CONSTRUCTION FENCING SPECIFICATIONS
PERIMETER AND PROJECT INFORMATION FENCING

University Architect / Campus Planning and Design Office
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INTRODUCTION
Prior to the siting and implementation of the perimeter and project information fencing, refer to the Construction Project Temporary Facilities Siting Policy found on the Facilities Design Guidelines (FDG). This policy specifies all necessary approvals needed before setting up the project information fencing.

The informational fencing concept and the standards below were developed to inform campus users about building and site improvements, and to provide a positive visual image at construction activity sites campus wide. This specification applies to all capital projects, and select department and facilities projects, as approved by the University Architect / Campus Planning and Design Office (UA/CPD).

The information below specifies standards and procedures for installing construction project enclosure fencing and project information panels. There are four components of construction fencing: perimeter project fencing, graphic panels, project information sign, and wood fence. For each project UA/CPD will determine which of these components are required, based on project size, complexity, and duration. Specifications and layout should respond to unique site conditions, and will be finalized on site through meetings with UA/CPD and project manager/engineer.

FENCING STANDARDS AND MATERIALS

PERIMETER PROJECT FENCING
Perimeter project fencing is to be supplied and installed by the project, under the direction of the project manager/engineer, to enclose and secure the project site and associated laydown areas, while providing screening from construction activities.

HEIGHT: 6’-4” (+/-) above grade at project areas or combined project and laydown areas, and 8 feet at dedicated construction/laydown areas where materials and large equipment may be stored. All fence panels to align with adjacent panels along top,( including wood fence if used) at information nodes.

MATERIALS: Fencing metals to be low sheen black finish, 2-3/8” galvanized posts with 11 gauge chain link fencing, 1-5/8” top and bottom rail. All fencing to have screening fabric, attached with galvanized metal heavy gauge wire clips, black color.
FABRIC: Black, “Signature” 96 closed mesh woven polyethylene cloth, with reinforced band and grommets along top and sides for secure anchoring to chain link panels. Available through CI Fabrics (San Diego, CA), or equal as approved by UA/CPD prior to installation.

ANCHORING: Embed fence posts for 6’ panels securely into ground whenever possible, as determined at on-site meetings. For sections holding graphic panels, posts to be installed at 8 feet on center. Fence posts may be installed on concrete blocks if frequent relocation is anticipated, only if approved by UA/CPD. 8’ fencing to be securely embedded into ground where possible to avoid tipping from wind load. Pull fabric tight and smooth, overlap grommets and clip together if fence fabric ends between posts. Metal wire clips to be used in all grommets, crimped tight. No cuts or openings allowed in fence fabric.

VENDOR/INSTALLER: Diamond Fence Company, Los Gatos, CA, 408-374-4282 or equal.

GRAPHIC PANEL FENCING
Graphic panels with imprinted images to be installed by the project and supplied by UA/CPD. Project fence contractor to install posts and panels to match perimeter fencing and attach graphic panels and black mesh fabric to them at each side of wood fencing (if applicable), or per the drawing and agreement with UA/CPD. Attach black fabric to the chain link fence on the interior (construction site) side of the graphic panels, beginning at the first post adjacent to the wood fencing (if applicable) and continuous across all posts holding graphic panels, to provide a dark background for images. A layout drawing will be provided by UA/CPD showing graphic panel placement and image locations, which will supersede other specifications.

HEIGHT: 6’-4” (+/-) above grade at project areas, to match project perimeter fencing height.

MATERIALS: Fencing metals to be low sheen black finish, 2-3/8” galvanized posts with 11 gauge chain link, 1-5/8” top rail and bottom rail, to match construction fencing. Metal galvanized heavy gauge wire clips, black color required, for attaching mesh fabric to chain link or posts. No other types of attachments are permitted.

FABRIC: White, vinyl mesh, with reinforced band and grommets 12” on center all sides, and nylon reinforcing webbing. Fabric will be imprinted with an image from a digital source, supplied to the vendor by UA/CPD. The black background fabric is to match the perimeter fabric fencing. Contact UA/CPD for graphic printing vendor information.

ANCHORING: Embed fence posts securely into ground at 8’-0” (+/-) on center, to hold panels flat and tight and minimize space between panels and posts. Hang chain link on tension rods centered between posts, with minimal space between post and rod. Center panels between top and bottom rails. Fasten graphic panels securely to chain link fence on all sides with galvanized metal heavy gauge wire clips crimped tight, through all grommets.
Match center line of fabric panels with center line of fencing panels per drawing. Align heights of project fencing and graphic panel fencing.

VENDOR/INSTALLER: Diamond Fence Company or equal.

PRODUCTION/DELIVERY TIME: Allow two weeks panel fabrication time, to include three to five days graphic production, five to seven days Fed-Ex Ground delivery, or pick up in Santa Clara. UA/CPD to supply graphic panels at time of perimeter fence installation, or per schedule agreed upon with project manager/engineer.

PROJECT INFORMATION SIGN
The project information sign will be supplied and installed under the direction of UA/CPD. Location will be determined by the UA/CPD in collaboration with the project manager/engineer and installer on site. Information and drawings to be supplied by project manager/engineer or appropriate designee.

HEIGHT: 9’-0” above grade

MATERIALS: 4” wide tongue and grooved surfaced redwood panel finished with Cabot acrylic stain “Dark Grey”, attached to two 2X4 redwood posts routered to accept panel, finished with Cabot acrylic stain “Black”. Cap with 2X4, trim with 1X8 and 1X4 surfaced redwood. Aluminum j-rail channel (black) to accept digital print applied to .080 aluminum backing. Project title letters to be acrylic, 3” tall or per drawing, and 3/8” thick painted smoke metallic.

ANCHORING: Embed fence posts securely into hole, core drill if on pavement, with base rock as anchoring foundation to allow for eventual removal and reuse. Sign top to be 9’-0” above finished grade. Attach j-rails and digital information panel to tongue and grooved panels with hidden fasteners. Attach acrylic letters with studs and epoxy, or equal.

VENDOR/INSTALLER: Facilities Operations Carpenter Shop and Sign Shop or equal.

PRODUCTION/DELIVERY TIME: UA/CPD will install on a schedule as agreed upon with project manager/engineer.

NOTE:
Drawings provided to the project by UA/CPD will serve as the most current specifications, since specifications may need to change to fit specific site conditions and constraints. However, bring all conflicts to the attention of UA/CPD before proceeding.
WOOD FENCE (if required)
Wood fence to be supplied to the project by UA/CPD, and installed by UA/CPD. Fence location will be determined by UA/CPD in collaboration with the project manager/engineer. A layout drawing will be provided by UA/CPD showing wood fence panel placement.

HEIGHT: 6’-4” +- above grade. Top of perimeter and graphic panel fencing to match height of wood panel fencing.

MATERIALS: Stock lumber, redwood rough sawn siding panel with grooves at 4” o.c., finished with Cabot acrylic solid color stain “Dark Grey”, mounted between 4X4 redwood posts routered to accept panel, finished with Cabot acrylic solid color stain “Black”. Cap with 2X4; trim with 1X4 redwood, finished with Cabot acrylic solid color stain “Black”.

ANCHORING: Embed fence posts securely into hole, core drilled if on pavement, with base rock as anchoring foundation to allow for eventual removal and reuse. Do not anchor in concrete.

VENDOR/INSTALLER: Facilities Operations Carpenter Shop or equal.

PRODUCTION/Delivery TIME: UA/CPD to install fencing materials on a schedule as agreed upon with project manager/engineer.

INSTALLATION PROCESS AND SITE MEETINGS
A meeting will be scheduled by project manager/engineer with UA/CPD to determine the project information fencing locations and production schedule. Logistics plans should be approved by the UA/CPD representative and all appropriate parties prior to the site walk.

INITIAL SITE VISIT
The project manager/engineer and UA/CPD will meet on site to discuss the project perimeter fence locations, and to determine an installation completion date. Fence locations will not be moved without approval from UA/CPD.

INSTALLATION REVIEW WALK
The project manager/engineer will call UA/CPD at least five days in advance, whenever possible, to confirm a site visit meeting for review of the finished installation. Site visit date should be at least five days before the installation completion date to allow time for any changes. This review will be done to assure compliance with the specifications and to discuss any project or UA/CPD concerns with the layout. Agreed upon changes are to be completed before the installation completion date.

FABRIC PANEL REMOVAL AND RETURN
At the conclusion of the project, all fabric panels must be returned to UA/CPD. Each panel must be washed to clean and remove any construction debris/dust. Panels also should be rolled, not folded, before returning to prevent any permanent creasing or tears.
The metal sign is a constant adjust the wood panel so that an even 3" border is mainted along all sides.
Learning & Knowledge Center

Hub for The School of Medicine

The Learning and Knowledge Center will be an active hub for the School of Medicine to support the educational, research and clinical mission of Stanford University Medical Center. The building will create interactive learning environments through the incorporation of advanced technologies while also creating the "front door" for the School of Medicine campus. The 120,000 sq. ft. project is a testament that focuses on collaborative learning spaces, state-of-the-art lecture halls, state-of-the-art classrooms, a large, dynamic meeting hall, the School’s leadership suite and a range of facilities for students, staff and faculty. Community facilities will include a lecture, café, and a fitness center. A centerpiece of the new education space is the “mock-clinic and hospital facility” where there will be a comprehensive array of simulation environments including standardized patient exam rooms, operating rooms, emergency and ICU rooms, procedural and clinical training stations and virtual reality interactive spaces.

Completion Date: Spring 2010
URL: http://the Stanford site/
Fabric Panel to be installed on 6x8 Chain link fence (clear dimensions between metal post 69" x 93.5")