PHASE AND SEQUENCE DIAGRAM

	TRAFFIC SIGNAL HEADS 1	2,6	3,4,5	7,8
PHASE A	←G G	G	R	R
PHASE A CLEARANCE	←A G	G	R	R
PHASE B	G	G	G	R
PHASE B CLEARANCE	A	A	A	R
PHASE C	R	R	R	G
PHASE C CLEARANCE	R	R	R	A
FLASH (F/)	F/A	F/A	F/A	F/R

*F/ — FLASH
→ — FREE MOVEMEMT
- - -▸ — YIELD PRIOR TO MOVEMENT

GENERAL NOTES

1 ~~Pole #1-8 are to be installed in place of the existing luminaire supports numbered 831 & 826~~

2 The contractor is not responsible for providing highway markings.

3 The timing of the signal system shall be furnished by the Traffic Engineer (ref 1003 general specifications)

4 The contractor shall conduct all backfill and cleanup operations as noted in the specifications (ref 22-07 & 22-08) or as directed by the Traffic Engineer

5 The contractor shall comply with all provisions contained within the General Specifications for Installation and Equipment of Traffic Signals for Howard County Department of Public Works, October 1974 and rev. Feb. 1976 (2)

6 ~~The existing luminaires shall be removed by the Baltimore Gas & Electric Co. Arrangement for removal shall be the responsibility of Howard County. The existing poles shall be removed by the contractor and delivered to a location specified by the Traffic Engineer.~~

7 The Contractor shall, after furnishing and installing the two (2) 250 watt Hg luminaires, notify the Baltimore Gas & Electric Co, Mr Walter W Kimmel 265-7500, to have the luminaires energized (1)

8 The two (2) luminaires shall not be supplied by the metered power source for the traffic signal system.

EXISTING EQUIPMENT LIST

SEE PAGE 2-10.0 OF SPECIFICATIONS FOR MAKE/MODEL

A CONTROLLER

1 Fully actuated two (2) phase solid state controller expandable to three (3) phase fully actuated with all red pedestrian phase push button actuated
2 All red clearance interval for phase A & phase B
3 Memory and recall for each phase
4 Conflict monitor with solid state signal/loading switches
5 Standard police panel (ref 2935 general specifications) without manual override feature
6 Two (2) loop detector amplifiers
7 Minimum acceptable adjustment range
a) Major & minor street initial period and unit extension 2-30
b) Major & minor street extension 10-60
c) Vehicle clearance interval & all red clearance interval up to 10

8 Base mounted control cabinet large enough to accommodate the ultimate three (3) phases The cabinet shall be finished bronze

B. DETECTORS - VEHICLE LOOP

Location in accordance

Phase	Detector N° (see plan)	Dimensions
A	2 & 3	6' x 18'
B	1	6' x 12'

C. SIGNAL HEADS STANDARD CAP VISORS

N° (see plan)		Size of indication
Traffic signals	1,2,3,4,5,6	12" red, 8" amber 8" green
	7,8	12" red, 8" amber, 8" green

D. POLES

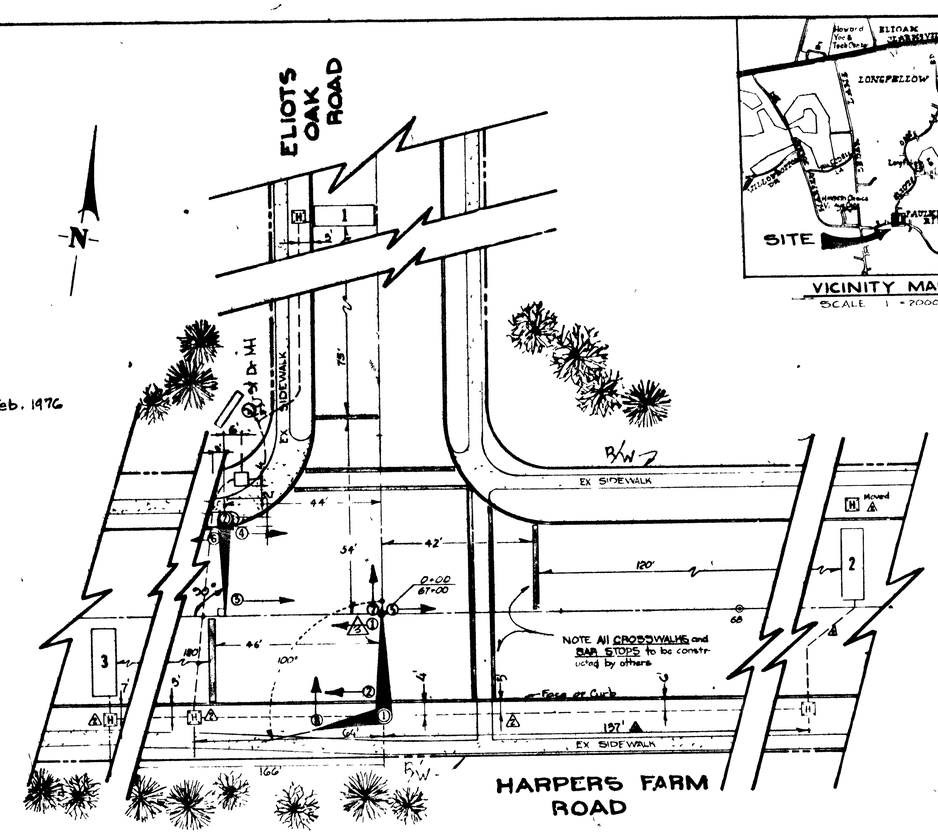
N° (see plan)	Description
1	Combination monolever with two (2) arms 28ft & 18ft with 100° angle of separation & luminaire support 28ft arm supports 1-12" signal heads 18ft arm supports 1-12" signal head
2	Combination monolever with one (1) arm 28ft & luminaire support 28ft arm supports 3-12" signal heads

Pole Finish - Zinc chromate prime coat with exterior bronze finish to be applied in the field

Note - The luminaire for poles 1 & 2 shall be 250 watt mercury vapor The contractor shall furnish and install the two (2) lumenaires & all related hardware The luminaires & hardware provided shall be consistent with standard BG&E specifications and the following
a) It shall be for use with 250 watt Hg Vapor lamp
b) It shall have long semi cut off with Type 3 distribution with clear lamp
c) It shall be equipped with 120-240 V regulated out put ballast connected for 120 v operation with locking type receptacle for photo electric controls
d) It shall have a 2" slip fitter mounting and bronze exterior finish

SYMBOLS

- Signal Head
- Vehicle Loop Detector
- Hand Box (Junction Box)
- Meter Box
- Control Cabinet
- Proposed Steel Pole



PLAN
SCALE 1" = 20'

(2) LEFT TURN PHASE EQUIPMENT

E SIGNAL HEADS STANDARD CAP VISORS

Remove existing signal head #1 and replace with 5 head combination

No (see plan)		Size of indication
Traffic Signal	1	12" Red, 12" amber, 12" amber arrow 12" Green Arrow, 12" Green

F. CONTROLLER - MODIFICATIONS

Phase module(s) FOR ECONOLITE DI3200 S/N 0613
Solid state load switch(s) COMPATIBLE WITH ECONOLITE DI3200 S/N 0613

George F Neuman 4-6-81
DIRECTOR, DEPT PUBLIC WORKS

Robert E Ray 4/3/81
CHIEF, BUREAU OF ENGINEERING

Elizabeth Anderson Colao 4/1/81
CHIEF, DIV RDS, BRS & STM DRNG

James E Kunkler 4/3/81
CHIEF, DIV OF TRAFFIC ENG.

REV NO	DESCRIPTION	DATE
(2)	Left Turn Phases	3/24/81
(1)	As Built	3 2 76
	Added General Note # 7 & 8	2 [illegible]

TRAFFIC SIGNAL CONSTRUCTION PLAN AND EQUIPMENT LIST HOWARD COUNTY MARYLAND

CAPITAL PROJECT T-1-7012

PROJECT AREA

HARPER'S FARM ROAD AT ELIOTS OAK ROAD

SCALE AS SHOWN
DATE 3/24/81
SHEET 1 of 1

DES DC & EAC
DRWN EAC
CHK JK
APPR EAC & JK

HARPELT 1,