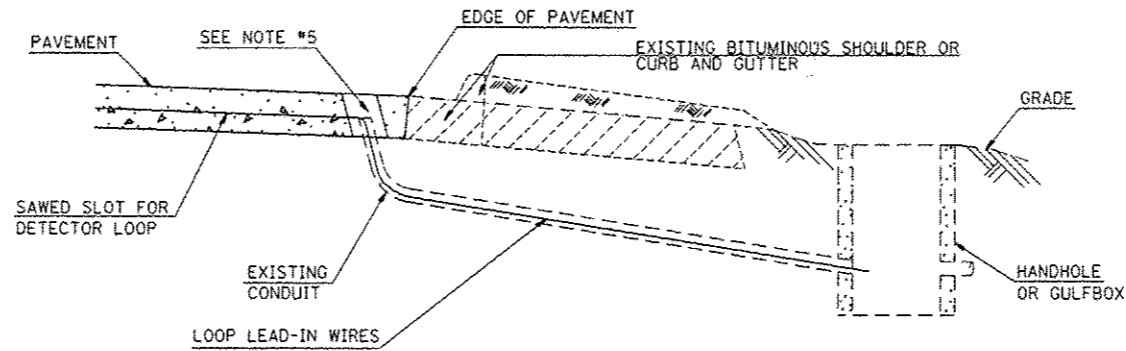


NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.

SEE "DETAIL A" FOR INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUITS.

SCHEDULE OF QUANTITIES			TOTAL QUANTITIES	IL 203 & MADISON AVE.	IL 203 & JILL AVE.	IL 203 & FEHLING RD.	IL 203 & LINDELL AVE.	IL 203 & MANLEY AVE.
CODE NO	ITEM	UNIT						
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SO FT	27	0	0	27	0	0
60300100	LOCATING UNDERGROUND CABLE	FOOT	100	20	20	20	20	20
81028340	UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	32	0	0	10	22	0
81300215	ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	132	0	0	0	132	0
87601100	PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE 1	EACH	3	0	0	2	1	0
87900200	DRILL EXISTING HANDHOLE	EACH	3	0	0	2	1	0
88600600	DETECTOR LOOP REPLACEMENT	FOOT	1903	380	383	385	374	381
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	9	0	2	3	2	2
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	122	0	0	0	122	0
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	276	0	0	32	244	0
89502315	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	0	0	1	0	0
89502316	REBUILD EXISTING HANDHOLE	EACH	1	0	0	0	0	1
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SO FT	27	0	0	27	0	0
X8950205	REBUILD EXISTING HANDHOLE, SPECIAL	EACH	1	0	0	0	0	1



DETAIL A
(NO SCALE)

INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUIT

1. DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
2. REMOVE EXISTING DETECTOR LOOP WIRES TO HANDHOLE OR GULFBOX.
3. INSTALL NEW LOOP LEAD-IN WIRES IN EXISTING CONDUIT.
4. SPLICE NEW DETECTOR LOOP WIRES TO EXISTING LOOP LEAD-IN CABLE IN HANDHOLE OR GULFBOX.
5. FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.
6. LOCATING UNDERGROUND CABLE WILL BE PAID FOR SEPARATELY.

NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"

DETECTOR LOOP REPLACEMENT LEGEND

- EX. HANDHOLE
- EX. DETECTOR LOOP
- ⊗ EX. TRAFFIC SIGNAL CONTROLLER
- EXISTING CONDUIT
- ▭ PROPOSED DETECTOR LOOP

▲ REVISED SHEET 7-23-14

FILE NAME =	USER NAME = prestonna	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN GENERAL NOTES, SCHEDULE OF QUANTITIES, DETAIL AND LEGEND			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\prestonna\d0322803\d070g24-sht-TG.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO. 1 OF 7 SHEETS	STA.	TO STA.	594	(X-3,X-2)RS-1	MADISON	52	45
		CHECKED -	REVISED -		CONTRACT NO. 76G24								
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

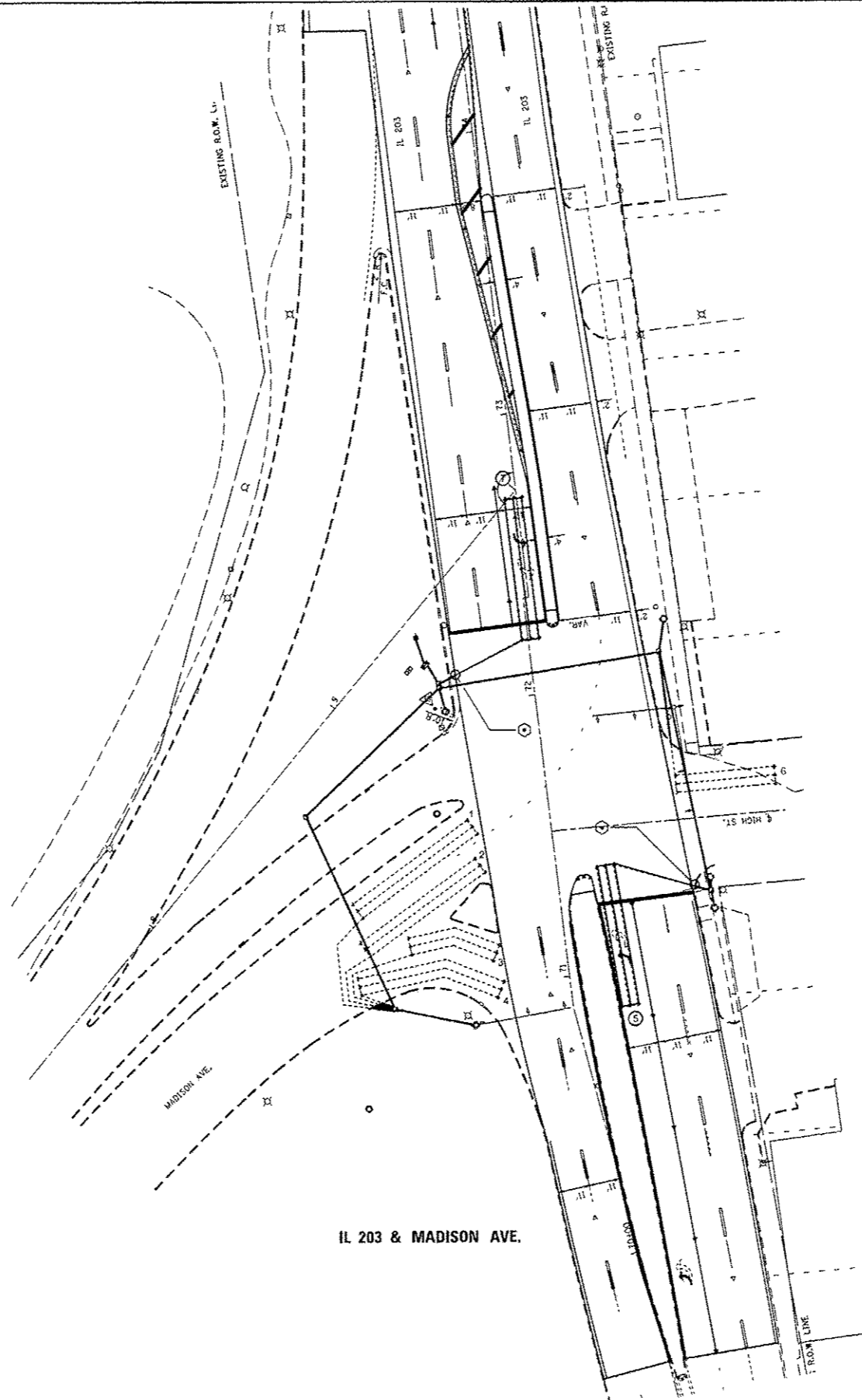
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 & MADISON AVE.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD	4	6 X 50-0	3-6-3	835.9	2.7
2. EB THRU CD	4	6 X 50-0	3-6-3	1006.0	6.6
3. EB RT CD A	4	6 X 30-0	3-6-3	534.2	2.1
4. EB RT CD B	4	6 X 50-0	3-6-3	827.1	2.5
5. NB THRU & LT CD	1 & 6	6 X 50-0	3-6-3	837.5	2.8
6. WB THRU CD	3	6 X 50-0	3-6-3	819.4	2.4
7. SB THRU & LT CD	2 & 5	6 X 50-0	3-6-3	798.8	1.9

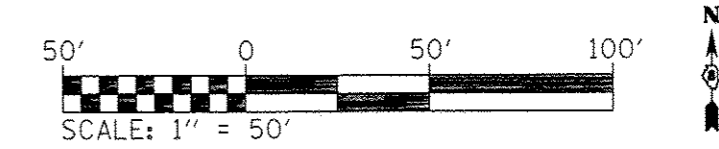
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

O=QUADRAPOLE

⊙=SEE DETAIL A



△ REVISED SHEET 7-23-14



FILE NAME: c:\pwwork\avidot\prestanne\08332803\0875624.sht-TS.dgn	USER NAME: prestanne	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT & ADA T.S. MODIFICATION PLAN 1 OF 5	F.A.P. RTE.: 594	SECTION: 0X-3,X-2JRS-1	COUNTY: MADISON	TOTAL SHEETS: 52	SHEET NO.: 46
PLOT SCALE: 50.0000' / 1"	CHECKED: -	REVISED: -	SCALE: SHEET NO. 2 OF 7 SHEETS			STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE: 5/28/2014	DATE: -	REVISED: -	CONTRACT NO. 76G24							

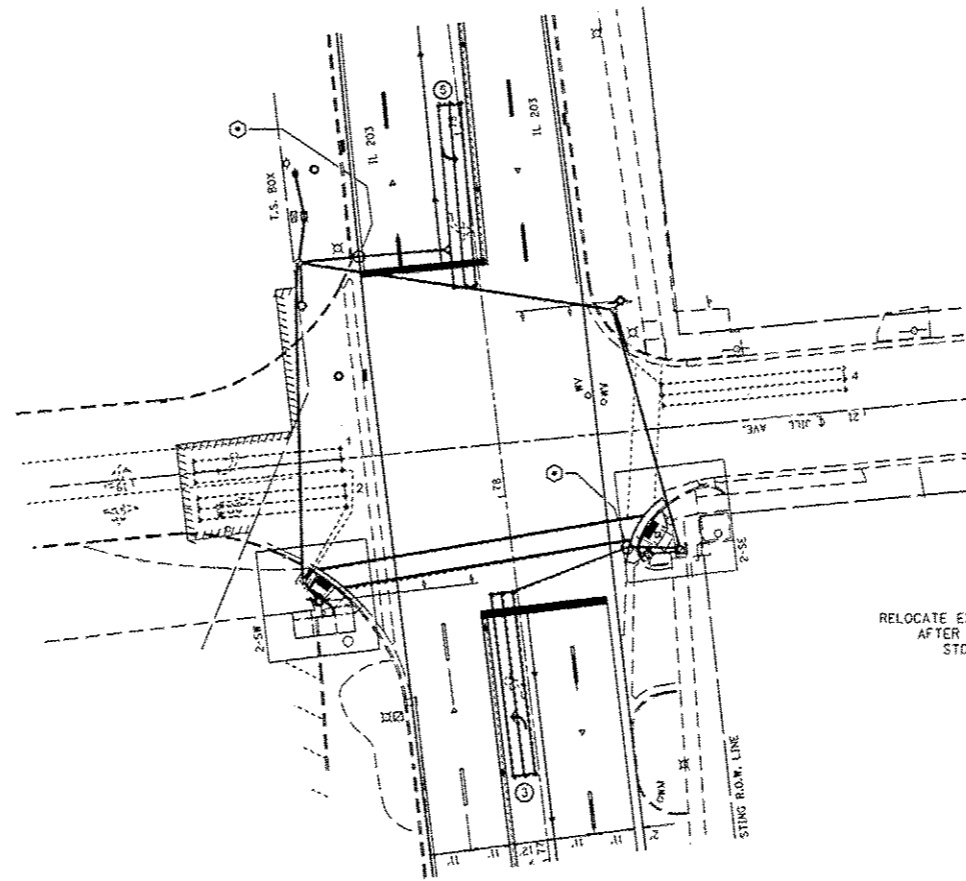
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 & JILL AVE.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB THRU- LT CD	3	6 X 40-0	3-6-3	670.1	2.1
2. EB THRU- LT CD	3	6 X 40-0	3-6-3	667.0	2.0
3. NB THRU- LT CD	1 & 6	6 X 50-0	3-6-3	836.6	2.7
4. WB THRU- LT CD	4	6 X 50-0	3-6-3	818.3	2.3
5. SB THRU- LT CD	2 & 5	6 X 50-0	3-6-3	801.4	1.9

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

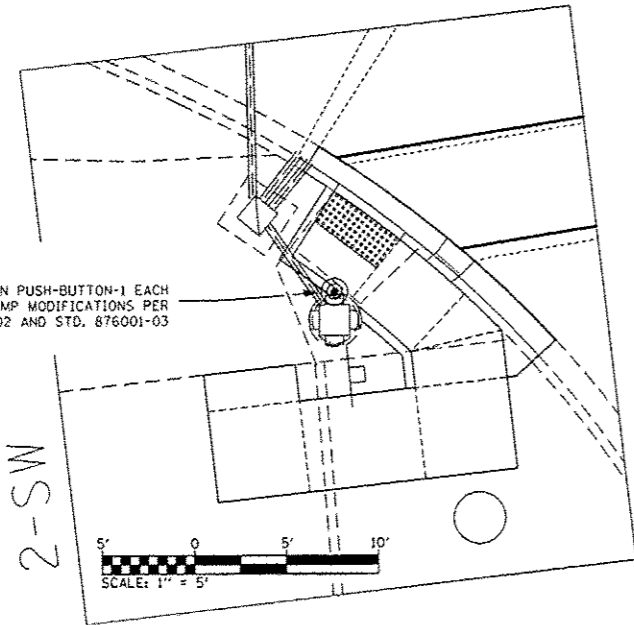
Q=QUADRAPOLE

⊙=SEE DETAIL A

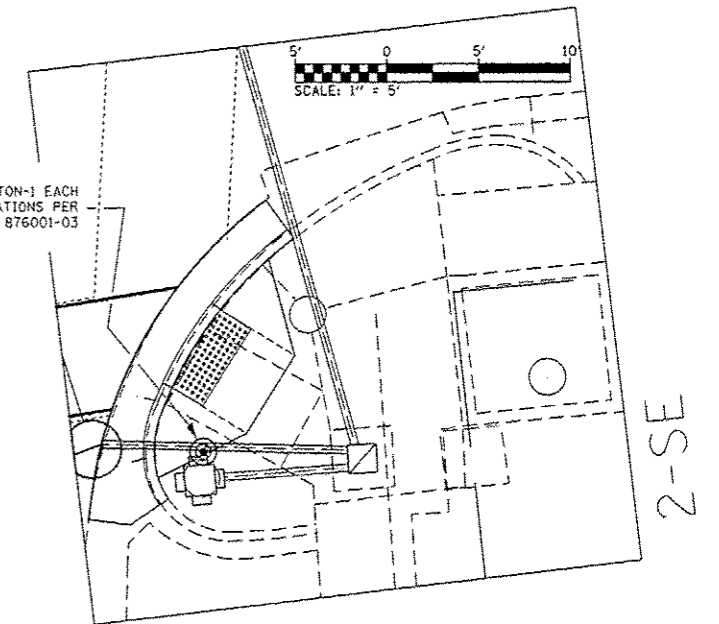


IL 203 & JILL AVE.

RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH AFTER ADA SIDE WALK RAMP MODIFICATIONS PER STD. SPEC. ART. 895.02 AND STD. 876001-03



RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH AFTER ADA SIDE WALK RAMP MODIFICATIONS PER STD. SPEC. ART. 895.02 AND STD. 876001-03



△ REVISED SHEET 7-23-14



FILE NAME :	USER NAME = prestonm	DESIGNED -	REVISED -
c:\pwwork\p\dot\prestonm\0332003\dot\76g24-sh1-TS.dgn		DRAWN -	REVISED -
PLOT SCALE = 58.0289 / / in.		CHECKED -	REVISED -
PLOT DATE = 5/28/2014		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT &
ADA T.S. MODIFICATION PLAN
2 OF 5

SCALE: SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
594	(X-3,X-2)RS-1	MADISON	52	47
CONTRACT NO. 76G24				
ILLINOIS FED. AID PROJECT				

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 & FEHLING RD.

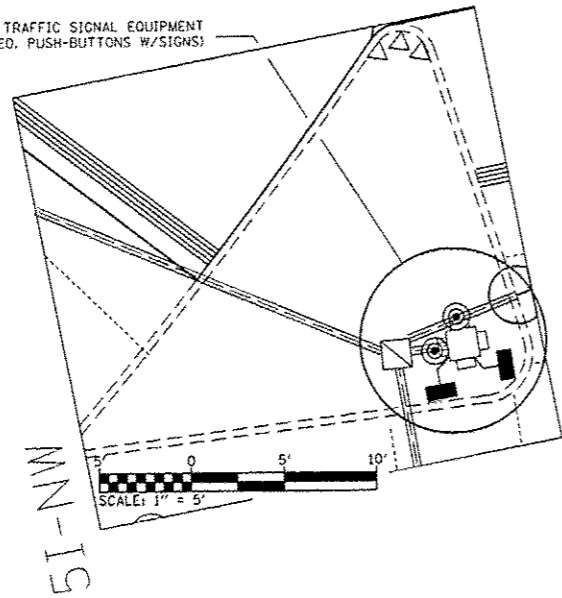
LOOP#	PHASE#	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD	3	6 X 50-0	3-6-3	826.5	2.5
2. EB THRU CD	3	6 X 50-0	3-6-3	824.1	2.5
3. EB RT CD	3	6 X 60-0	3-6-3	971.6	2.7
4. NB THRU-LT CD	1 & 6	6 X 50-0	3-6-3	809.5	2.1
5. WB LT CD	4	6 X 50-0	3-6-3	823.6	2.4
6. WB THRU CD	4	6 X 50-0	3-6-3	820.1	2.4
7. WB RT CD	4	6 X 50-0	3-6-3	819.6	2.3
8. SB THRU-LT CD	2 & 5	6 X 50-0	3-6-3	824.8	2.9

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

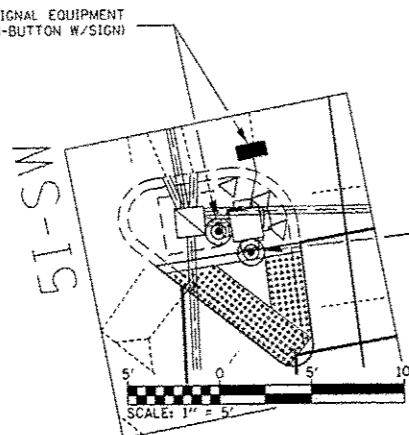
O=QUADRAPOLE

⊙=SEE DETAIL A

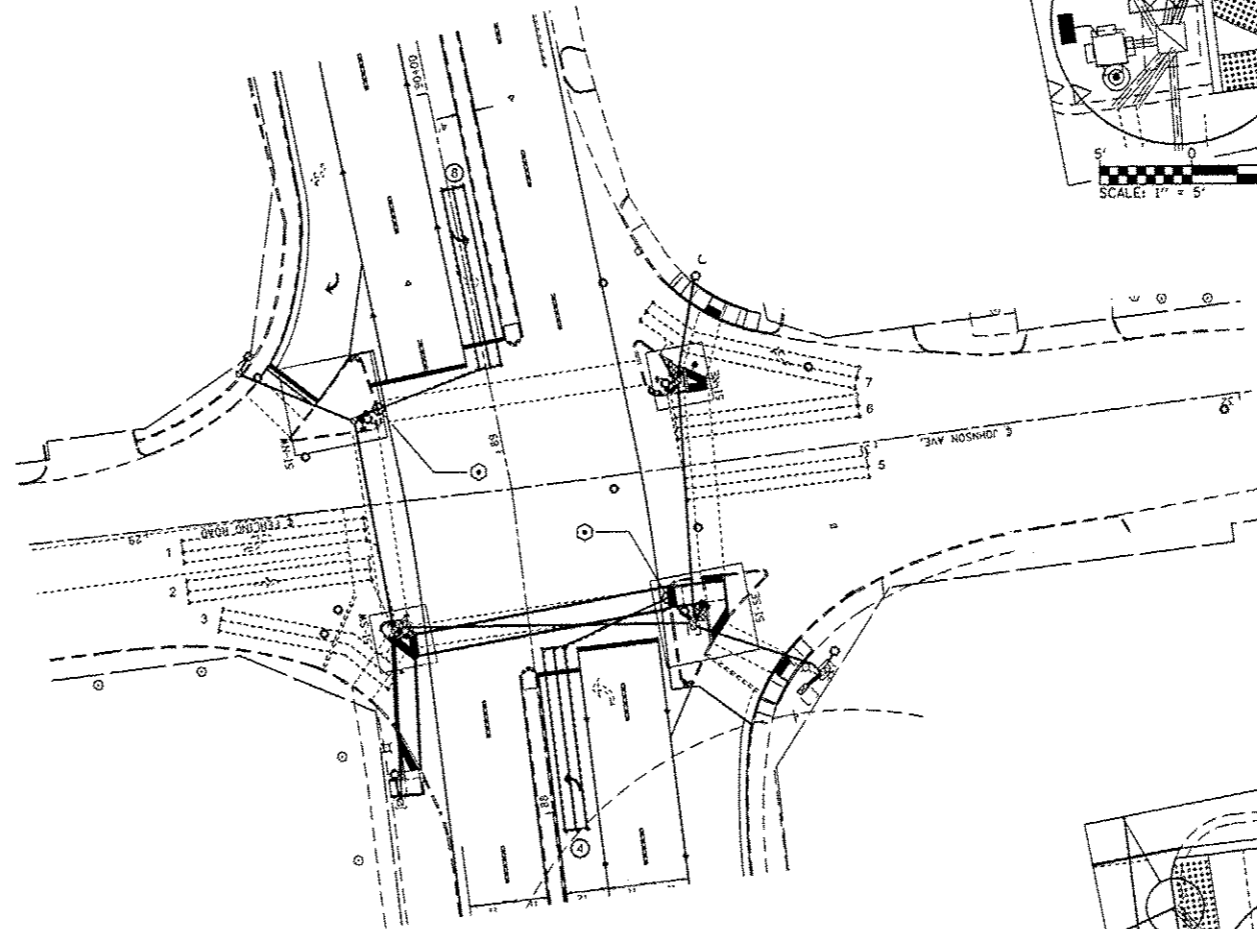
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (PED. SIGNAL HEADS AND PED. PUSH-BUTTONS W/SIGNS)



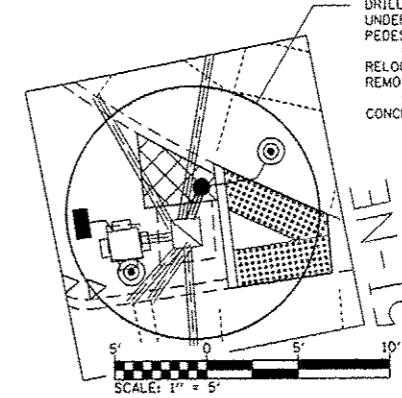
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (PED. SIGNAL HEAD AND PED. PUSH-BUTTON W/SIGN)



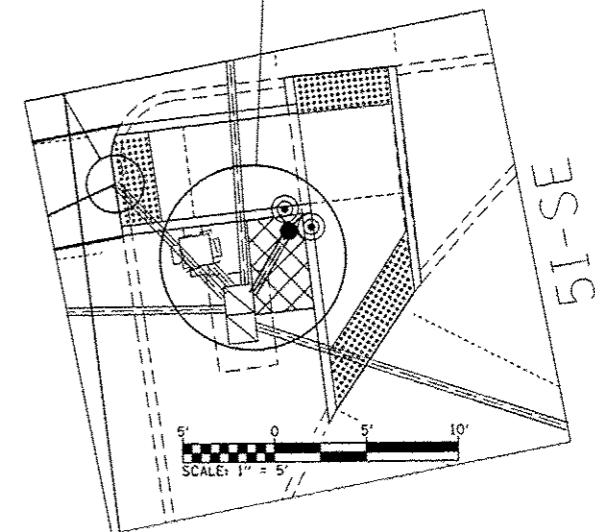
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH AFTER ADA SIDE WALK RAMP MODIFICATIONS PER STD. SPEC. ART. 895.02 AND STD. 876001-03



REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (PED. SIGNAL HEAD AND PED. PUSH-BUTTON W/SIGN)
CONCRETE MEDIAN SURFACE REMOVAL-11 50 FT
DRILL EXISTING HANDHOLE-1 EACH
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.-5 FT
PEDESTRIAN PUSH-BUTTON POST,
GALVANIZED STEEL, TYPE I-1 EACH
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH
REMOVE AND REINSTALL ELECTRIC CABLE FROM
CONDUIT-16 FT
CONCRETE MEDIAN SURFACE, 4 INCH-11 50 FT

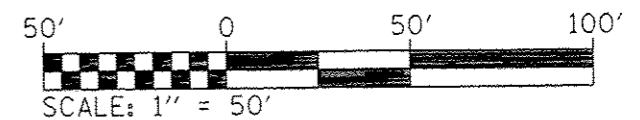


CONCRETE MEDIAN SURFACE REMOVAL-16 50 FT
DRILL EXISTING HANDHOLE-1 EACH
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.-5 FT
PEDESTRIAN PUSH-BUTTON POST,
GALVANIZED STEEL, TYPE I-1 EACH
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-2 EACH
REMOVE AND REINSTALL ELECTRIC CABLE FROM
CONDUIT-16 FT
CONCRETE MEDIAN SURFACE, 4 INCH-16 50 FT



IL 203 & FEHLING RD.

REVISOR'S MARK: REVISED SHEET 7-23-14



FILE NAME =	USER NAME = prestonma	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT & ADA T.S. MODIFICATION PLAN 3 OF 5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ex:\pwork\pvidet\prestonma\08332083\0876g24-ah-15.dgn		DRAWN -	REVISED -			594	(X-3,X-2)RS-1	MADISON	52	48
PLOT SCALE = 58.8208 1/16"		CHECKED -	REVISED -			CONTRACT NO. 76G24				
PLOT DATE = 5/26/2014		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
						SCALE:	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	

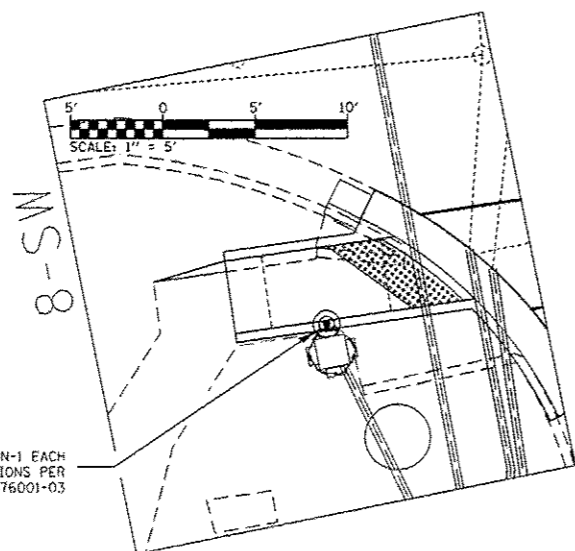
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 & LINDELL AVE.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD	4	6 X 35-0	3-6-3	573.5	1.4
2. EB THRU CD	4	6 X 35-0	3-6-3	570.9	1.4
3. NB THRU CD	1 & 6	6 X 50-0	3-6-3	797.7	1.9
4. EB THRU CD-A	3	6 X 30-0	3-6-3	534.4	2.1
5. EB THRU CD-B	3	6 X 20-0	3-6-3	361.8	1.7
6. SB THRU CD	2 & 5	6 X 50-0	3-6-3	817.9	2.3

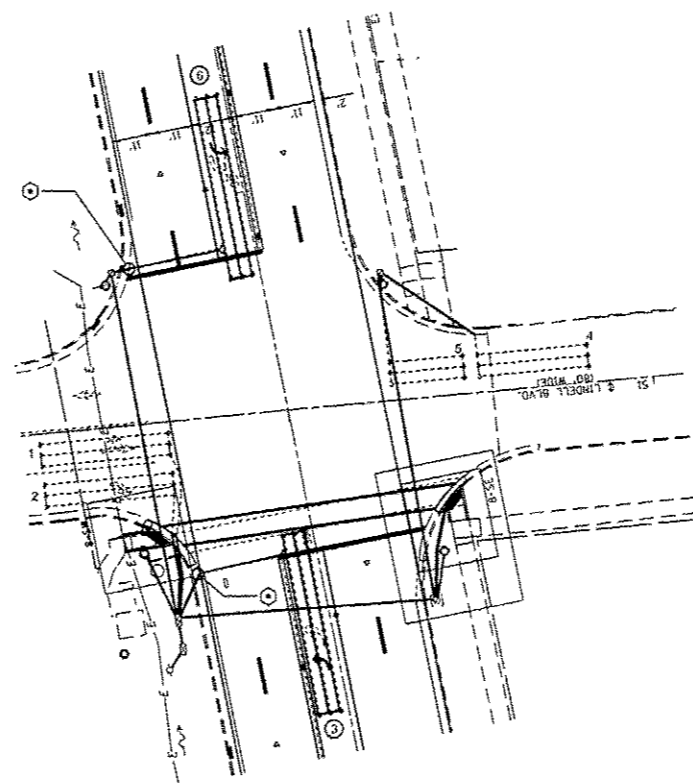
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

0=QUADRAPOLE

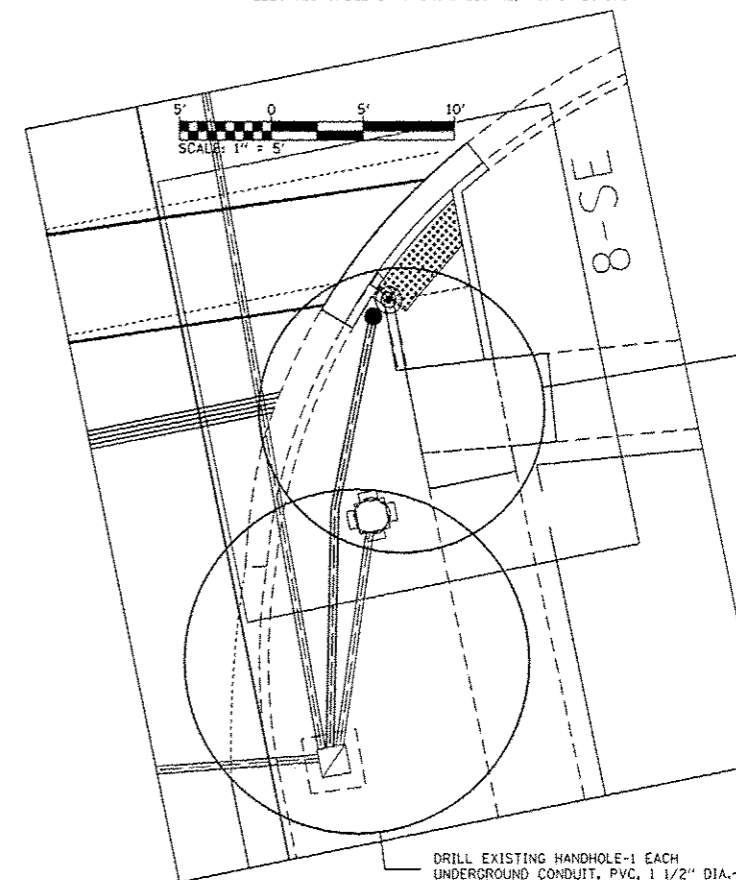
⊙ =SEE DETAIL A



RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH AFTER ADA SIDE WALK RAMP MODIFICATIONS PER STD. SPEC. ART. 895.02 AND STD. 876001-03



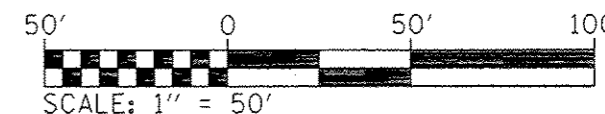
PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE 1-1 EACH
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 20-132 FT



DRILL EXISTING HANDHOLE-1 EACH
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.-22 FT
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT-244 FT
REMOVE ELECTRIC CABLE FROM CONDUIT-122 FT

IL 203 & LINDELL AVE.

REVISOR'S MARK: **REVISOR'S MARK** REVISED SHEET 7-23-14



FILE NAME *	USER NAME = prestonm	DESIGNED -	REVISED -
c:\pwork\pwork\prestonm\18332803\087624-ht-T5.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 5/28/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT &
ADA T.S. MODIFICATION PLAN
4 OF 5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
594	(X-3,X-2)RS-1	MADISON	52	49
			CONTRACT NO. 76G24	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET NO. 2 OF 7 SHEETS STA. TO STA.

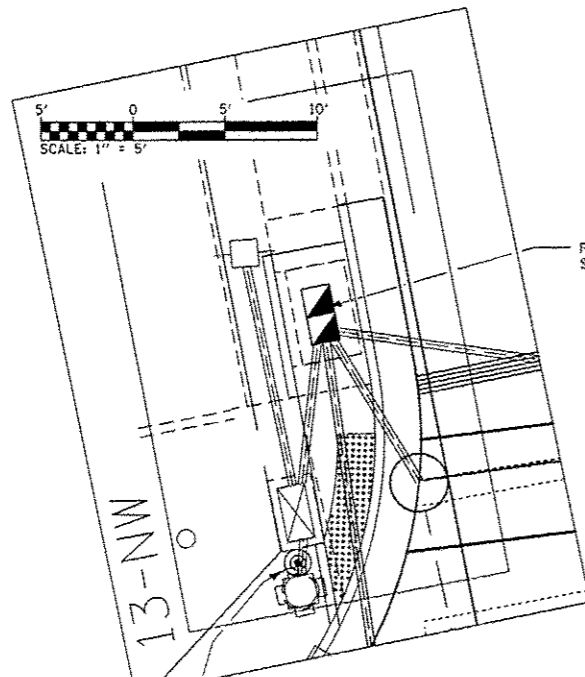
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 & MANLEY AVE.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD	4	6 X 40-0	3-6-3	666.6	2.0
2. EB THRU CD	4	6 X 40-0	3-6-3	664.9	1.9
3. NB THRU CD	1 & 6	6 X 50-0	3-6-3	817.7	2.3
4. EB THRU CD A	3	6 X 30-0	3-6-3	522.1	1.8
5. EB THRU CD B	3	6 X 20-0	3-6-3	369.4	1.5
6. SB THRU CD	2 & 5	6 X 50-0	3-6-3	800.1	1.9

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

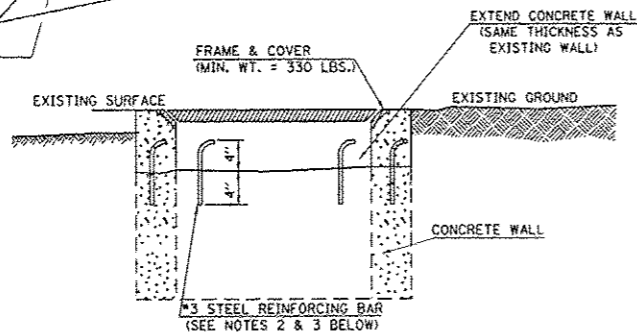
Q=QUADRAPOLE

⊙ =SEE DETAIL A



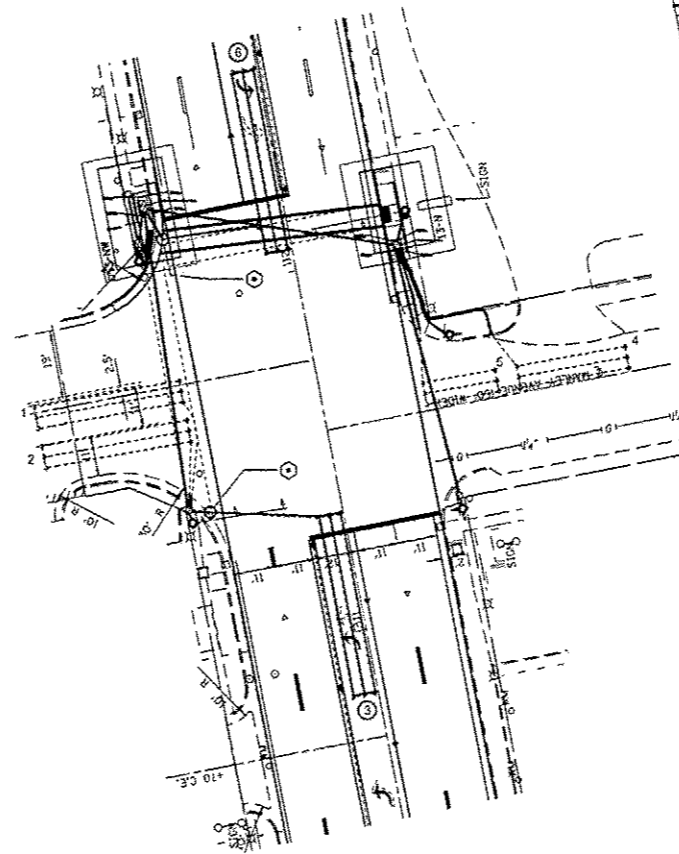
REBUILD EXISTING HANDHOLE, SPECIAL-1 EACH
SEE DETAIL BELOW

RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH
AFTER ADA SIDE WALK RAMP MODIFICATIONS PER
STD. SPEC. ART. 895.02 AND STD. 876001-03

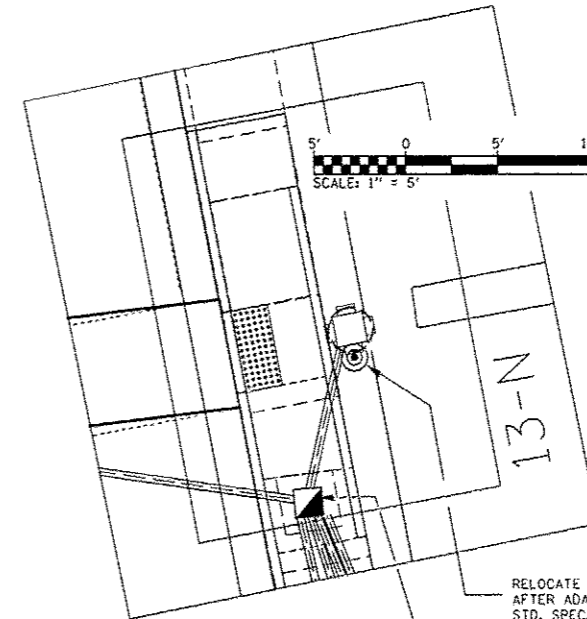


DETAIL
REBUILD EXISTING HANDHOLE, SPECIAL
NOTES:

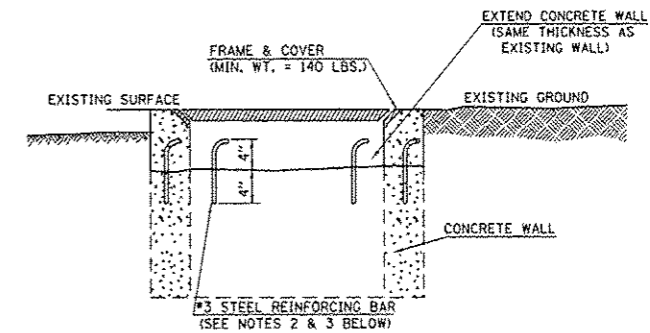
1. REMOVE EXISTING FRAME AND COVER.
2. DRILL CONCRETE WALL (12 LOCATIONS EQUALLY SPACED & CENTERED)
3. INSTALL REBAR AND GROUT.
4. RAISE/LOWER ELEVATION OF CONCRETE WALLS SO THAT THE TOP OF THE INSTALLED FRAME AND COVER WILL BE THE SAME GRADE AS THE TOP OF THE PROPOSED GRADE.
5. THIS DETAIL TO BE USED IN CONJUNCTION WITH STANDARD 814006, GENERAL NOTES AND THE SPECIAL PROVISIONS "REBUILD EXISTING HANDHOLE, SPECIAL".
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THAT MAY OCCUR TO THE EXISTING CABLES.



IL 203 & MANLEY AVE.



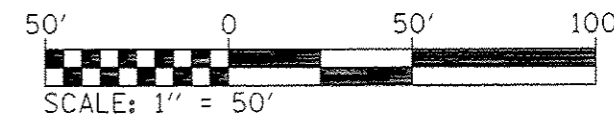
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON-1 EACH
AFTER ADA SIDE WALK RAMP MODIFICATIONS PER
STD. SPEC. ART. 895.02 AND STD. 876001-03
REBUILD EXISTING HANDHOLE-1 EACH
SEE DETAIL BELOW



DETAIL
REBUILD EXISTING HANDHOLE
NOTES:

1. REMOVE EXISTING FRAME AND COVER.
2. DRILL CONCRETE WALL (8 LOCATIONS EQUALLY SPACED & CENTERED)
3. INSTALL REBAR AND GROUT.
4. RAISE/LOWER ELEVATION OF CONCRETE WALLS SO THAT THE TOP OF THE INSTALLED FRAME AND COVER WILL BE THE SAME GRADE AS THE TOP OF THE PROPOSED GRADE.
5. THIS DETAIL TO BE USED IN CONJUNCTION WITH STANDARD 814001, GENERAL NOTES AND THE SPECIAL PROVISIONS "REBUILD EXISTING HANDHOLE".
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THAT MAY OCCUR TO THE EXISTING CABLES.

REVISOR'S MARK: REVISED SHEET 7-23-14



FILE NAME: c:\pwork\pwork\prstonma\d0322003\076g24-ent-15.dgn	USER NAME: prstonma	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT & ADA T.S. MODIFICATION PLAN 5 OF 5	F.A.P. RTE. 594	SECTION (X-3,X-2)RS-1	COUNTY MADISON	TOTAL SHEETS 52	SHEET NO. 50		
PLOT SCALE: 50.0000' / in.	CHECKED: -	REVISED: -	SCALE:			SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 76G24				
PLOT DATE: 5/28/2014	DATE: -	REVISED: -										