

SECTION 01 5050 - CONSTRUCTION FENCING / COVERED WALKWAYS / TREE PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes requirements for construction fencing and related requirements.
- B. Fencing Design Requirements:
 - 1. Construction fencing in and around campus must be erected before any construction work, excavation or other site preparation begins, including repair to existing infrastructure. Design of all construction fencing must meet current OSHA standards. Two weeks minimum notice is to be provided to Facilities Management before any construction fencing erected.
 - 2. Fencing needs to be installed to prevent access from University staff, students and the general public to any construction sites/areas.
 - 3. Placement of any fencing needs to respect the surrounding area and acknowledge the presence of: local environmental conditions – access or pathways, stairs, trees or vegetation, weather, equipment, working inside or outside etc. Placement also needs to recognize the difficulties that individuals with sight impairment face and not place them in danger through unexpected changes in travel routes or placement of obstacles.
 - 4. The duration of project length will also determine the type of protective barrier to be put in place. When fencing is required, it will surround the entire construction activity and be kept in place throughout the construction activity and not removed until the need has ceased and the area made safe.
 - 5. Under special circumstances custom designed fencing, graphics may be installed around a major construction project. This may include covered walkways. Any graphics material will be provided by Northwestern University. This will be coordinated through Facilities Management should the need occur.
 - 6. Where required, warning lights (i.e. orange flashing lights) may be required for safety reasons. Placement to be in accordance with OSHA standards.
 - 7. Where construction activity interferes with vehicle access, IDOT signs are to be provided indicating “reduced lane width ahead” or other appropriate message. Signs must not interfere with pedestrian movements and be compliant with IDOT and ADA standards.

1.3 ACTION SUBMITTALS

- A. Site Plan: The location of any construction fencing needs to be reviewed with Facilities Management a minimum of three weeks prior to its installation. Provide site logistic plans for each phase of construction showing the extent of fencing and any access points within the fencing, including hydrant and fire command points. The NU Facilities Management Project

Manager will coordinate a review with NU Risk Management to ensure compliance with "Interim Life Safety Measures" protocols.

1.4 QUALITY ASSURANCE

A. Installer Qualifications:

1. The Contractor is responsible for hiring a suitably qualified Sub Contractor experienced in the installation of construction fencing and related materials and aware of the field conditions for each installation.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Construction Fencing may be one of two type of fencing, a) Solid construction fencing and b) Chain link fencing backed by wind screens.

1. Temporary Fence Panels.

- a. Dependent upon the need for protection, construction fencing can be 48" or 60" high. It is to be constructed of knitted polyethylene barrier fencing in green. The fence posts need to be suitable for carrying an impact load and each fence post is to be capped for safety purposes. This is only acceptable for short/temporary periods not exceeding five working days duration. Adjacent temporary panels to be secured with hardware or zip ties located at the inner face of the fencing.
- b. It is not acceptable to place "construction tape" or hazard cones around excavations, construction areas etc., a more rigid method of protection is required. For minor construction, maintenance or repair jobs that pose low risk not exceeding four hour's in duration, mobile barricades etc. may be used as long as they are removed at the end of the shift. Beyond this duration, suitable construction fencing must be used.

2. Permanent Fence Panels.

- a. Chain linked fencing, backed with wind screens must be a minimum 72" high unless otherwise approved and be in accordance with OSHA requirements and the relevant local codes. Fencing will include a top and bottom rail. The chain link fence is to be made of galvanized steel and suitable for its intended purpose. The wind screen is to be constructed of knitted polyethylene barrier fencing in green securely fixed to the inside face of the fencing. No twisted wire is to protrude on the exterior side of the fence. Any screening that is torn or ripped will be replaced at the contractor's expense. No tears or rips greater than 2" in any dimension will be allowed. No visible gaps in the fencing are allowed, including between panels or under them. Gates must close tightly with no gaps in or around them.

B. The following materials are not acceptable as fencing material: chicken wire, barbwire, razor, single strand wire, snow fencing or welded fabric.

C. For site access control, openings in the fence will be secured with a gate(s) and chain with a series of padlocks to allow Evanston Fire Department, Northwestern University and contractor access.

- D. Where covered walkways are required for pedestrian safety, these will be designed to OSHA standards. The location is to be reviewed with Facilities Management a minimum of three weeks prior to placement.
- E. Construction fencing will be supported by metal posts inserted into ground in accordance with OSHA standards. Where moveable fencing used, this will be secured by sandbagged stands. Sandbags will be maintained intact without tears or holes and positioned on the interior side of construction fence.
- F. Where dumpsters are free standing and not within a construction site they will be surrounded by screened temporary construction fencing 72" high, meeting all of the requirements listed in this document.
- G. Each side of fenced area to be signed "Authorized Personnel Only". Signage to be in keeping with OSHA standards. For long runs of fencing, multiple signs may be installed at not less than 24' on centers.
- H. Tree Protection.
 - a. Tree protection can be as under Temporary Fence Panels or wood studs 6"x2"x6' high wired together with no protruding wire twists and removed at the end of activity and landscape repaired.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. The Contractor is to apply for any relevant permit required for the placement of any protective fencing and ensure that J.U.L.I.E. locates are called for.
- B. The Contractor is responsible for the removal and site cleanup or repair from any protective fencing once the need has ceased.
- C. The Contractor is to ensure that all construction fencing and screening is correctly anchored in place, with a special review procedure in place when excessive/high winds are anticipated. Any corrective measures are to be made at the Contractors expense. The contractor is to inform Facilities Management in a timely manner that this action has taken place.
- D. Northwestern University, at its discretion, may place informative signage on a construction fence. This will be coordinated through Facilities Management. If a Contractor wishes to place signage on the construction fencing, it has to be reviewed by Facilities Management. The University will not willfully withhold its permission.

END OF SECTION 01 5050

NORTHWESTERN UNIVERSITY
PROJECT NAME _____
JOB # _____

FOR: _____
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