

DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE

**400 STANTON-CHRISTIANA ROAD
NEWARK, DELAWARE 19713**

DELAWARE TECHNICAL COMMUNITY COLLEGE
400 STANTON-CHRISTIANA ROAD
NEWARK, DELAWARE 19713

ABHA ARCHITECTS
1621 N. LINCOLN STREET
WILMINGTON, DELAWARE 19806

LANDMARK SCIENCE & ENGINEERING
100 WEST COMMONS BOULEVARD
NEW CASTLE, DELAWARE 19720

MERJE
120 NORTH CHURCH STREET, SUITE 208
WEST CHESTER, PENNSYLVANIA 19380

PARAGON ENGINEERING CORPORATION
708 PHILADELPHIA PIKE
WILMINGTON, DELAWARE 19809

OWNER

ARCHITECT
302-658-6426
FAX 302-658-8431

CIVIL ENGINEER
302-323-9377
FAX 302-323-9461

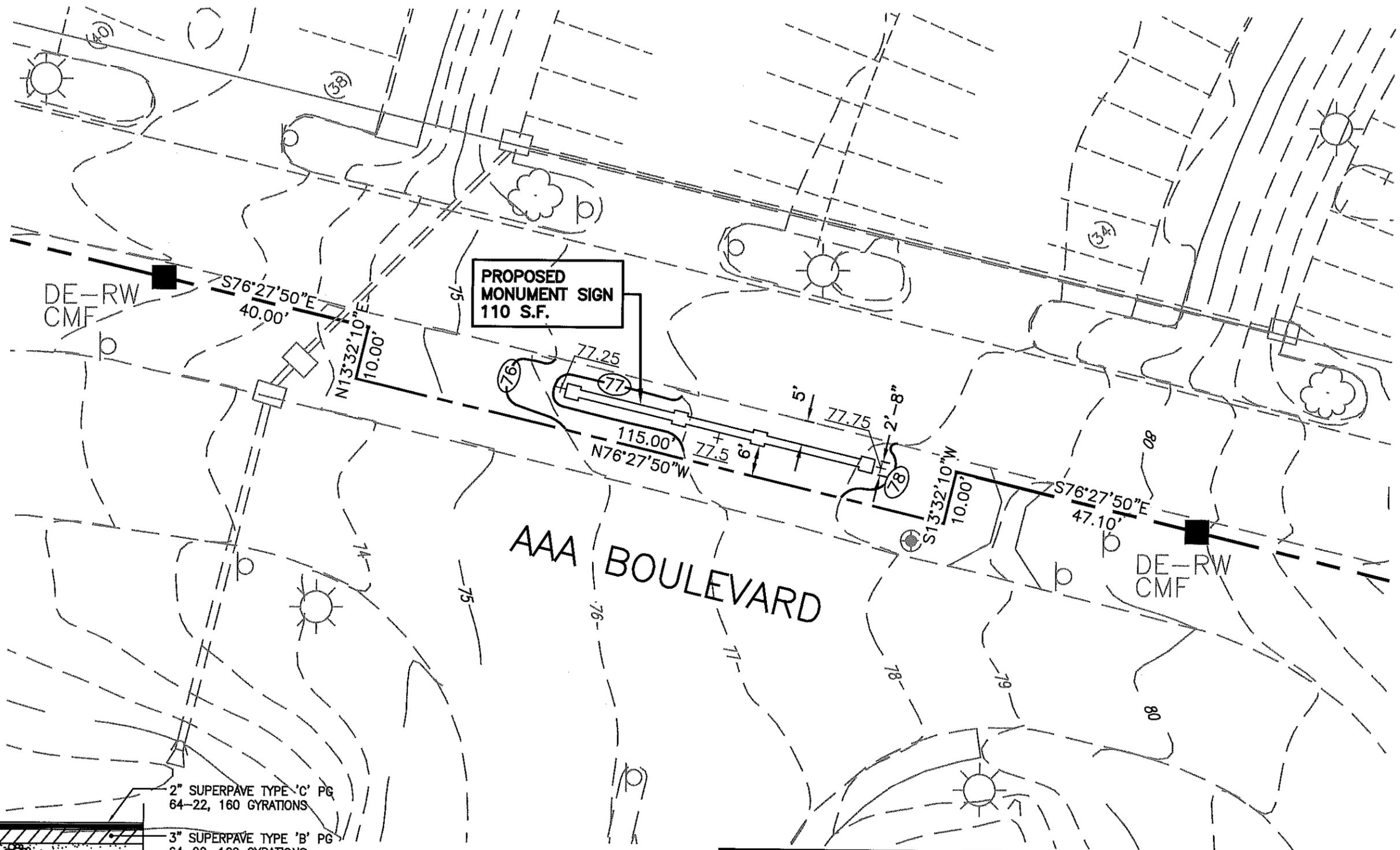
GRAPHIC DESIGNER
484-266-0648

ELECTRICAL ENGINEER
302-762-6010
FAX 302-762-0653

DRAWING LIST

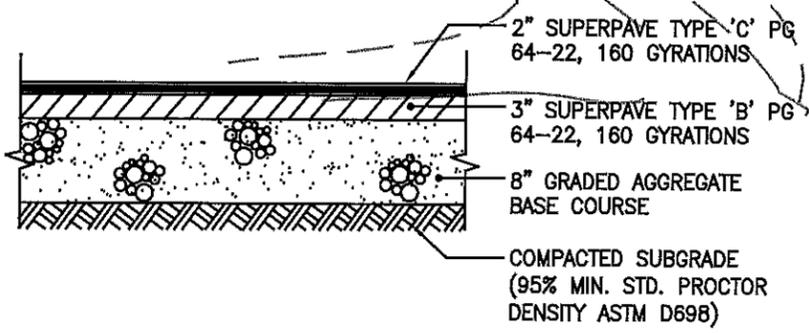
SHEET NUMBER	SHEET NAME	ISSUED FOR BID
G-001	COVER SHEET	X
C-110	SITE GRADING PLAN	X
A-001	SYMBOLS, ABBREVIATIONS, PLAN NOTES	X
A-101	PARTIAL ARCHITECTURAL SITE PLAN	X
A-200	ELEVATION	X
A-300	WALL SECTIONS	X
A-400	ENLARGED PLANS	X
A-500	DETAILS	X
E-100	ELECTRICAL SITE LIGHTING PLAN	X
SG-001	PERFORMANCE SPECIFICATIONS	X
SG-002	PERFORMANCE SPECIFICATIONS	X
SG-003	PERFORMANCE SPECIFICATIONS	X
SG-004	PERFORMANCE SPECIFICATIONS	X
SG-005	PERFORMANCE SPECIFICATIONS	X
SG-006	PERFORMANCE SPECIFICATIONS	X
SG-007	LIGHTING SPECIFICATIONS	X
SG-008	LIGHTING SPECIFICATIONS	X
SG-009	GRAPHIC STANDARDS - TYPOGRAPHY	X
SG-010	GRAPHIC STANDARDS - COLOR CHART & ARTWORK	X
SG-101	GATE.B CONSTRUCTION DETAILS	X
SG-102	GATE.B CONSTRUCTION DETAILS	X
SG-103	GATE.B CONSTRUCTION DETAILS	X

 <p>1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com</p>	SHEET TITLE COVER SHEET	
	PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
	CONSULTANT	
	G-001	
	REV:	
ISSUE:	08/22/16	
PROJECT NO:	1617	
FILE NAME:	1617-Signage.dwg	
DRAWN BY:	BH	
CHECKED BY:	SRL	

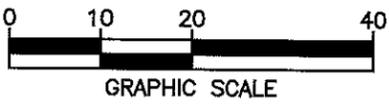


**PROPOSED
MONUMENT SIGN
110 S.F.**

AAA BOULEVARD



PAVEMENT SECTION
NO SCALE



	1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com
	REV:
	ISSUE: 08/22/2016
	PROJECT NO: 1817
	FILE NAME:
DRAWN BY:	
CHECKED BY:	

SHEET TITLE	
GRADING PLAN	
PROJECT	
DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
CONSULTANT	
LANDMARK SCIENCE & ENGINEERING	C-110

SYMBOLS :

ABBREVIATIONS :

SITE PLAN NOTES :

	SECTION NUMBER SHEET WHERE SECTION IS DRAWN	§	AND
	DETAIL NUMBER SHEET WHERE DETAIL IS DRAWN	∟	ANGLE
	WALL TYPE	@	AT
	DOOR NUMBER	φ	DIAMETER OR ROUND
	WINDOW/LOUVER TYPE	#	FOUND OR NUMBER
	COLUMN NUMBER OR LETTER	⊕	CENTER LINE
	REVISION INDICATOR	Ⓢ	PLATE
	KEYNOTE INDICATOR	±	PLUS OR MINUS
	ROOM NAME		CONCRETE MASONRY UNIT
	ROOM FINISH TYPE		BRICK
	ROOM NUMBER		CONCRETE
	ELEVATION NUMBER SHEET WHERE ELEVATION IS DRAWN		DRAINAGE FILL
	WOOD - ROUGH		EARTH
	WOOD - FINISH		INSULATION - BATT
	PLYWOOD		INSULATION - RIGID
	GYP SUM WALL BOARD		WOOD - ROUGH
	WORK POINT, CONTROL POINT		WOOD - FINISH
			STEEL

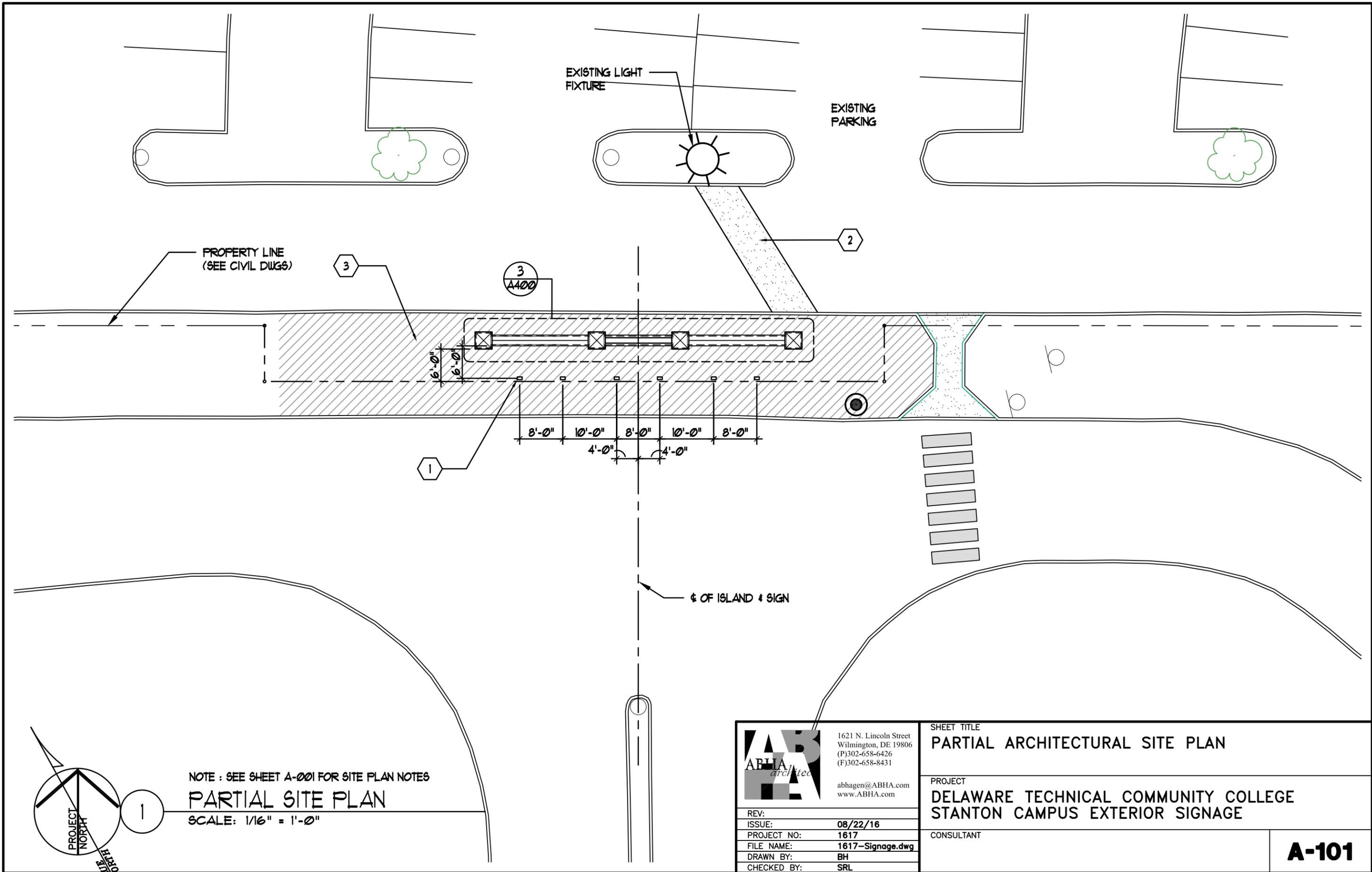
AB ANCHOR BOLT	EQUIP EQUIPMENT	MAX MAXIMUM	S SOUTH
ACST ACOUSTIC	EW EACH WAY	MECH MECHANICAL	SC SOLID CORE
AD AREA DRAIN	EUC ELECTRIC WATER COOLER	MED MEDIUM	SCHED SCHEDULE
ADJ ADJUSTABLE	EXP EXPANSION	MEMB MEMBRANE	SECT SECTION
AFF ABOVE FINISHED FLOOR	EXIST EXISTING	MHL METAL	SHR SHOWER
AGGR AGGREGATE	EXPO EXPOSED	MH MANHOLE	SHM SIMILAR
ALUM ALUMINUM	EXT EXTERIOR	MIN MINIMUM	STL STEEL *****
ALT ALTERNATE		MIRR MIRROR	SPEC SPECIFICATION
APPROX APPROXIMATE		MISC MISCELLANEOUS	SQ SQUARE
ARCH ARCHITECT	FA FIRE ALARM	MO MASONRY OPENING	SST STAINLESS STEEL
	FD FLOOR DRAIN	MRT MARBLE THRESHOLD	STA STATION
BD BOARD	FDTN FOUNDATION	MTD MOUNTED	STD STANDARD
BOF BOTTOM OF FOOTING *****	FE FIRE EXTINGUISHER	MULL MULLION	STOR STORAGE
BOS BOTTOM OF STEEL	FEC FIRE EXTINGUISHER CAB.		STRUCT STRUCTURAL
BITUM BITUMINOUS	FHC FIRE HOSE CABINET		SUSP SUSPEND
BLDG BUILDING	FIN FINISH	N NORTH	SYMM SYMMETRICAL
BM BEAM	FLR FLOOR	NIC NOT IN CONTRACT	
BOS BOTTOM OF STEEL	FLUOR FLUORESCENT	NO NUMBER	TOC TOP OF CURB
BOT BOTTOM	FOC FACE OF CONCRETE	NOM NOMINAL	TEL TELEPHONE
BRG BEARING	FOM FACE OF MASONRY	NTS NOT TO SCALE	TER TERRAZZO
BU BUILT-UP	FOS FACE OF STUD		T & G TONGUE AND GROOVE
BW BOTH WAYS	FP FIREPROOF	OC ON CENTER	TOM TOP OF MASONRY
BLKG BLOCKING *****	FS FULL SIZE	OD OUTSIDE DIAMETER (DIM)	TOC TOP OF CONCRETE
	FT FOOT OR FEET	OFF OFFICE	TOF TOP OF FOOTING
CAB CABINET	FTG FOOTING	OFNG OPENING	TOS TOP OF STEEL
CB CATCH BASIN	FURG FURRING	OPP OPPOSITE	TP TOP OF PAVEMENT
CEM CEMENT	FUT FUTURE		TV TELEVISION
CER CERAMIC		PCC PRECAST CONCRETE	TOW TOP OF WALL
CI CAST IRON	GA GAGE	FLAM PLASTIC LAMINATE	TYP TYPICAL
CIP CAST-IN-PLACE	GALV GALVANIZED	PLAS PLASTER	
CJ CONTROL JOINT	GB GRAB BAR	PLYWD PLYWOOD	UON UNLESS OTHERWISE NOTED
CLG CEILING	GL GLASS	FR PAIR	
CLO CLOSET	G GROUND	PSF POUNDS/SQ. FOOT	VCT VINYL COMPOSITION TILE
CLR CLEAR	GSLU GLAZED STRUCTURAL UNIT	PSI POUNDS/SQ. INCH	VERT VERTICAL
CMU CONCRETE MASONRY UNIT	GYP BD GYPSUM BOARD	PT PAINT	VEST VESTIBULE
CNTR COUNTER	GYP GYPSUM	PVG PAVING	VIF VERIFY IN FIELD
COL COLUMN		QT QUARRY TILE	
CONC CONCRETE	HB HOSE BIBB		W WEST
CONSTR CONSTRUCTION	HC HOLLOW CORE	R RISER	W/ WITH
CORR CORRIDOR	HDWD HARDWOOD	R RADIUS	WC WATER CLOSET
CT CERAMIC TILE	HDW HARDWARE	RD ROOF DRAIN	WD WOOD
	HT HEIGHT	REF REFERENCE	WI WROUGHT IRON
DBL DOUBLE	HM HOLLOW METAL	REF REFRIGERATOR	W/O WITHOUT
DEPT DEPARTMENT	HORIZ HORIZONTAL	REG REGISTER	WP WORKING POINT
DET DETAIL		REINF REINFORCE	WSCT WAINGSCOT
DF DRINKING FOUNTAIN	ID INSIDE DIAMETER (DIM)	REQD REQUIRED	WT WEIGHT
DIA DIAMETER	INSUL INSULATION	RESIL RESILIENT	WUF WELDED WIRE FABRIC
DIM DIMENSION	INT INTERIOR	RET RETURN	
DISP DISPENSER	INV INVERT	RM ROOM	
DN DOWN *****		RO ROUGH OPENING	
DS DOWNSPOUT	JAN JANITOR	RWD REDWOOD	
DWG DRAWING	JT JOINT *****		
	JST JOIST *****		
E EAST	LAB LABORATORY		
EA EACH	LAM LAMINATE		
EXP BT EXPANSION BOLT	LAV LAVATORY		
EJ EXPANSION JOINT	LKR LOCKER		
ELEC ELECTRIC	LPT LOW POINT		
EL ELEVATION	LT LIGHT		
EMER EMERGENCY	LLH LONG LEG HORIZONTAL		
ENCL ENCLOSURE	LLV LONG LEG VERTICAL		
EQ EQUAL			

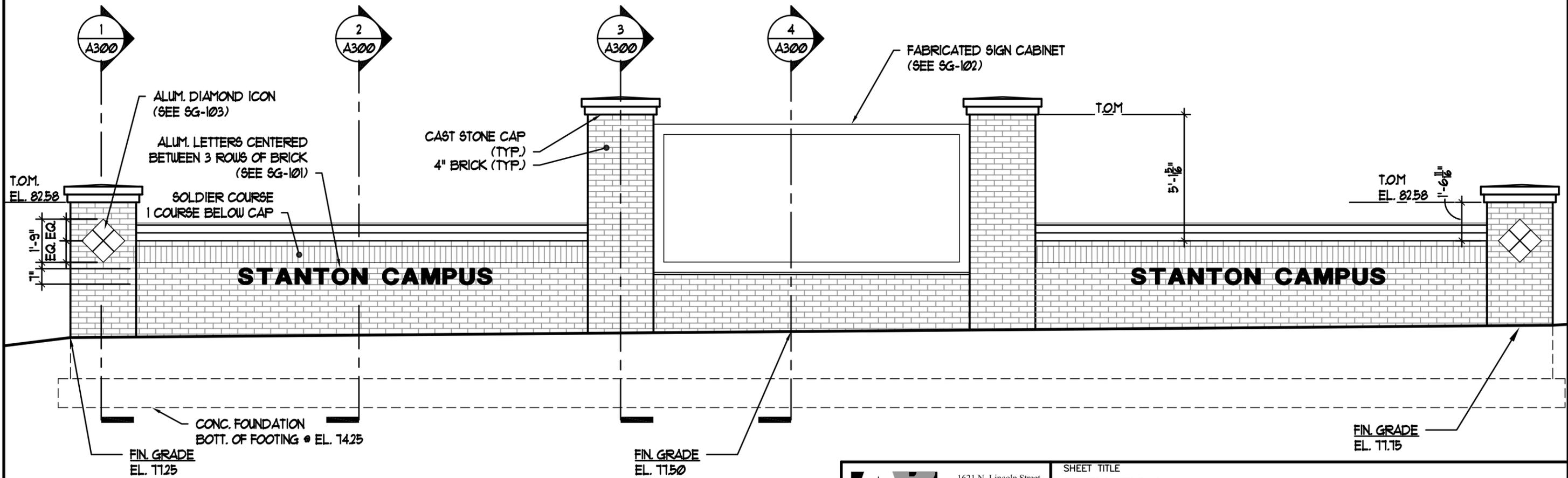
- LIGHT FIXTURE (SEE ELECTRICAL).
- PATCH PAVING AT UTILITY WORK. SEE CIVIL DRAWINGS FOR PAVEMENT SECTION.
- REMOVE TOPSOIL & GRADE AS SHOWN ON CIVIL DRAWINGS PROVIDE TOPSOIL AND RE-SEED ALL AREAS DISTURBED BY CONSTRUCTION.

GENERAL NOTES :

- VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE PROCEEDING WITH WORK.
- ALL CONSTRUCTION SHOWN IS NEW (UNLESS OTHERWISE NOTED).
- MASONRY WALLS ARE DIMENSIONED TO THE OUTSIDE FACE (UNLESS OTHERWISE NOTED).
- RESTORE ALL SITE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.

<p>1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431</p> <p>abhagen@ABHA.com www.ABHA.com</p>	SHEET TITLE SYMBOLS, ABBREVIATIONS, PLAN NOTES	
	PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
REV: ISSUE: 08/22/16 PROJECT NO: 1617 FILE NAME: 1617-Signage.dwg DRAWN BY: BH CHECKED BY: SRL	CONSULTANT	A-001



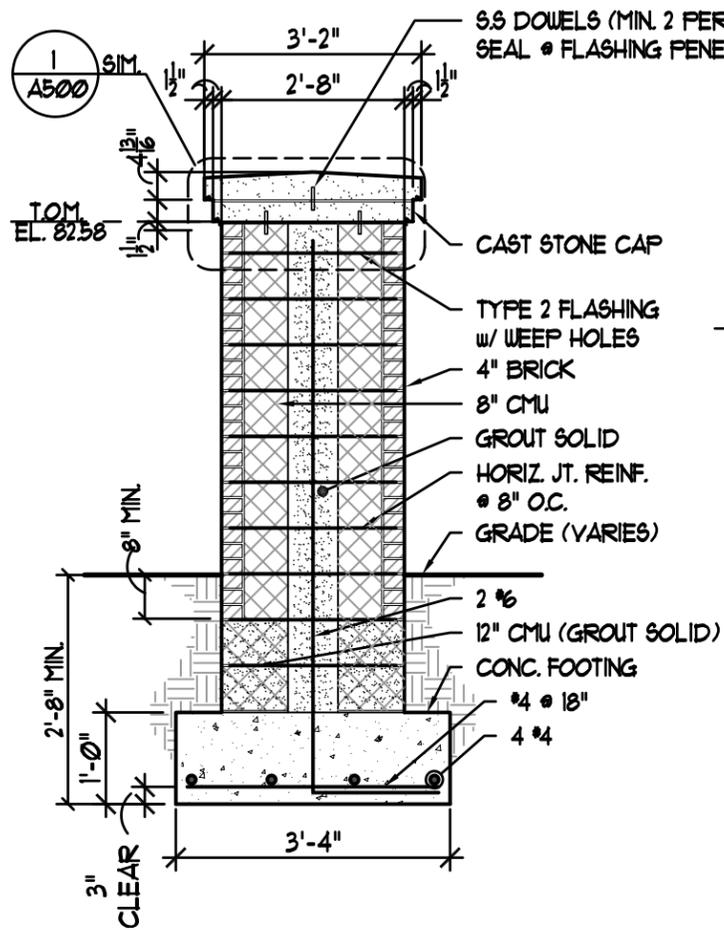


NOTE : SEE CIVIL DRAWINGS FOR DETAILED GRADING & ELEVATIONS.

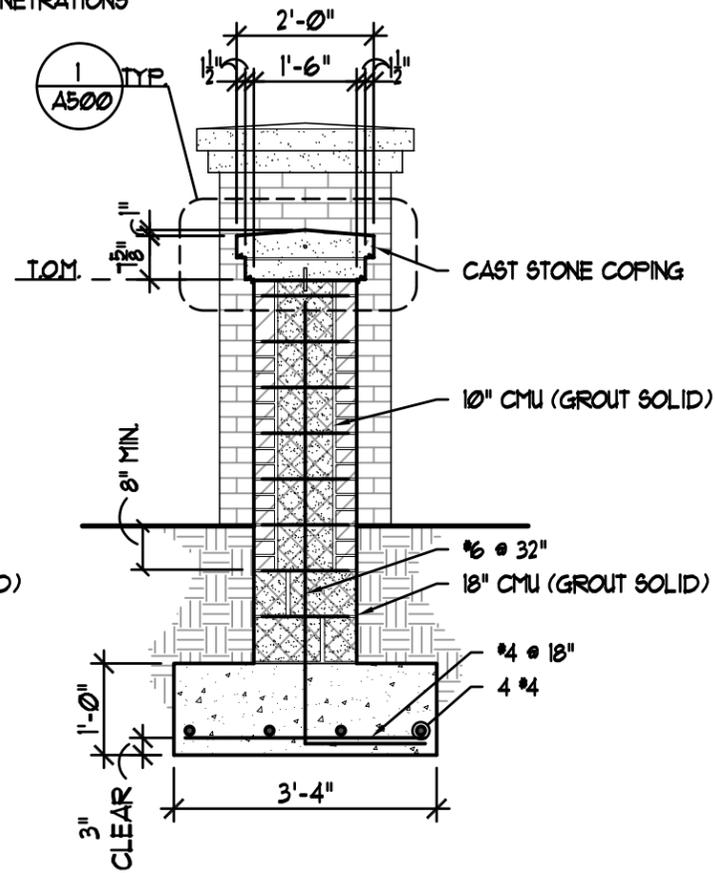
1 ELEVATION
SCALE: 1/4" = 1'-0"

	1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431
	abhagen@ABHA.com www.ABHA.com
	REV:
	ISSUE: 08/22/16
	PROJECT NO: 1617
FILE NAME: 1617-Signage.dwg	
DRAWN BY: BH	
CHECKED BY: SRL	

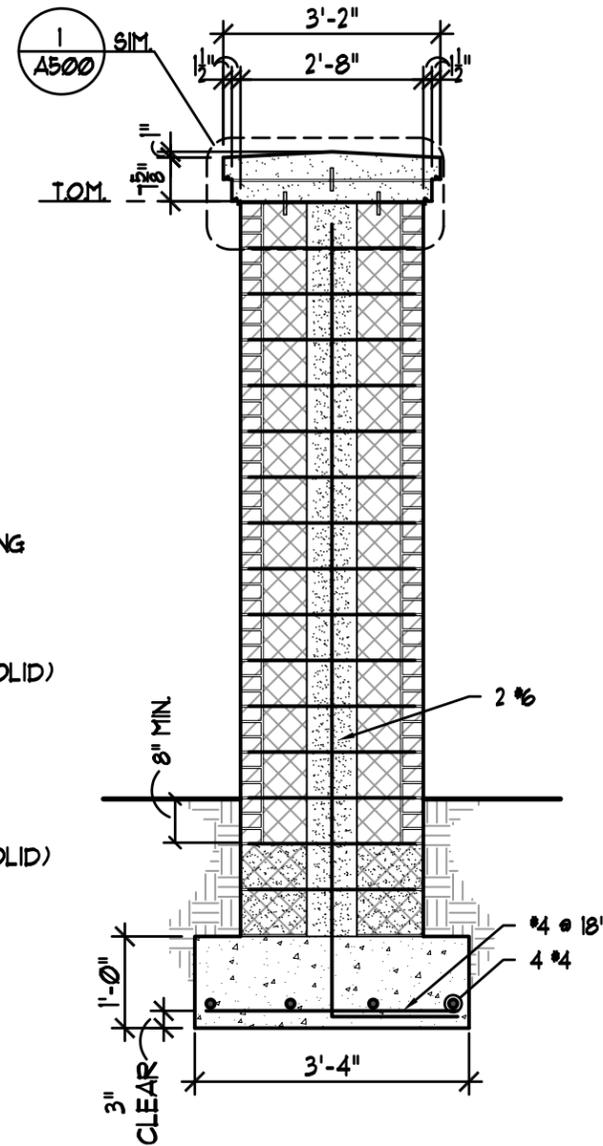
SHEET TITLE ELEVATION	
PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
CONSULTANT	A-200



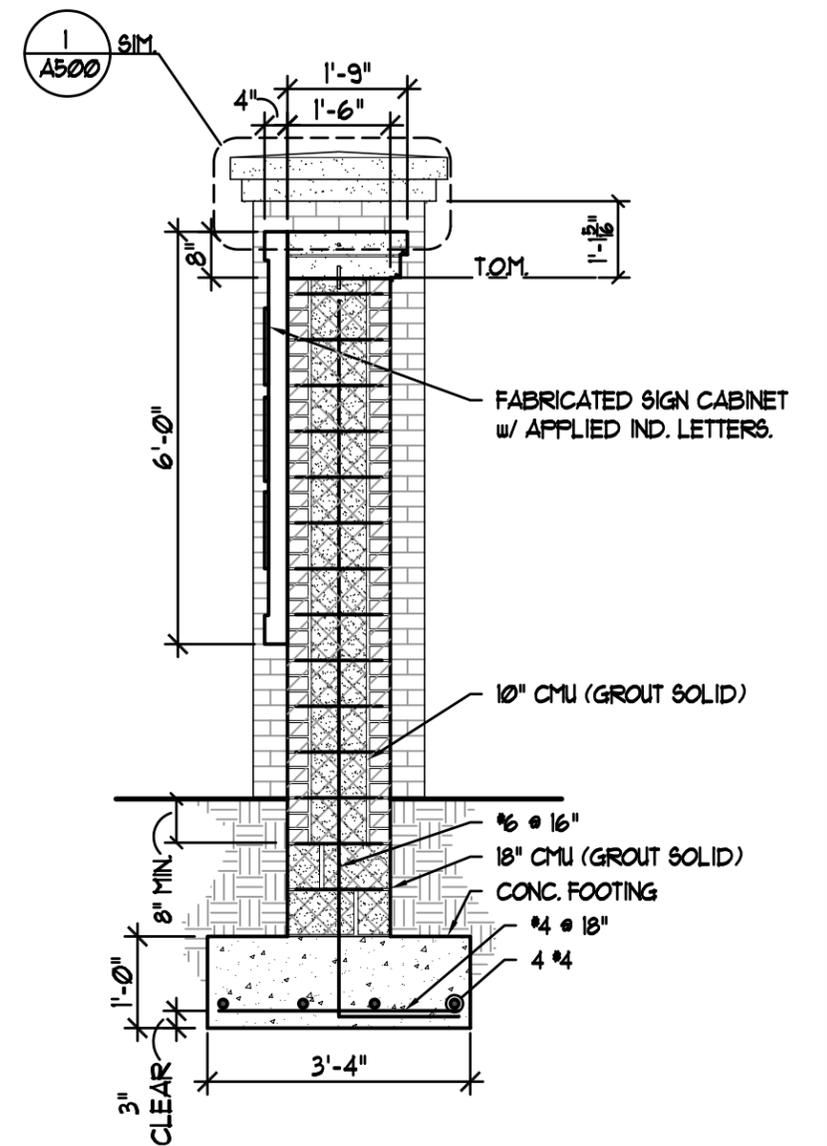
1 TYP. SECTION
SCALE: 3/8" = 1'-0"



2 SECTION
SCALE: 3/8" = 1'-0"



3 SECTION
SCALE: 3/8" = 1'-0"



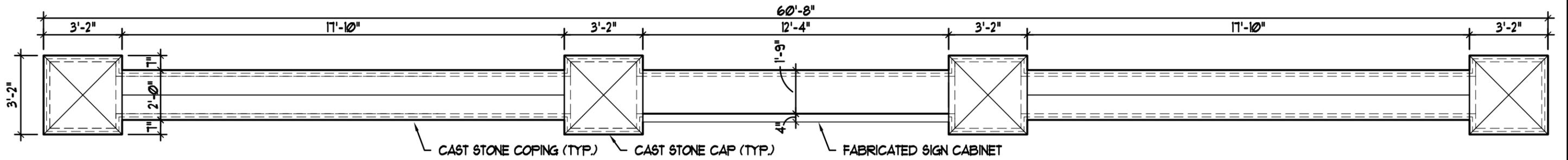
4 SECTION
SCALE: 3/8" = 1'-0"

NOTE : SEE 1/A-300 FOR TYP. NOTES & MATERIALS.

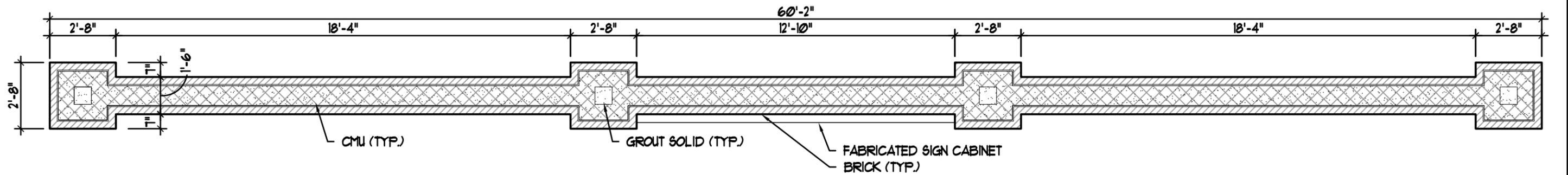
	1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431
	abhagen@ABHA.com www.ABHA.com
	REV:
	ISSUE: 08/22/16
	PROJECT NO: 1617
FILE NAME: 1617-Signage.dwg	
DRAWN BY: BH	
CHECKED BY: SRL	

SHEET TITLE WALL SECTIONS
PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE
CONSULTANT

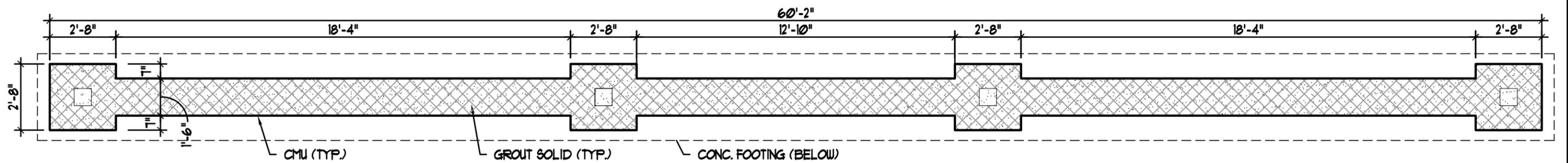
A-300



3 PLAN ABOVE CAP
SCALE: 1/4" = 1'-0"



2 PLAN ABOVE GRADE
SCALE: 1/4" = 1'-0"



1 PLAN BELOW GRADE
SCALE: 1/4" = 1'-0"

ABHA
architect

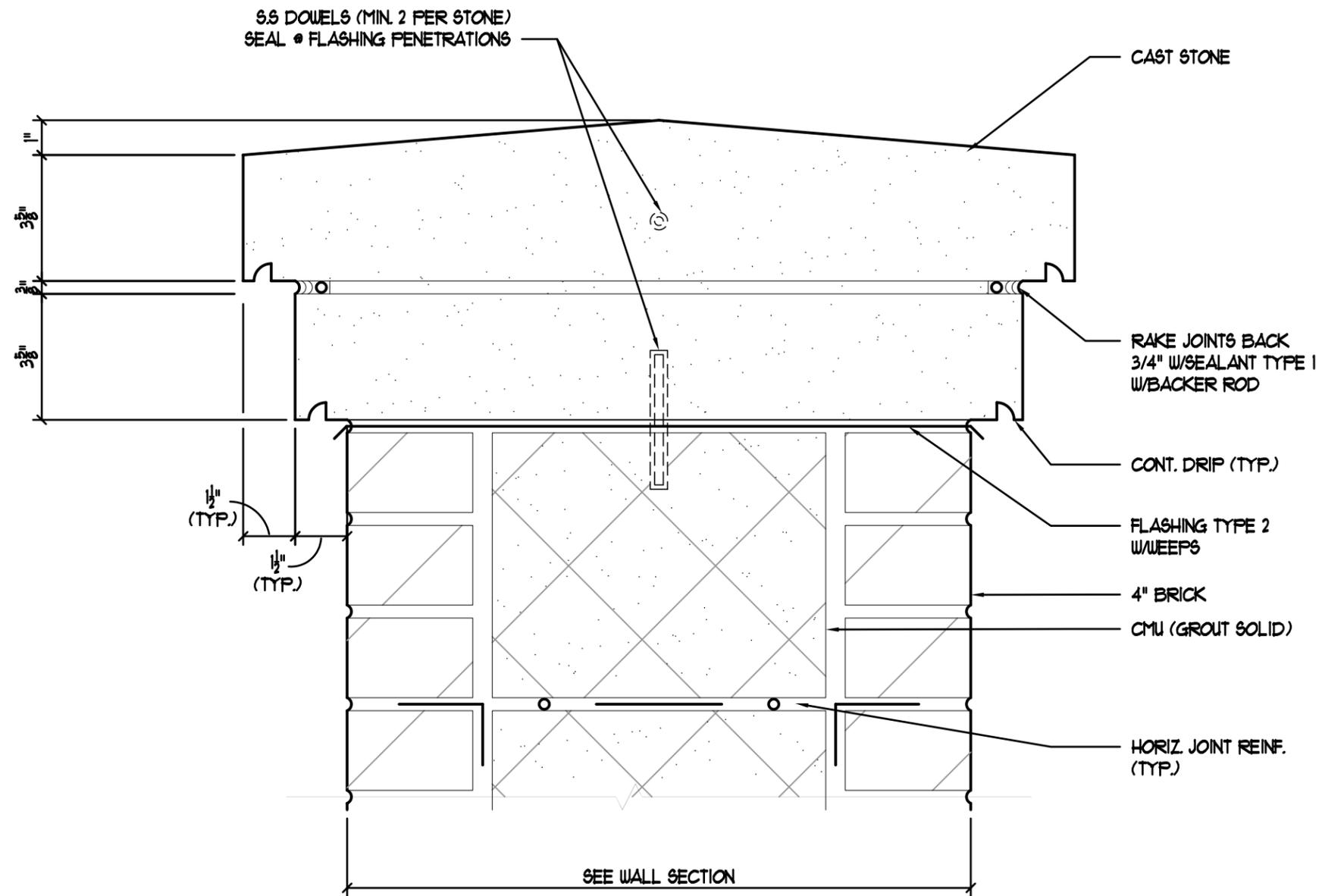
1621 N. Lincoln Street
Wilmington, DE 19806
(P)302-658-6426
(F)302-658-8431

abhagen@ABHA.com
www.ABHA.com

REV:	
ISSUE:	08/22/16
PROJECT NO:	1617
FILE NAME:	1617-Signage.dwg
DRAWN BY:	BH
CHECKED BY:	SRL

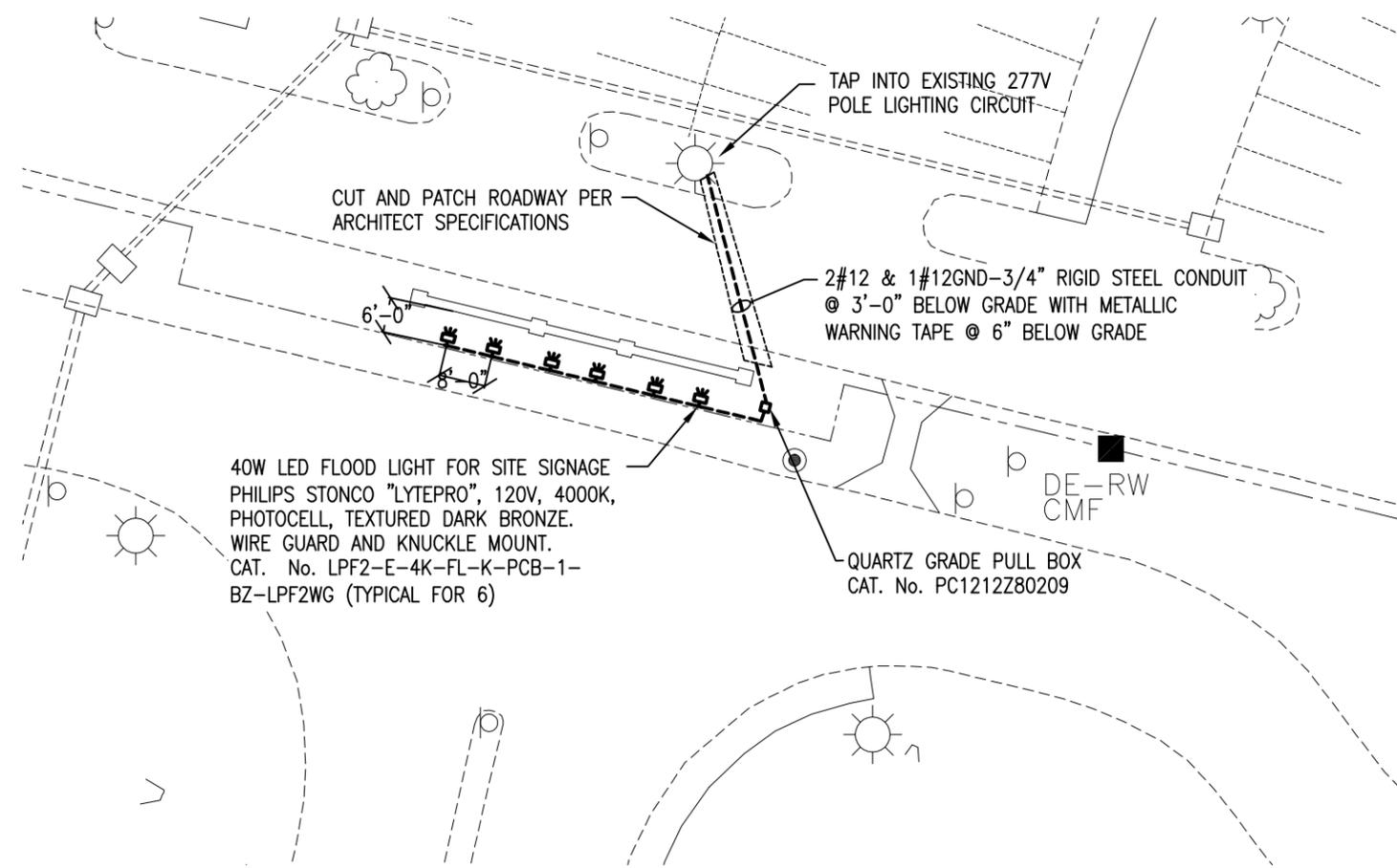
SHEET TITLE	
ENLARGED PLANS	
PROJECT	
DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
CONSULTANT	

A-400

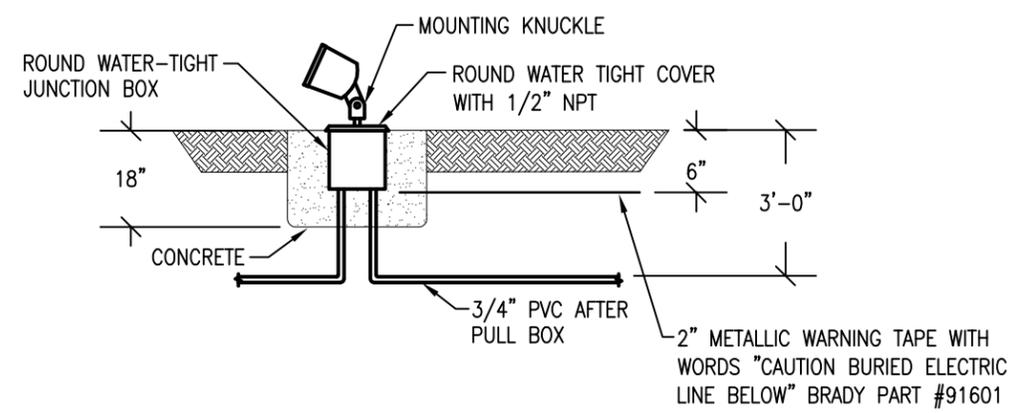


1 COPING/CAP DETAIL
SCALE: 3" = 1'-0"

	1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431	SHEET TITLE DETAILS	
	abhagen@ABHA.com www.ABHA.com	PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
REV: ISSUE: 08/22/16 PROJECT NO: 1617 FILE NAME: 1617-Signage.dwg DRAWN BY: TJH CHECKED BY: SRL	CONSULTANT		A-500



1 SIGN LIGHTING PLAN
E-100 SCALE : 1"=30'-0"



2 FLOOR LIGHT MOUNTING DETAIL
E-100 SCALE : NONE

ELECTRICAL NOTES

1. ALL WORK SHALL COMPLY WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, OSHA, BOCA, NFPA AND ANY APPLICABLE LOCAL CODES/ORDINANCES AS LISTED IN THE SPECIFICATIONS.
2. AN INSULATED GROUND WIRE, SIZED PER THE NEC., SHALL BE PULLED IN ALL RACEWAYS.
3. EACH CIRCUIT SHALL HAVE A SEPARATE NEUTRAL CONDUCTOR, SHARED NEUTRAL CONDUCTORS NOT PERMITTED.
4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAKE OPERATIONAL THE ELECTRICAL SYSTEMS & EQUIPMENT ASSOCIATED WITH THE WORK DESCRIBED IN THE BID DOCUMENTS FOR THIS PROJECT.
5. ANY NEW JUNCTION/PULL BOXES INSTALLED SHALL HAVE CIRCUIT NUMBERS WRITTEN ON BOX EXTERIORS.
6. WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGH CIRCUIT.
7. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
8. DRAWINGS ARE DIAGRAMMATIC ONLY: EXACT LOCATION, MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SUPPORTS AND HARDWARE FOR MOUNTING OF ELECTRICAL EQUIPMENT INCLUDED IN THIS PROJECT.
10. THE ENTIRE ELECTRICAL SYSTEM SHALL BE TESTED FOR PROPER GROUNDING AND OPERATION PRIOR TO FINAL ACCEPTANCE AS SPECIFIED IN THE BID SPECIFICATIONS AND/OR AS SPECIFIED HEREIN. TESTS SHALL VERIFY THAT THE ENTIRE ELECTRICAL SYSTEM HAS NO SHORT-CIRCUITS, OPENS, OVERLOADS, OR PANEL UNBALANCES. ALL EQUIPMENT AND WIRING SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEC.
11. ALL ELECTRICAL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW AND APPROVED BY U.L., EXCEPT WHERE NOTED.
12. THE E.C. SHALL SUBMIT "AS-BUILT" DRAWINGS WHEN THE PROJECT IS COMPLETE.

ABHA
architect

1621 N. Lincoln Street
 Wilmington, DE 19806
 (P)302-658-6426
 (F)302-658-8431

abhagen@ABHA.com
 www.ABHA.com

REV:	-
ISSUE:	08/22/16
PROJECT NO:	1617
FILE NAME:	I1601-E-100.DWG
DRAWN BY:	MJS
CHECKED BY:	JBB

SHEET TITLE	
ELECTRICAL: SIGN LIGHTING PLAN	
PROJECT	
DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
CONSULTANT	
PARAGON ENGINEERING CORPORATION 708 PHILADELPHIA PIKE, WILMINGTON, DE 19810 302-762-6010	

E-100

PERFORMANCE SPECIFICATIONS

PART 1 – GENERAL

1.01 WORK RELATED

- A** Labor, materials, equipment and services necessary for the fabrication, delivery and installation of signage as described in the detail design intent drawings.
- B** Refer to the message schedule for a complete list of sign types and quantities.
Signs listed on message schedule should match those indicated on sign location plans. Contractor to notify owner of any discrepancies in sign quantities by doing take-offs before manufacturing signs.
- C** Signage is located in Delaware on the Stanton Campus.
- D** For all signs, all fasteners, support structures required for installation.

1.02 RELATED WORK

- A** General carpentry and painting requirements: all work to be done in a professional manner and to the highest trade standards.
- B** Use OSHA safety requirements if necessary for pedestrian and/or vehicular safety.

1.03 REGULATORY REQUIREMENTS

Observe applicable codes, sign ordinances and ADA guidelines for handicapped and fire/life safety signing. All exterior signs located in the public right-of-way, including local city, county and state roadways, shall comply with the 2009 MUTCD standards.

1.04 REFERENCE STANDARDS

Refer to current editions of the following:

- A** MUTCD standards manual, 2009 edition.
- B** Federal ADAAG, 2010 standards.
- C** ASTM B 209–Aluminum sheet and plate.
- D** ASTM B 221–Aluminum-alloy extruded bars, rods, wire, shapes and tubes.
- E** ASTM D 822–Light and water exposure apparatus (carbon-arc type) for testing paint, varnish, lacquer and related products.
- F** ASTM E 84–Surface burning characteristics of building materials.
- G** ASTM C 143-74–Concrete slump test.
- H** FS L-P-391–Plastic sheet, rods and tubing, rigid and cast materials.

1.05 SUBMITTALS

A Bid submittal requirements

- 1 All of the inclusive bid submittals must be provided to be considered a qualified bid.

- 2 All proprietary contractual paperwork provided by the client filled out accurately, including all requested bonding and insurance information.
- 3 Submit completed spreadsheet (form and/or file provided) with all requested line item prices. Ensure that all row and column totals add up properly. Use the provided format, do NOT use a different spreadsheet format.

B Requirements

- 1 Schedule shop drawings, product data and sample submittals for delivery at the same time.
- 2 The owner may hold shop drawings, product data and samples in cases where a partial submittal cannot be reviewed until associated items have been received.
- 3 Allocate not less than four weeks, plus mailing time, for processing by the owner.

C Schedule

- 1 Submit a projected project schedule. Schedule will show major milestones such as sample submittals, fabrication, and installation. The payment schedule will be tied to reaching these milestones. Schedule will be updated regularly throughout the project.
- 2 Submit Gantt-style schedule with all pertinent dates and milestones for the project.
- 3 Include all lead times for materials, processes and third party products or components.
- 4 Include submittal delivery dates, fabrication and installation dates.
- 5 Allow several weeks in schedule for review and revision time for all submittals.
- 6 Revise schedule regularly as project details dictate.

D Shop Drawings

NOTE: All final shop drawings must have an engineering stamp from a state licensed engineer before being approved for fabrication.

- 1 Submit three (3) sets of shop drawings as outlined below.
- 2 Include plans, elevations, sections and large scale details of sign wording and lettering layout. Show anchorages and accessory items. Provide mounting templates.
- 3 Show fabrication and installation details, including all sign components such as extrusions, brackets, bracing, hardware, internal framing, foundations, etc.
- 4 Provide engineering data to confirm viability of signs and supports, including structural stability of all signs, fasteners and foundation design.
- 5 Structural details must be reviewed and stamped by a state certified structural engineer, ensuring structural integrity and safety.

E Sub Contractor Qualifications Information

- 1 Fabricator must submit credentials for any subcontractor selected to execute any portion of this contract. This must be submitted with proposal or bid. Demonstrate subs qualifications for doing specified work.

F Samples

- 1 Submit three (3) sets of each sample required.
- 2 Owner reserves the right to reject any samples that do not satisfy the construction, finish or color requirements. Submit additional samples as required to obtain final approval.
- 3 Samples shall be labeled on the back, designating item number, name of manufacturer, name of project.
- 4 The following sample submittals are required for this project:
The following samples MUST be submitted and approved PRIOR to the fabrication of the signs.
 - a) 3 sets of all color samples, including paint and vinyl samples on thin aluminum plates (approx. 3" x 6").
 - b) 2 sets of material samples.
 - c) Sample fasteners, hardware and mounting hardware sufficient to obtain clear ideas of how signs are fabricated, made changeable and installed.
- 5 Samples should represent extreme variations in color and texture that might occur during fabrication.

G Maintenance Data

- 1 Submit two (2) copies of each manufacturer's recommendations for maintenance of all items.
- 2 The instructions shall cover cleaning, repair, repainting and maintenance of signs, including data on cleaning solutions or methods of application which should be avoided.

1.06 DELIVERY OF ATTIC STOCK (IF ANY)

- A** For any attic stock ordered, package separately or in like groups labeled as to contents. Include installation hardware, adhesives and installation instructions; include a reasonable array of alternative adhesives, fasteners or materials to be able to respond effectively to varying field conditions.

1.07 PROTECTION

- A** Store and protect assemblies from injury at the shop, in transit to the job and until erected in place, completed, inspected and accepted.
- B** Take special precautions to prevent pilferage both prior to and after installation. Be prepared to provide replacements for any material so removed from the site.

SHEET TITLE

PERFORMANCE SPECIFICATIONS

PROJECT
**DELAWARE TECHNICAL COMMUNITY COLLEGE
STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-001

1621 N. Lincoln Street
Wilmington, DE 19806
(P)302-658-6426
(F)302-658-8431



abha@abha.com
www.abha.com

REV: _____
ISSUE: 08/22/2016
PROJECT NO: 1617
FILE NAME: 1617 Signage DRW
DRAWN BY: GES
CHECKED BY: SRL



120 North Church Street
Suite 208
West Chester, PA 19380
T 484.266.0648
www.merjedesign.com

PART 1 – GENERAL *continued*

1.08 INSPECTION

- A** Materials, colors and fabricated or partially fabricated items shall be available for inspection at the factory or elsewhere, by the owner or designer during the process of manufacture and until final delivery, installation and acceptance, to determine whether or not there is compliance with the requirements of these specifications.
- B** Approval prior to the time of final acceptance shall not preclude rejection of delivered items which do not satisfy these specifications.

1.09 REORDERING

All items specified herein shall be available to the owner in additional quantities for a period of 10 years after completion of all work called for in this specification.

1.10 WARRANTY

All warranties on fabricator's standard contract forms must be modified to match warranty criteria mentioned herewith. Any changes in warranty length or criteria must be negotiated prior to contract signing. Any discrepancies from fabricator's contract are superseded by this performance specification.

ALL PAINT FINISH WARRANTIES MUST BE ACCOMPANIED BY SIGNED WARRANTY AGREEMENTS WITH THE PAINT MANUFACTURER AND FINISHER.

- A** Warrant all products (including, but not limited to, materials, hardware and finishes) against any and all defects for a **minimum period of five (5) years** from date of installation.
- B** Correct any and all defects in material and/or workmanship which may appear during the warranty period by restoring defective work to the standard of the contract documents at no cost to the owner and to the owner's satisfaction.
- C** Custom color background and characters printed with 3M inks direct to 3M High Intensity Prismatic Reflective Sheeting Series 3930, with 3M ElectroCut Film 1170 overlamine (applied according to 3M specifications to aluminum sheet), must be warranted for a period of eight (8) years and shall not excessively fade, discolor, crack, craze, peel, blister or lose reflectivity such that the signs become visually unsuitable for their intended purpose.
- D** Vinyl die-cut letters shall be warranted for five (5) years against delamination from substrate.
- E** Correct any and all paint finish defects which may appear during the warranty period by restoring defective work to the standard of the contract documents at no cost to the owner and to the owner's satisfaction.

F Additional corrections shall include, but not be limited to, the following:

- 1 Peeling, bubbling, crazing, chalking, rusting or other disintegration of the sign face or of the messages or of the edge finish of the sign inserts or panel.
- 2 Corrosion developing beneath paint surfaces of the support systems (except when it is the result of obvious vandalism or other external damage to the paint surfaces).
- 3 Corrosion of the fastenings.
- 4 The signs not remaining true or plumb on their supports.
- 5 Fading of the colors when matched against a sample of the original color and material.
- 6 Discoloration of metal finishes.

1.11 ALTERNATE FABRICATION

- A** The drawings show design intent only. The fabricator is responsible for fabrication and overall level of quality. Any changes in design, materials, fabrication techniques or details necessary to the successful completion of this project should be communicated to the designer and the owner in a timely fashion.

Further development and engineering of designer's details (for fabrication and installation) is expected and should be shown in the shop drawings.

- B** The designer recognizes that manufacturers may have shop fabrication techniques that differ from details shown. Suggested changes in fabrication that do not alter the design intent nor reduce the quality will be considered by the designer provided they are submitted in sketch form as soon as possible prior to shop drawing preparation.
- C** Any value engineering changes during fabrication shall be split evenly between the contractor and owner.

SHEET TITLE

PERFORMANCE SPECIFICATIONS

PROJECT
**DELAWARE TECHNICAL COMMUNITY COLLEGE
 STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-002

1621 N. Lincoln Street
 Wilmington, DE 19806
 (P)302-658-6426
 (F)302-658-8431



abhagen@ABHA.com
 www.ABHA.com

REV: _____
 ISSUE: **08/22/2016**
 PROJECT NO: **1617**
 FILE NAME: **1617 Signage DRW**
 DRAWN BY: **GES**
 CHECKED BY: **SRL**



120 North Church Street
 Suite 208
 West Chester, PA 19380
 T 484.266.0648
 www.merjedesign.com

PART 2 – PRODUCTS

2.01 QUALITY ASSURANCE

- A** Materials used for this project shall be new and not reconditioned or re-purposed.
- B** Fabricator shall be familiar with the site and all conditions related to the fabrication and installation of the project.
- C** Use only personnel thoroughly skilled and experienced with the products and method for fabrication and installation of signage specified.
- D** The owner shall reserve the right to reject any shop drawings, samples or other submittals, as well as any finished product or installation, than cannot meet the standard of quality established. Any such decision will be considered final and not subject to recourse.
- E** The intent of the contract documents is to provide everything necessary for a complete contract. In the event of conflict or omission, the fabricator shall consult the owner for resolution.
- F** Materials and hardware not specified, but necessary to the complete functioning of the sign, shall conform to the quality level established.

2.02 PREFERRED MATERIAL SUPPLIERS

Vendors and products listed below are specified for this product. These products have either been tested on prior projects and have delivered proven results, or have properties unique to this project. Any suggested substitutions must have documentation demonstrating the same level of quality and warranty PRIOR to bidding. Bids are subject to disqualification if unauthorized substitutions are used.

A Acrylic Polyurethane paint

Matthews Paint (a division of PPG), Delaware, OH 43015
 Phone: 800-323-6593
www.matthewspaint.com

B All vinyl and vinyl coatings

3M Commercial Graphics Division, St.Paul, MN 55144
 Phone: 888-364-3577
www.solutions.3m.com

C Acrylic sheeting

ACRYLITE® Sheet
 Evonick Cyro LLC, Parsippany, NJ 07054
 Phone: 855-202-7467
www.acrylite-shop.com

2.03 DESIGN REQUIREMENTS

A Typeface specifications

- 1 Typeface (or fonts) are purchased from respective font websites, licensed to the designer, and will not be shared with the fabricator. Fabricators will be responsible for purchasing matching licensed fonts for project usage. See the Graphics Standards section of the design intent drawings for the specific fonts utilized within the project.

- 2 Size: all letter heights specified are based on the cap height of the capital letter.
- 3 Alignment: When setting type or installing cut letters, ensure that letters are perfectly straight and even, with no characters set crooked or “popping up.”
- 4 Spacing
 - a) See the Graphics Standards section of the design intent drawings for the samples of letterspacing programs. The proper letter and word spacing is of extreme importance to the desired look of the signs.
 - b) Contractor is responsible for visual corrections to the typesetting that might be necessary. Any problems in spacing or copyfitting should be brought to the attention of the designer for solution.

B Visual justification

- 1 Display type may align mechanically but not optically. When flushing copy message left, a visual adjustment shall be made compensating for arrows and those letter forms that must be extended into the left hand margin to appear flush. For example, S and O must extend beyond the left margin slightly.

C Arrow and symbol specifications

- 1 Symbols: Symbols and pictographs shall conform to the symbol signs issued by the Department of Transportation and the American Institute of Graphic Arts. To obtain more information and digitized Macintosh (EPS) compatible AIGA symbols, contact: Society for Environmental Graphic Design (SEGD), 1000 Vermont Ave., NW, Suite 400, Washington, DC 20005, Phone: 202-638-5555.
- 2 Arrows: Arrows on all signs shall use the arrow files which will be provided by the owner to the successful bidder.
 - a) Arrow size will be dimensioned by height as shown in the design intent drawings.

D Artwork

- 1 The contractor shall be provided electronic Adobe InDesign and Illustrator files with the project artwork and templates. The final output quality of the artwork for finished signage shall be the responsibility of the contractor. The owner’s representative reserves the right to reject artwork if it fails to meet the standard of quality established.

2.04 MATERIALS

- A Aluminum extrusions:** For mounting plates and structural frames shall conform to ASTM B-221, alloy 6063-T6. Shapes, sizes and weights of members shall be as required for structural stability. All connections of aluminum members shall be heli-arc welded, continuous fillets, ground smooth on all exposed surfaces, unless specifically detailed otherwise. Aluminum finishes shall be hereinafter specified.
- B Aluminum sheet and plate:** Type 5052-H-32 alloy aluminum, thickness as indicated. For painted finish, faces shall be etched to give an even stain finish and remove oxidation, then conversion coated to improve paint adhesion and inhibit

corrosion. Surface shall be belt-sanded for a smooth finish, edges filed and ground then immersed in hot alkaline cleaner to remove contamination. For anodized finish, prepare for finish AA-M31-C21-A31. Aluminum should have consistency of color and finish throughout the project.

- C Stainless Steel sheet:** Chromium stainless steel sheet. Use type 304 or type 316 austenitic stainless steel with 16% chromium and 10% nickel.
- D Hangers, brackets and accessories:** Shall be of the type and size indicated. Where such items are not specifically called for, provide hangers, brackets and accessories as required for the proper execution of the work, as approved by the owner.
- E Paint for aluminum:** All coating to protect aluminum by uniformly penetrating, filling, and sealing surface pores. Coating should provide an invisible barrier to weathering, airborne contaminants, graffiti, industrial air pollution, mildew, and salt air. Coating should not yellow, peel or flake. *Coating should be guaranteed in conformance with Warranty Section 1.10-E. Sign panels shall be pre-drilled in proper locations before any priming, painting or coating processes.* Aluminum should have consistency of color and finish throughout the project.

1 Matthews Acrylic Polyurethane (PPG)

MAP® is a superior two-component catalyzed coating system that provides a high degree of ultraviolet, chemical and weather protection for signage and architectural metals. When used as a complete system, primer through topcoat, MAP provides a high performance finish that lasts for years.

- a) Pretreatment: Mechanically clean and chemically pretreat fabricated items in accordance with coating manufacturer’s requirements and AAMA requirements for finish indicated.
 - 1) Pretreatment: One coat 74-734 and 74-735 metal pre-treat at .25 mils DFT or one coat 74-793 spray bond at .15 to .25 mils DFT.
- b) Apply primer and finish coats in accordance with coating manufacturer’s requirements for finish indicated.
 - 1) Finish coat: One coat Matthews Acrylic Polyurethane 2 mils DFT. As a final step, spray one coat of satin clear Matthews Acrylic Polyurethane 2 mils DFT for a protective top coat.

F Pressure Sensitive Vinyl Legends

- 1 Use **3M High Intensity Prismatic Reflective Sheeting Series 3930**, with **3M ElectroCut Film 1170 overlaminate**.
 - a) Custom color background and characters printed with 3M inks directly.
 - b) Series 3930 sheeting incorporates a pressure sensitive adhesive and should be applied to the sign substrate at temperature of 65°F/18°C or higher by any of the following methods:

SHEET TITLE

PERFORMANCE SPECIFICATIONS

PROJECT

**DELAWARE TECHNICAL COMMUNITY COLLEGE
STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-003

1621 N. Lincoln Street
 Wilmington, DE 19806
 (P)302-658-6426
 (F)302-658-8431



abhagen@ABHA.com
www.ABHA.com

REV: 08/22/2016

ISSUE: 1617

PROJECT NO: 1617

FILE NAME: 1617 Signage DRW

DRAWN BY: GES

CHECKED BY: SRL

merje
ENVIRONMENTS & EXPERIENCES

120 North Church Street
 Suite 208
 West Chester, PA 19380
 T 484.266.0648
www.merjedesign.com

PART 2 – PRODUCTS *continued*

- 1) Mechanical squeeze roll applicator – refer to 3M Information Folder (IF) 1.4 for more details.
- 2) Hand squeeze roll applicator – refer to 3M IF 1.6 for more details.
- c) Splices: Series 3930 sheeting must be butt spliced when more than one piece of sheeting is used on one piece of substrate. The sheeting pieces should not touch each other. This is to prevent buckling as the sheet expands in extreme temperature and humidity exposure.
- d) For traffic sign use, substrates found to be most reliable and durable are properly prepared aluminum sheets and extrusions. Plastic substrates are NOT acceptable.
- e) High intensity prismatic sheeting may be processed into traffic signs by any of the imaging methods describe below:
 - 1) Screen Processing: Series 3930 sheeting may be screen processed into traffic signs before or after mounting on a sign substrate, using 3M Process Colors Series 880I or Series 880N. Refer to 3M IF 1.8 for more details.
 - 2) Thermal Transfer Printing: Series 3930 sheeting may be imaged with 3M Thermal Transfer Ribbon Series TTR2300 in conjunction with the Matan SprinG3 or Matan Spot4 thermal transfer printers. Additionally, series 3930 sheeting may be imaged by the Durst RHO 161 TS printer, by Sherine Industries: (604) 513-1887. All applications utilizing the above printers must be covered with 3M ElectroCut Film 1170 Clear UV/ Anti-Graffiti overlaminates.
 - 3) 3M ElectroCut Film Series 1170 may be used to provide transparent colored background copy for traffic control signs on high intensity prismatic sheeting. Both materials then must be covered with 3M ElectroCut Film 1170 Clear UV/Anti-Graffiti overlaminates. Refer to Product Bulletin 1170 for fabrication procedures.
 - 4) Vinyl Graphic Films: Scotchcal Vinyl Series 7720 and Series 7725 may be used to provide copy for traffic control signs on high intensity prismatic sheeting. Both materials then must be covered with 3M ElectroCut Film 1170 Clear UV/Anti-Graffiti overlaminates. Refer to Scotchcal product literature for more information.
- f) All of the above methods utilizing series 3930 reflective sheeting must be warranted for a period of eight (8) years and shall not excessively fade, discolor, crack, craze, peel, blister or lose reflectivity such that the signs become visually unsuitable for their intended purpose.
- 2 Use **3M Scotchcal brand graphic film**. Material shall consist of a tough, flexible, and pigmented vinyl film and shall be processed with compatible screen printing inks and clear coatings as recommended by the film manufacturer. The film shall be precoated with pressure-sensitive adhesive. The adhesive shall be protected by

a treated paper liner which shall be easily removable without soaking in water or other solvents. The sheeting shall be guaranteed against delamination for a period of 5 years.

- 3 Use **3M Scotchlite brand reflective graphic film**. Material shall consist of transparent plastic having a smooth, flat outer surface embedded with spherical lens elements. Material shall be capable to being processed with compatible screen printing inks and clear coatings as recommended by the film manufacturer. The film shall be precoated with pressure-sensitive adhesive. The adhesive shall be protected by a treated paper liner which shall be easily removable without soaking in water or other solvents. The sheeting shall be guaranteed against delamination for a period of 5 years.

G Concrete

- 1 All concrete footers are to be poured in place.
- 2 All concrete footers are to be poured from thoroughly mixed and agitated concrete in order to prevent unreasonable voids in the finished casting.
- 3 Concrete to meet specified "PSI testing" for strength: 3500 PSI minimum.
- 4 Concrete to meet specified "slump test" before pouring footing.
- 5 All footings to extend past the frost line.
- 6 Any footers or posts for signs will be placed in wet concrete and allowed to fully cure in place before any signage is attached or mounted to it in any way.
- 7 All exposed surfaces of concrete shall receive a finish to match existing, adjacent surfaces.
- 8 Do NOT chamfer corners or edges of concrete, unless specifically identified, or called out in the sign drawings.
- 9 Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - a) Plywood, metal, or other approved panel materials.
 - b) Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1.

H Breakaway post: Manufacturer shall provide breakaway posts for the sign types and locations indicated in the documentation drawings. Final designs and shop drawings shall be supplied by the fabricator for each of the poles identified. A Professional Engineer shall sign and seal the submittal of shop drawings. The breakaway post shall meet or exceed the following criteria:

- 1 Most Current policy on Geometric Design of Highway and Streets.
- 2 Most Current Standard Specification for Structural supports for Highway Signs, Luminaries and Traffic Signals.
- 3 Most Current AASHTO Roadside Design Guide.

I Adhesive tape: Use closed-cell foam type tape with adhesive surfaces on both faces. Thicknesses and widths of tapes shall be as required to safely secure signs to various wall finishes, but in no case shall be less than 1/16 inch thick and 1/2 inch wide. Adhesive tape shall be equal to Norton Sealant Tape No. 1001 Series.

J Liquid adhesive: Use Silicone Silastic 732 RTV adhesive sealant as manufactured by Dow Corning.

2.05 FABRICATION

A Report any discrepancies between drawings, specifications and owner requirements, and request direction from owner before proceeding.

B Verify measurements in field as required for work fabricated to fit job conditions. Before starting work, examine adjoining work on which work of this section is in any way dependent for perfect workmanship and fit.

C Make work in ample time not to delay job progress and deliver to job at such time as required for proper coordination. Fabricate work true to line and detail with clean, sharply defined profiles. Finish surfaces smooth unless otherwise specified.

D Do cutting, punching, drilling and tapping required for attachment or other work coming in contact with signage work where indicated.

E Changeability: Fabricate signs in such a manner that each of the major mounting components may be removed and replaced with similar components by maintenance personnel, but not by unauthorized personnel.

F Construction: Fabricate all joints, corners, miters, etc., with work accurately machined, filed and fitted, rigidly framed together at joints and contact points. Carefully match all work to provide a perfect continuity of lines and design, with metal in contact having hairline joints. Make joints of such character and assembly to be strong and as rigid as adjoining sections. Make exposed joints where joint is least conspicuous. Corners shall be square as indicated. All edges shall be finished and free of saw marks.

Allow for expansion and contraction of materials from temperature changes, especially when two materials with different coefficients of expansion are used together.

Detail signs to minimize deflection from snow, ice, water and their own weight.

G Engineering: The system shall be engineered to eliminate buckling of any members, failure at any points, distortions or other damage. The system shall be engineered to be rigid with minimum deflection and rotation under stress and shall be able to withstand movement, shear and torsional loads. Exposed areas of signs shall not oil can. Signs shall be designed as structurally self-supporting units. The suspension systems and substructure shall be designed by the sign manufacturer to perform in accordance with the contract documents.

SHEET TITLE

PERFORMANCE SPECIFICATIONS

PROJECT
**DELAWARE TECHNICAL COMMUNITY COLLEGE
 STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-004

1621 N. Lincoln Street
 Wilmington, DE 19806
 (P)302-658-6426
 (F)302-658-8431



abhagen@ABHA.com
 www.ABHA.com

REV: 08/22/2016

ISSUE: 1617

PROJECT NO: 1617

FILE NAME: 1617 Signage DRW

DRAWN BY: GES

CHECKED BY: SRL



120 North Church Street
 Suite 208
 West Chester, PA 19380
 T 484.266.0648
 www.merjedesign.com

PART 2 – PRODUCTS *continued*

H Connections and accessories: Weights of connections and accessories shall be adequate to sustain and withstand stresses and strains to which they will be normally subjected.

I Sign panels - General

- 1 Surface finish: Provide surface finishes that are free from lines, mottling, ridges, variations in color, peeling, orange peel, bubbles, pinholes, mottling, crazing, grit and coarse particles. This applies to all methods of fabrication and finishing. Use clear coatings for durability, surface protection, appearance and maintenance.
- 2 Material: Sign panel material is stated in the schedules under "Notes" and/or "Specifications" and/or on drawings.
- 3 Opacity: All signs shall have opaque background and opaque graphics, unless specifically noted otherwise.

J Anchors and fastenings

- 1 Mechanical
 - a) Provide anchors and fasteners required to secure work in place.
 - b) Surface finish: Do NOT expose fastenings on surface of sign panels unless specifically noted otherwise. Do NOT deform, distort or discolor sign face surfaces by attachment of concealed fastenings.
 - c) Corrosion resistance: all fastenings shall be non-corrosive and resistant to oxidation or other corrosive action, of the same composition completely through their cross sections, particularly when used below grade. Use highest quality stainless steel hardware and fasteners.
 - d) Anchors, inserts or fasteners shall be compatible with sign materials, shall not result in galvanic action or chemical interaction of adhesives and shall have demonstrable and sufficient strength for intended use.
 - e) Steel anchors and fastenings for exterior use shall be galvanized in accordance with ASTM A153.
 - f) Stability: Fabricate and install signs with fastenings to withstand all actions imposed by use; **90 mph wind** perpendicular to surfaces, water, ice, snow loads and similar forces.
 - g) Anchor bolts in concrete shall be cast in place. Manufacturer shall furnish instructions for the setting of anchors and bearing plates. Manufacturer shall ascertain that the items are properly set during the process of the work.
 - h) Color: Secure work with fastenings of same color and finish as the components they secure where they are exposed to view, unless noted otherwise.
 - i) Security: All exposed fasteners must be vandal resistant and have vandal-proof "spanner" type slots to be removed only with the special driver head.

K Messages

The fabricator is responsible for the message layout of all directional messages panels. Fabricator must produce scale drawings of message layouts for review prior to fabrication. Layout spacing and letterheights to be based on typical layout guideline drawing pages.

- 1 Layout: Typical sign panel layouts are illustrated in the design intent drawings. All messages including braille shall be flush left, unless noted otherwise. Correct line breaks are indicated in the "message" column of the schedule and should be followed exactly. Braille line breaks shall match those of the raised copy.
Any problems in the message layout shall be brought to the attention of the designer for a solution.
- 2 Fabrication: Execute all signs such that letter forms are true and clean. Letter forms with rounded corners, or chipped, nicked, cut or ragged edges, will not be accepted. This applies to all methods of fabrication and copy application.
- 3 Copy: Message copy on detail drawings is for layout purposes only. Actual copy is listed in the "message" column of the schedule. Certain copy may be provided later by the owner.
- 4 Capitalization: Directions for upper and lower case are found in the "message" column of the schedule must be followed exactly.
- 5 Single- or double-faces: All signs that are double-faced will be noted as such in the drawings and message schedule. For double-faced signs, the message will be indicated as "Side A" and "Side B" or "Side C" and Side D".

L Surface-applied messages

- 1 Reflectivity and specular gloss
 - a) Non-reflectORIZED message: 60 degree specular in accordance with ASTM Test D523.
- 2 Thickness: as indicated in specifications herein.
- 3 Color and color fastness
 - a) Exposed surfaces and finishes shall show no discernible color change or chalking when exposed for 1,000 hours in an Atlas Twin Arc Weathermaster Model HCDL-X, or equivalent, when tested in accordance with ASTM D822.
- 4 Inter letter spacing: Follow examples in drawings. Show sample inter-letter and inter-word spacing in sample submissions as specified.
- 5 Layout: Positions for all messages, symbols, arrows, lines, etc., for all signs are clearly indicated on the drawings and shall be complied with.
- 6 Artwork: Contractor shall be responsible for all final reproduction artwork for all messages, symbols, arrows, lines, and location plan and/or floor plan drawings.

7 Fabrication

- a) Screened messages: Execute all silk screen printing in such a manner that all edges and corners of finished letter forms are true and clean. Letter forms, color areas or lines with rounded corners, edge buildup or bleeding, sawtoothing, etc., will not be accepted. Execute all silk screening from photo-screens prepared from typesetter's reproduction of the copy specified. All above work is included in this contract. Hand cut screens will not be acceptable.
- b) Die-cut messages: Die-cut, pre-spaced, pre-aligned messages (numbers, words, phrases, and arrows) from 3.0 MIL flexible film coated with continuous adhesive pressure sensitive backing to meet characteristics specified for surface-applied messages. Execute die-cutting in such a manner that all edges and corners of finished letter forms are true and clean. Letter forms with round positive or negative corners, nicked, cut or ragged edges, etc., will not be acceptable.

M Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

SHEET TITLE

PERFORMANCE SPECIFICATIONS

PROJECT

**DELAWARE TECHNICAL COMMUNITY COLLEGE
STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-005

1621 N. Lincoln Street
Wilmington, DE 19806
(P)302-658-6426
(F)302-658-8431



abhagen@ABHA.com
www.ABHA.com

REV: 08/22/2016

ISSUE: 1617

PROJECT NO: 1617 Signage DRW

FILE NAME: GES

DRAWN BY: SRL

CHECKED BY:

merje
ENVIRONMENTS & EXPERIENCES

120 North Church Street
Suite 208
West Chester, PA 19380
T 484.266.0648
www.merjedesign.com

PART 3 – EXECUTION

3.01 INSPECTION

A Examine the substrates and conditions under which the signs are to be installed and notify the owner in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A Install sign units and components with concealed fasteners, unless otherwise shown. Refer to detail drawings for general method. Verify each surface in field to determine specific, appropriate hardware.

Drawings in this package may not indicate any below-ground or in-wall structural tie-ins or connections that may be necessary to assure stable and secure installation of signs. Sign fabricator is responsible for determining where such connections are necessary and for coordinating with related trades to make them.

B Locations: Refer to drawings for approximate locations. Any discrepancies or apparent deviations from drawing locations because of different site conditions shall be brought to the attention of the owner for solution. The owner must be present for field placement of the sign.

It shall be the responsibility of the Contractor to determine location of underground structures and utilities by the use of test pit excavation prior to excavation operations. Test pits shall be the size, depth and location as approved by the Engineer. Each pit shall be tamp-back-filled. Test pit excavation will be measured on the basis of the volume of material actually removed from within the limits specified. Tamped backfill will not be measured but shall be included in the price bid for test pit excavation.

Price provided shall include all excavation, tamped backfill, labor, tools, equipment and incidentals necessary to complete the installation of each sign.

C For ground-mounted signs, provide whatever replacement concrete, pavers, bricks, etc., are necessary to match adjacent surfaces exactly. Seams should be parallel or perpendicular to sign face and be symmetrical around post(s).

D Note that this area experiences heavy public use. Strong environmental conditions such as weather and vandalism may be routine problems. Signs must be securely mounted. Contractor is responsible for suggesting alternative fabrication or installation methods if required to prevent theft or vandalism.

E Install signs to be level, plumb and at the proper height. Cooperate with other trades for installation of sign units.

F Clean and polish, remove excess adhesive.

G Fixture installation

1 Install lighting fixtures with seals and gaskets. Conceal all wiring in or within the construction.

- 2 Lamp installation
 - a) Do not install lamps for permanent use until operating voltage is verified and established.
 - b) Install lamps in accordance with lamp and fixture manufacturer's instructions.
- 3 Ballast installation
 - a) Install ballasts at factory unless specifically indicated otherwise. Mount on rubber grommets or sound isolating details to reduce noise transmission.

3.03 TREE TRIMMING AND PROTECTION

A Include the protection and trimming of trees that interfere with, or are affected by, execution of the Work, whether temporary or new construction.

- 1 Quality Assurance:
 - a) Tree Service Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site on a full-time basis during execution of the Work.
 - b) Arborist Qualifications: An arborist certified by the International Society of Arboriculture or licensed in the jurisdiction where Project is located.
- 2 Preparation:
 - a) Install temporary fencing located as indicated or outside the drip line of trees to protect remaining vegetation from construction damage.
 - b) Protect tree root systems from damage due to noxious materials caused by runoff or spillage while mixing, placing, or storing construction materials. Protect root systems from flooding, eroding, or excessive wetting caused by dewatering operations.
 - c) Do not store construction materials, debris, or excavated material within the drip line of remaining trees. Do not permit vehicles or foot traffic within the drip line; prevent soil compaction over root systems.
 - d) Do not allow fires under or adjacent to remaining trees or other plants.
- 3 Excavation
 - a) Install shoring or other protective support systems to minimize sloping or benching of excavations.
 - b) Do not excavate within drip line of trees, unless otherwise indicated.
 - c) Where excavation for new construction is required within drip line of trees, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks and comb soil to expose roots.

- 1) Relocate roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and relocate them without breaking. If encountered immediately adjacent to location of new construction and relocation is not practical, cut roots approximately 3 inches back from new construction.
- 2) Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

- 4 Tree repair and replacement
 - a) Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to written instructions of the qualified arborist.
 - b) Remove and replace dead and damaged trees that the qualified arborist determines to be incapable of restoring to a normal growth pattern.
 - 1) Provide new trees of 6-inch caliper size and of a species selected by Designer when trees more than 6 inches in caliper size, measured 12 inches above grade, are required to be replaced.
- 5 Disposal of waste materials
 - a) Burning is not permitted.
 - b) Remove excess excavated material, displaced trees, and excess chips from Owner's property.

3.04 CLEANUP

A Periodically (at least daily) and upon completion of the installation, remove all waste, dirt, wrappings and excess materials, tools and equipment, and carefully and thoroughly clean all surfaces to the satisfaction of the owner.

3.05 PROPERTY DAMAGE

A Protect all adjacent surfaces from damage and pay the cost of repairing any damage to the property caused by delivery or installation of materials. In all cases, match existing surfaces.

SHEET TITLE

PERFORMANCE SPECIFICATIONS

PROJECT

**DELAWARE TECHNICAL COMMUNITY COLLEGE
STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-006

1621 N. Lincoln Street
Wilmington, DE 19806
(P)302-658-6426
(F)302-658-8431



abhagen@ABHA.com
www.ABHA.com

REV:	08/22/2016
ISSUE:	1617
PROJECT NO:	1617 Signage DRW
FILE NAME:	GES
DRAWN BY:	GES
CHECKED BY:	SRL

merje
ENVIRONMENTS & EXPERIENCES

120 North Church Street
Suite 208
West Chester, PA 19380
T 484.266.0648
www.merjedesign.com

A perfect blend of design, performance and value

LYTEPRO LED SMALL FLOODLIGHT 40W LPF2



Project: _____
 Location: _____
 Catalog No: _____
 Fixture Type: _____
 Mfg: _____ Lamps: _____ Qty: _____
 Notes: _____

PHILIPS STONCO LYTEPRO LED SMALL FLOODLIGHT 40W LPF2

The Philips Stonco LytePro LED Small Floodlight allows precision and flexibility in a compact design. The LPF2 features state-of-the-art long-life LED technology and is ideal for landscapes, accenting signage or displays, facades, and many other lighting applications.

Ordering guide¹

example: LPF2-E-4K-FL-K-F1-PCB-1-BZ

Series / # of COB ²	Drive Current	Color Temperature	Distribution	Mounting	Options	Voltage	Finish
LPF2 -	E -	4K -	FL -	K -	-	-	-
LPF2 LytePro LED Small Floodlight 40W	E 500 mA	4K 4000K ³ 5K 5000K ³	FL Flood	K Knuckle 1/2" NPT	F1 ⁴ Single Fusing F2 ⁵ Double Fusing F3 ⁶ Double Fusing, Canada PCB ⁷ Photocontrol DM25 ^{8,9} Dynadimmer	1 120V 2 208V 3 240V 4 277V 6 347V 8 120-277V	BZ Textured Dark Bronze WH Textured White DGY Textured Dark Gray

Accessories – Ordering Guide (must be ordered separately)

Catalog #	Description
LPF2WG ^{10,11}	Wire Guard
LPF2SG ^{10,11}	Stone Guard
LPFW10BZ ^{10,11}	Bronze Wall Adapter
LPFW10WH ¹²	White Wall Adapter
LPFW10DGY ¹²	Textured Dark Gray Wall Adapter

Stocked Luminaires – Ordering Guide^{13,14,15,16}

Catalog #	Description	Master Pack, QTY	UPC Code
STKLPF2K-8	LPF2, Knuckle Mount, 120-277V	Yes, 4	786034956932

Footnotes:

- MTO configurations are assembled in the USA.
- COB denotes Chip On Board LED platform.
- Both 4K and 5K options have a minimum 80 CRI.
- 'F1' for 120, 277, 347V.
- 'F2' for 208, 240V.
- 'F3' for 208, 240V Canadian double pull.
- Specify voltage. 'PCB' not available with '8' universal voltage option.
- 'DM25' only available 120-277V and dims to 25% for 6 hours.
- Dynadimmer is suitable for use from -30°C to 40° temperature ambient only.

- Limited quantities stocked in our Carrollton RDC.
- Contact factory for availability of large order quantities.
- LPFW10WH and DGY are Made to Order only.
- All stock products are BZ Textured Dark Bronze, 4K Neutral White and FL Flood Optics.
- Stock LPF products ship out of our Carrollton Distribution facility within 2-days of receipt of order.
- Always consult factory for current inventory levels. Larger quantities may be converted to MTO if necessary.
- LPF2 is provided with full 4-color POP packaging.



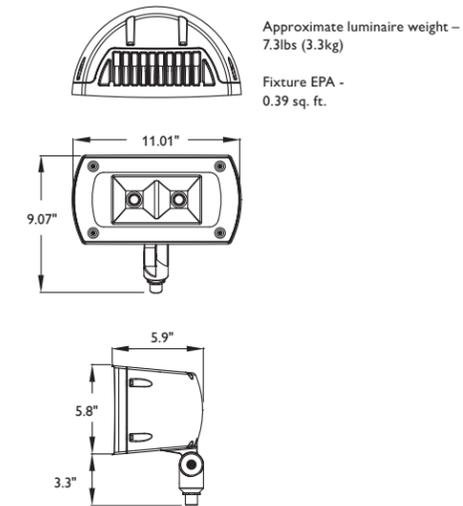
**PHILIPS
Stonco**

LYTEPRO LED SMALL FLOODLIGHT 40W LPF2

Features

- LPF2 delivers 3,460 lumens at 40W, with an efficacy of 87 lumens per watt
- Effectively replaces equivalent 150W HID at minimum
- 4000K neutral white is standard, 5000K cool white is optional, minimum 80 CRI
- DLC certified optics provide excellent uniformity ideal for general facade, target and landscape illumination
- Fixtures are IP66 rated and suitable for use in ambients from -40°C to 40°C
- Rated system life of 100K hours for the driver and LED (>L₇₀) at ambients up to 30°C
- 5-year limited warranty, see philips.com/warranties for details
- LPF2 stocked in dark bronze, 120-277V and 4000K Neutral White for quick 2-day shipment
- Additional made to order versions available that are assembled in the USA, consult factory for current lead time

Dimensions

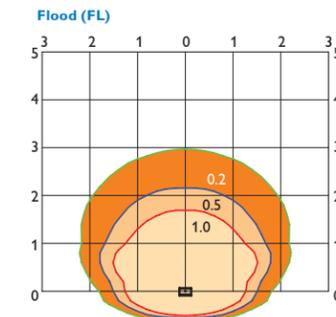


Performance Specifications

Beam Specs	Flood (FL)
Initial Lumens (4K and 5K) ¹⁷	3,460
Average Wattage ¹⁸	40W
Lumens/Watt	87
NEMA Beam	6H x 6V
50% beam (horizontal X vertical)	93° x 79°
10% beam (horizontal X vertical)	127° x 105°
Max Candela	1,974 cd

- Lumen values based on photometric tests performed in compliance with IESNA LM-79.
- System input wattage may vary based on input voltage, by up to +/- 8%, and based on manufacturer forward voltage, by up to +/- 4%.

Photometrics



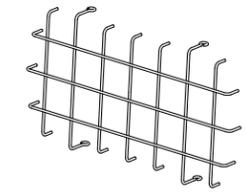
LPF2 40W - 12' Mounting Height, 30° Tilt

Mounting Height	18	15	12	10	8
Multiplier	0.32	0.56	1.0	1.5	2.5

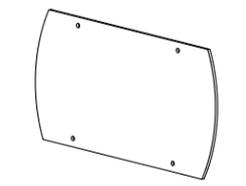
Notes: Grid is in multiples of mounting height and values shown are in footcandles. Values shown are based on initial lumens.

Accessory Details (must be ordered separately)

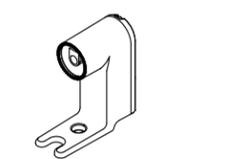
LPF2WG wire guard (field installed)



LPF2SG stone guard (field installed)



LPFW10 wall adapter (field installed)



SHEET TITLE

LIGHTING SPECIFICATIONS

PROJECT
**DELAWARE TECHNICAL COMMUNITY COLLEGE
 STANTON CAMPUS EXTERIOR SIGNAGE**

CONSULTANT

SG-007

1621 N. Lincoln Street
 Wilmington, DE 19806
 (P)302-658-6426
 (F)302-658-8431
 abhagen@ABHA.com
 www.ABHA.com



REV: _____
 ISSUE: 08/22/2016
 PROJECT NO: 1617
 FILE NAME: 1617 Signage DRW
 DRAWN BY: GES
 CHECKED BY: SRL

merje
 ENVIRONMENTS & EXPERIENCES

120 North Church Street
 Suite 208
 West Chester, PA 19380
 T 484.266.0648
 www.merjedesign.com

LYTEPRO LED SMALL FLOODLIGHT 40W LPF2

Specifications

General Description

The Philips Stonco LytePro LED Small Floodlight 40W LPF2 combines excellent performance, design and value to meet the needs for the energy and budget conscious. The LPF2 is available with a 1/2" NPT knuckle for ease of installation and an all-purpose Flood optical distribution suitable for use on a wide range of applications. A single primary SKU is available in stock for 2-day quick ship while a more comprehensive offering is available made-to-order with multiple offerings that include fusing, photocontrol, Dynadimmer, NW and CW color temps and three standard finishes.

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates integrated heatsinking to maximize thermal performance and reliability.

Mounting

The LPF2 comes standard with a 1/2" NPT knuckle mount to allow for wide range of aiming and adjustability. Optional LPFW10 mounting accessory can be field installed to allow for easy installation to a wall or surface. Caution: Philips Stonco is not responsible for failure of mounting components supplied by others. Proper care should be exercised in mounting component selection and installation to insure adequate luminaire support, given system weight, vibration potential, exposure to the elements, thermal conditions present in the given application, etc. If luminaires are not properly supported and installed correctly per local codes and requirements, this may result in damage or injury caused by the luminaire, for which Philips Stonco is not responsible.

IP Rating

Entire fixture is rated IP66 rated, including driver and optical assemblies. Use of field installed LPFW10 wall mount accessory is rated to IP54, but luminaire housing remains IP66.

LED Board and Array

The LPF2 utilizes two Citizen CLL032 COB (Chip On Board) LEDs. Provides 87 lm/W at the system level. Standard color temp is 4000K +/- 250K, with optional 5000K available. Both color temps have a minimum 80 CRI.

LED Thermal Management

Housing design integrates thermal heatsinking between the optical and driver assemblies, allowing for pass-through convective cooling which promotes airflow for improved and maximum heat dissipation. This results in maximized performance and reliability of critical components to ensure long LED system life.

Optical Systems

LPF2 is standard with a specular vacuum metalized reflector that provides a very uniform and highly efficient all purpose flood distribution, suitable for use in wide range of applications.

Energy saving benefits and controls

The LPF2 has a system efficacy of 87 lm/W at a system wattage of 40W. It provides significant energy savings over traditional HID systems less controls. Optional Dynadimmer controls provides additional maximum energy savings by dimming to 25% low for 6 hours.

Electrical

Driver efficiency (>90% standard). 120-347V available (restrictions apply). Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. RoHS compliant. Surge protector standard and is in accordance with IEEE / ANSI C62.41.2 guidelines, with a surge current rating of 10,000 amps (10KVA).

Listings

Product is UL and cUL listed to the UL1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). The LPF2 luminaire with either 4K Neutral White or 5K Cool White LEDs and flood optics is DesignLights Consortium® qualified. Stock SKUs of the LPF family are made in China while all made-to-order configurations are assembled in the USA.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard finish on all stocked LPF luminaires is Textured Dark Bronze. Textured White and Dark Gray are also available as optional colors for made-to-order products.

Warranty

LPF2 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See philips.com/warranties for details.

Predicted Lumen Depreciation Data¹⁹

Ambient Temp. °C	TM-21 Calculated L ₇₀ hrs ^{19,20}	Reported L ₇₀ Per TM-21 ^{20,21}	Lumen Maint. % @60,000 hrs
up to 40°C	269,000 hrs	>48,000 hrs	91.5%

19. Calculated performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

20. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

21. Reported per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.



© 2014 Koninklijke Philips N.V. All rights reserved.
Specifications are subject to change without notice.
www.philips.com/luminaires

LytePro_LPF2 04/14 page 3 of 3

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216

Philips Lighting Company
281 Hillmount Road
Markham ON, Canada L6C 2S3
Phone: 800-668-9008

SHEET TITLE

LIGHTING SPECIFICATIONS

PROJECT

DELAWARE TECHNICAL COMMUNITY COLLEGE
STANTON CAMPUS EXTERIOR SIGNAGE

CONSULTANT

SG-008

1621 N. Lincoln Street
Wilmington, DE 19806
(P)302-658-6426
(F)302-658-8431



abhagen@ABHA.com
www.ABHA.com

REV: 08/22/2016
ISSUE: 1617
PROJECT NO: 1617
FILE NAME: 1617 Signage DRW
DRAWN BY: GES
CHECKED BY: SRL

merje
ENVIRONMENTS & EXPERIENCES

120 North Church Street
Suite 208
West Chester, PA 19380
T 484.266.0648
www.merjedesign.com

FONT - CAMPUS NAMES

Myriad Pro Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890 "!"@#\$%^

Amongst the several mechanical Arts that have engaged my attention, there is no one which I have pursued with so much steadiness and pleasure, as that of Letter Founding.

Downtown

acceptable

Downtown

NOT acceptable

Downtown

NOT acceptable

123A

acceptable

123A

NOT acceptable

1 2 3 A

NOT acceptable

LETTERSPACING

Inconsistencies in Letter Spacing

TYPEFACE 2

Estevan

Corrected Letter Spacing

TYPEFACE 2

Estevar

IMPORTANT: Individual spacing of each letter needs to be evaluated. See Examples Above.
Kern all Copy so that **each character is optically centered** between the center of each of the surrounding characters.

SIGN TEXT STANDARDS

COPY HEIGHT

When measuring copy height, measure only the height of the Capital letters to determine your overall copy height (shown in illustration below as "X") Some of the other letters have an extended height beyond the average height of the letters.



LINE SPACING

When measuring line spacing, always measure from the baseline of the topmost text line to the baseline of the text line below (shown as "X")



 ENVIRONMENTS & EXPERIENCES 120 North Church Street Suite 208 West Chester, PA 19380 T 484.266.0648 www.merjedesign.com	 1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com	SHEET TITLE	
		GRAPHIC STANDARDS - TYPOGRAPHY	
REV: ISSUE: 08/22/2016 PROJECT NO: 1617 FILE NAME: 1617 Signage DRW DRAWN BY: GES CHECKED BY: SRL		PROJECT	
		DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
		CONSULTANT	SG-009

COLORS

P PAINTS	NAME	SPECIFICATION	PROCESS
P1	 Del Tech Blue	To match PMS 541C	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
P2	 Del Tech Green	To match PMS 347C	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
P3	 Dark Silver Metallic	Matthews Paint MP 18145 Dark Silver Metallic	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
P4	 Light Silver Metallic	Matthews Paint MP 18071 Light Silver Metallic	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
P5	 Black Stallion	Matthews Paint MP 33653 Black Stallion	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
P6	 Deep River Grey	Matthews Paint MP 07102 Deep River	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
P7	 Verizon White	Matthews Paint MP 27386 Verizon White	Surface painted, with Matthews Acrylic Polyurethane Clear Coat Satin Finish
			Absolutely NO HIGH GLOSS clear coat! NONE!

WORDMARKS



Delaware Tech is to give final review and approval of all logo - artwork and shop drawing submittals by the Contractor for size - font - color etc prior to fabrication.

A Full Size Template shall be supplied for approval in the field by the Architect - Fabricator and DCCC Branding Department prior to Fabrication.

Logo Artwork artwork/color files are to be supplied by DCCC Office of the President.

Contact : Judi Sciple, Ed.D.

Vice President for Institutional Effectiveness and College Relations

Delaware Technical Community College

Office of the President

P.O. Box 897

Dover, DE 19903

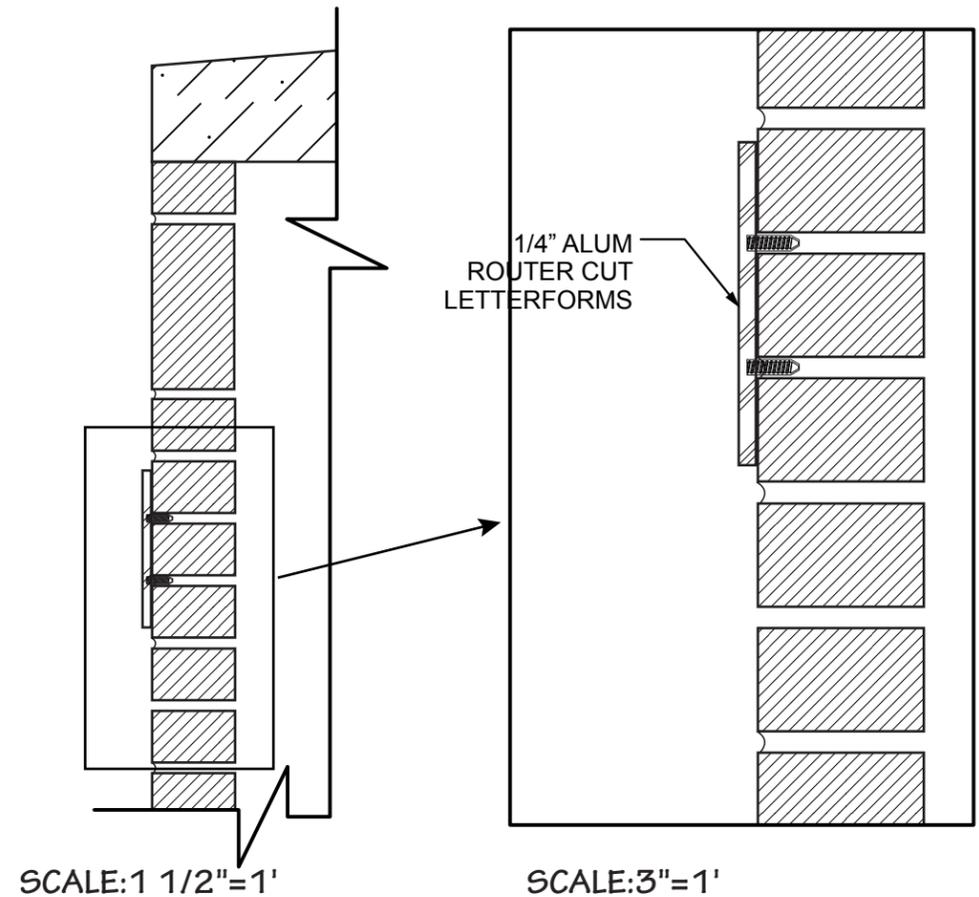
302.857.1665

 <small>ENVIRONMENTS & EXPERIENCES</small> 120 North Church Street Suite 208 West Chester, PA 19380 T 484.266.0648 www.merjedesign.com	 1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com	SHEET TITLE	
		<p align="center">GRAPHIC STANDARDS - COLOR CHART & ARTWORK</p>	
		PROJECT	
		<p align="center">DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE</p>	
		CONSULTANT	SG-010

REV:	
ISSUE:	08/22/2016
PROJECT NO:	1617
FILE NAME:	1617 Signage DRW
DRAWN BY:	GES
CHECKED BY:	SRL



1 SECTION : GATE.B
 PANEL SIGN
 SCALE: 1/2" = 1'-0

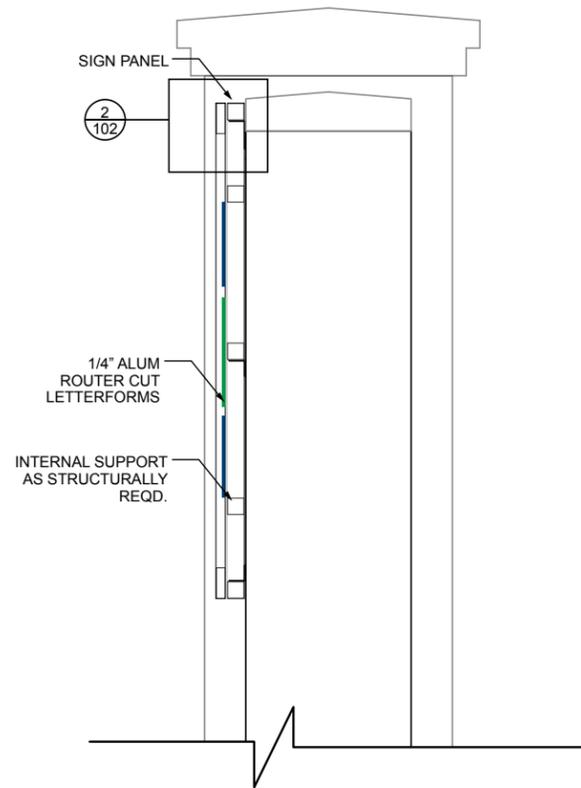


3 SECTION: GATE.B
 LETTERS
 SCALE: 1 1/2" = 1'
 SCALE: 3" = 1'

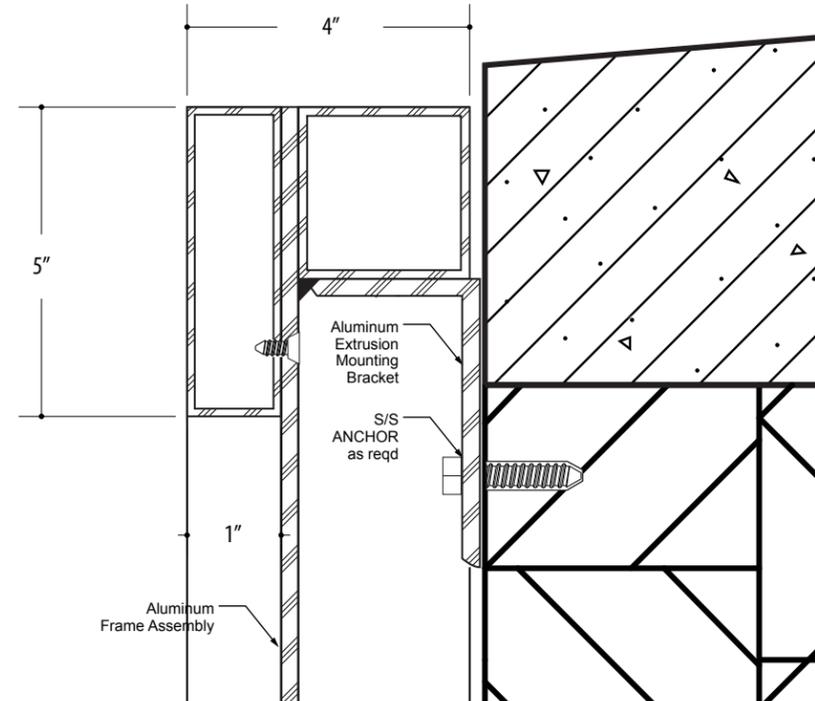


2 GRAPHIC LAYOUT : GATE.B
 SCALE: 1/2" = 1'-0

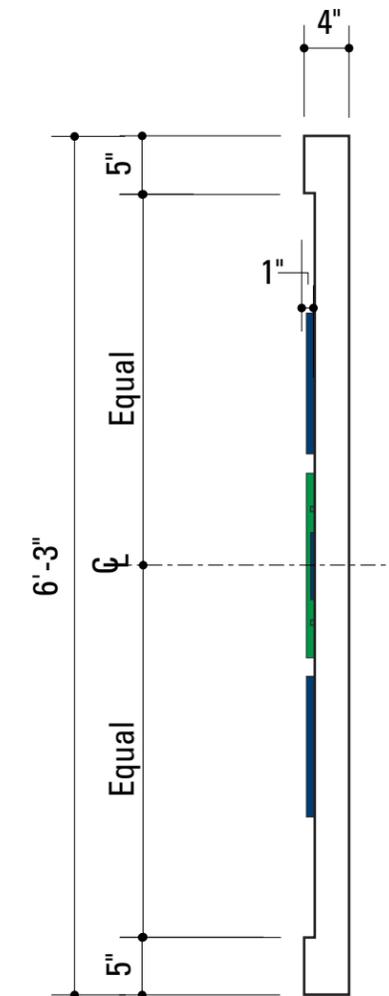
 120 North Church Street Suite 208 West Chester, PA 19380 T 484.266.0648 www.merjedesign.com	 1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com	SHEET TITLE GATE.B CONSTRUCTION DETAILS	
		PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
REV: ISSUE: 08/22/16 PROJECT NO: 1617 FILE NAME: 1617 Signage DRW DRAWN BY: GES CHECKED BY: SRL		CONSULTANT	SG-101



1 SECTION : GATE.B
 PANEL SIGN
 SCALE: 1/2" = 1'-0

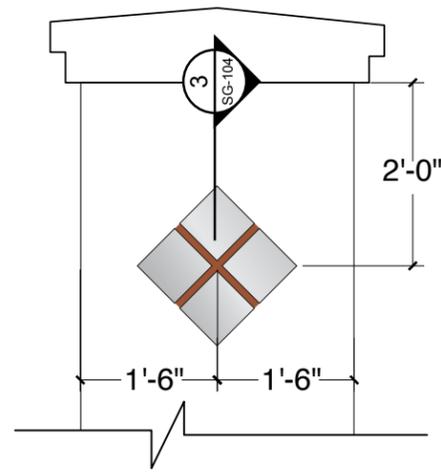


2 SECTION : GATE.B
 PANEL BRACKET
 SCALE: 3" = 1'-0

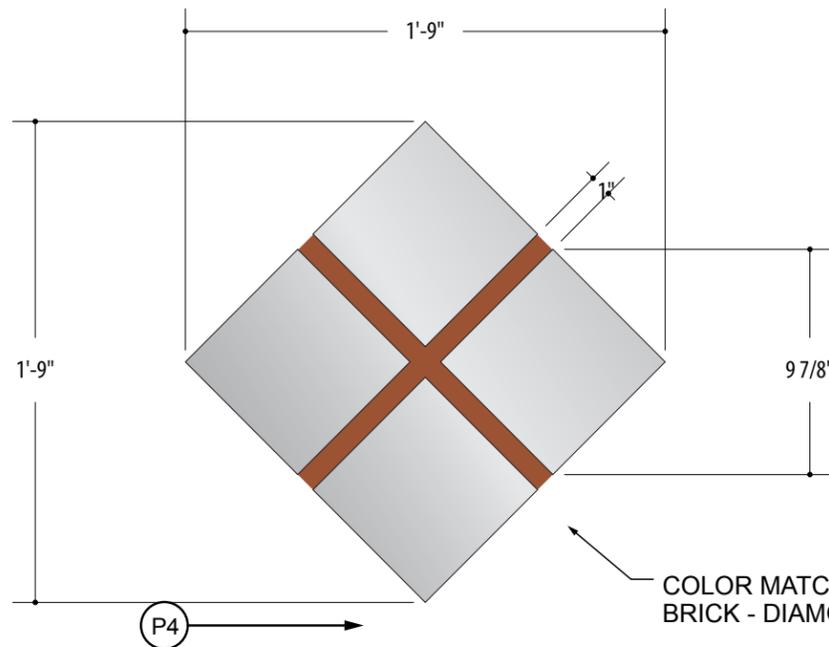


3 SECTION : GATE.B
 PANEL BRACKET
 SCALE: 3/4" = 1'-0

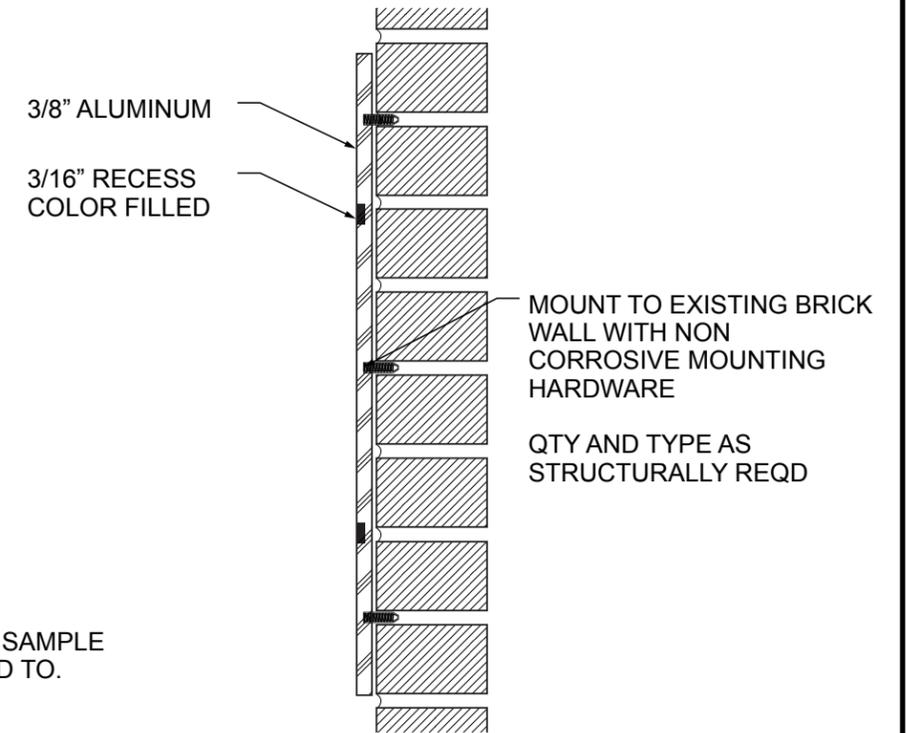
 ENVIRONMENTS & EXPERIENCES 120 North Church Street Suite 208 West Chester, PA 19380 T 484.266.0648 www.merjedesign.com	 1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com	SHEET TITLE	
		GATE.B CONSTRUCTION DETAILS	
		PROJECT	
		DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
		CONSULTANT	SG-102
REV: ISSUE: 08/22/16 PROJECT NO: 1617 FILE NAME: 1617 Signage DRW DRAWN BY: GES CHECKED BY: SRL			



1 PLACEMENTS : GATE.B
DIAMONDS
 SCALE: 1/2" = 1'-0



2 GRAPHIC LAYOUTS: GATE.B
DIAMONDS
 SCALE: 1" = 1'-0



3 SECTION : GATE.B
DIAMONDS
 SCALE: 1/2" = 1'-0

 ENVIRONMENTS & EXPERIENCES 120 North Church Street Suite 208 West Chester, PA 19380 T 484.266.0648 www.merjedesign.com	 1621 N. Lincoln Street Wilmington, DE 19806 (P)302-658-6426 (F)302-658-8431 abhagen@ABHA.com www.ABHA.com	SHEET TITLE GATE.B CONSTRUCTION DETAILS	
		PROJECT DELAWARE TECHNICAL COMMUNITY COLLEGE STANTON CAMPUS EXTERIOR SIGNAGE	
REV: ISSUE: 08/22/16 PROJECT NO: 1617 FILE NAME: 1617 Signage DRW DRAWN BY: GES CHECKED BY: SRL		CONSULTANT	SG-103