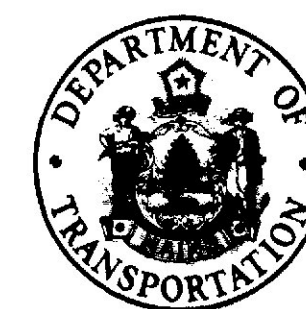


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

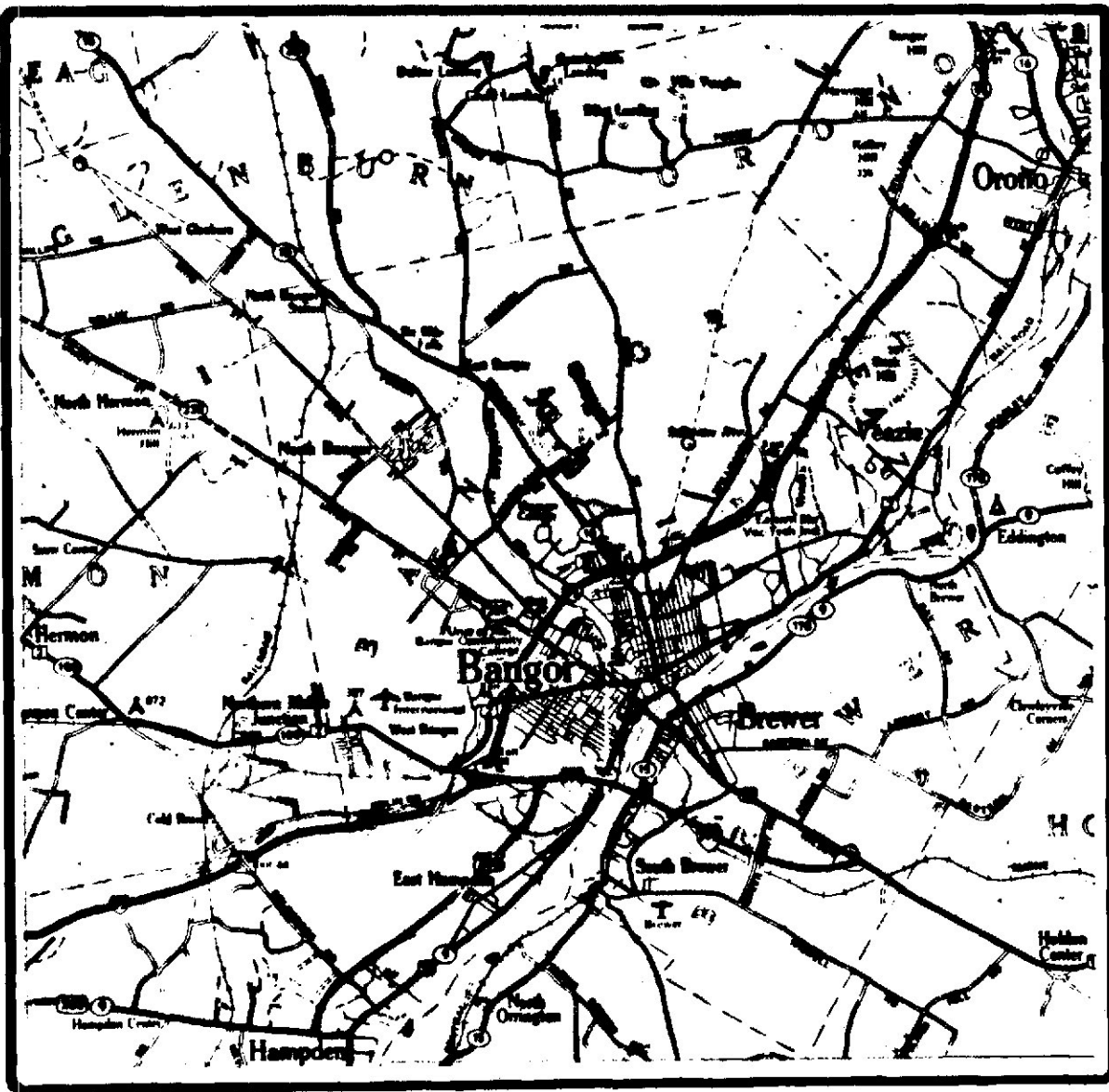
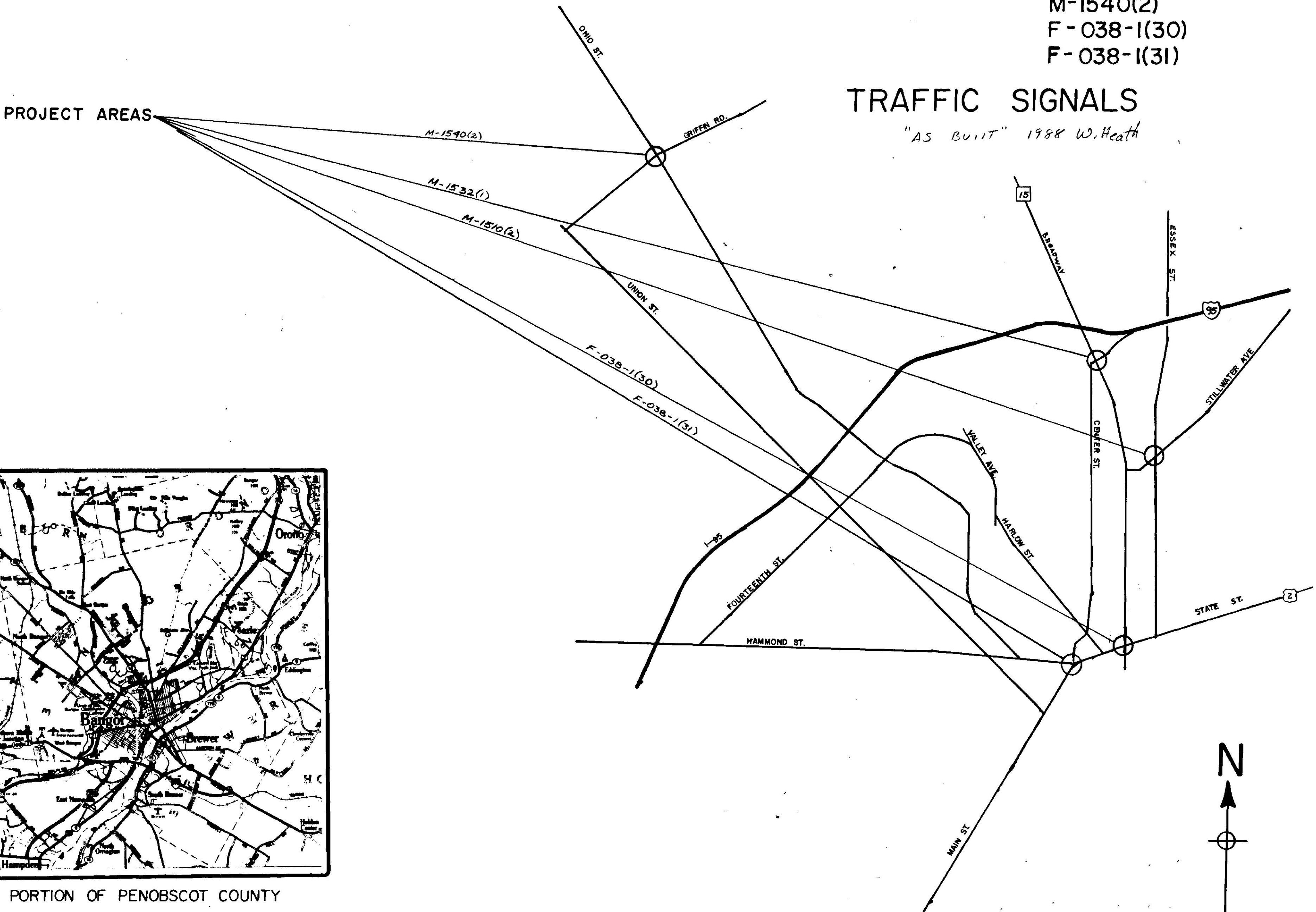


BANGOR
PENOBSCOT COUNTY

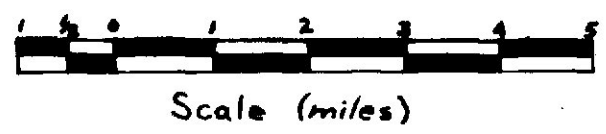
MAINE FEDERAL AID

PROJECT NOS. M-1510(2)
M-1532(1)
M-1540(2)
F-038-1(30)
F-038-1(31)

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3 - 7	PLAN SHEETS
8 - 15	STANDARD DETAILS



A PORTION OF PENOBSCOT COUNTY



APPROVED: STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
David A. ... COMMISSIONER
Richard A. ... BUREAU DIRECTOR AND CHIEF ENGINEER
DATE 3-6-87
DATE 3-6-87

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1
APPROVED: _____
DIVISION ENGINEER DATE

MTA6

BRIANING 44-132 35926

JANUARY 1988

203-1 2080

F.H.W.A. DIST. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	M-1510(2) M-1532(1) M-1540(2) F-038-1(30) F-038-1(31)	2	10

BANGOR
TRAFFIC SIGNALS

M-1532(1) BROADWAY, CENTER & I-95

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.20	COMMON EXCAVATION	C.Y.	114
304.103	ASBC GRAVEL-TRUCK MEASURE	C.Y.	98
403.07	HOT BIT. PAVEMENT-GRADING "B"	TONS	20.05
403.08	HOT BIT. PAVEMENT-GRADING "C"	TONS	12.63
609.31	CURB TYPE III	L.F.	210
626.11	PRECAST CONCRETE JUNCTION BOX	EACH	2
626.22	NON METALLIC CONDUIT	L.F.	244
626.32	24 INCH FOUNDATION	EACH	4
626.36	REMOVE OR MODIFY CONCRETE FOUNDATION	EACH	1
627.61	4 INCH SOLID WHITE PAVEMENT MARKING LINE	L.F.	370
627.63	4 INCH SOLID YELLOW PAVEMENT MARKING LINE	L.F.	440
627.65	WHITE OR YELLOW PAVEMENT AND CURB MARKING	S.F.	731
643.7102	TRAFFIC SIGNAL MODIFICATION	L.S.	1
643.91	MAST ARM POLE	EACH	4
609.18	ADJUST MANHOLE AND CATCHBASIN TO GRADE	EACH	1
652.31	TYPE 1 BARRICADE	EACH	4
652.33	DRUM	EACH	0
652.34	CONE	EACH	10
652.35	CONSTRUCTION SIGNS	S.F.	96
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	L.S.	1
652.38	FLAGGERS	M.H.	55
659.10	MOBILIZATION	L.S.	1
461.14	ESC. CLAUSE HOT B.T. PAVE.	L.S.	1

M-1540(2) OHIO ST. & GRIFFIN RD.

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.20	COMMON EXCAVATION	C.Y.	33
304.103	ASBC GRAVEL-TRUCK MEASURE	C.Y.	28
403.07	HOT BIT. PAVEMENT-GRADING "B"	TONS	6.00
403.08	HOT BIT. PAVEMENT-GRADING "C"	TONS	2.63
609.31	CURB TYPE 3	L.F.	60
626.21	METALLIC CONDUIT	L.F.	90
627.61	4" SOLID WHITE PAVE MARKING LINE	L.F.	440
627.63	4" SOLID YELLOW PAVE MARKING LINE	L.F.	880
627.65	WHITE OR YELLOW PAVE AND CURB MARKING	S.F.	746
643.8001	TRAFFIC SIGNAL AT OHIO AND GRIFFIN	L.S.	1
652.31	TYPE 1 BARRICADE	EACH	4
652.33	DRUM	EACH	0
652.34	CONE	EACH	10
652.35	CONSTRUCTION SIGNS	S.F.	64
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	L.S.	1
652.38	FLAGGERS	M.H.	17
659.10	MOBILIZATION	L.S.	1
461.14	ESC. CLAUSE HOT BITUM. PAVE.	L.S.	1

M-1510(2) STILLWATER AVE. & ESSEX ST.

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITIES
626.21	METALLIC CONDUIT	L.F.	85.1
626.22	NON-METALLIC CONDUIT	L.F.	174
626.31	18 INCH FOUNDATION	EACH	2
627.63	4 INCH SOLID YELLOW PAVE MARKING LINE	L.F.	800
627.65	WHITE OR YELLOW PAVE OR CURB MARKING	S.F.	404
643.7101	TRAFFIC SIGNAL MODIFICATION	L.S.	1
643.92	PEDESTAL POLE	EACH	2
652.31	TYPE 1 BARRICADE	EACH	4
652.33	DRUM	EACH	0
652.34	CONE	EACH	10
652.35	CONSTRUCTION SIGNS	S.F.	64
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	L.S.	1
652.38	FLAGGERS	M.H.	28
659.10	MOBILIZATION	L.S.	1

F-038-1(31) MAIN, CENTRAL AND HAMMOND STS.

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
609.10	REMOVE AND REPLACE BRICK SIDEWALK	S.Y.	20
626.22	NON-METALLIC CONDUIT	L.F.	28
626.32	24 INCH FOUNDATION	EACH	2
626.33	30 INCH FOUNDATION	EACH	2
643.8003	TRAFFIC SIGNAL AT MAIN, CENTRAL and HAMMOND	L.S.	1
643.91	MAST ARM POLE	EACH	3
652.31	TYPE 1 BARRICADE	EACH	4
652.33	DRUM	EACH	0
652.34	CONE	EACH	10
652.35	CONSTRUCTION SIGNS	S.F.	96
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	L.S.	1
652.38	FLAGGERS	M.H.	0
659.10	MOBILIZATION	L.S.	1
643.94	DUAL PURPOSE POLE	EACH	1
630.07	TRAFFIC CONTROLLERS	L.S.	1

F-038-1(30) BROADWAY, STATE ST. & OAK ST.

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
206.07	STRUCTURAL ROCK EXCAVATION-DRAINAGE AND MINOR STRUCTURES	C.Y.	0
304.103	ASBC GRAVEL-TRUCK MEASURE	C.Y.	0
608.07	PLAIN CONCRETE SIDEWALK	S.Y.	7
626.11	PRECAST CONCRETE JUNCTION BOX	EACH	2
626.22	NON-METALLIC CONDUIT	L.F.	384
626.31	18 INCH FOUNDATION	EACH	4
626.33	30 INCH FOUNDATION	EACH	2
627.61	4 INCH SOLID WHITE PAVEMENT MARKING LINE	L.F.	640
627.63	4 INCH SOLID YELLOW PAVEMENT MARKING LINE	L.F.	420
627.65	WHITE OR YELLOW PAVEMENT AND CURB MARKING	S.F.	1144
643.8002	TRAFFIC SIGNALS AT BROADWAY, STATE & OAK	L.S.	1
643.90	INTERCONNECT WIRE BETWEEN BROADWAY, AND EXCHANGE	L.S.	0
643.92	PEDESTAL POLE	EACH	4
643.94	DUAL PURPOSE POLE	EACH	2
626.35	CONTROLLER CABINET FOUNDATION	EACH	1
652.31	TYPE 1 BARRICADE	EACH	4
652.33	DRUM	EACH	2
652.34	CONE	EACH	10
652.35	CONSTRUCTION SIGNS	S.F.	96
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	L.S.	1
652.38	FLAGGERS	M.H.	47
659.10	MOBILIZATION	L.S.	1
630.07	TRAFFIC CONTROLLERS	L.S.	1

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.20	COMMON EXCAVATION	CY	147
206.07	STRUCTURAL ROCK EXCAVATION-DRAINAGE AND MINOR STRUCTURES	CY	0
304.103	ASBC GRAVEL-TRUCK MEASURE	CY	0
403.07	HOT BIT. PAVEMENT-GRADING "B"	TONS	26.05
403.08	HOT BIT. PAVEMENT-GRADING "C"	TONS	15.26
609.18	ADJUST MANHOLE AND CATCHBASIN TO GRADE	EACH	1
609.07	PLAIN CONCRETE SIDEWALK	S.Y.	7
609.10	REMOVE AND REPLACE BRICK SIDEWALK	S.Y.	20
609.31	CURB TYPE III	L.F.	270
626.11	PRECAST CONCRETE JUNCTION BOX	EACH	4
626.21	METALLIC CONDUIT	L.F.	85.1
626.22	NON METALLIC CONDUIT	L.F.	830
626.31	18 INCH FOUNDATION	EACH	6
626.32	24 INCH FOUNDATION	EACH	4
626.33	30 INCH FOUNDATION	EACH	1
626.36	REMOVE OR MODIFY CONCRETE FOUNDATION	EACH	1
626.35	CONTROLLER CABINET FOUNDATION	EACH	1
627.61	4 INCH SOLID WHITE PAVEMENT MARKING LINE	L.F.	2450
627.63	4 INCH SOLID YELLOW PAVEMENT MARKING LINE	L.F.	2540
627.65	WHITE OR YELLOW PAVEMENT AND CURB MARKING	S.F.	3030
643.7101	TRAFFIC SIGNAL MODIFICATION	L.S.	1
643.7102	TRAFFIC SIGNAL MODIFICATION	L.S.	1
643.8001	TRAFFIC SIGNALS AT OHIO & GRIFFIN	L.S.	1
643.8002	TRAFFIC SIGNALS AT BROADWAY, STATE AND OAK	L.S.	1
643.8003	TRAFFIC SIGNALS AT MAIN, CENTRAL and HAMMOND	L.S.	1
643.90	INTERCONNECT WIRE BETWEEN BROADWAY, AND EXCHANGE	L.S.	0
643.91	MAST ARM POLE	EACH	7
643.92	PEDESTAL POLE	EACH	6
643.94	DUAL PURPOSE POLE	EACH	3
652.31	TYPE 1 BARRICADE	EACH	20
652.33	DRUM	EACH	2
652.34	CONE	EACH	50
652.35	CONSTRUCTION SIGNS	S.F.	416
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	L.S.	1
652.38	FLAGGERS	M. HR.	147
659.10	MOBILIZATION	L.S.	1
461.14	ESC. CLAUSE HOT B.T.	L.S.	1
630.07	TRAFFIC CONTROLLERS	L.S.	1

PROJECT DESIGN ENGINEER	DATE
DESIGN-DETAILED	4-82
CHECKED	
REVISIONS	
FIELD CHANGES	

PLANS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BANGOR
TRAFFIC SIGNALS
ESTIMATED QUANTITIES

SHEET OF AUGUSTA, MAINE

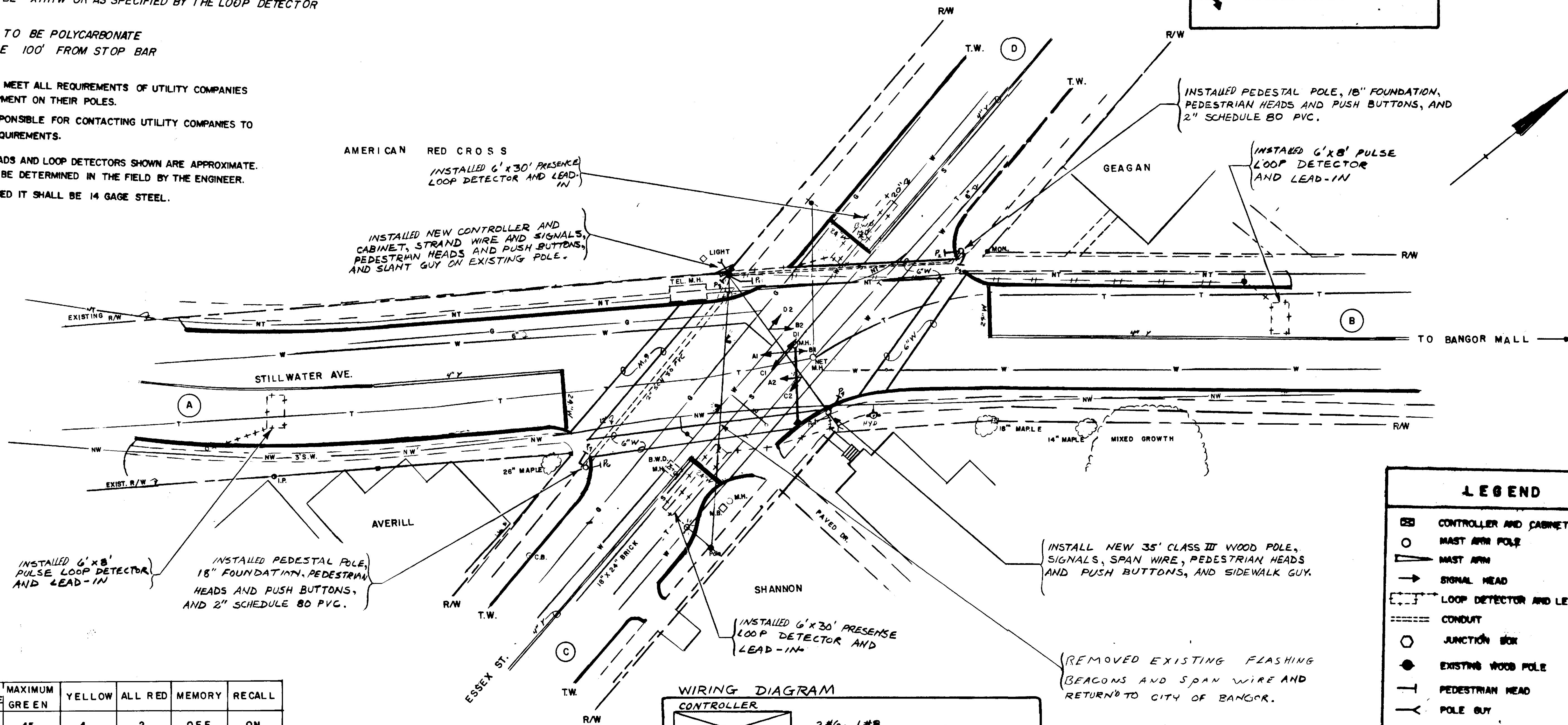
GENERAL NOTES

1. THE CONTROLLER SHALL BE A FULLY ACTUATED, TWO PHASE CONTROLLER WITH A SOLID STATE TIME CLOCK FOR FLASHING OPERATION AND WALK ON PARALLEL GREEN PEDESTRIAN PHASE.
2. PRESENCE LOOPS SHALL BE 6' X 30' QUADRAPOLES
3. PULSE LOOPS SHALL BE 6' X 8'
4. LOOP WIRE SHALL BE XHHW OR AS SPECIFIED BY THE LOOP DETECTOR MANUFACTURER.
5. ALL SIGNAL LENSES TO BE POLYCARBONATE
6. PULSE LOOPS TO BE 100' FROM STOP BAR
7. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF UTILITY COMPANIES WHEN INSTALLING EQUIPMENT ON THEIR POLES.
8. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING UTILITY COMPANIES TO DETERMINE SPECIFIC REQUIREMENTS.
9. LOCATIONS OF SIGNAL HEADS AND LOOP DETECTORS SHOWN ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
10. IF A STEEL CABINET IS USED IT SHALL BE 14 GAGE STEEL.

KEY TO PAVEMENT MARKINGS

- 4"Y 4 INCH DOUBLE YELLOW CENTER LINE
- 4"W 4 INCH WHITE LANE LINE
- 6"W 6 INCH WHITE CROSSWALK LINE
- 12"W 12 INCH WHITE STOP BAR
- THRU ARROW
- THRU AND RIGHT/LEFT ARROW
- LEFT/RIGHT ARROW

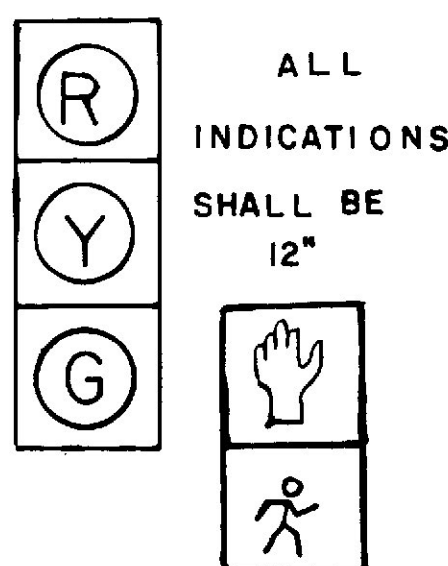
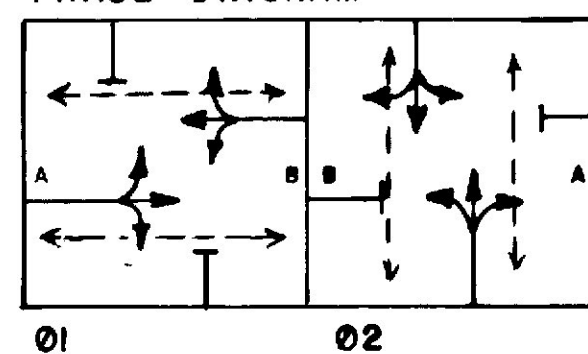
F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	M-1510 (2)	3	16



TIMING DATA

PHASE	INITIAL	PASSAGE	MAXIMUM GREEN	YELLOW	ALL RED	MEMORY	RECALL
1	17	3	45	4	2	OFF	ON
2	3	3	30	4	2	OFF	OFF

PHASE DIAGRAM

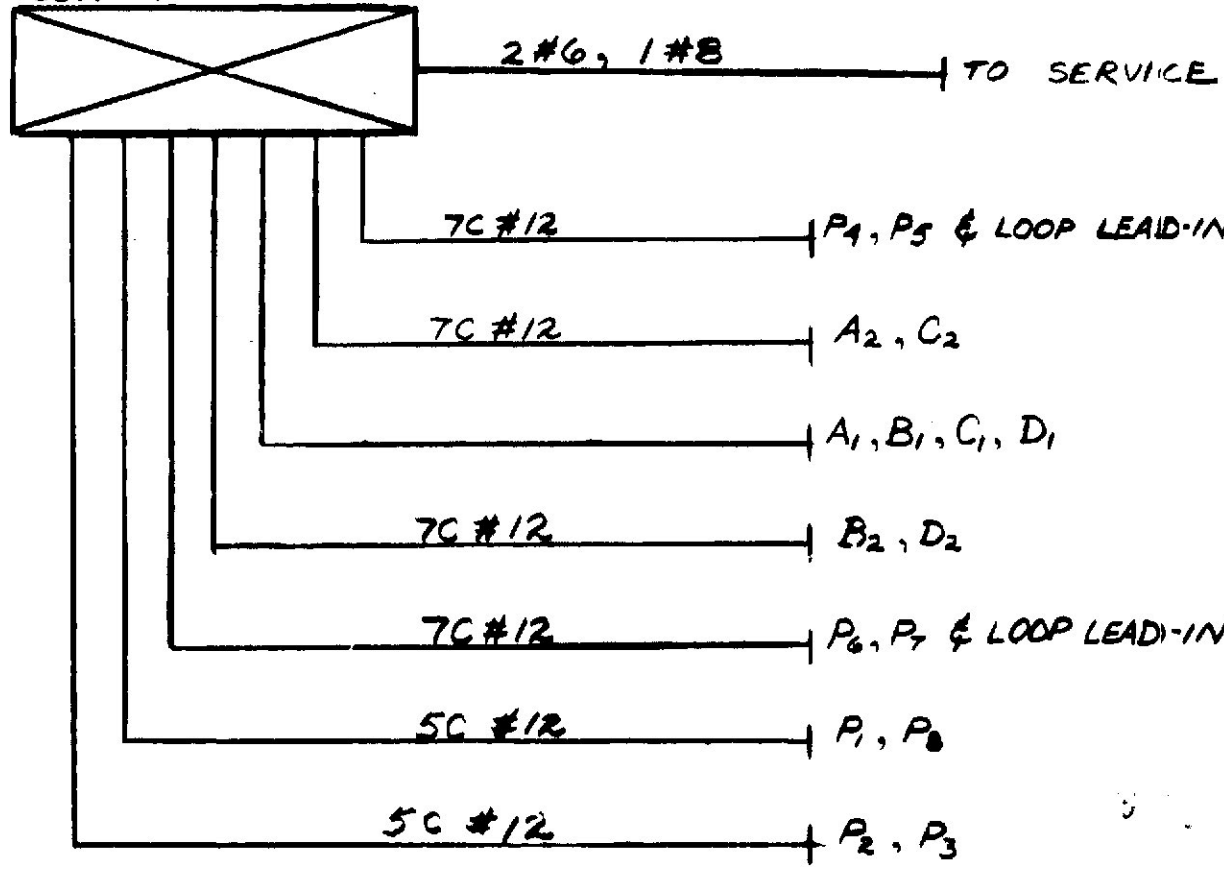


SEQUENCE DIAGRAM

HEAD	PHASE 1 TO 2						PHASE 2 TO 1		FLASH
	G	Y	R	R	R	R	G	Y	
A1, A2	G	Y	R	R	R	R	G	Y	
B1, B2	G	Y	R	R	R	R	G	Y	
C1, C2	R	R	R	G	Y	R	R	R	
D1, D2	R	R	R	G	Y	R	R	R	

FLASH OPERATION 11:00 P.M. TO 6:30 A.M.

WIRING DIAGRAM



LEGEND

- CONTROLLER AND CABINET
- MAST ARM POLE
- MAST ARM
- SIGNAL HEAD
- LOOP DETECTOR AND LEAD-IN
- CONDUIT
- JUNCTION BOX
- EXISTING WOOD POLE
- PEDESTRIAN HEAD
- POLE GUY
- AERIAL INTERCONNECT

SCALE 1"=20'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS:
STILLWATER AVE. & ESSEX ST.
BANGOR

M-1510 (2)

"AS BUILT" 1988 W. HEAL

SHEET OF AUGUSTA, MAINE

PIN 2666.00

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	W.L.M. 2-7-86
CHECKED	
REVISIONS	
FIELD CHANGES	

PLANS

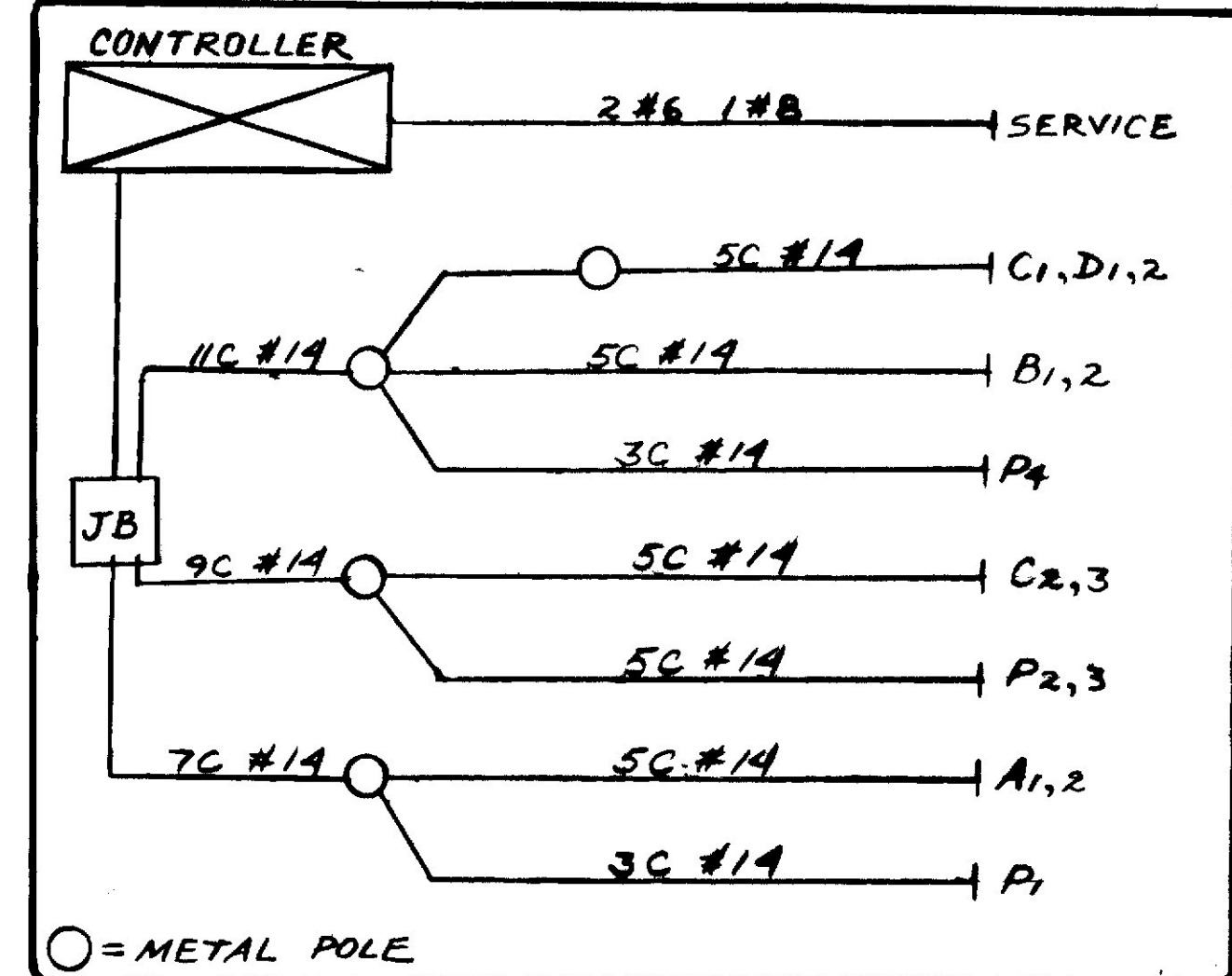
GENERAL NOTES

1. THE EXISTING CONTROLLER IS A CROUSE-HINDS P.C.E. 3000 WITH 3 DIALS AND 3 OFFSETS ON EACH DIAL. THE CAM SHALL BE MODIFIED TO ACCOMMODATE THE PROPOSED SEQUENCE. ALL NEW WIRING SHALL BE USED TO CONNECT TO THE CONTROLLER.
2. THE CONTRACTOR SHALL REMOVE ALL EXISTING PEDESTRIAN AND SIGNAL HEADS, POLES, SPAN WIRE AND ACCESORIES AND SHALL DELIVER THEM TO M.DOT. DIV. 3 OFFICE, HOGAN RD. AS DIRECTED BY THE ENGINEER.
3. LOCATIONS OF POLES AND SIGNAL HEADS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF UTILITY COMPANIES WHEN INSTALLING EQUIPMENT ON THEIR POLES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING UTILITY COMPANIES TO DETERMINE SPECIFIC REQUIREMENTS.
5. ALL EXISTING CONDUIT SHALL BE ABANDONED. NEW CONDUIT SHALL BE LOCATED AND INSTALLED AS DIRECTED BY THE ENGINEER.
6. CATCH BASIN AT STATION 43+04 LT. SHALL BE ADJUSTED AS PER ITEM NO. 604.01 OF STANDARD SPECS.
7. ALL EXCAVATION (INCLUDING CONCRETE SIDEWALK) SHALL BE PAID FOR UNDER ITEM NO. 203.20 - COMMON EXCAVATION.

KEY TO PAVEMENT MARKINGS

- 24" W 24 INCH WHITE STOP BAR
4" W 4 INCH WHITE LANE LINE
4" Y 4 INCH YELLOW CENTER LINE
OR LEFT OR RIGHT TURN ARROW
OR THRU-LEFT OR THRU-RIGHT MARKER
ONLY WHITE "ONLY" MESSAGE

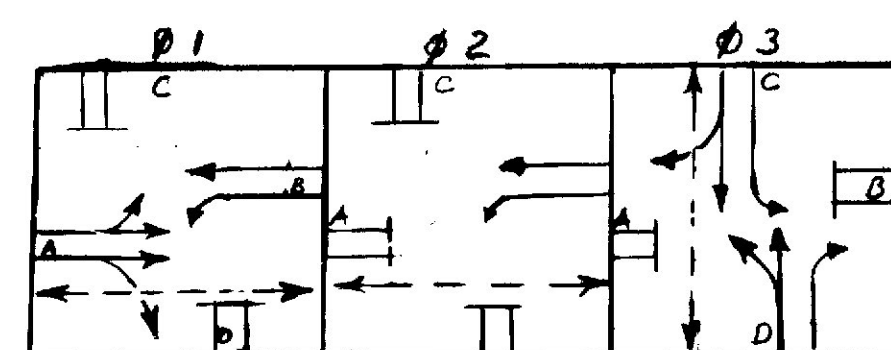
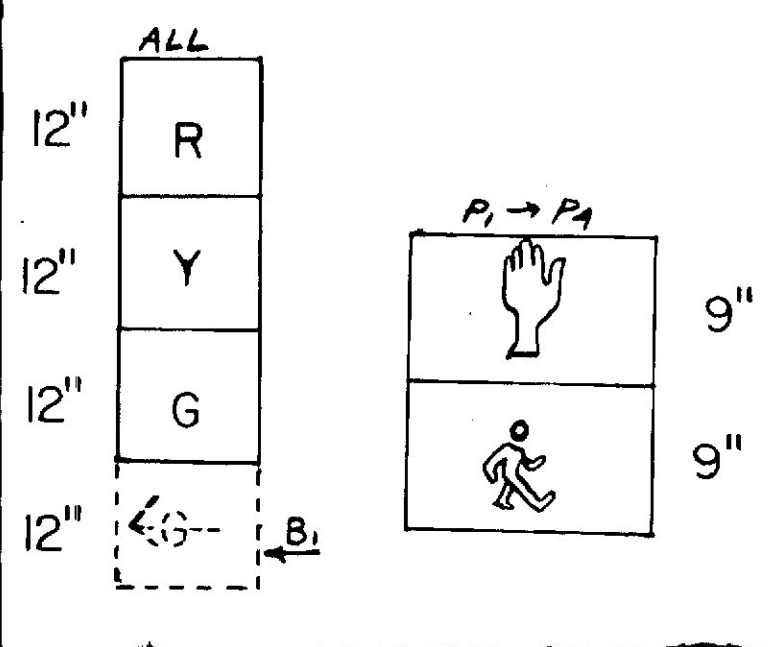
WIRING DIAGRAM



LEGEND

- EXISTING POLE
- CONTROLLER
- UNDERGROUND CONDUIT
- VEHICULAR HEADS
- PEDESTRIAN HEADS
- NEW METAL POLE WITH MAST ARM
- JUNCTION BOX
- STREET LIGHT

INDICATIONS



PHASE DIAGRAM

EXISTING SEQUENCE & TIMING

HEAD	1	2	3	4	5	6	7	8	9	10	11	FLASH
A ₁ , A ₂	G	Y	R	R	R	R	R	R	R	R	G	Y
B ₁	G	G	G	G	Y	R	R	R	R	R	G	Y
B ₂	G	G	G	G	Y	R	R	R	R	R	G	Y
C ₁ , C ₂ , C ₃	R	R	R	R	R	R	G	G	Y	R	R	R
D ₁ , D ₂	R	R	R	R	R	R	G	G	Y	R	R	R
P ₁ , P ₂	FW	FDW	FDW	DW	DW	DW	DW	DW	DW	DW	FW	
P ₃ , P ₄	DW	DW	DW	DW	DW	DW	FW	FDW	DW	DW	DW	
110 SEC	24.2	4.4	2.2	19.8	4.4	2.2	12.1	16.5	4.4	2.2	17.6	
%	22	4	2	18	4	2	11	15	4	2	16	



Scale (ft.)

"AS BUILT" 1988 W. HEATH
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
BROADWAY, CENTER ST., & I-95

BANGOR

M-1532(1)

SHEET OF AUGUSTA, MAINE

PIN 2665.0

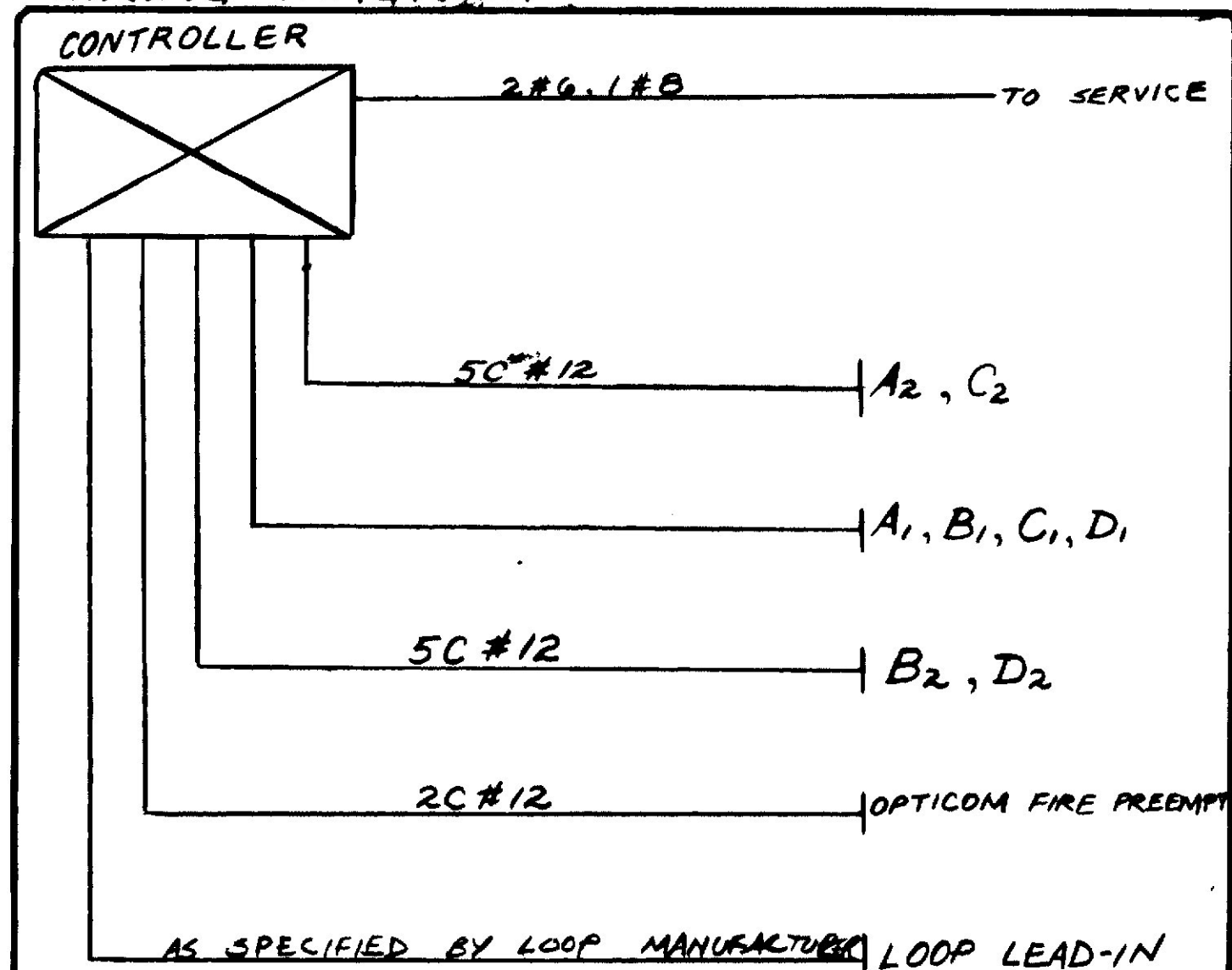
GENERAL NOTES:

1. ALL LOOP WIRE SHALL BE XHHW OR AS SPECIFIED BY THE LOOP DETECTOR MANUFACTURER.
2. ALL SIGNAL LENSES TO BE POLYCARBONATE.
3. FLASH TIME CLOCK TO BE SOLID STATE.
4. THE CONTROLLER SHALL BE A THREE PHASE FULLY ACTUATED CONTROLLER.
5. THE CONTRACTOR SHALL INSTALL AN OPTICOM PHASE SELECTOR AND DETECTOR ACCORDING TO THE MANUFACTURERS RECOMMENDATION. THE PRE-EMPT CIRCUIT SHALL NOT FUNCTION DURING FLASHING OPERATION.
6. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF UTILITY COMPANIES WHEN INSTALLING EQUIPMENT ON THEIR POLES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING UTILITY COMPANIES TO DETERMINE SPECIFIC REQUIREMENTS.
7. IF A STEEL CABINET IS USED, IT SHALL BE 14 GA. STEEL.
8. THE LOCATIONS OF ALL NEW EQUIPMENT SHOWN ARE APPROXIMATE. THE ACTUAL LOCATIONS SHALL BE DETERMINED IN THE FIELD, BY THE ENGINEER.
9. ALL EQUIPMENT REMOVED FROM THIS LOCATION SHALL BE RETURNED TO THE OWNER AS DIRECTED BY THE ENGINEER.
10. ALL PRESENCE LOOPS SHALL BE QUADRAPOLES.

KEY TO PAVEMENT MARKINGS

- 4" Y 4 INCH DOUBLE YELLOW CENTERLINE
4" W 4 INCH WHITE LANE LINE
12" W 12 INCH WHITE STOP BAR
- OR LEFT OR RIGHT ARROW
OR THRU-LEFT OR THRU-RIGHT
- ONLY WHITE "ONLY" MESSAGE

WIRING DIAGRAM



LEGEND

- CONTROLLER
- VEHICULAR HEADS
- EXISTING WOOD POLE
- PROPOSED WOOD POLE
- LOOP DETECTOR & LEAD IN
- AERIAL LEAD IN
- SLANT or SIDEWALK GUY
- STREET LIGHT
- EMERGENCY VEHICLE DETECTOR

PHASE TIMING (SEC.)

	01	02	03
INITIAL	2	2	2
EXTENSION	3	3	3
MAXIMUM	20	40	30
RECALL	OFF	OFF	OFF
YELLOW CLEARANCE	3	3	3
ALL RED	2	2	2
DENSITY 0		4	
FLASHING OPERATION 11:00 P.M. TO 6:30 A.M.			
PREEMPTION 02			

ALL INDICATIONS
SHALL BE 12"

R
Y
G
Y
G

"AS BUILT" 1988 W. HATH
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

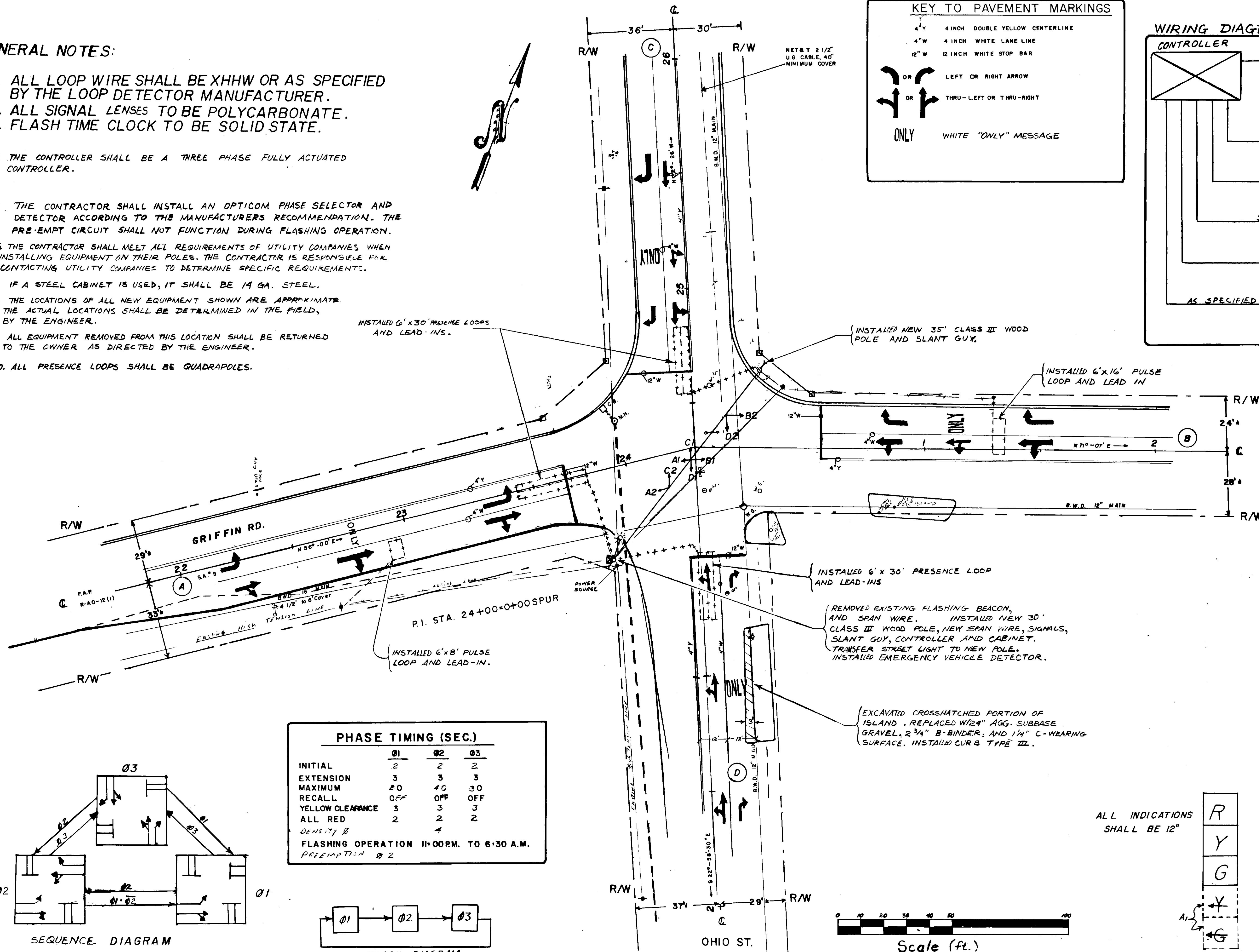
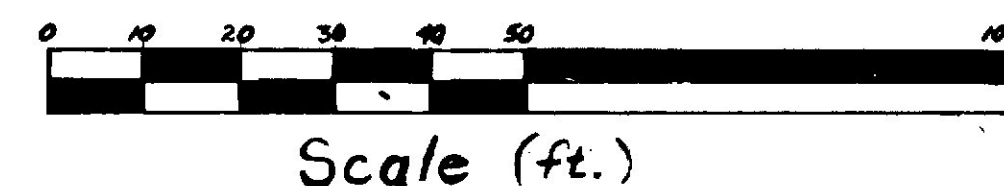
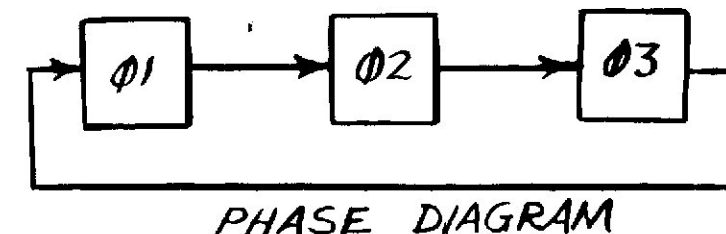
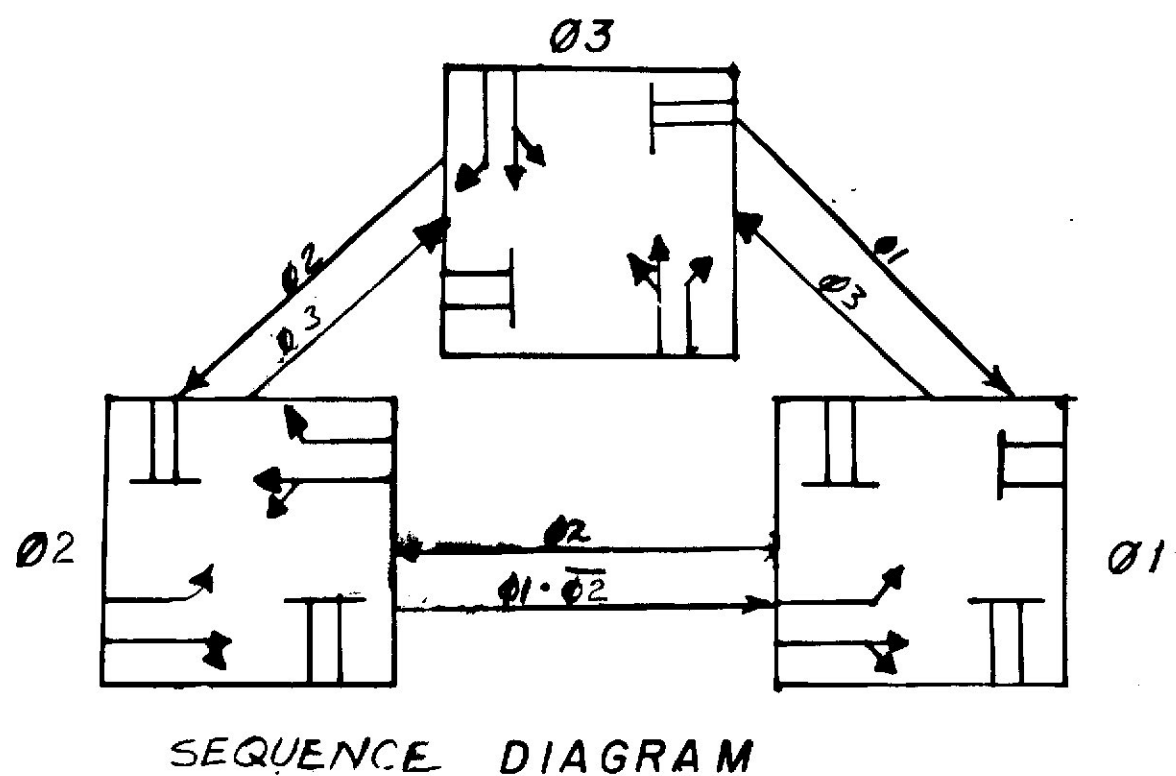
TRAFFIC SIGNALS
OHIO ST. & GRIFFIN RD.
BANGOR

M-1540(2)






SHEET OF AUGUSTA, MAINE

PIN. 2664.00

PROJECT DESIGN ENGINEER	DATE
DESIGN-DETAILED	2-86
CHECKED	W.H.H. W.L.L.
REVISIONS	3-87
FIELD CHANGES	



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-038-1(30)	6	16

- | KEY TO PAVEMENT MARKINGS | |
|--|----------------------------------|
| 4" W | 4 INCH WHITE LANE LINE |
| 4" Y | 4 INCH YELLOW DOUBLE CENTER LINE |
| 12" W | 12 INCH WHITE STOP BAR |
|  OR  | LEFT OR RIGHT ARROW |
|  OR  | THRU-LEFT OR THRU-RIGHT ARROW |
|  | THRU ARROW |
| ONLY | WHITE "ONLY" MESSAGE |
| 6" W | 6 INCH X-WALK LINE |

C.

CONTROLLER

9C #12 INTERCONNECT

2#6 / #8 SERVICE

5C #14 P₁, P₂

5C #14 P₃, P₄

7C #14 A₁, A₂ AC #14 A₃

15C #14 D₁, D₂

PULL WIRE STREET LIGHT

5C #14 P₁, P₂

5C #14 P₃, P₄

21C #14 C₁, C₂, C₃

7C #14 B₁, B₂ AC #14 B₃

PULL WIRE STREET LIGHT

O = METAL POLE
AS PER MANUFACTURERS RECOMMENDATION LOOPS

- ◆ EXISTING WOOD POLE
- ⊙ EXISTING METAL POLE
- PROPOSED METAL POLE
- ++++ 2" SCH. 80 CONDUIT
- #### 3" SCH. 80 CONDUIT
- ← VEHICULAR HEAD
- ┐ PEDESTRIAN HEAD
- ▽ MAST ARM
- ☒ CONTROLLER AND CABINET
- ⬡ PRECAST CONCRETE JUNCTION BOX
- ☼ STREET LIGHT
- [---+---] LOOP DETECTOR AND LEAD-IN
- ⋈ OPTICOM DETECTOR

INDICATIONS

A1, 2 - B1, 2
C2, 3 - D1, 2

12"

C1
AS & BS

12"

12"

B1 → B2

9"

F1 → F2

11. THE CONTRACTOR SHALL INSTALL ALL CONDUIT SHOWN AS DIRECTED BY THE RESIDENT ENGINEER.

12. ALL PRESENCE LOOPS SHALL BE QUADRAPOLES.

	01	02	03	04	05
INITIAL	4	6	4	8	4
PASSAGE	2	2	2	4	2
YELLOW	4	4	4	4	4
RED CL.	2	2	2	2	2
MAX	20	20	20	30	20
RECALL	OFF	OFF	OFF	ON	OFF

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

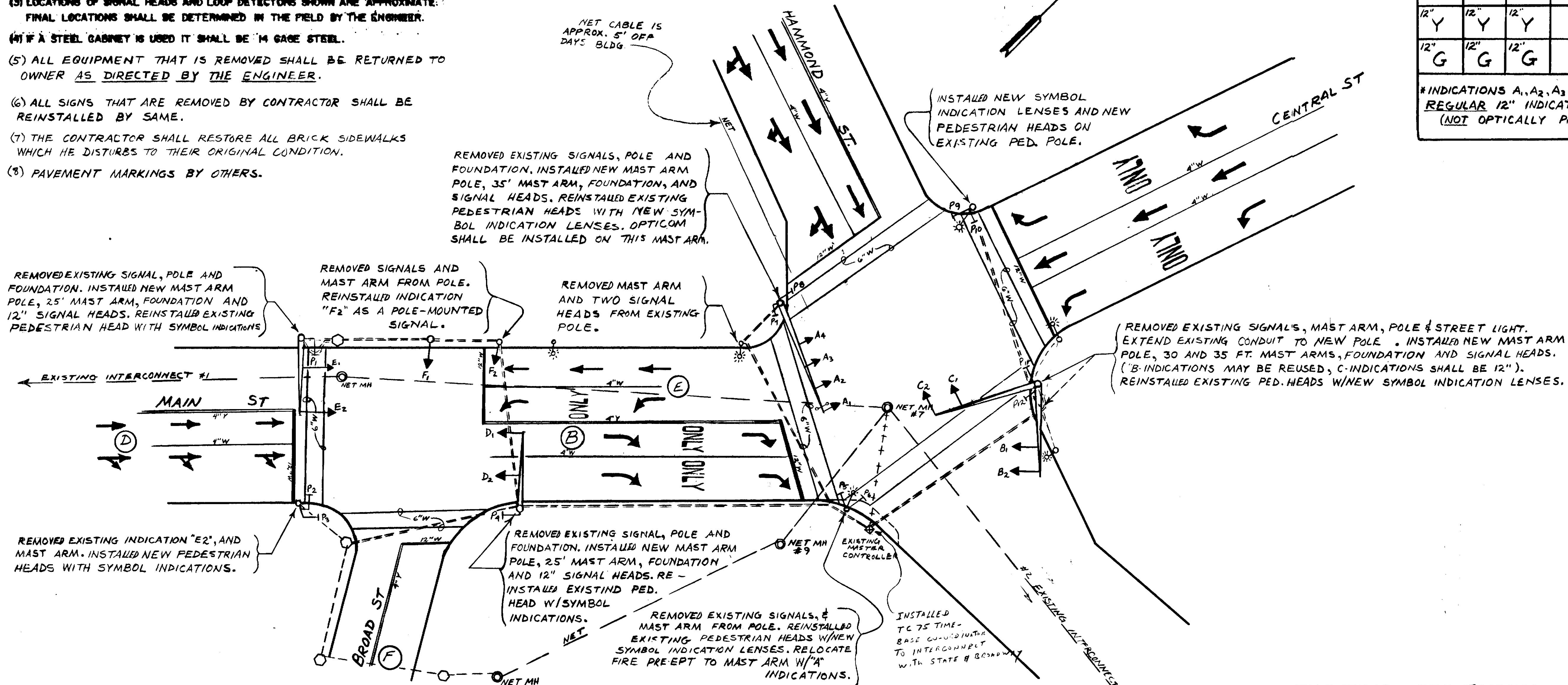
BROADWAY, STATE ST. & OAK ST.

F-038-1(30)

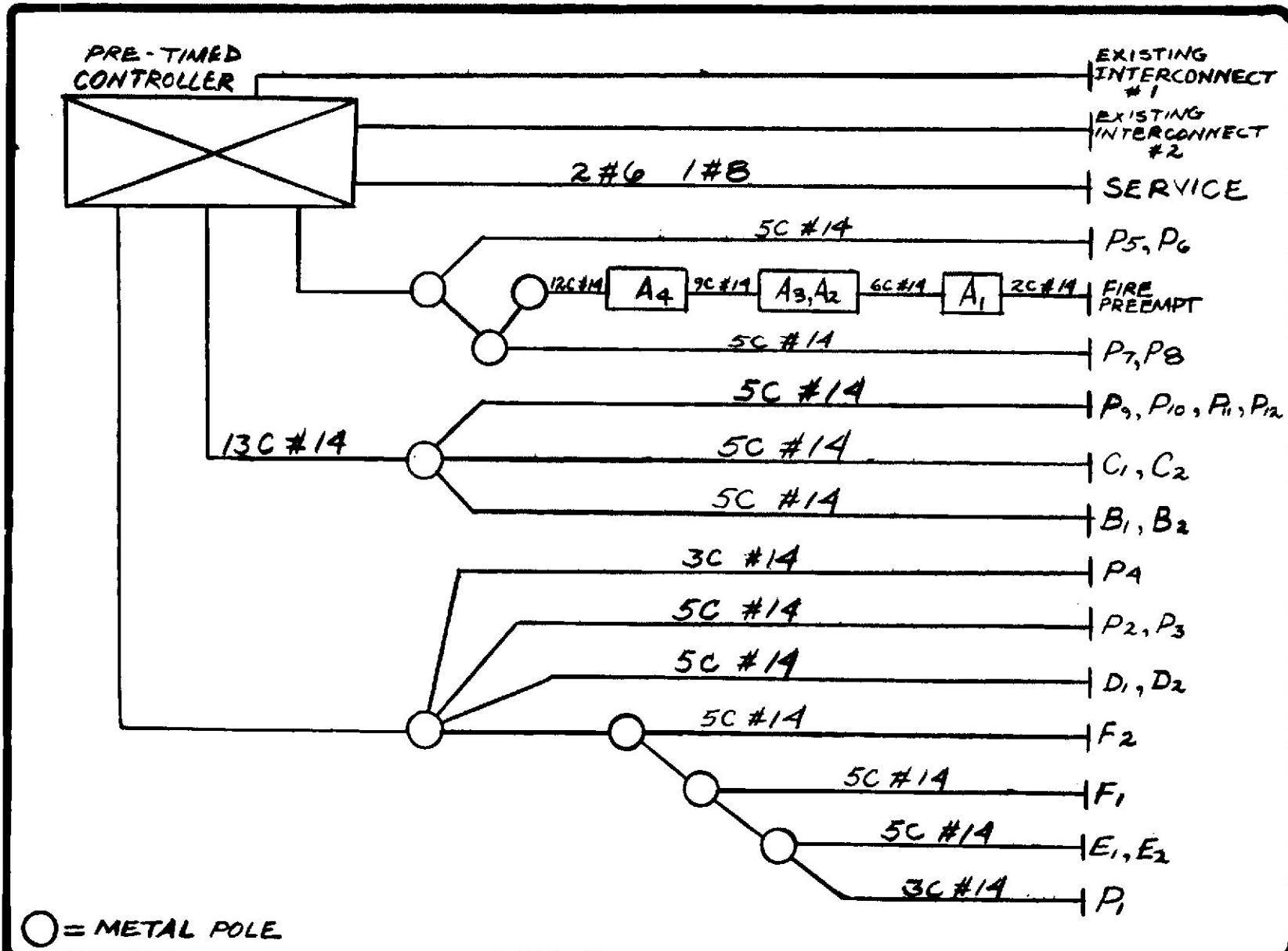
SHEET OF AUGUSTA, MAINE

GENERAL NOTES

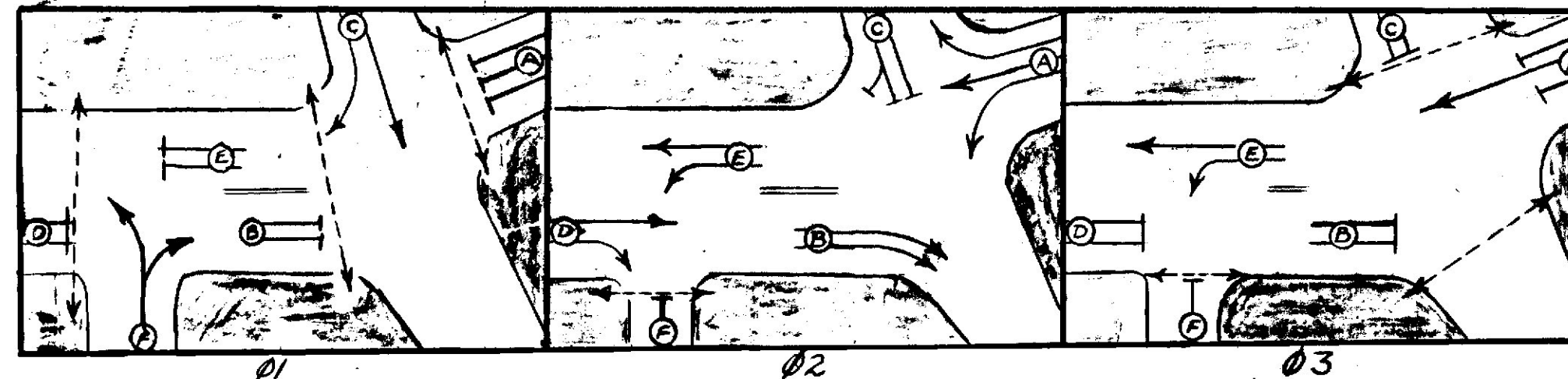
- (1) THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF UTILITY COMPANIES WHEN INSTALLING EQUIPMENT ON THEIR POLES.
- (2) THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING UTILITY COMPANIES TO DETERMINE SPECIFIC REQUIREMENTS.
- (3) LOCATIONS OF SIGNAL HEADS AND LOOP DETECTORS SHOWN ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- (4) IF A STEEL CABINET IS USED IT SHALL BE 14 GAGE STEEL.
- (5) ALL EQUIPMENT THAT IS REMOVED SHALL BE RETURNED TO OWNER AS DIRECTED BY THE ENGINEER.
- (6) ALL SIGNS THAT ARE REMOVED BY CONTRACTOR SHALL BE REINSTALLED BY SAME.
- (7) THE CONTRACTOR SHALL RESTORE ALL BRICK SIDEWALKS WHICH HE DISTURBS TO THEIR ORIGINAL CONDITION.
- (8) PAVEMENT MARKINGS BY OTHERS.



WIRING DIAGRAM



PHASE DIAGRAM (EXISTING)



"CHANGES IN" EXISTING INDICATIONS					
C _{1,2}	D _{1,2}	E _{1,2}			
12" R	12" R	12" R			
12" Y	12" Y	12" Y			
12" G	12" G	12" G			

*INDICATIONS A₁, A₂, A₃, A₄ SHALL BE REGULAR 12" INDICATIONS. (ARROW) (NOT OPTICALLY PROGRAMMED.)

KEY TO PAVEMENT MARKINGS	
4Y	4 INCH DOUBLE YELLOW CENTER LINE
4W	4 INCH WHITE LANE LINE
6W	6 INCH WHITE CROSSWALK LINE
12W	12 INCH WHITE STOP BAR
→	THRU ARROW
↘	THRU AND RIGHT/LEFT ARROW
↙	LEFT/RIGHT ARROW
ONLY	WHITE "ONLY" MESSAGE

EXISTING INDICATIONS									
A ₁	A ₂	A ₃	A ₄	B _{1,2}	C _{1,2}	D _{1,2}	E _{1,2}	F _{1,2}	
12" R	12" R	12" R	12" R	12" R	12" R	12" R	12" R	12" R	
12" Y	12" Y	12" Y	12" Y	8" Y	8" Y	12" Y	12" Y	12" Y	
12" G	12" G	12" G	12" G	8" G	8" G	12" G	12" G	12" G	

*INDICATIONS A₁, A₂, A₃, A₄ ARE CURRENTLY OPTICALLY PROGRAMMED HEADS.

LEGEND	
⊠	CONTROLLER AND CABINET
○	MAST ARM POLE
—	MAST ARM
→	SIGNAL HEAD
⊠	LOOP DETECTOR AND LEAD-IN
—	CONDUIT
○	JUNCTION BOX
●	EXISTING WOOD POLE
—	PEDESTRIAN HEAD
—	POLE BUY
⊙	STREET LIGHT (EXISTING)
—	EMERGENCY VEHICLE DETECTOR

EXISTING SEQUENCING

HEAD	1	2	3	4	5	6	7	8	9	FLASH
A ₁	R	R	R	G	Y	R	R	R	R	Y
A ₂ A ₃	R	R	R	G	G	G	G	Y	R	Y
A ₄	R	R	R	G	Y	R	R	R	R	Y
B _{1,2}	R	R	R	G	Y	R	R	R	R	Y
C _{1,2}	G	G	Y	R	R	R	R	R	G	R
D _{1,2}	R	R	R	G	Y	R	R	R	R	Y
E _{1,2}	R	R	R	G	G	G	G	Y	R	Y
F _{1,2}	G	G	Y	R	R	R	R	R	G	R
P ₃ P ₄	DW	DW	DW	FW	FW	FW	FDW	DW	DW	
P _{1,2,5,7,10,11}	FW	FDW	DW	DW	DW	DW	DW	DW	FW	
P ₆ P ₈ P ₉ P ₁₂	DW	DW	DW	DW	DW	FW	FDW	DW	DW	
TIMING	5	12	3	32	4	5	15	4		
EO SEC DIAL										

"AS BUILT" 1988 W. HENK

Scale (ft.)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
MAIN, CENTRAL and HAMMOND ST.
BANGOR

F-038-1(31)

SHEET OF AUGUSTA, MAINE

PIN 2644.00

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	
PLANS	

BRUNING 44-132-45710-1