

## Wayfinding and Signage Manual

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Prepared by Exit Design

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SECTION 1

# About the Sign System

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## **Introduction**

Lehigh University, located in Bethlehem, Pennsylvania, spans 1,600 acres across three campuses:

- 1. Packer
- 2. Mountaintop
- 3. Goodman

Lehigh University has recently announced its ambitious new "Path to Prominence" plan that will transform the physical campus landscape to support dramatic academic growth over the next ten years. A key component in improving the built environment and landscape design to achieve this plan is the creation of wayfinding and signage standards and an implementation strategy to establish a coherent, navigable, and consistent identity for Lehigh University. The Wayfinding and Signage program at Lehigh University is guided by the following vision and objectives:

## **Vision**

Create a system of total support to help students, prospective students and families, faculty, staff, and the general public navigate the campus with ease. Support their journey with respect, empathy and joy.

## **Objectives**

Create a visitor-centric experience.

Develop a wayfinding system that creates a coherent and navigable campus environment.

Elevate the Lehigh University brand in the environment.

Connect, leverage, and strengthen Lehigh University assets.

Engage stakeholders including the City of Bethlehem, Lower Saucon, Hellertown, and PennDOT to create a consistent wayfinding experience beyond Lehigh University borders.

Provide leadership in innovation and design.

Assist users in navigating the steep topography of the campus.

Apply sustainable concepts and principles to the system through the efficient use of natural and manufactured resources.

Create a sustainable, maintainable, and flexible system to respond to the continued campus growth.

Consider technology to enhance the system.

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**SECTION 1A** 

# Wayfinding at Lehigh

## Wayfinding At Lehigh University

Wayfinding is a process of spatial orientation and decisionmaking along an individual's path of travel to a destination. There are points along this journey when orientation is required to make a decision about which direction to proceed. Exterior signs provide the information necessary to guide students, visitors and staff to destinations, identify areas and provide safety information. A successful sign system assists people in finding their way, enhances the campus environment and complies with the Americans with Disabilities Act (ADA) and local regulations.

In 2017, Lehigh University assessed the manner in which it moves people between, around and through its campuses to develop a new wayfinding strategy. Lehigh University engaged Exit Design, a Philadelphia-based design firm, to evaluate its campus wayfinding, access and usability. Comprehensive signage audit, site observations, tours, fieldwork and work sessions with University stakeholders informed the design direction of the sign program.

The Experience Assessment audit provided a clear understanding of the current campus experience. Its findings were used to develop an overall Wayfinding Master Plan for a new campus experience to match the growth of the University and accommodate future changes.

The Wayfinding Master Plan identifies the top wayfinding challenges on campus and outlines the opportunities to address these challenges and enhance the overall user experience across all campuses. Recommendations include creating an overall language of wayfinding for the campuses, promoting pedestrian navigation of the campus, enhancing the connection between campuses and across the mountain, and enhancing the campus shuttle experience.

This comprehensive wayfinding and signage standards manual documents the approved design direction to address the needs identified in the Wayfinding Master Plan (8/1/18), and demonstrates constructability, maintenance, and guidelines for implementation.

The University's visual identity system and image was translated to a new, aesthetically distinct, affordable and easily maintainable exterior sign standard system. The new standards outline guidelines for signage locations, keeping in mind that campus beautification efforts include minimizing the quantity of signage in the campus landscape. The new sign system promotes the Lehigh University commitment to standardization, yet provides the flexibility to respond to the variety of campus conditions. For the ease of wayfinding and direction-giving, Lehigh University has been divided into four distinct regions as shown in the map to the right. Packer Campus, the largest of Lehigh's three campuses, has been divided into two neighborhoods based upon their unique characteristics: the Packer neighborhood (reflecting the core of academic buildings) and Sayre Park neighborhood (representing the residential housing on the mountainside). The wayfinding system has been developed to infuse the environment with the Lehigh Identity, connect the three campuses, support the approach and departure to and from each campus, delineate the two Packer neighborhoods, organize and create clarity in the pedestrian and vehicular wayfinding, and establish information hubs at key public destinations.

## Wayfinding Sign Program Policy

The Lehigh University Wayfinding and Signage Manual provides specific guidelines and standards to the Lehigh University community for the implementation of the Lehigh sign system across all University campuses, buildings and environments. The Lehigh University Signage Manual has been developed by Campus Planning and Projects with extensive advice and consultation from faculty, staff and students.

The power of a strong visual identity and consistent wayfinding system can only be realized through consistent application over time. It is Lehigh University's policy that the official wayfinding signage, as described in this manual, is the only sanctioned wayfinding and signage system across Lehigh University. No other signage may be used or created to represent Lehigh University as a whole or any part thereof.



## **Glossary Of Terms**

Definitions of key concepts and tools are provided in this section:

## Wayfinding Methodology

Finding and harnessing the hidden logic of a place to create a simple, clear and easily communicated methodology for wayfinding is the first step in providing directions to a visitor. A wayfinding methodology creates a platform or language for the wayfinding and signage program. This manual provides a deeper understanding of how to implement and maintain the wayfinding and signage program.

## **Hierarchy**

The logic of wayfinding is heavily based on developing and maintaining a hierarchy of information. This pre-determined hierarchy applies to terminology, direction-giving methodology and even the design features of a system, such as typography and color.

## Terminology

Lehigh University has developed a consistent terminology, or language, that should be used in all wayfinding communication, i.e. print, web, signage and verbal direction-giving.

## Copy list

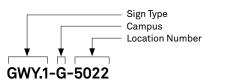
The Copy List details signs specified for fabrication. It references a sign location number that corresponds to a sign location plan and includes the sign type, copy to appear on each sign, quantity, and installation notes.

## Sign Location Plans

Sign Location Plans are site or floor plans that show locations of each sign specified for installation. Each sign location number shown on the site plan references the sign location number in the copy list.

## Sign Location Numbering

A strategy for sign location numbering has been developed to ease the process of review and revisions. For example:



There should be no duplicating number sequences. Every location should have a unique location number.

## Sign Type Numbering System

The "Sign Type Numbering System" is designed to assist in specifying each sign type. The numbers help organize the signs by function, layout and product category.

## Sign System Overview

The sign system overview section of this manual shows every sign type in the system, organized by sign type category. Each sign type category includes an introduction to its usage. For each sign type, a description of the sign and its function, the sign type number and overall size is provided as a quick reference.

## **Design Intent Drawings**

Each sign type is dimensioned and detailed in the specification section of the manual. Every sign type has at least four pages (front and back) of fabrication and installation details. These pages are organized so that they can be removed from the manual, copied, and provided to a fabricator and/or installer based upon an individual project's needs.

## **Strategy Section**

The strategy section of the manual is designed for use by the team that is planning, managing and programming a wayfinding system at Lehigh University. This section provides the detailed strategies that were used to design the wayfinding system, and should be included in each implementation of the system.

## Brand Usage

The logo, terminology, fonts, colors and signature elements of the Lehigh University brand are strategically included in the messaging and design of the Wayfinding and Signage System. The Lehigh logo and signatures are integrated, where appropriate, into the signage system. The goal for all logo usage is to adhere to the standards in the Lehigh University Branding and Visual Identity Guide. Any brand application in the system that deviates from the identity manual has been reviewed and approved for signage usage only.

Typically, logos appear on signage at large permanent installations, such as campus arrival moments, but not at individual information or regulatory warning signs. Some typefaces, colors and layouts are not suitable for application on large-scale environmental graphics. Critical adjustments may need to be made to brand elements for inclusion on signage. For questions about brand usage, contact the Lehigh University Communications and Public Affairs office.

**SECTION 1B** 

## How to Use the Manual

## How To Use The Manual

The manual has been developed for the ongoing maintenance of the system that includes comprehensive information for the Exterior Signage program. The Wayfinding and Signage Manual consists of a vocabulary of pre-designed sign types that will effectively meet a broad range of sign function requirements. This manual documents the signage program and describes the entire sign family as a sign system, including descriptions of sign types and their functions.

The Wayfinding and Signage Manual facilitates the implementation of signs across campus as new buildings are constructed and areas of campus are renovated and as a catalog to order replacements for damaged or outdated parts or signs where the program has already been installed.

This document is intended to provide project managers and other interested parties with a detailed description of the primary operating characteristics of the Exterior Sign program at Lehigh University. The manual is divided into three parts:

### Section 1-About The Sign System

This section provides an overview of objectives, policies and strategies that were developed and approved by the Lehigh University Signage Working Group.

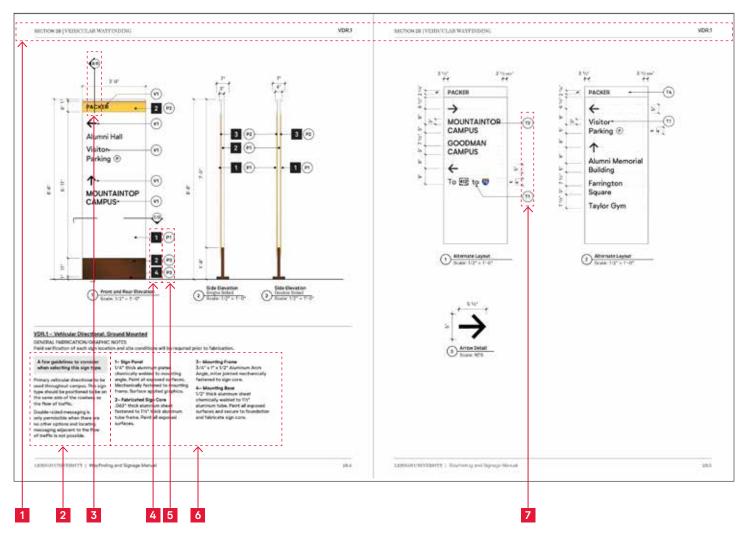
### Section 2-Sign System Overview

Each exterior sign is shown with a drawing that specifies typography, color, materials, construction and installation details, placement guidelines and performance specifications.

## Section 3-Sign Maintenance

This section outlines the levels of implementation of the signage standards and the tools and processes for maintaining the Signage System.

## Understanding the Layout



## 1 Sign Type Number Header

The Header outlines the sign type number and description, available configurations and variation details including size, illumination and mounting options. Use the reference chart on the right side of the Header for how to read the number.

## 2 Guidelines

This paragraph includes details about the design, usage, and programming of this specific sign type.

#### **3** Construction / Installation Detail Reference

Construction and Mounting Details are shared between multiple sign types in the Manual and are noted as section call outs. Sign types may reference multiple details located in the Construction and Installation Detail sections.

## 4 6 Construction Specifications

Portions of the sign elevation, indicated with a letter in a black box, key to the notes at the bottom of the page.

#### 5 General Color and Material Specifications

Color or Material specifications are noted with a P (paint) and number or M (material) and number, and key to the Color and Materials page in the Graphic Standards Section.

#### 7 Typography Specification

Typography specifications are noted with a T (type) and a number that key to the Typefaces page in the Graphic Standards Section. This Page is Intentionally Left Blank

**SECTION 1C** 

## **Graphic Standards**



Square

BASE LINE

See Examples Above. Kern all Copy so that each character is optically centered between the center of each of the surrounding characters.

LEHIGH UNIVERSITY | Wayfinding and Signage Manual



Lehigh Logo

golehigh

goLehigh Logo

No Smoking



 $(\mathbf{P})$ 



Lehigh University Logo

Parking Symbol

Bus Logo



178 Symbol



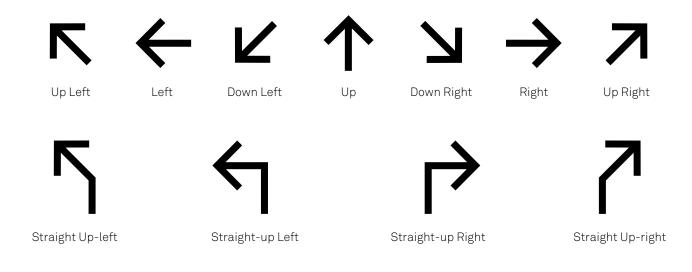
PA-378 Symbol



PA-412 Symbol



Do Not Enter





The standard arrow order for the Lehigh University system is: **Up, Left, Right.** 

Listings on all directional signs should follow this order.

Separate and organize messages for destinations within a campus versus trailblazing to campuses by name **(Example 1)**.

Arrow hierarchy still applies within each group listing **(Example 2)**.



Arrows should follow this order when messages direct within campuses or neighborhoods.

Example 1



Example 2

Color / M	Naterial / Finish Name	Specification (Color to Match)	Type, Substrate	Application Process
P1	White	MP07275 – White Christmas	Aluminum	Surface Painted with UV Clear Coat
P2	Lehigh Gold	MP06960 – Sun Coast	Aluminum	Surface Painted with UV Clear Coat
Р3	Dark Brown	MP07458 – Cast Bronze	Aluminum	Surface Painted with UV Clear Coat
P4	Black	Match PMS Black 6 C	Aluminum	Surface Painted with UV Clear Coat
P5	Red	Match PMS Warm Red C	Aluminum	Surface Painted with UV Clear Coat
D1	Black	Match PMS Black 6 C	Aluminum	Surface Printed
D2	Green	Match PMS 390 C	Aluminum	Surface Printed
D3	Lehigh Brown	Match PMS 1545 C	Aluminum	Surface Printed
D4	Light Brown	Match PMS 7501 C	Aluminum	Surface Printed
D5	Blue	Match PMS 2995 C	Aluminum	Surface Printed
D6	Light Gray	Match PMS 887 C	Aluminum	Surface Printed
D7	Lehigh Gold	Match MP06960 - Sun Coast	Aluminum	Surface Printed
D8	Red	Match PMS Warm Red C	Aluminum	Surface Printed
V1	Reflective Black Vinyl	3M Reflective Black 5100-085	Aluminum	Surface Applied
V2	Opaque Black Vinyl	3M Scotchal Electrocut 7125 Matte Black 22	Aluminum	Surface Applied
V3	White Vinyl	3M Scotchal Electrocut Matte White 7725-20	Glass	Second Surface Applied
V4	Dark Gray Vinyl	3M Scotchal Electrocut 7125 Dark Gray 41	Aluminum	Surface Applied
V5	Gray Vinyl	3M Scotchal Electrocut 7125 Mid Gray 61	Aluminum	Surface Applied
V6	Lehigh Brown	Digitally print to match PMS 1545 C	Aluminum	Surface Applied
V7	Reflective Red Vinyl	3M Reflective Ruby Red 5100-082	Aluminum	Surface Applied
M1	Aluminum	Brushed Horizontal finish with matte clear coat	Aluminum	Surface Applied
M2	Bronze	Dark Oxidized Bronze with matte clear coat	Bronze	Bronze

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SECTION 2

# Sign System Overview

## **Campus Gateways**

## <u>GWY.1 — Signature Gateway</u>

The Signature Gateway is intended as a landmark element at the primary campus arrival points (Packer, Mountaintop, and Goodman). These should be located for maximum visibility on approach.

## GWY.2 — Secondary Gateway Horizontal

Horizontal Secondary Gateways mark arrival to all campuses at primary and secondary entrance points. This horizontal orientation should be used when there is ample real estate to accommodate this sign type. The less urban environments should accept this orientation.

### GWY.3 — Secondary Gateway Vertical

Vertical Secondary Gateways mark arrival to all campuses at primary and secondary entrance points. This vertical orientation should be used when there is limited real estate to accommodate this sign type. This sign type works well for tight urban environments.

### <u>GWY.4 — Campus Identification</u>

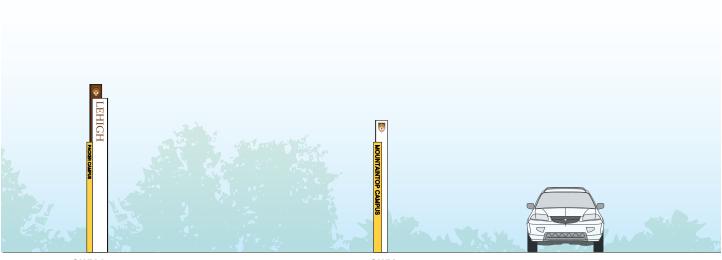
Campus Identification is intended to identify a campus by name. They can be used in conjunction with a Signature Gateway to mark a primary campus arrival. They can also be used as a standalone element to identify a transition point between campuses.



GWY.1 Signature Gateway



**GWY.2** Secondary Gateway Horizontal



**GWY.3** Secondary Gateway Vertical GWY.4 Campus Identification

## Vehicular Wayfinding

## CTB.1 — Campus Trailblazer

Campus Trailblazers should only be used along roadways connecting campuses. These signs are intended to mark the Lehigh Campus as well as connect drivers from one campus to another.

### VDR.1 — Vehicular Directional: Ground Mounted

Ground Mounted Vehicular Directionals are the primary vehicular directionals to be used throughout campus. This sign type should be positioned to be on the same side of the roadway as the flow of traffic and are primarly a singlesided sign. Double-sided messaging is only permissible when there are no other options and locating messaging adjacent to the flow of traffic is not possible.

### VDR.2 — Vehicular Directional: Post and Panel (Small)

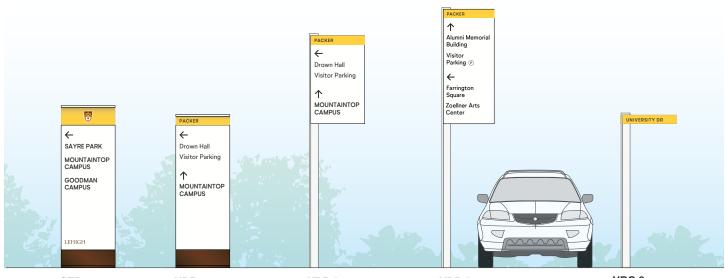
Post and Panel Vehicular Directionals are to be used when a smaller footprint is required or the ground mounted condition does not allow for the acceptable traffic sightlines. The use of this sign type should be limited to the Packer Campus and should be used to meet the needs of the urban conditions.

### VDR.3 — Vehicular Directional: Post and Panel (Large)

Post and Panel Vehicular Directionals are to be used when a smaller footprint is required or the ground mounted condition does not allow for the acceptable traffic sightlines. The use of this sign type should be limited to the Packer Campus and should be used to meet the needs of the urban conditions. This larger panel will accommodate longer 3 arrow messages.

## VRG.3 — Street Name

Street signs are to be used on Lehigh University owned streets to help define the campus edge.



**CTB.1** Campus Trailblazer **VDR.1** Vehicular Directional: Ground Mounted **VDR.2** Vehicular Directional: Post and Panel (Small) VDR.3 Vehicular Directional: Post and Panel (Large)

VRG.3 Street Name

## **Building Identification**

## BID.1 — Building Identification: Pedestrian

Pedestrian Building Identification signs are used to identify buildings along a pedestrian path. This sign type should be located along a pedestrian walkway, perpendicular to the path at the point of approach to the building. These signs are typically double-sided unless the second side of the sign is not visible.

### BID.2 — Building Identification: Vehicular

Vehicular Building Identification signs are used to identify buildings along a roadway. This sign type should be located perpendicular to the roadway, at the point of entry to the building driveway or in front of the building. These signs are typically double-sided unless the second side of the sign is not visible.

## BID.3 — Building Identification: Wall Mounted Plaque

Wall Mounted Building Identification signage should be positioned to the right of a primary building entrance. This sign type should be used to identify points of building access from this entrance, specific entrance name, and accessibility. If conflicts occur the sign can be located to the left of the doorway as an alternate location.

## BID.4 — Building Identification: Dimensional Letters

Dimensional letters are used to identify the name of a building, and are situated either above or next to the main entrance or can be used at a higher elevation to increase a building's visibility from across campus. A building's donor name may be identified using this sign type.

#### BID.5 — Building Identification: Vinyl Messaging

Vinyl messaging is to be used on glass entries to identify the building and entrance along with any other important regulatory information.

#### BID.6 — Building Identification: Greek Housing

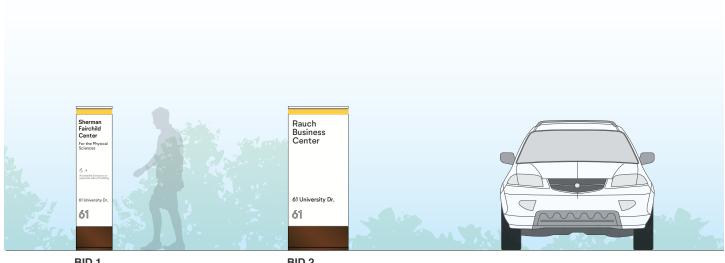
Greek Housing Identification signs are used to identify greek houses along a roadway. This sign type should be located perpendicular to the roadway, at the point of entry to the house driveway or in front of the house. These signs are typically double-sided unless the second side of the sign is not visible

#### BID.7 — Building Identification: Wall Mounted Address

Wall Mounted Address signage should be positioned to the right of a primary building entrance. This sign type should be used for Greek Housing address identification. If conflicts occur the sign can be located to the left of the doorway as an alternate location.

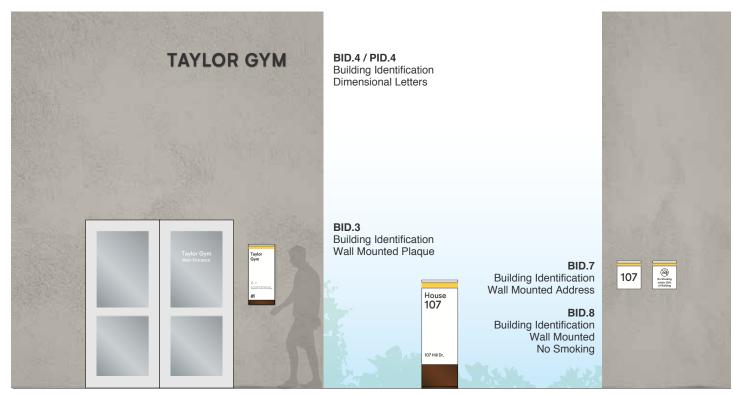
#### BID.8 — Building Identification: Wall Mounted No Smoking

Wall Mounted No Smoking signs should be positioned near building entrances when vinyl messages at the door entrance cannot be utilized. Place signs in areas where smoking could occur within 25ft of a building. Minimize sign clutter by placing signage 300ft apart if multiple signs are required.



**BID.1** Building Identification: Pedestrian





BID.5 Building Identification Vinyl Letters BID.6 Building Identification Greek Housing

## Parking

## PBB.1 — Garage Clearance Bang Bar

This sign is to be used to mark the garage clearance upon entry to the garage. The bottom of this sign should be mounted to match the garage clearance and positioned at each point of clearance change.

## PID.1 — Parking Identification: Large

Large Parking Identification signs should be located at parking lot entrances. Messaging should include lot name and number, what buildings the lot serves, plus any and all parking restrictions and rules.

## PID.2 — Parking Identification: Small

Small Parking Identification signs should be located at parking garage entrances. Messaging should include the garage name and number, plus any and all parking restrictions and rules.

## PID.3 — Parking Symbol: Building Mounted

Building mounted parking identification to increase visibility of visitor parking garages. This sign should be placed on the garage facade to optimize visibility on the garage approach.

## PID.4 — Parking Identification: Dimensional Letters

Dimensional letters are used to identify the name of a parking garage. Dimensional letters are situated either above or next to the main entrance or can be used at a higher elevation to increase a building's visibility from across campus.

## PRG.1 — Garage Entrance/Exit

This sign is to be used to mark the lanes of ingress and egress of the garage.

## VRG.1— Parking Regulatory: Small

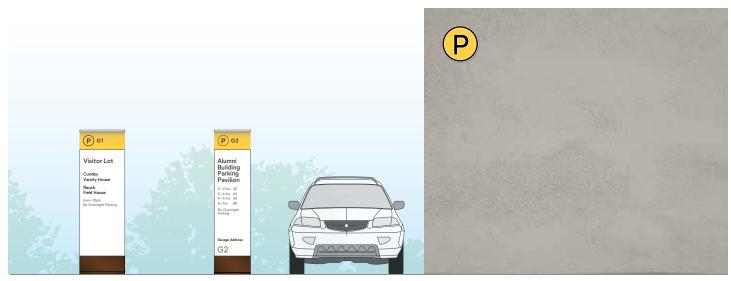
Small Parking Regulatory signs are intended to post notices about parking information including: reserved spaces, parking restrictions, limitations, etc.. These are to be located at the head of parking spaces or adjacent to curb parking.

## VRG.2— Parking Regulatory: Large

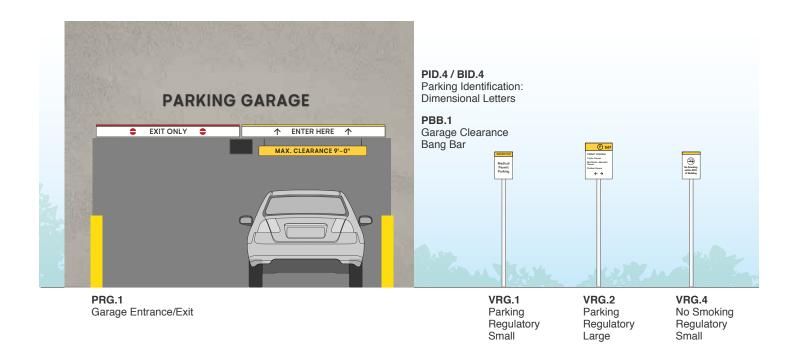
Large Parking Regulatory signs are intended to post notices about parking information including: reserved spaces, parking restrictions, limitations, etc.. These are to be located at the head of parking spaces or adjacent to curb parking.

## VRG.4— No Smoking Regulatory: Small

Small No Smoking Regulatory signs are intended to post notices about No Smoking restrictions around buildings.



PID.1 Parking Identification Large PID.2 Parking Identification Small PID.3 Parking Symbol: Building Mounted



## **Pedestrian**

## BUS.1 — Shuttle Stop Monolith

Shuttle Stop Monolith placement is dictated by the stop locations. These signs should always be double-sided and positioned perpendicular to the stop and the roadway.

## GR.1— Stair Graphics

Stair Graphics are intended to motivate and incentivize pedestrians to navigate the inclines of campus on foot. The messaging for these graphics should be developed in conjunction with the brand voice of the University.

## IHB.1 — Information Hub: Multi-sided

Multi-sided Information Hubs are structures that provide University-wide orientation and information as well as campus specific orientation and information. This sign type is located at key gathering spots and/or public destinations.

## IHB.2— Information Hub: Single-sided

Single-sided Information Hubs are structures that provide University-wide orientation and information as well as campus specific orientation and information. This sign type is located at key gathering spots and/or public destinations.

## PDR.1 — Pedestrian Directional

Pedestrian Directional signs are to be located at each decision point along primary pedestrian paths (or spines) throughout the campus. This sign type includes an orientation map and directions to key destinations.

As a general rule and in order to manage the number of destinations on the various campuses, an overall strategy for pedestrian directional signage has been established:

On the Packer campus it is recommended to use the map/ destination as the primary layout to help manage the high number of destinations.

On Sayre it is recommended to use orientation maps only and key touchpoints—this will help manage the number of breadcrumbs needed on Goodman and Packer. A mix of directional layouts can be paired together on one sign or directionals used throughout campus with maps at key locations.



BUS.1 Shuttle Stop Monolith IHB.1 Information Hub: Multi-sided



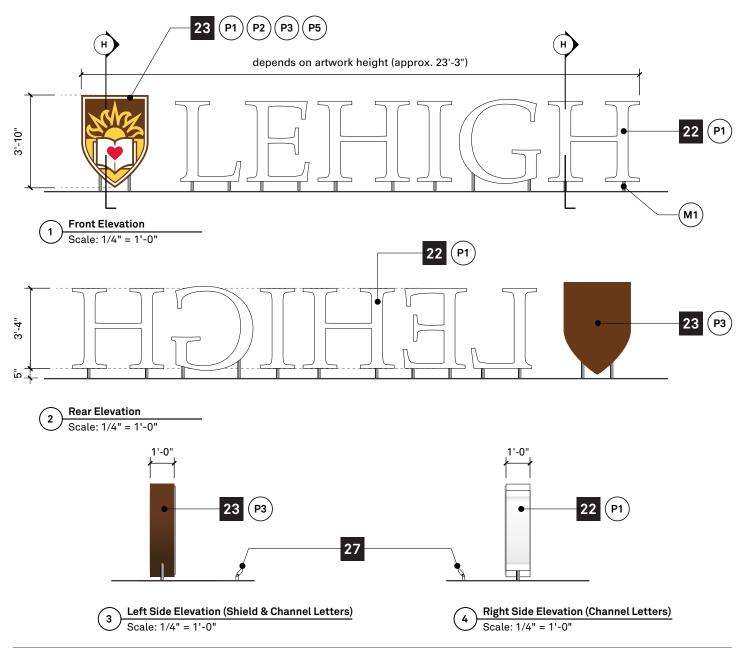
**PDR.1** Pedestrian Directional



**GR.1** Stair Graphics This Page is Intentionally Left Blank

SECTION 2A

## **Campus Gateways**



## <u>GWY.1 – Signature Gateway</u>

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Intended as a landmark element at the primary campus arrival points (Packer, Mountaintop, and Goodman).

These should be located for maximum visibility on approach.

#### 22- Channel Letters

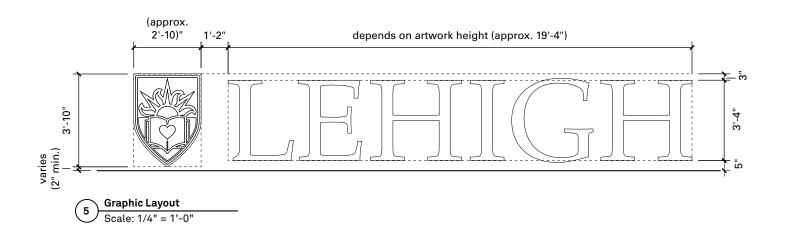
Painted fabricated aluminum letterforms. To be externally illuminated. Provide internal structure and bracing, as required by engineering. Mount on aluminum posts welded to Support Plate.

#### 23- Lehigh Shield

Fabricated aluminum form, painted, artwork to be provided. Details to be laser cut and chemically welded to aluminum skin. To be externally illuminated. Provide internal structure and bracing, as required by engineering. Mount on aluminum posts welded to Support Plate.

#### 27- Light Fixtures

Hubbell Lighting ALF 12LV-5K-BZ linear LED flood light, or approved similar. Set back 2 feet from sign. Provide necessary electrical components, boxes, wiring, transformers, manual switch and photo sensor switch.





 ${\rm DO}\,{\rm NOT}$  change proportions of shield and LEHIGH.



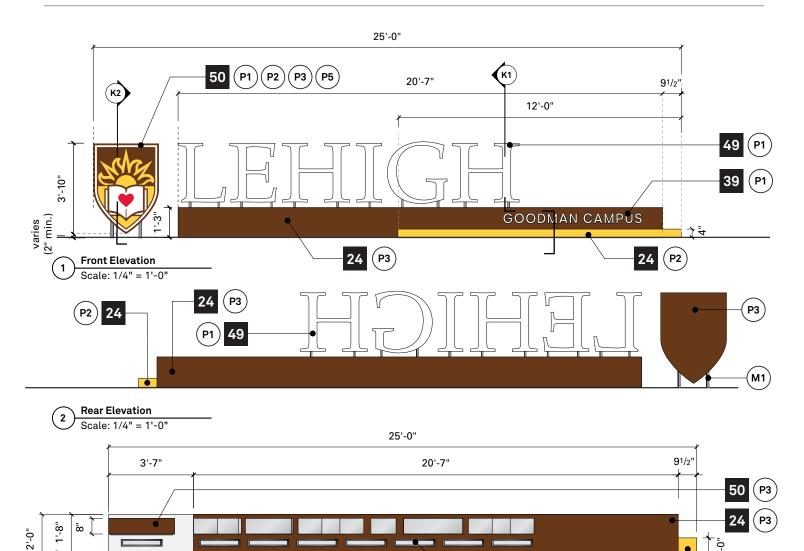
**DO NOT** change relationship of shield and LEHIGH.



DO NOT change colors.



DO NOT mount on a base.



## GWY.2 - Secondary Gateway Horizontal

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

**Top View** 

Scale: 1/4" = 1'-0"

3

Marks arrival to all campuses at primary and secondary entrance points. This orientation should be used when there is ample real estate to accommodate this sign.

The less urban environments should accept this orientation.

## 24- Support Wall

Fabricated steel cabinet for support of Channel Letters, painted as per specs. Mount to concrete footing, as required by engineering.

**39**- Dimensional Letters

Aluminum letter forms, to be laser cut and painted, as per specs. Stud mount to Support Wall.

## 44- Light Fixtures

Bega #77917 Rectangular LED In-Grade Floodlight Asymmetrical Flood, Warm White Color (20 7/8" x 3 1/2"), or approved similar. Bottom of Faceplate sits slightly above finished surface. Provide necessary electrical components, boxes, wiring, transformers, manual switch and photo sensor switch.

#### 49- Channel Letters

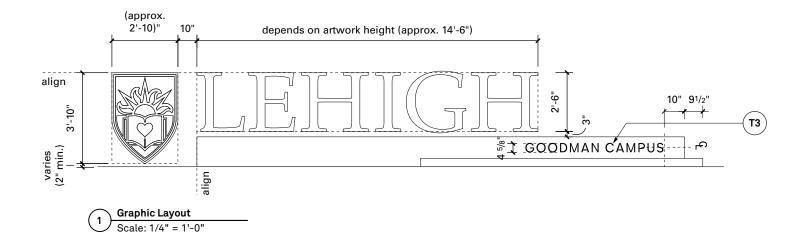
Painted fab steel letterforms, 1/2" thick faces, 3/16" returns. To be externally illuminated. Provide internal structure and bracing, as required by engineering. Weld 2" O.D. sleeves to bottom of letters and mount on steel posts welded to Support Wall.

#### 50- Lehigh Shield

Fabricated steel form, painted, artwork to be provided. Details to be laser cut and welded to first surface. To be externally illuminated. Provide internal structure and bracing, as required by engineering. Mount on steel posts to be direct buried into concrete.

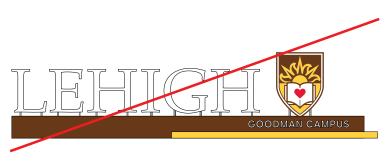
1'-0"

( P2 24





**DO NOT** change proportions of shield and LEHIGH.



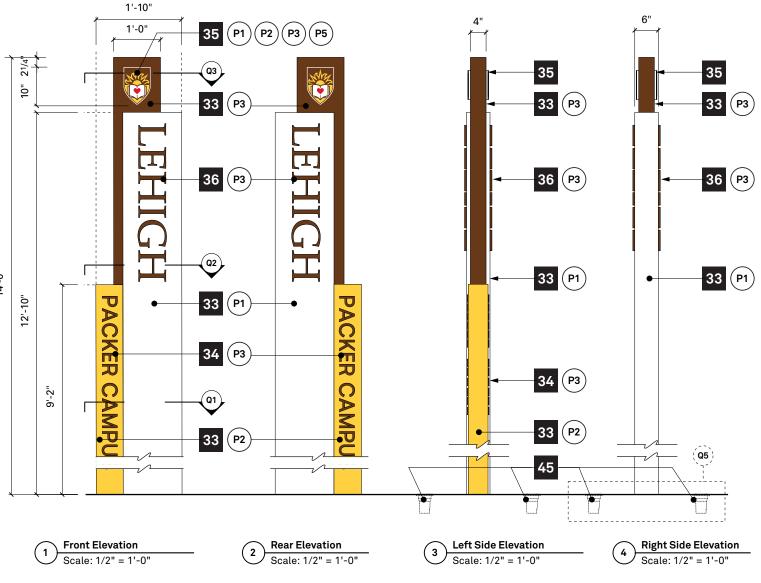
**DO NOT** change relationship of shield and LEHIGH.



DO NOT change colors.



**DO NOT** change colors.



## GWY.3 - Secondary Gateway Vertical

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Marks arrival to all campuses at primary and secondary entrance points. This orientation should be used when there is limited real estate to accommodate this sign.

This sign type works well for tight urban environments.

## 26- Gravel Bed

Provide stainless steel landscape edging all around and fill with grey river pebbles.

## 33- Gateway Panels

Fabricated aluminum cabinets, paint all exposed surfaces as per specs. Mount on 1/2" aluminum plate fastened to bolts embedded in reinforced concrete foundation, as required by engineering.

## **34–Dimensional Letters**

Aluminum letter forms, to be laser cut and painted, as per specs. Stud mount to Gateway Panels.

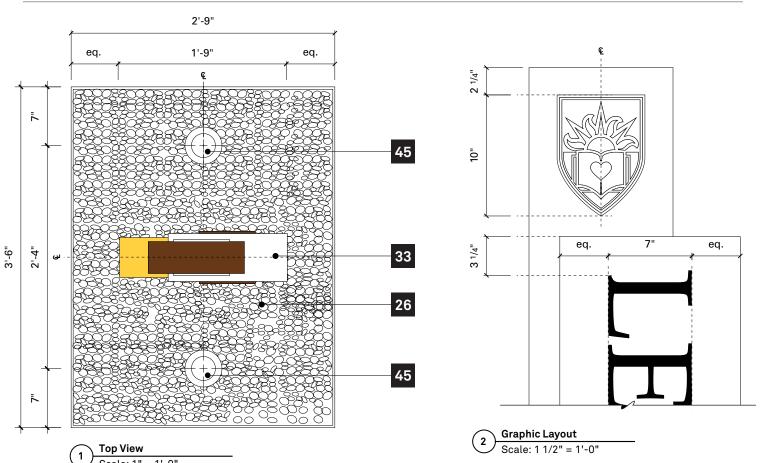
## 35- Gateway Shield

Laser cut aluminum shape, painted, artwork to be provided. Details to be laser cut and chemically welded. Stud mount to Gateway Panel.

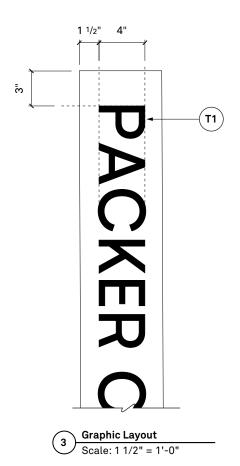
36- Gateway Letters Laser cut aluminum shape, painted, artwork to be provided. Stud mount to Gateway Panel.

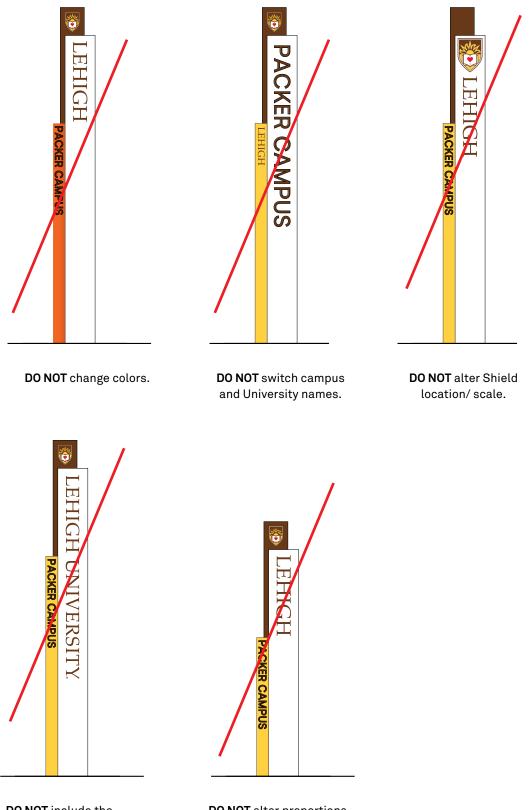
## 45- Light Fixtures

Bega #77008 LED In-Grade Floodlight Asymmetrical Flood with reinforced polyamide housing. Warm White Color, or approved similar. Provide necessary electrical components, boxes, wiring, transformers, manual switch and photo sensor switch.



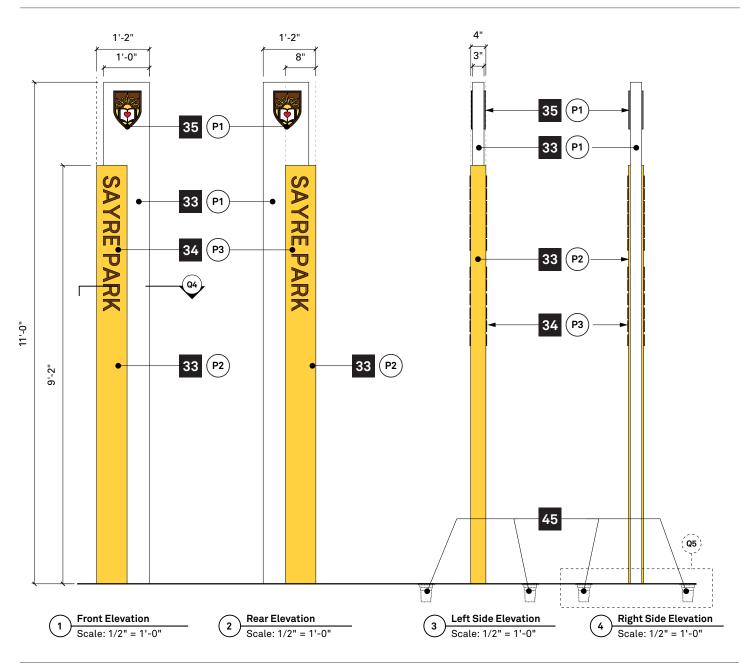
Scale: 1" = 1'-0"





**DO NOT** include the word "UNIVERSITY".

**DO NOT** alter proportions.



## **GWY.4 – Campus Identification**

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Intended to identify a campus by name. Can be used in conjunction with a Signature Gateway to mark a primary campus arrival.

Can also be used as a standalone element to identify a transition point between campuses.

## 26– Gravel Bed

Provide stainless steel landscape edging all around and fill with grey river pebbles.

## 33- Gateway Panels

Fabricated aluminum cabinets, paint all exposed surfaces as per specs. Mount on 1/2" aluminum plate fastened to bolts embedded in reinforced concrete foundation, as required by engineering.

## 34-Dimensional Letters

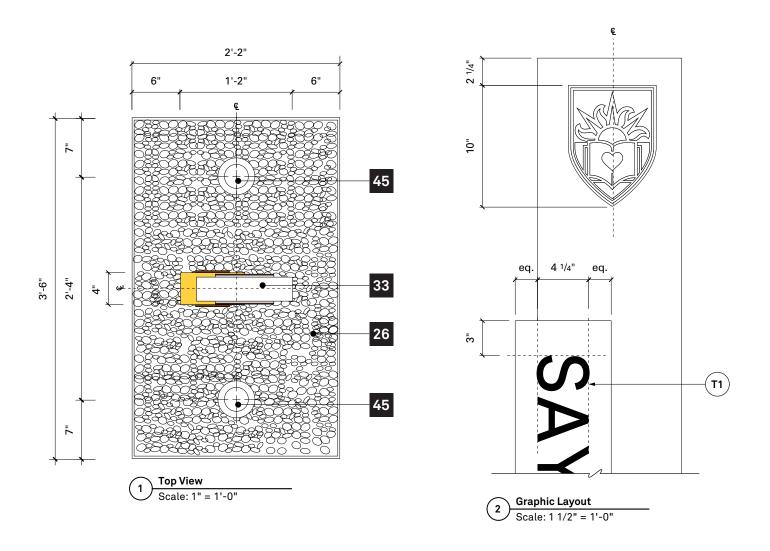
Aluminum letter forms, to be laser cut and painted, as per specs. Stud mount to Gateway Panels.

#### 35- Gateway Shield

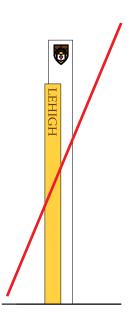
Laser cut aluminum shape, painted, artwork to be provided. Details to be laser cut and chemically welded. Stud mount to Gateway Panel.

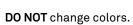
## 45- Light Fixtures

Bega #77008 LED In-Grade Floodlight Asymmetrical Flood, Warm White Color, or approved similar. Bottom of Faceplate sits slightly above finished surface. Provide necessary electrical components, boxes, wiring, transformers, manual switch and photo sensor switch.







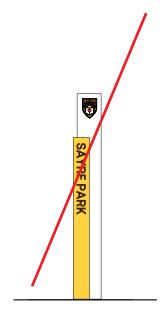


**DO NOT** switch campus and University names.

**DO NOT** alter Shield location/ scale.

•

SAYRE PAR

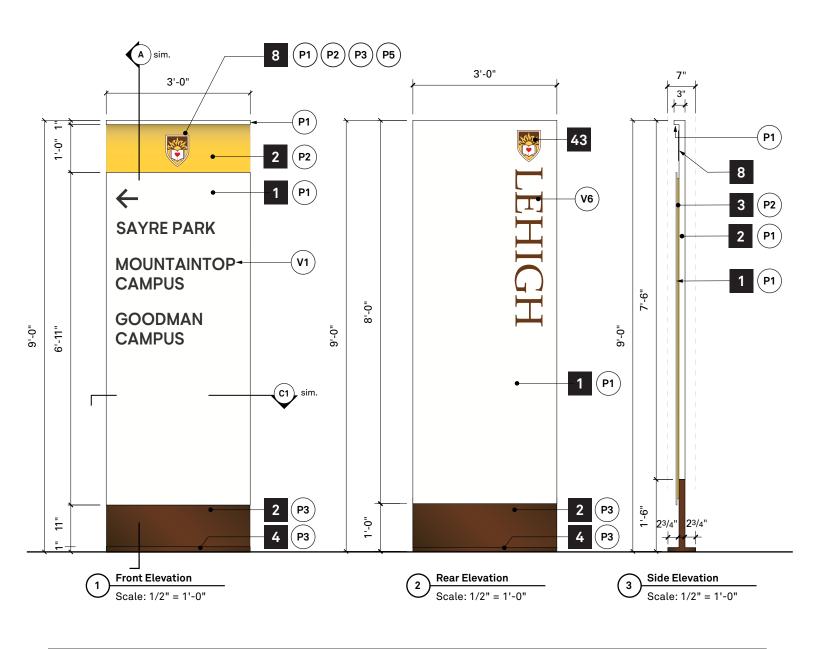


**DO NOT** alter proportions.

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**SECTION 2B** 

## Vehicular Wayfinding



## CTB.1 - Campus Trailblazer

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Only used along roadways connecting campuses. These signs are intended to mark the Lehigh Campus as well as connect drivers from one campus to another.

Theses signs are to be single sided messages only, with Brand on the rear elevation.

## 1- Sign Panel

1/4" thick aluminum plates chemically welded to mounting angle. Paint all exposed surfaces. Mechanically fastened to mounting frame. Surface applied graphics.

## 2- Fabricated Sign Core

.063" thick aluminum sheet fastened to 1½" thick aluminum tube frame. Paint all exposed surfaces.

## 3- Mounting Frame

3/4" x 1" x 1/2" Aluminum Arch Angle, miter jointed mechanically fastened to sign core.

#### 4- Mounting Base

1" thick aluminum sheet welded to 11/2" aluminum tube. Paint all exposed surfaces and secure to foundation and fabricated sign core.

#### 8- Lehigh Logo

1/8" thick painted aluminum plate with digital printed graphic on face plate adhered to sign core and all exposed edges painted.

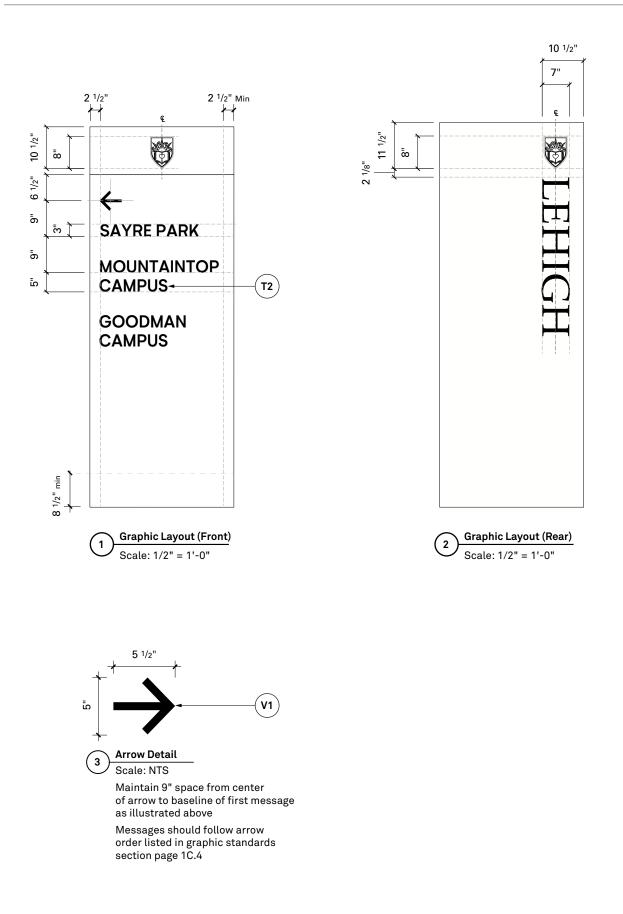
## 43- Lehigh Logo

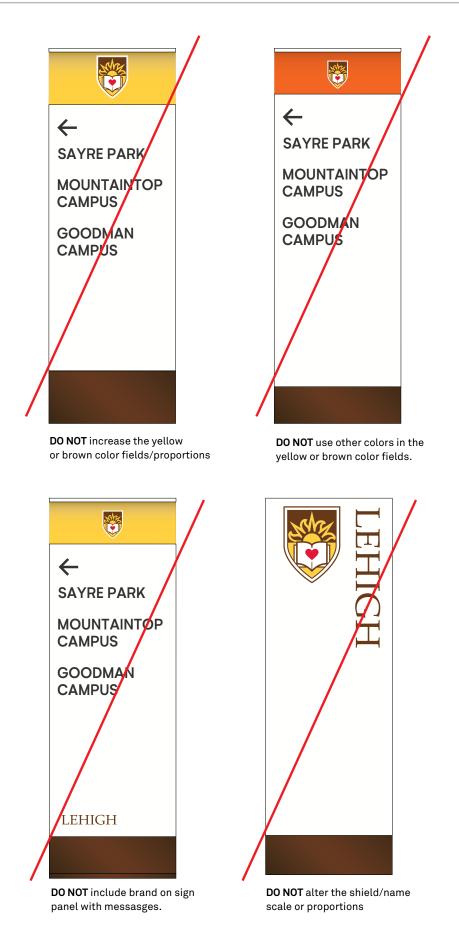
Digital print on vinyl, to be applied to Sign Panel. Artwork to be provided.

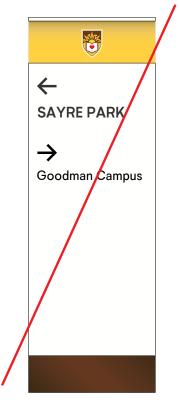
## NOTE:

Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.

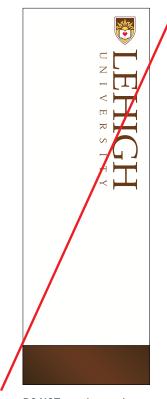
CTB.1



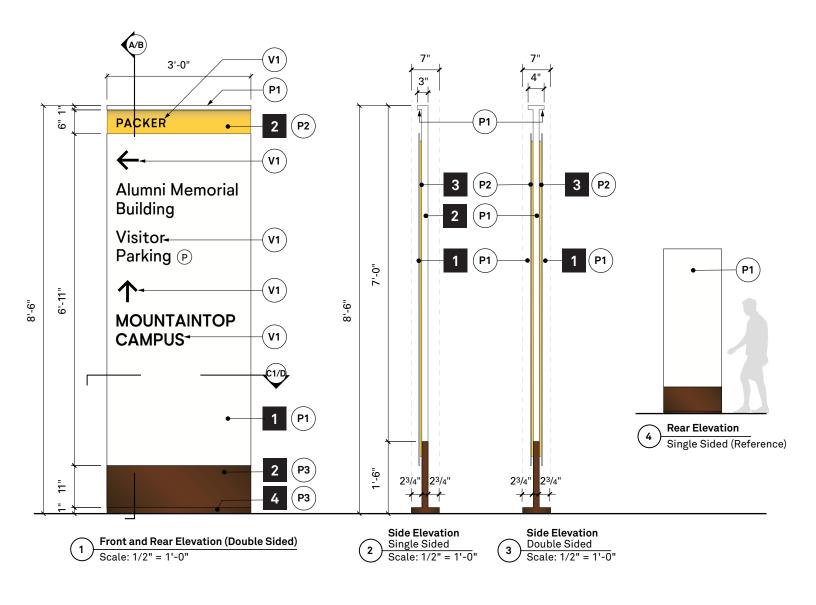




**DO NOT** use small pedestrian scale messages on this sign type.



**DO NOT** use the word "UNIVERSITY" on the logo.



## VDR.1 - Vehicular Directional: Ground Mounted

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Primary vehicular directional to be used throughout campus. This sign type should be positioned to be on the same side of the roadway as the flow of traffic.

Double-sided messaging is only permissible when there are no other options and locating messaging adjacent to the flow of traffic is not possible.

## 1- Sign Panel

1/4" thick aluminum plates chemically welded to mounting angle. Paint all exposed surfaces. Mechanically fastened to mounting frame. Surface applied graphics.

## 2- Fabricated Sign Core

.063" thick aluminum sheet fastened to  $1\frac{1}{2}$ " thick aluminum tube frame. Paint all exposed surfaces.

## 3 – Mounting Frame

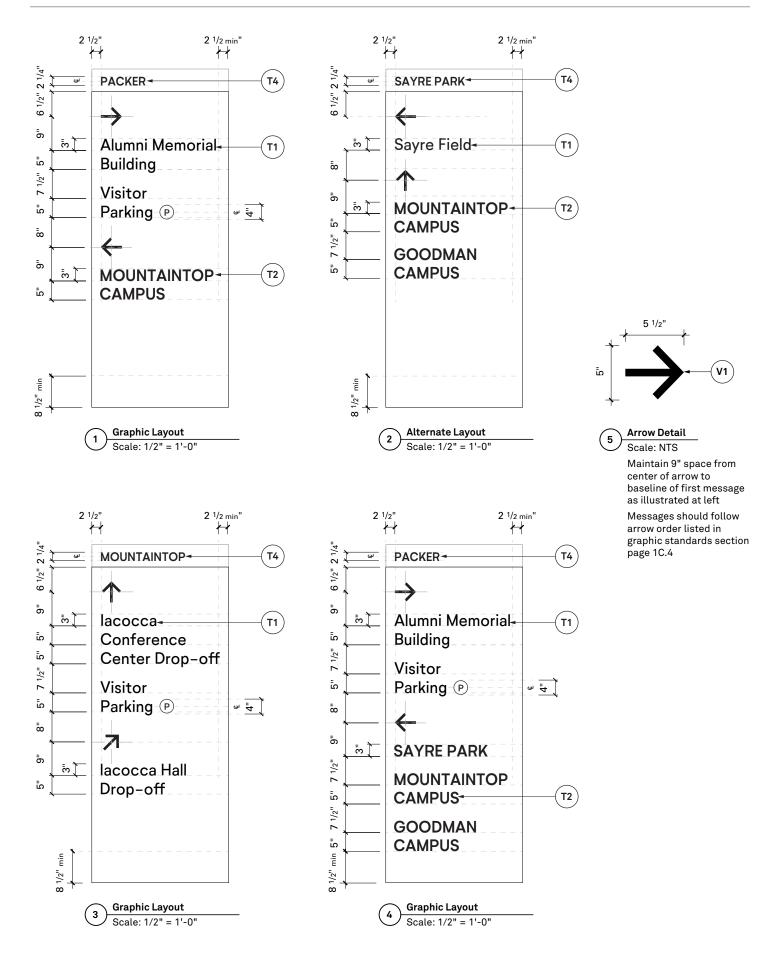
3/4" x 1" x 1/2" Aluminum Arch Angle, miter jointed mechanically fastened to sign core.

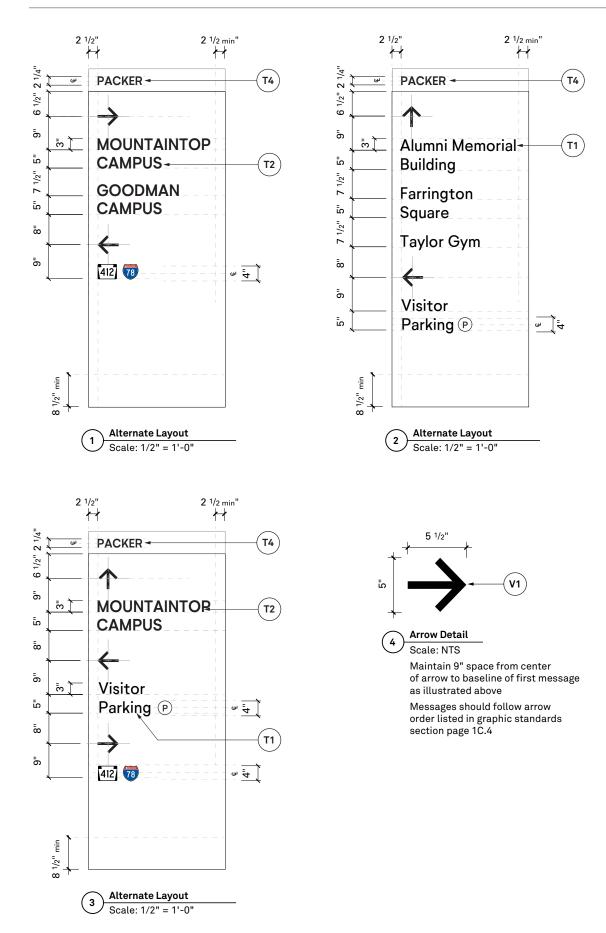
## 4- Mounting Base

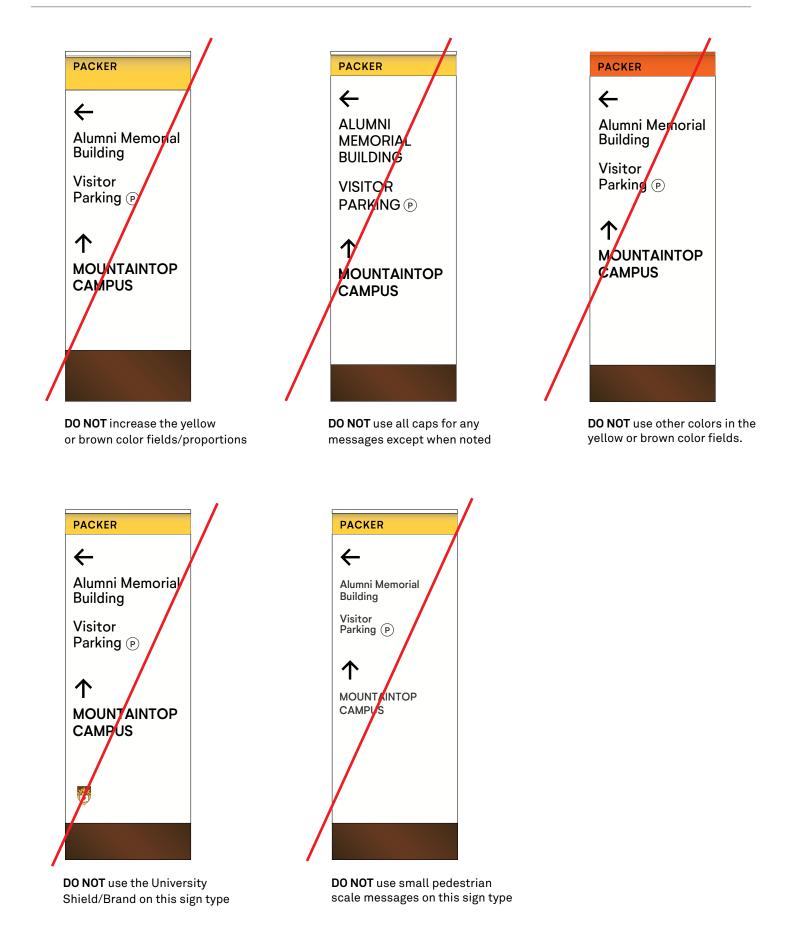
1" thick aluminum sheet welded to 1½" aluminum tube. Paint all exposed surfaces and secure to foundation and fabricated sign core.

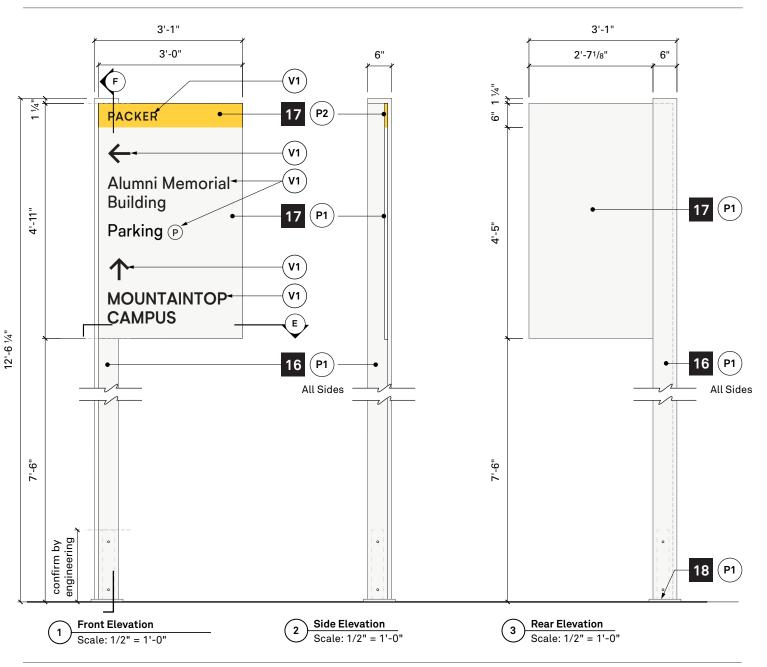
## NOTE:

Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.









## VDR.2 - Vehicular Directional: Post and Panel (Small)

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Used when a smaller footprint is required or the ground mounted condition does not allow for the acceptable traffic sightlines.

The use of this sign type should be limited to meet the needs of urban conditions.

This sign type is intended for single-sided messages only.

## 16- Fabricated Sign Pole

Aluminum frame with 1/8" thick aluminum skins. Cap any open ends. Paint all exposed surfaces.

#### 17- Sign Panel

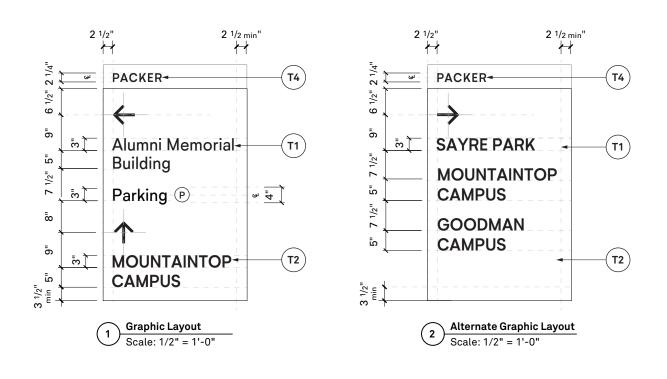
1/2" thick aluminum panel. Mask and paint exposed surfaces as shown. Surface applied graphics. Mechanically fasten to Fabricated Sign Pole.

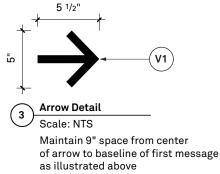
#### 18- Mounting Base

1/2" thick aluminum sheet welded to 1" x 3" aluminum tubes. Secure to foundation, mount Fabricated Sign Pole and mechanically fasten. Paint all exposed surfaces.

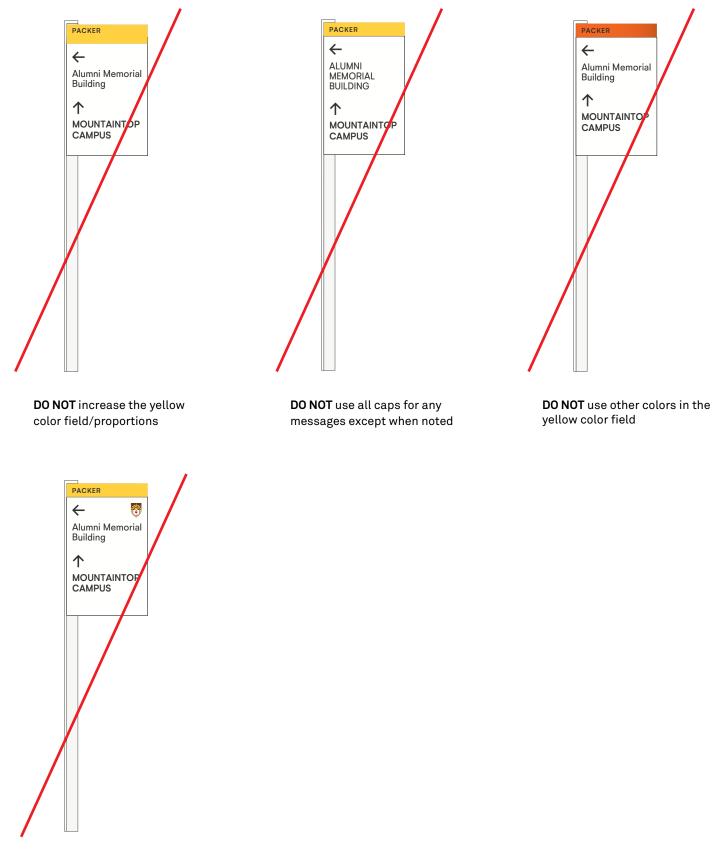
## NOTE:

Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.

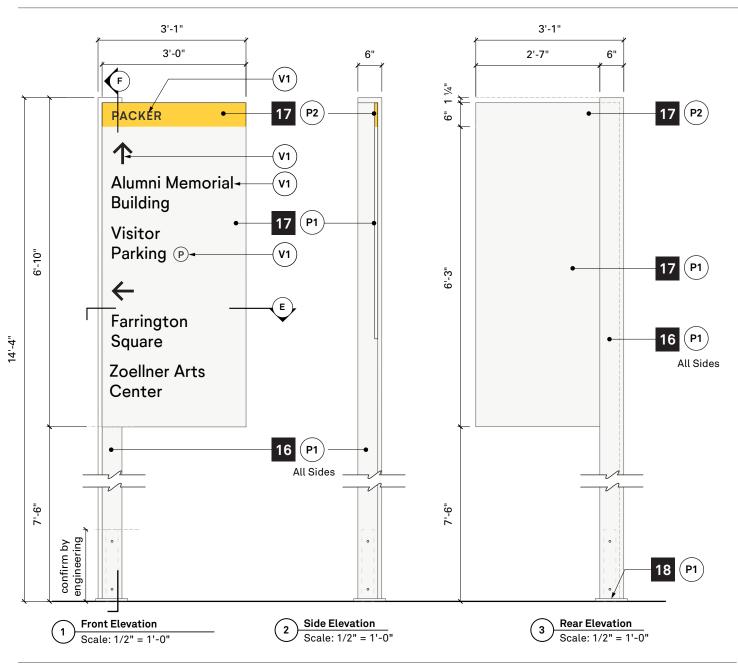




Messages should follow arrow order listed in graphic standards section page 1C.4



**DO NOT** use the University Shield/Brand on this sign type



## VDR.3 - Vehicular Directional: Post and Panel (Large)

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Used when a smaller footprint is required or the ground mounted condition does not allow for the acceptable traffic sightlines.

The use of this sign type should be limited to meet the needs of urban conditions.

This sign type is intended for single-sided messages only.

## 16- Fabricated Sign Pole

Aluminum frame with 1/8" thick aluminum skins. Cap any open ends. Paint all exposed surfaces.

#### 17- Sign Panel

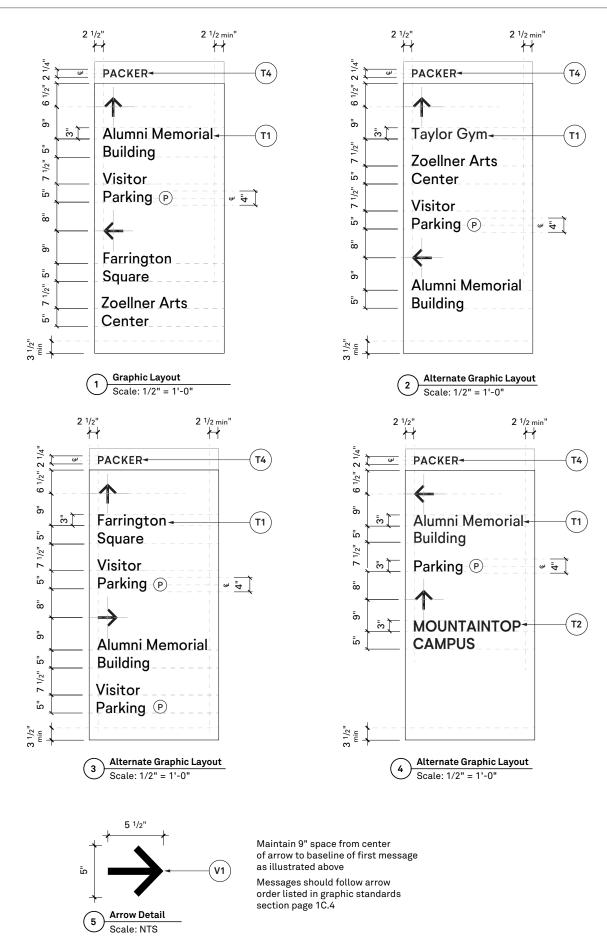
1/2" thick aluminum panel. Mask and paint exposed surfaces as shown. Surface applied graphics. Mechanically fasten to Fabricated Sign Pole.

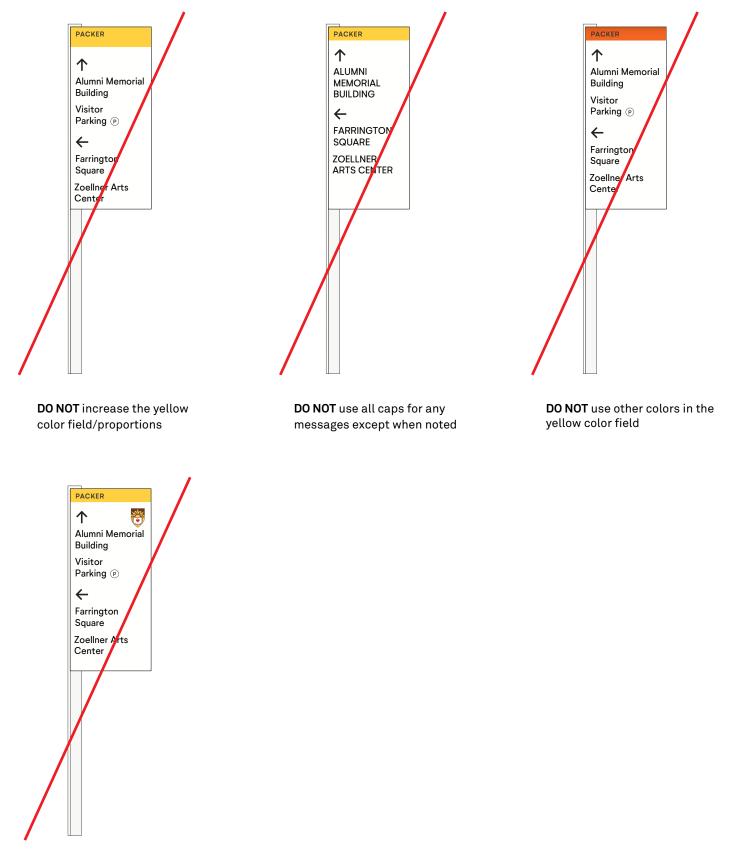
#### 18- Mounting Base

1/2" thick aluminum sheet welded to 1" x 3" aluminum tubes. Secure to foundation, mount Fabricated Sign Pole and mechanically fasten. Paint all exposed surfaces.

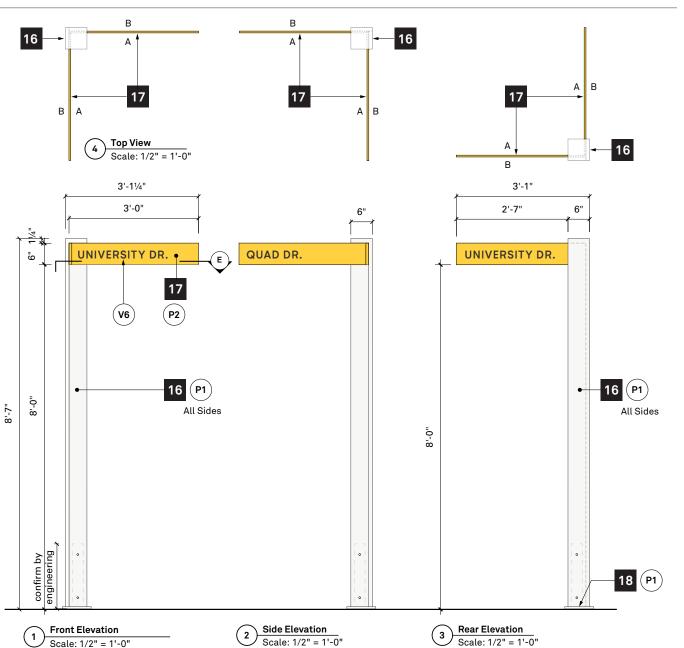
## NOTE:

Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.





**DO NOT** use the University Shield/Brand on this sign type



## VRG.3 – Street Name

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Street signs are to be used on Lehigh University owned streets to help define the campus edge.

## 16- Fabricated Sign Pole

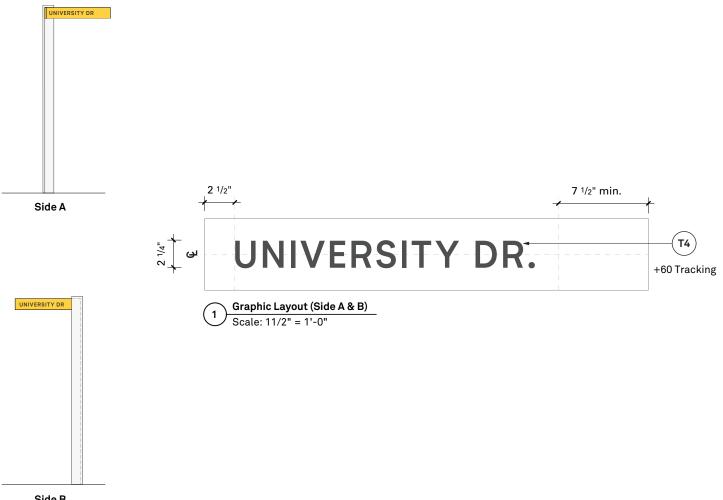
Aluminum frame with 1/8" thick aluminum skins. Cap any open ends. Paint all exposed surfaces.

## 17- Sign Panel

1/2" thick aluminum panel. Mask and paint exposed surfaces as shown. Surface applied graphics. Mechanically fasten to Fabricated Sign Pole.

## NOTE:

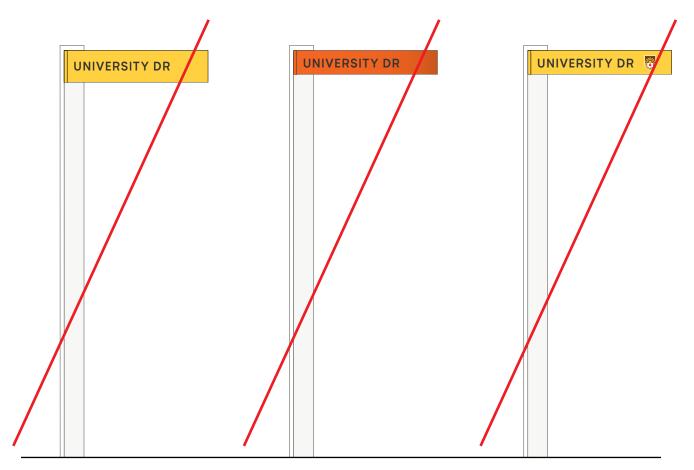
Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.





## **Abbreviation Guidelines**

Street = ST.Avenue = AVE. Drive = DR.Road = RD. North = N. South = S. East = E. West = W.



**DO NOT** increase the yellow color field/proportions

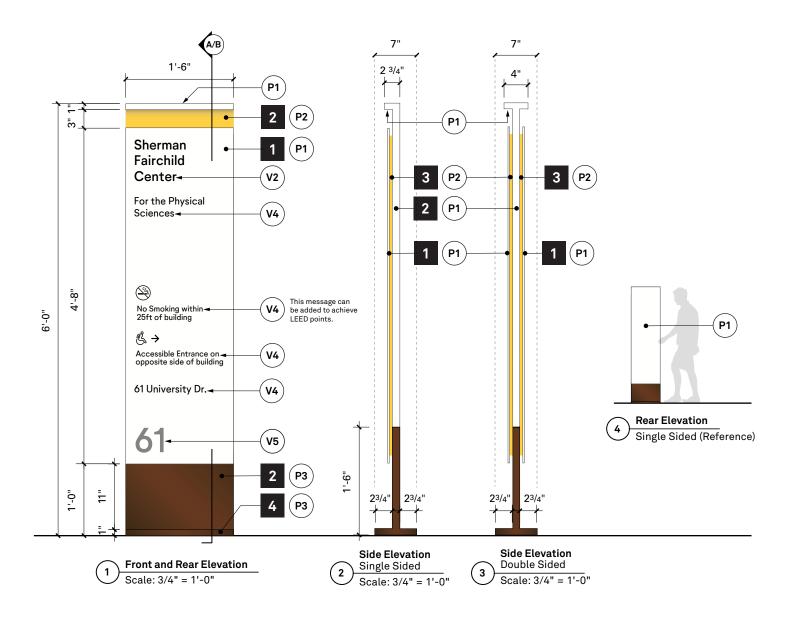
**DO NOT** use other colors in the yellow color field

**DO NOT** use the University Shield/Brand on this sign type

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**SECTION 2C** 

# **Building Identification**



## BID.1 – Building Identification: Pedestrian

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

This sign type is to be programmed and used to mark a building visible from a pedestrian approach.

Program and locate this sign to maximize visbility from all pedestrian approaches and with enough ambient light to maximize visibility both day/night.

Single-sided configurations made be used when the second sign face is oriented away from pedestrian view.

## 1- Sign Panel

1/4" thick aluminum plates chemically welded to mounting angle. Paint all exposed surfaces. Mechanically fastened to mounting frame. Surface applied graphics.

#### 2- Fabricated Sign Core

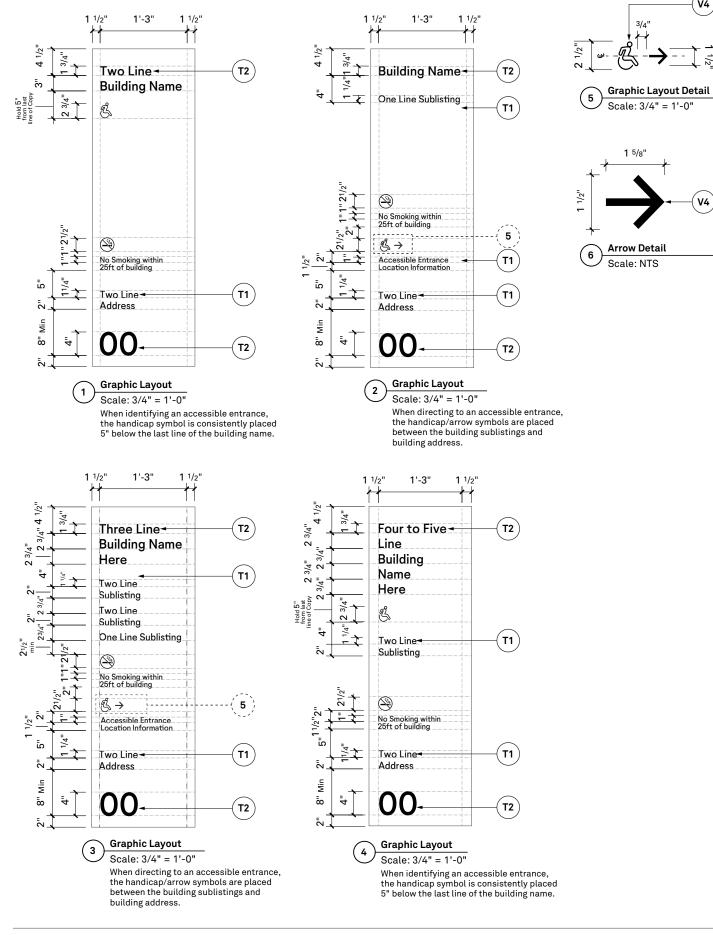
.063" thick aluminum sheet fastened to 1½" thick aluminum tube frame. Paint all exposed surfaces.

## 3- Mounting Frame

3/4" x 1" x 1/2" Aluminum Arch Angle, miter jointed mechanically fastened to sign core.

#### 4- Mounting Base

1/2" thick aluminum sheet chemically welded to 1½" aluminum tube. Paint all exposed surfaces and secure to foundation and fabricate sign core.



V4

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V4



 SHERMAN

 FAIRCHILD

 CENTER

 FOR THE PHYSICAL

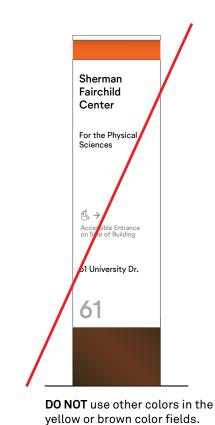
 SCIENCES

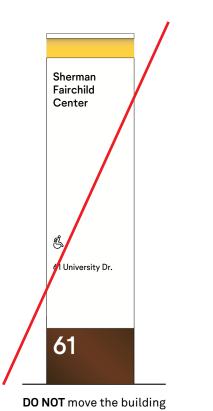
 COLONCES

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**DO NOT** use all caps for any messages except when noted





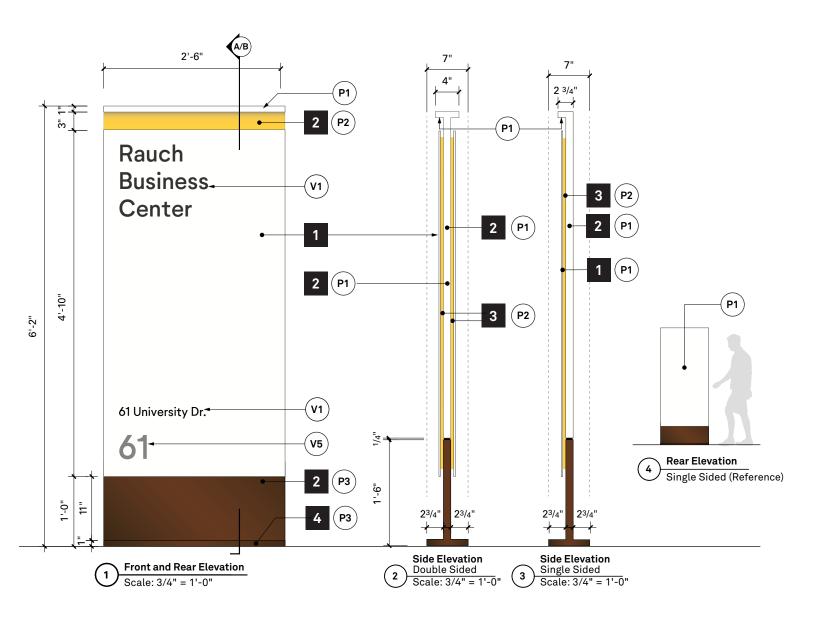
**DO NOT** move the building number or accessible entrance symbol to other areas on the sign



**DO NOT** use the University Shield on signs located within the campus



**DO NOT** use large vehicular scale messages on this sign type



## BID.2 - Building Identification: Vehicular

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

This sign type is to be programmed and used to mark a building/building driveway visible from a roadway.

This sign type should alway use refelctive vinyl to maximize visibility at all times of day/night.

Program and locate this sign to maximize visbility from all vehicular approaches.

## 1- Sign Panel

1/4" thick aluminum plates chemically welded to mounting angle. Paint all exposed surfaces. Mechanically fastened to mounting frame. Surface applied graphics.

#### 2- Fabricated Sign Core

.063" thick aluminum sheet fastened to 1½" thick aluminum tube frame. Paint all exposed surfaces.

## 3 – Mounting Frame

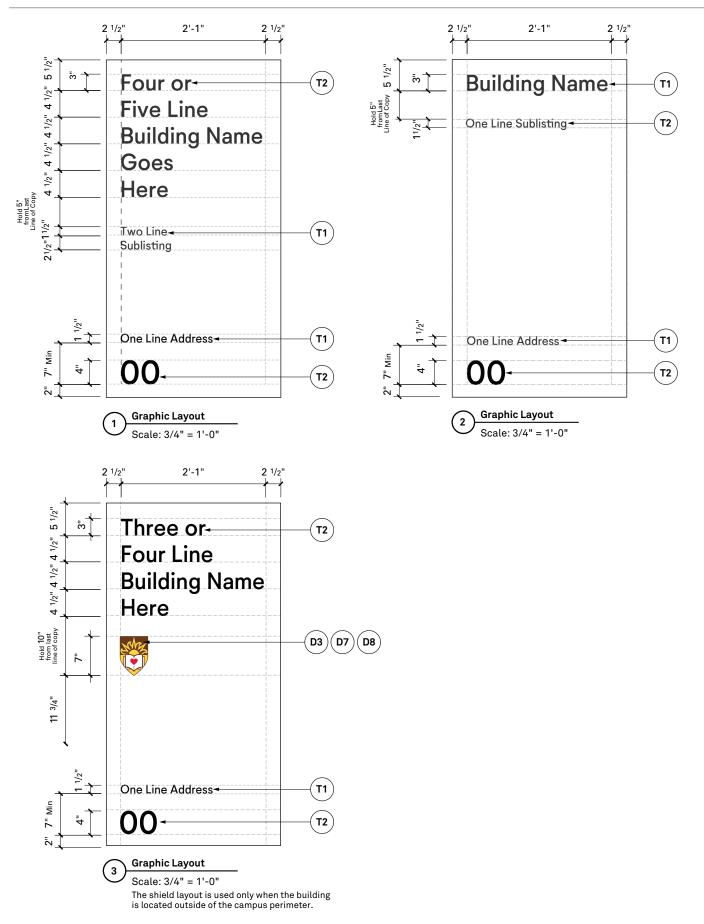
3/4" x 1" x 1/2" Aluminum Arch Angle, miter jointed mechanically fastened to sign core.

#### 4- Mounting Base

1/2" thick aluminum sheet chemically welded to 1½" aluminum tube. Paint all exposed surfaces and secure to foundation and fabricate sign core.

## NOTE:

Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.



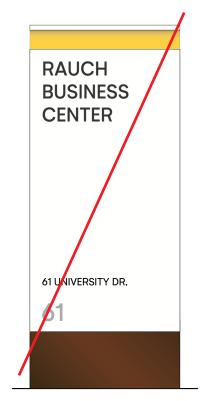
# SECTION 2C $|\,{\rm SIGN}\,{\rm TYPE}\,{\rm DRAWINGS}$



**DO NOT** increase the yellow or brown color fields/proportions



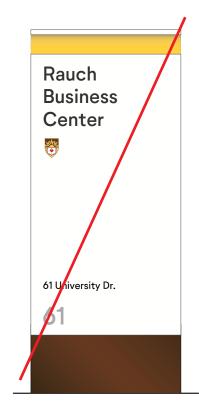
**DO NOT** move the building number to other areas on the sign



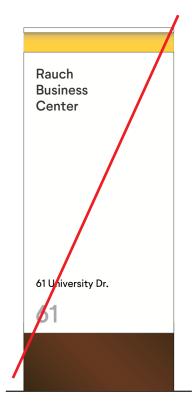
**DO NOT** use all caps for any messages except when noted



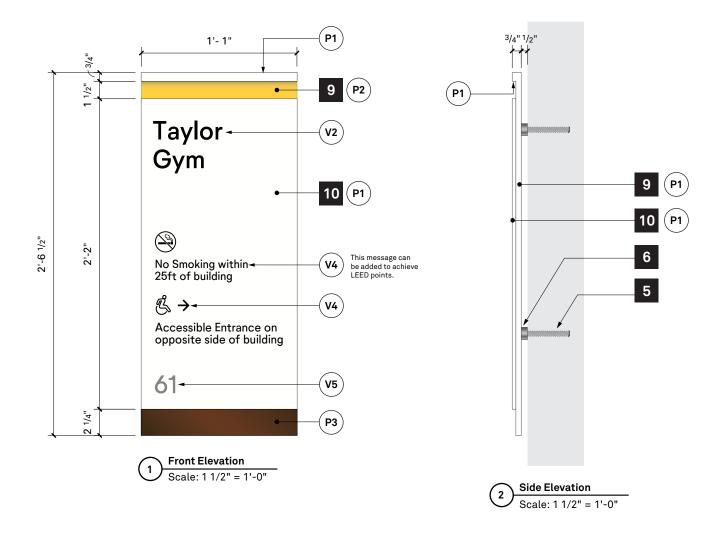
**DO NOT** use other colors in the yellow or brown color fields.



**DO NOT** use the University Shield on signs located within the campus



**DO NOT** use small pedestrian scale messages on this sign type



# BID.3 - Building Identification: Wall Mounted

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

This sign type is to be programmed and used to mark a building entry.

Program and locate this sign next to the entry way (preferably to the right of the entrance), and identify the building name, number, and entrance (i.e. main, accessible, etc.).

## 5- Stud Mount

Sign panel/letterforms to be drilled and tapped to receive threaded studs. Drill wall and set with clear epoxy.

6– Spacer

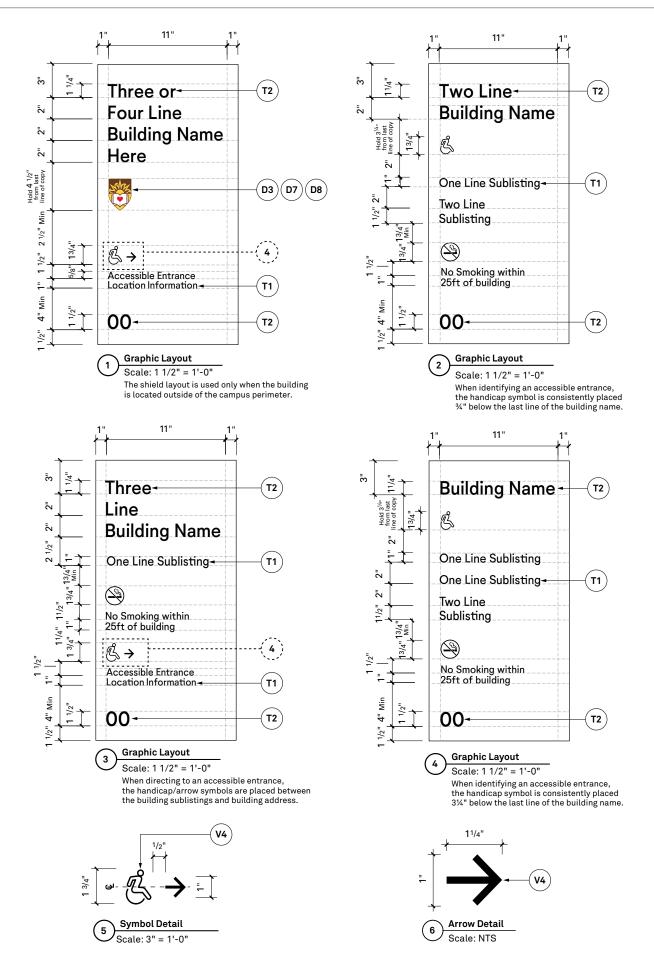
1/2" aluminum spacer.

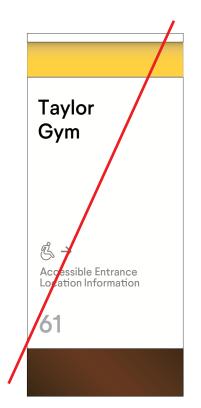
# 9- Back Plate

3/4" thick aluminum milled to shape shown. Paint all exposed surfaces.

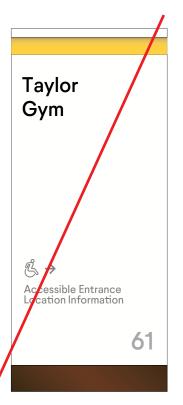
#### 10– Sign Panel

3/8" thick aluminum sheet with surface applied graphics. Paint all exposed surfaces

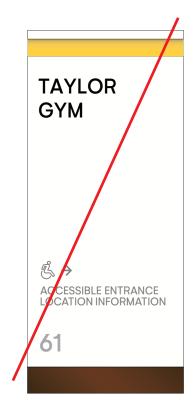




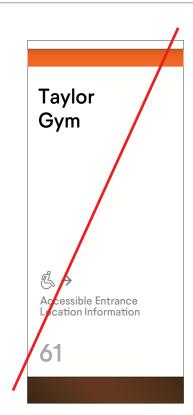
**DO NOT** increase the yellow or brown color fields/proportions



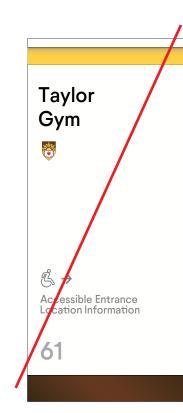
**DO NOT** move the building number to other areas on the sign



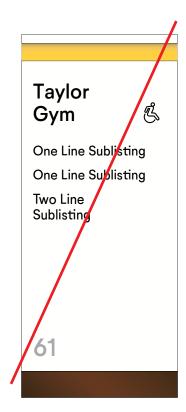
**DO NOT** use all caps for any messages except when noted



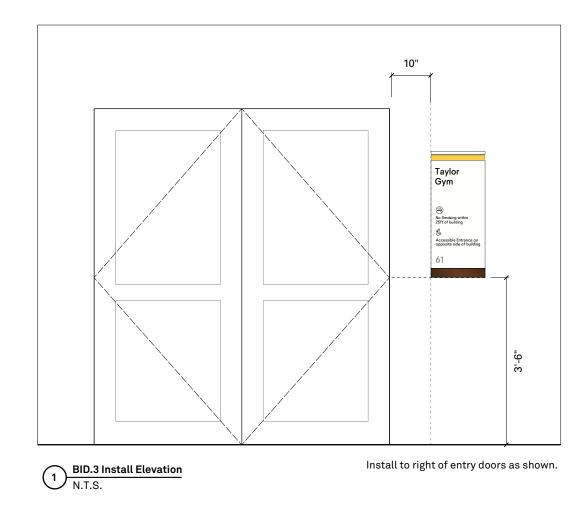
**DO NOT** use other colors in the yellow or brown color fields.



**DO NOT** use the University Shield unless the building is located outside of the campus perimeter



**DO NOT** move the accessible entrance symbol to other areas on the sign



1

Scale: NTS

# ALUMN TO POSTO Colors/finishes ALUMN TO POSTO Colors/finishes Vary by location BID.4- Front Elevation

Thickness varies based on overall letter height 2 BID.4- Side Elevation Scale: NTS

NOTE: Use Viewing Distance Guidelines chart to determine appropriate letter height per location based on visibility. Materials and finish selection to be made based on mounting

to be made based on mounting surface materials for maximum contrast and legibility.

# BID.4 / PID.4 - Building and Parking Identification: Dimensional Letters

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Dimensional letters are to be programmed and used to mark a building name on the facade of the building, often the full building donor name.

These can be sized and located above or next to the building entry or on a higher building elevation for greater visibility across campus.

#### 5- Stud Mount

Sign panel/letterforms to be drilled and tapped to receive threaded studs. Drill wall and set with clear epoxy.

6– Spacer

1/2" aluminum spacer.

## 7- Dimensional Letters

Laser cut aluminum or acrylic letter forms. Acrylic letters to be painted, aluminum letters to have brushed horizontal finish with clear coat. Finish specified in copy list.

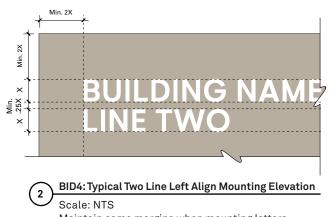


# BID4: Typical Horizontal Left Align Mounting Elevation

Scale: NTS

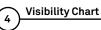
1

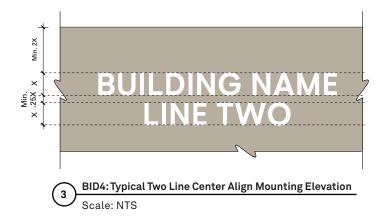
Maintain same margins when mounting letters right aligned on buildings

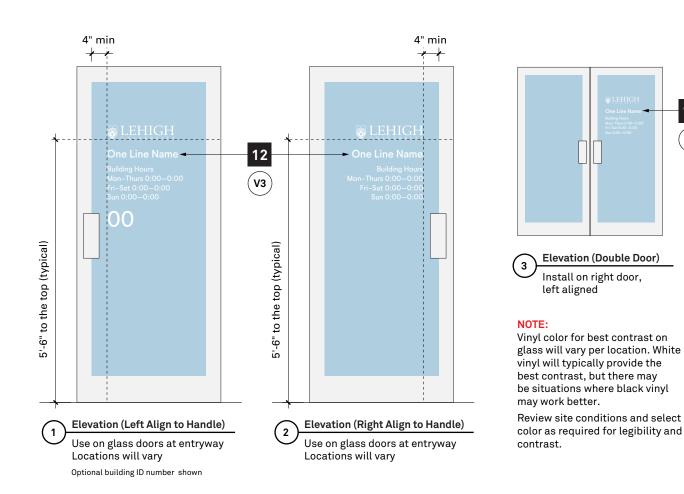


Maintain same margins when mounting letters right aligned on buildings

Letter Height = X	Best Impact	Max Readable Distance
3 inches	30 feet	100 feet
4 inches	40 feet	150 feet
6 inches	60 feet	200 feet
8 inches	80 feet	350 feet
9 inches	90 feet	400 feet
10 inches	100 feet	450 feet
12 inches	120 feet	525 feet
15 inches	150 feet	630 feet
18 inches	180 feet	750 feet
24 inches	240 feet	1000 feet
30 inches	300 feet	1250 feet
36 inches	360 feet	1500 feet
42 inches	420 feet	1750 feet
48 inches	480 feet	2000 feet
54 inches	540 feet	2250 feet
60 inches	600 feet	2500 feet







# BID.5- Building Identification: Vinyl Letters

#### GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

12 - Vinyl Message Second surface applied opaque vinyl copy in color specified.

Vinyl Letters are to be programmed and used at glass entries to provide supplemental regulatory information.

# Artwork to be provided for logo.

ers

12

V3





**DO NOT** use all caps for any messages except when noted

Cone Line Name Building Hours Mon-Thurs 0:00-0:00 Fri-Sat 0:00-0:00 Sun 0:00-0:00

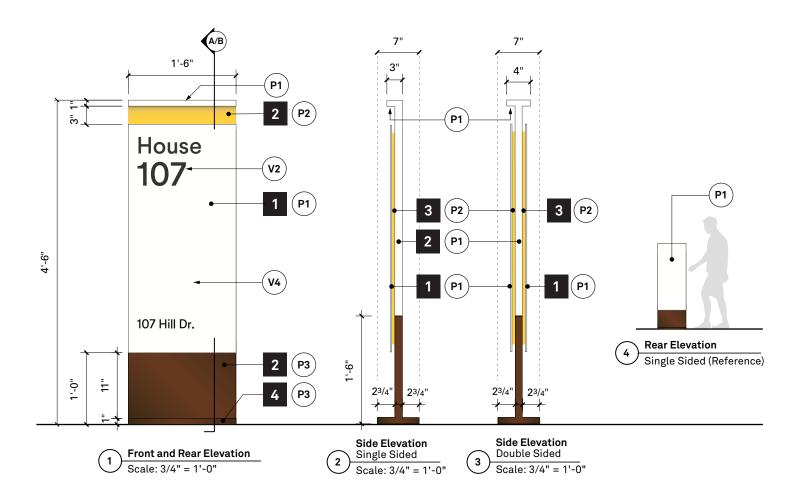
**DO NOT** use the shield without the full logo lockup



Building Hours Mon-Thurs 0:00-0:00 Fri-Sat 0:00-0:00 Sun 0:00-0:00

# 00

**DO NOT** use building address number smaller than 4"



# BID.6 - Building Identification: Greek Housing

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

This sign type is to be programmed and used to mark a housing entry.

Program and locate this sign next to the entry way (preferably to the right of the entrance), and identify the house number, accessibility for handicap, and house address.

Lehigh University is required by the city to provide a minimum 4" building number for use by emergency vehicles.

#### 1- Sign Panel

1/4" thick aluminum plates chemically welded to mounting angle. Paint all exposed surfaces. Mechanically fastened to mounting frame.

# 2- Fabricated Sign Core

.063" thick aluminum sheet fastened to 11/2" thick aluminum tube frame. Paint all exposed surfaces.

#### 3- Mounting Frame

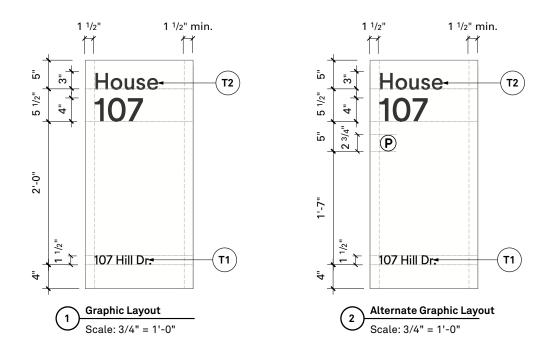
3/4" x1" x 1/4" aluminum angle, miter jointed mechanically fastened to fabricated sign core and sign panel mounting angle.

#### 4- Fabricated Base

1/2" thick aluminum sheet chemically welded to 1 1/2" aluminum tube. Paint all exposed surfaces and secure to foundation and fabricated sign core.

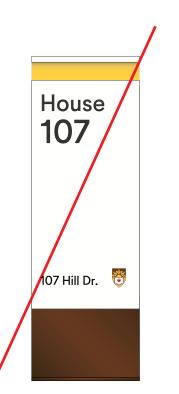
#### NOTE:

Prior to manufacturing this sign, the fabricator shall confirm with Lehigh University whether a breakaway design is required.

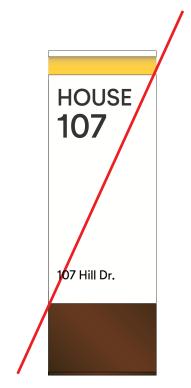




**DO NOT** increase the yellow or brown color fields/proportions



**DO NOT** use the University Shield/Brand on this sign type



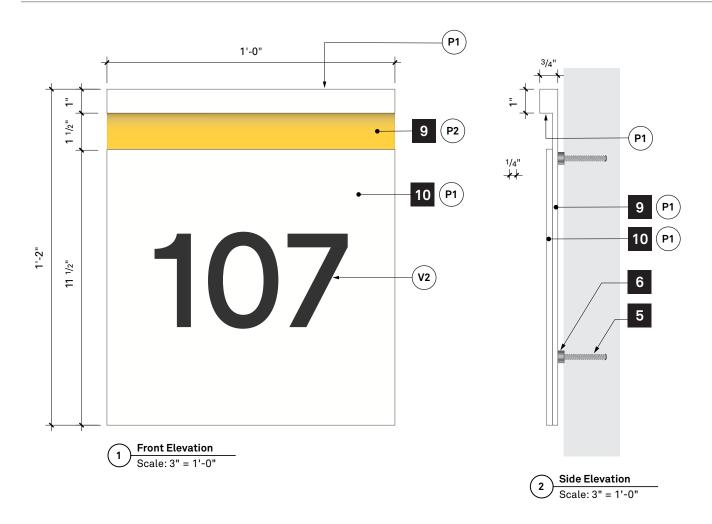
**DO NOT** use all caps for any messages except when noted

**DO NOT** use other colors in the yellow or brown color fields.

House

107

107 Hill Dr.



# BID.7 - Building Identification: Wall Mounted Address

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

This sign type is to be programmed and used to mark a housing entry.

Program and locate this sign next to the entry door (preferably to the right of the entrance), and identify the house number.

Lehigh University is required by the city to provide a minimum 4" building number for use by emergency vehicles.

## 5- Stud Mount

Sign panel/letterforms to be drilled and tapped to receive threaded studs. Drill wall and set with clear epoxy.

6– Spacer

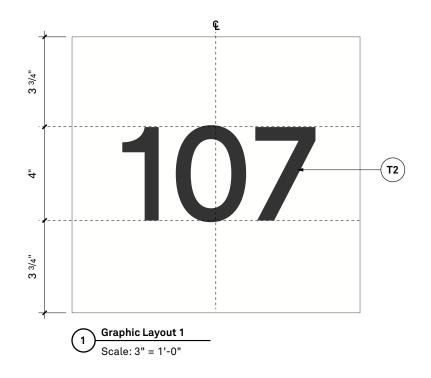
1/2" aluminum spacer.

# 9– Back Plate

3/4" thick aluminum milled to shape shown. Paint all exposed surfaces.

## 10– Sign Panel

3/8" thick aluminum sheet with surface applied graphics. Paint all exposed surfaces



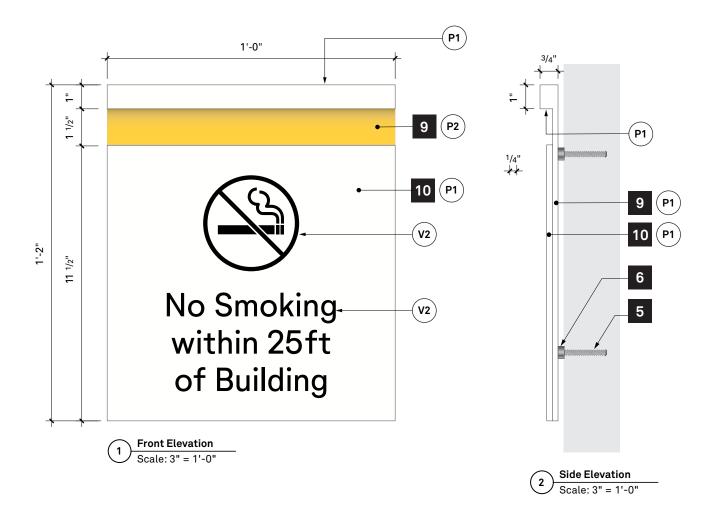




**DO NOT** increase the yellow fields/proportions

**107** 

**DO NOT** use the University Shield/Brand on this sign type



# BID.8 - Building Identification: Wall Mounted No Smoking

GENERAL FABRICATION/GRAPHIC NOTES

Field verification of each sign location and site conditions will be required prior to fabrication.

A few guidelines to consider when selecting this sign type.

Program and locate this sign type near building entrances when vinyl messages at the door entrance cannot be utilized.

Place signs in areas where smoking could occur within 25ft of a building.

Minimize sign clutter by placing signage 300ft apart if multiple signs are required.

## 5- Stud Mount

Sign panel/letterforms to be drilled and tapped to receive threaded studs. Drill wall and set with clear epoxy.

## 6– Spacer

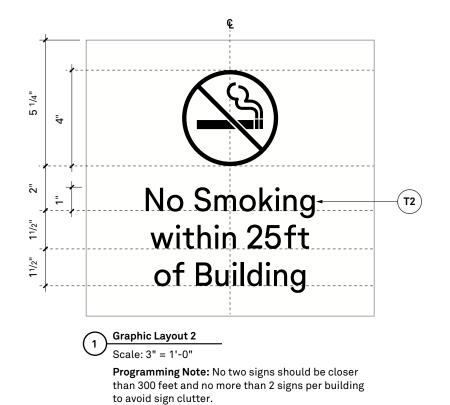
1/2" aluminum spacer.

## 9- Back Plate

3/4" thick aluminum milled to shape shown. Paint all exposed surfaces.

#### 10– Sign Panel

3/8" thick aluminum sheet with surface applied graphics. Paint all exposed surfaces







**DO NOT** increase the yellow fields/proportions

DO NOT use other colors in the yellow color field.