

APPROVED

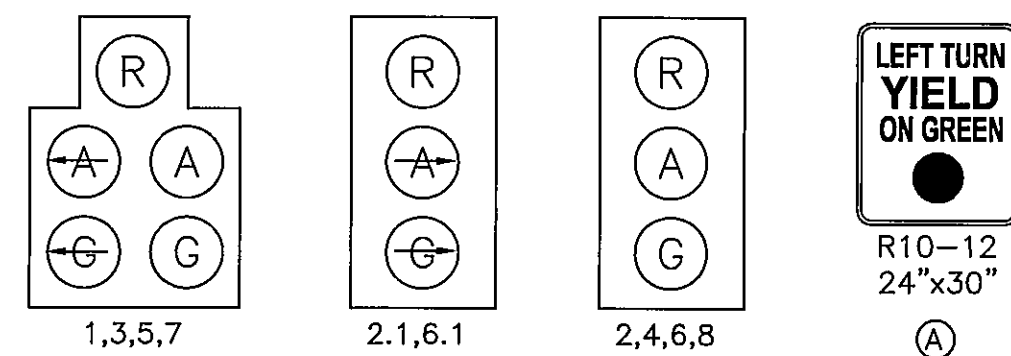
POLE SCHEDULE

- △ SIGNAL POLE PF-1, 42' SINGLE ARM
PERPENDICULAR TO GANDER MOUNTAIN ROAD
N 3656896.45
E 11059585.34
- △ SIGNAL POLE PF-1, 58' SINGLE ARM
PERPENDICULAR TO PLANTATION ROAD
N 3656944.69
E 11059695.38
- △ SIGNAL POLE PF-1, 42' SINGLE ARM
PARALLEL TO PLANTATION ROAD
N 3656852.11
E 11059752.21
- △ SIGNAL POLE PF-1, 46' SINGLE ARM
PERPENDICULAR TO PLANTATION ROAD
N 3656787.47
E 11059622.54

COLOR SEQUENCE CHART

PHASE SIGNAL	01+05 R/W	02+06 R/W	03+07 R/W	04+08 R/W	FLASH
1	→G←	G	R	R	R
2	R	G	R	R	A
2.1	R	→G←	R	R	A
3	R	R	→G←	G	R
4	R	R	R	G	R
5	→G←	G	R	R	R
6	R	G	R	R	A
6.1	R	→G←	R	R	A
7	R	R	→G←	G	R
8	R	R	R	G	R

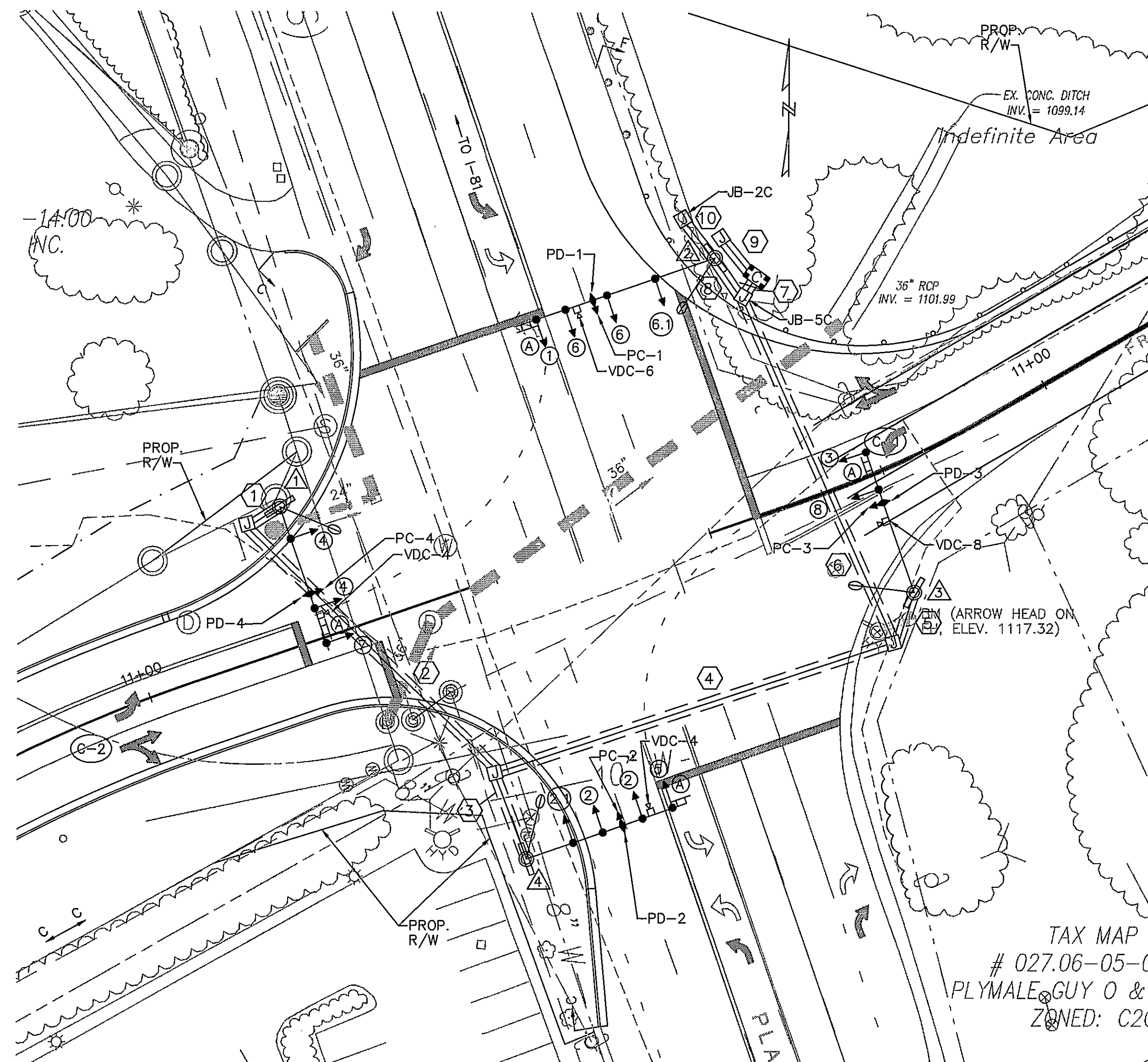
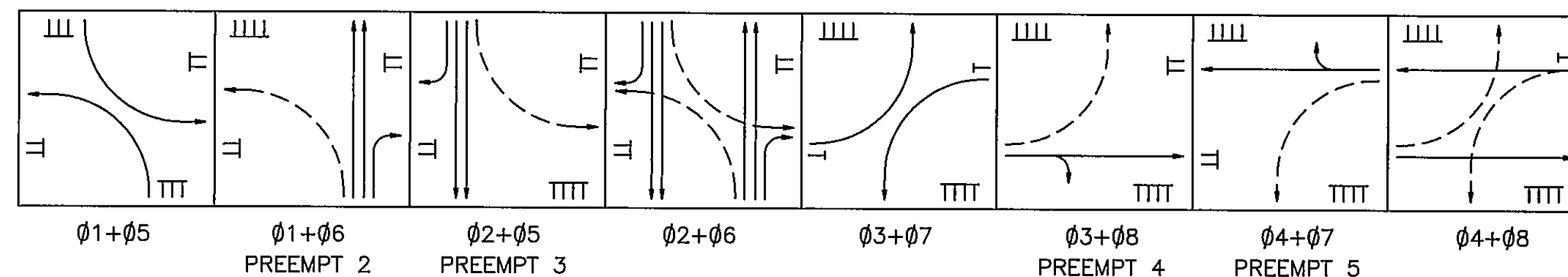
PROPOSED SIGNAL HEAD AND SIGN DISPLAY



NOTES

- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, 2001, THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, 2002 INCLUDING APPLICABLE SPECIAL PROVISIONS AND COPIED NOTES, AND THE VIRGINIA WORK AREA PROTECTION MANUAL, MAY 2005.
- SYSTEM BOND WIRE SHALL BE PLACED IN ALL NON-GALVANIZED CONDUITS CONTAINING GREATER THAN 48 VOLTS.
- CONDUIT PLACED UNDER EXISTING PAVEMENT (PLANTATION ROAD AND FRIENDSHIP LANE) SHALL BE DIRECTIONALLY BORED.
- ALL SIGNAL HEADS SHALL CONFORM TO VDOT APPROVED LED SIGNALS AND SHALL INCLUDE TUNNEL VISORS. SIGNAL HEAD PLACEMENT ON MAST ARMS SHALL BE CONFIRMED BY TRAFFIC ENGINEERING PRIOR TO INSTALLATION.
- SURVEY PERFORMED BY LUMSDEN ASSOCIATES, P.C AND PROVIDED TO HSMM ON JANUARY 29, 2007. ADDITIONAL SURVEY INFORMATION CAN BE FOUND IN THE GANDER MOUNTAIN SITE DEVELOPMENT PLANS.
- LANE CLOSURE OPERATIONS FOR SIGNAL POLE AND MAST ARM INSTALLATION SHALL BE ALLOWABLE BETWEEN THE HOURS OF 9:00AM - 11:00AM AND 1:00PM - 3:30PM MONDAY THROUGH FRIDAY.
- THE CONTRACTOR SHALL PROVIDE A CLARY UPS (UNINTERRUPTABLE POWER SUPPLY) MODEL SP 1250 SN FOR THE TRAFFIC SIGNAL. THE UPS SHALL BE SIDE MOUNTED TO THE CONTROLLER CABINET.
- 200 AMP SERVICE SHALL BE PROVIDED TO THE CONTROLLER CABINET WITH 4 INDIVIDUAL CIRCUIT BREAKERS, ONE FOR THE SIGNAL AND THREE FOR THE OVERHEAD LUMINAIRES.
- TRAFFIC SIGNAL CABINET AND CONTROL EQUIPMENT SHALL BE TS-2 MANUFACTURED BY NAZTEC, SERIES 900. THE CONTROLLER CABINET AND ALL CONTROL EQUIPMENT SHALL BE SUPPLIED BY VDOT. "INSTALL CABINET" SHALL BE USED AS THE BID ITEM.
- THE SPARE 19/6C VIDEO DETECTION CABLE COMING FROM POLES 2 AND 4 WILL BE COILED UP AT EACH MAINLINE CAMERA FOR FUTURE CONSIDERATION.

PHASING DIAGRAM



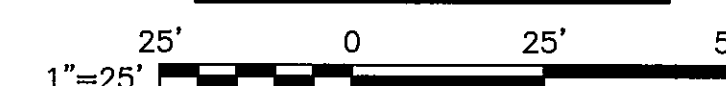
CONDUIT AND CABLE SCHEDULE

- 3" CONDUIT W/2-14/4C, 1-14/7C, 1-EMERGENCY PREEMPTION DETECTOR CABLE, 1-14/2C, 1-12/2C
2" CONDUIT W/1-19/6C VIDEO DETECTION CABLE
- 3" CONDUIT W/2-14/4C, 1-14/7C, 1-EMERGENCY PREEMPTION DETECTOR CABLE, 1-14/2C, 1-12/2C
3" CONDUIT W/1-19/6C VIDEO DETECTION CABLE
2" SPARE CONDUIT
- 3" CONDUIT W/3-14/4C, 1-14/7C. 1-EMERGENCY PREEMPTION DETECTOR CABLE
2" CONDUIT W/2-19/6C VIDEO DETECTION CABLES (ONE IS A SPARE FOR FUTURE CONSIDERATION)
- 3" CONDUIT W/5-14/4C, 2-14/7C, 2-EMERGENCY PREEMPTION DETECTOR CABLES, 1-14/2C, 1-12/2C
3" CONDUIT W/3-19/6C VIDEO DETECTION CABLES
2" SPARE CONDUIT
- 3" CONDUIT W/1-14/4C, 1-14/7C, 1-EMERGENCY PREEMPTION DETECTOR CABLE, 1-14/2C, 1-12/2C
2" CONDUIT W/1-19/6C VIDEO DETECTION CABLE
- 3" CONDUIT W/6-14/4C, 3-14/7C, 3-EMERGENCY PREEMPTION DETECTOR CABLE, 2-14/2C, 2-12/2C
3" CONDUIT W/4-19/6C VIDEO DETECTION CABLES
2" SPARE CONDUIT
- 3" CONDUIT W/9-14/4C, 4-14/7C
3" CONDUIT W/4 EMERGENCY PREEMPTION DETECTOR CABLES, 3-14/2C, 3-12/2C
3" CONDUIT W/4-19/6C VIDEO DETECTION CABLES
- 3" CONDUIT W/3-14/4C, 1-14/7C, 1-EMERGENCY PREEMPTION DETECTOR CABLE, 1-14/2C, 1-12/2C
2" CONDUIT W/2-19/6C VIDEO DETECTION CABLE (ONE IS A SPARE FOR FUTURE CONSIDERATION)
- 2" PVC CONDUIT W/#8 SYSTEM BOND WIRE FOR FUTURE INTERCONNECT USE
- STUBOUT FOR POWER CONNECTION

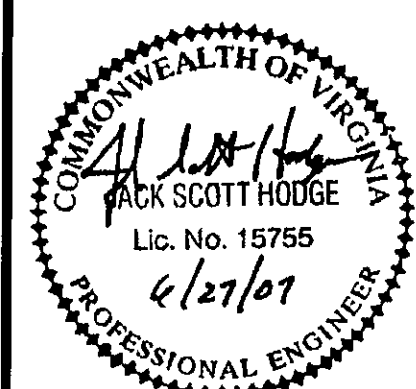
LEGEND

- ① PROPOSED SIGNAL HEAD WITH PHASE MOVEMENT
- PROPOSED SIGNAL POLE
- △ POLE DESIGNATION, SEE POLE SCHEDULE FOR DETAILS
- JUNCTION BOX JB-3C, UNLESS OTHERWISE NOTED
- ① CONDUIT AND CABLE DESIGNATION, SEE SCHEDULE FOR SIZES AND TYPES
- ≡≡≡ CONDUIT AND CABLE
- ☐ CONTROLLER CABINET
- ↔ EMERGENCY PREEMPTION DETECTOR (PD-X) AND CONFIRMATION LIGHT (PC-X)
- ☐ VIDEO IMAGING DETECTION SYSTEM CAMERA (VDC) (ECONOLITE AUTOSCOPE SOLO PRO)
- ⊙ ARM MOUNTED SIGN AND SIGN DESIGNATION
- 18' LUMINAIRE ARM, 250W HPS

GRAPHIC SCALE



SEALS



CONSULTANT

OPPIDAN RETAIL CENTER

OPPIDAN INVESTMENT COMPANY

ROANOKE COUNTY, VIRGINIA

HSMM

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CIVIL

SIGNAL PLAN

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