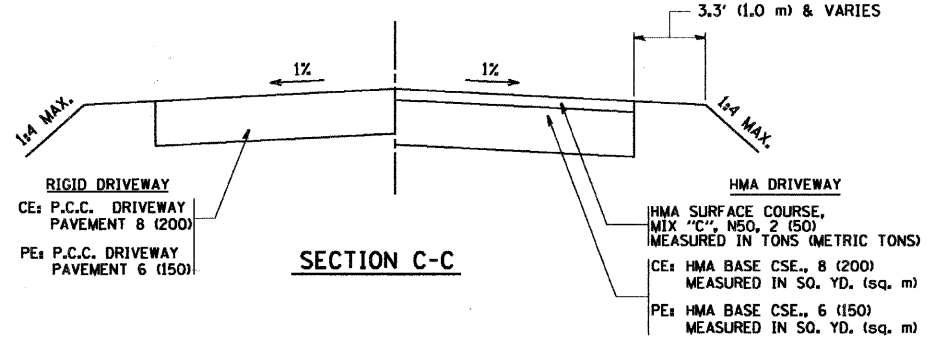
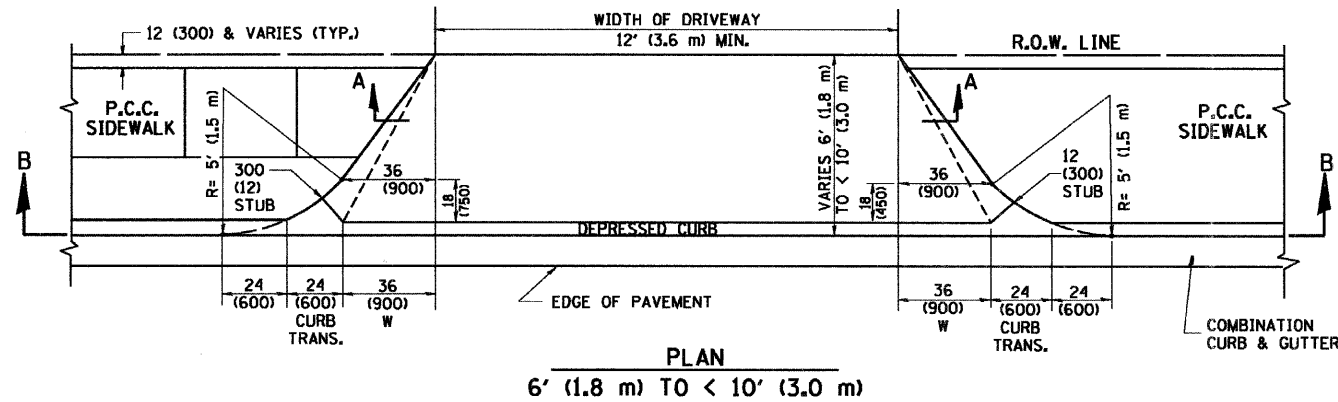
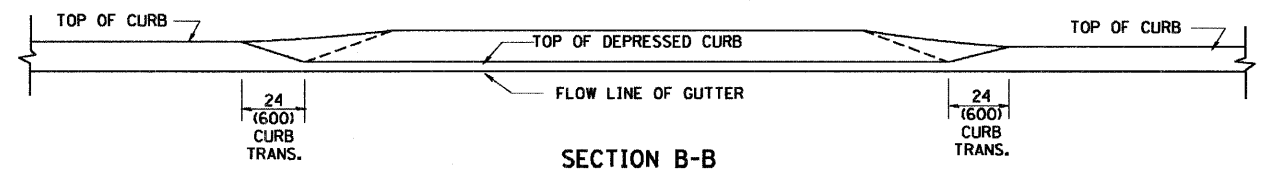
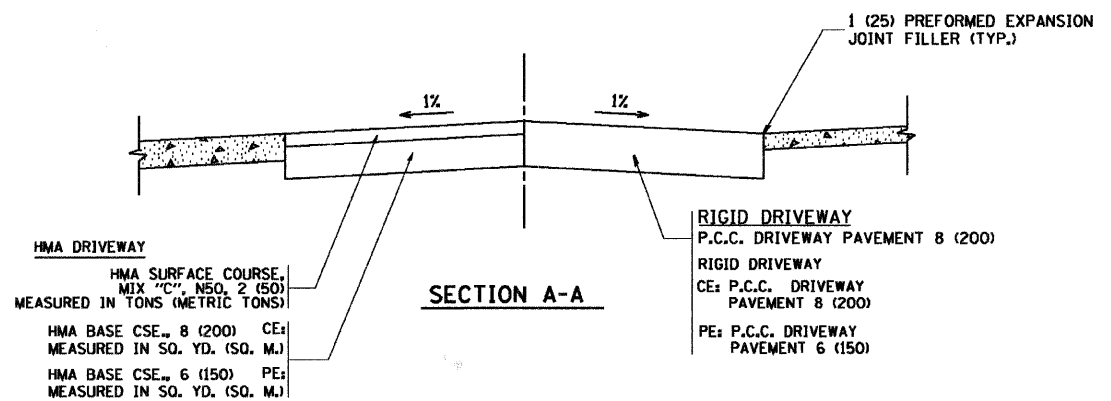
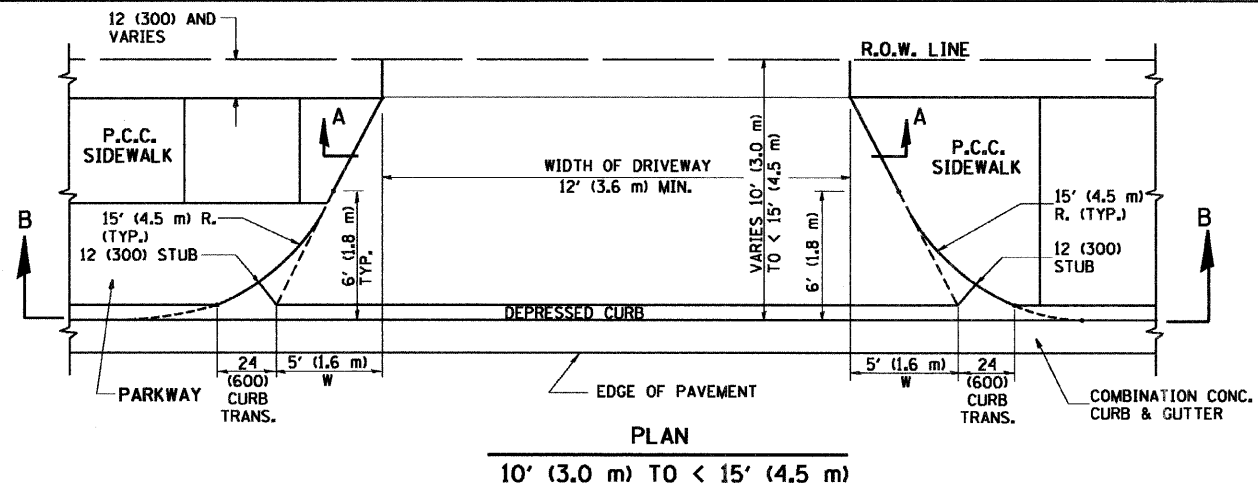
REVISIONS	
NAME	DATE

Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@clorba.com

CITY OF NORTH CHICAGO
MARTIN LUTHER KING JR. DRIVE IMPROVEMENTS
RETAINING WALL,
PEDESTRIAN RAIL, AND BIKE PATH
DETAILS

SCALE: N.T.S. DRAWN BY: KMS
DATE: APRIL, 2008 CHECKED BY: MJL

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	198
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

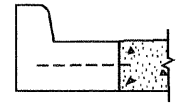
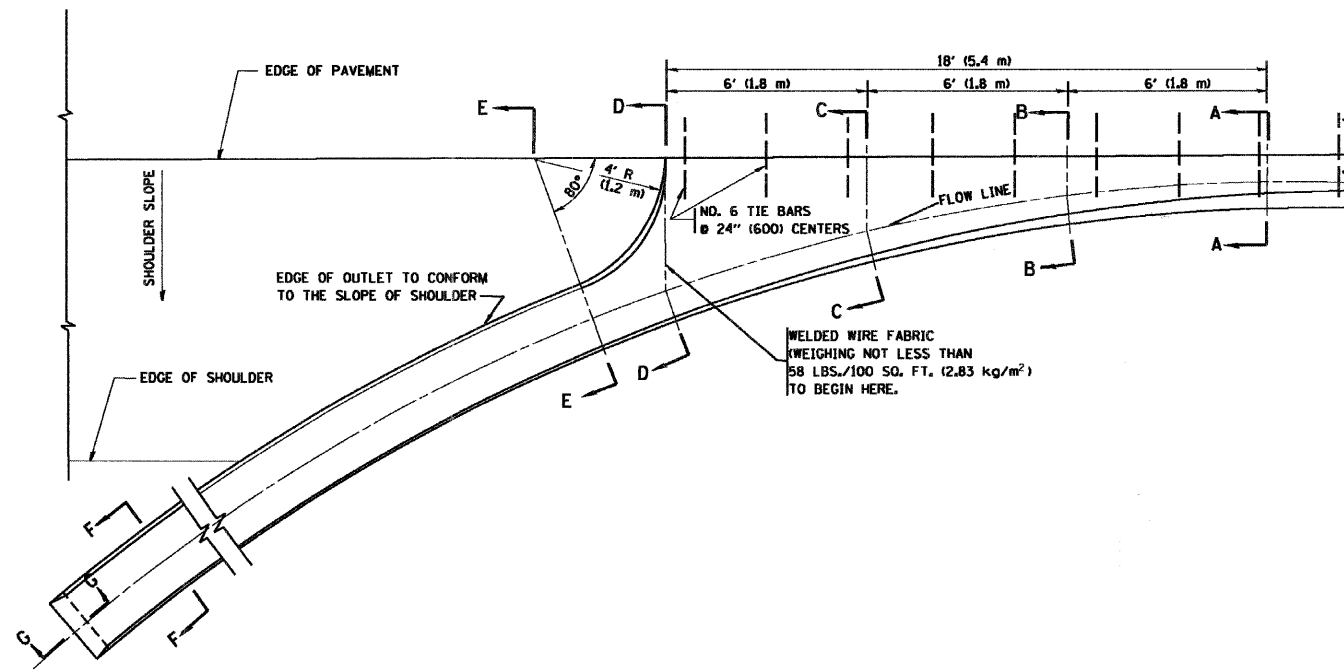
ILLINOIS DEPARTMENT OF TRANSPORTATION
DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

REVISIONS	
NAME	DATE
R. SHAH	11/06/98
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. HOLTZ	04/08/97
M. GOMEZ	04/06/01
P. LOFLEUR	04/15/03
R. BORO	01/01/07

SCALE: VERT. NONE
HORIZ. DRAWN BY
CHECKED BY

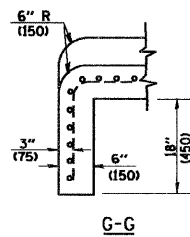
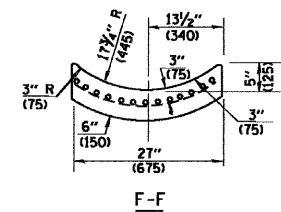
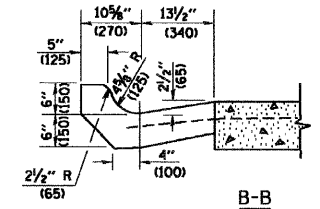
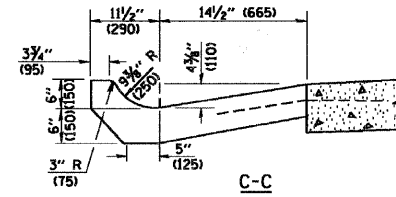
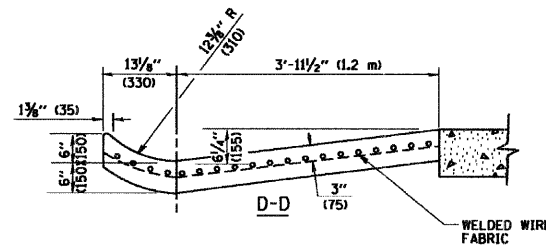
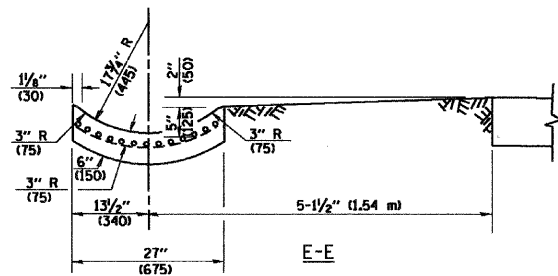
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PLOT SCALE = 1/8" = 1'-0"
USER NAME = bawer-dl

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	199
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



A-A *

* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\" (600) CENTERS UNLESS OTHERWISE SHOWN.

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6\" (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL =
 1.25 CU. YDS. (0.96 m³) CLASS S1 CONCRETE (OUTLET) FOR 9\" (225) PAV'T.
 1.27 CU. YDS. (0.96 m³) CLASS S1 CONCRETE (OUTLET) FOR 10\" (250) PAV'T.
 FOR SECTION F-F =
 0.045 CU. YDS. (0.03 m³) CLASS S1 CONCRETE PER FT. (m).

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

REVISIONS	
NAME	DATE
M. DE YONG	8/4/86
R. SHAH	09/09/94
R. SHAH	10/25/94
E. GOMEZ	12/21/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

OUTLET FOR CONCRETE CURB AND GUTTER

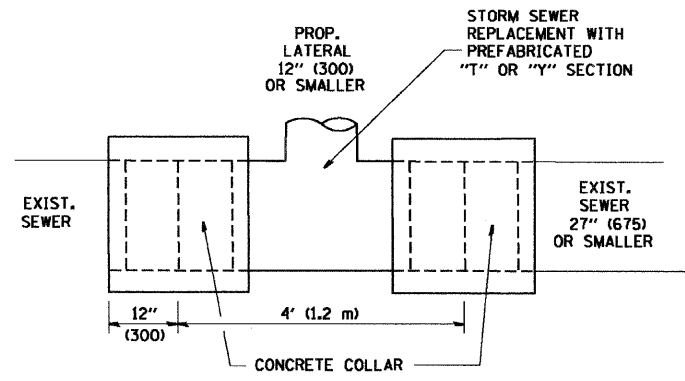
SCALE: VERT. NONE
 HORIZ.

DRAWN BY

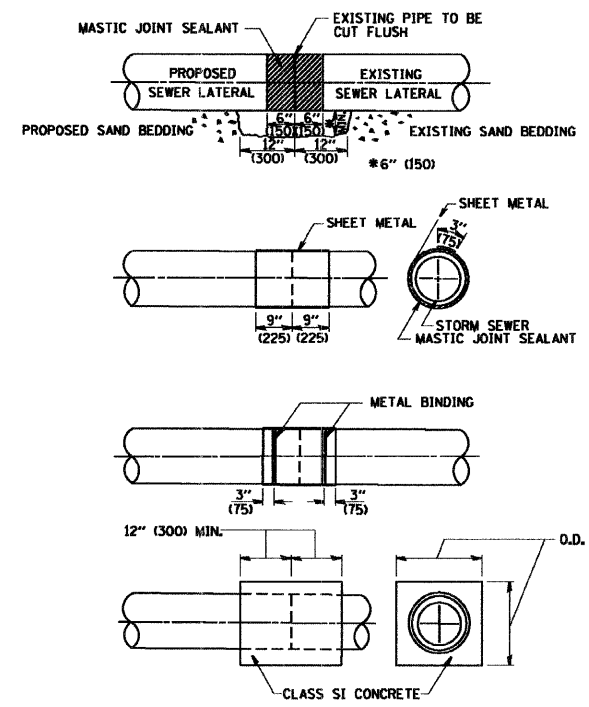
CHECKED BY

PLT DATE = 2/1/2007
 FILE NAME = I:\Users\N\p0340p
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 USER NAME = bauer-d

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1230	03-00159-00-PV	LAKE	262	200
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



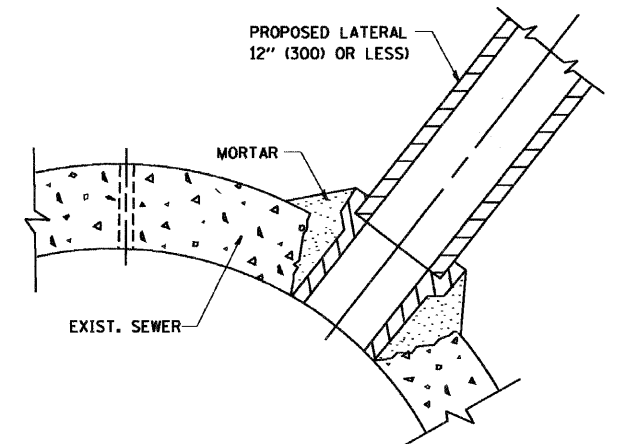
DETAIL "A"
LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



DETAIL "B"
CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"
PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
 - CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".
- IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SCALE: VERT. NONE
HORIZ. _____

DRAWN BY _____
CHECKED BY _____

PLOT DATE = 3/1/2007
PLOT SCALE = 1/8" = 1'-0"
PLOT USER = bauer-d