

ITEM 58

MAINTENANCE OF TRAFFIC

1.0 DESCRIPTION. This section includes identifying safety hazards and furnishing all necessary labor, materials, tools, and equipment including, but not limited, to signs, barricades, traffic drums, cones, flashers, construction fencing, flag persons, variable message boards, uniformed police officers, warning devices, temporary pavement markings, temporary sidewalk, delineators, etc., to maintain vehicular and pedestrian traffic through and adjacent to the project area(s).

2.0 SUBMITTALS. The Contractor shall submit the following:

A. Reference Standards. The Traffic Control Plan shall be submitted and conform to the following standards:

1. Ohio Manual of Uniform Traffic Control Devices (OMUTCD), latest edition including all subsequent supplements issued by the Ohio Department of Transportation, (ODOT) ITEM 614 CMS
2. Manual on Uniform Traffic Control Devices for Streets and Highways by U.S. Department of Transportation, Federal Highway Administration.

B. Shop Drawings.

1. Submit at Contractor's expense a Traffic Control Plan for approval by the controlling roadway agency (ODOT, Stark County Metropolitan Sewer District or other local government) having jurisdiction over the road for approval.
2. The Traffic Control Plan will detail procedures and protective measures proposed by the Contractor to provide for protection and control of traffic affected by the work consistent with the standards as listed herein.
3. The Traffic Control Plan will be signed and sealed by a Professional Engineer registered in the state of Ohio and shall include proposed locations and time durations of the following, as applicable:
 - a. Pedestrian and public vehicular traffic routing.
 - b. Lane and sidewalk closures, other traffic blockage and lane restrictions and reductions anticipated to be caused by construction operations.
 - c. Show and describe the proposed location, dates, hours and duration of closure, vehicular and pedestrian traffic routing and management, traffic control devices for implementing pedestrian and vehicular movement around the closures, and details of barricades.
 - d. Location, type and method of shoring to provide lateral support to the side of an excavation or embankment parallel to an open travel-way.
 - e. Allowable on-street parking within the immediate vicinity of worksite.
 - f. Access to buildings immediately adjacent to worksite.
 - g. Driveways blocked by construction operations.

- h. Temporary traffic control devices, temporary pavement striping and marking of streets and sidewalks affected by construction.
 - i. Temporary commercial and industrial loading and unloading zones.
 - j. Construction vehicle reroutes, travel times, staging locations, and number and size of vehicles involved.
4. Obtain and submit prior to erection, or otherwise impacting traffic, all required permits from all authorities having jurisdiction, including ODOT, the Stark County Engineer, and permits required by the local jurisdiction as required.

C. Calculations. This section is not applicable.

D. Certifications. This section is not applicable.

3.0 MATERIALS.

A. Traffic Control Devices. The Contractor shall furnish, erect, and maintain all necessary traffic control devices, including flag person, in accordance with the Manual of Uniform Traffic Control Devices for Streets and Highways published by the U.S. Department of Transportation, Federal Highway Administration.

- 1. Flag Persons.
 - a. All flag persons used on this Project will adhere to the following requirements:
 - i. Any person acting as a flag person on this Project will have attended a training session taught by a Contractor's qualified trainer before the start date of this Contract.
 - ii. Flag persons will not be assigned other duties while working as authorized flag persons.
 - iii. Any person replacing flag person for break shall have the same training.
- 2. Work Zone Traffic Signals.
 - a. In conformance with ODOT Item 614.10 and subject to approval of the Engineer, the Contractor may employ signal controller equipment.

B. Temporary Shoring.

- 1. Use shoring to maintain traffic when it is necessary to provide lateral support to the side of an excavation or embankment parallel to an open travel-way. Provide shoring when a theoretical 2:1 or steeper slope from the bottom of the excavation or embankment intersects the existing ground line closer than 5-feet (1.5 m) from the edge of pavement of the open travel-way.
- 2. The Contractor will furnish, install, and remove sheeting, shoring, and bracing necessary to maintain traffic at locations shown on the Traffic Control Plan and other locations determined during construction.

4.0 EXECUTION.

A. Agency References. In the above, referenced standards shall be construed to also include the municipality as applicable for this Work.

B. Notifications.

1. The Contractor will notify individual owners, owner's agents, and tenants of buildings affected by the construction, with copies to the county, 72-hours in advance of any construction activities.
2. The Contractor shall notify residents and pedestrians via variable message boards no later than 10 days prior to the closure of any road, lane or pedestrian thoroughfare.
3. The Contractor shall notify Emergency Management Services agencies no less than 7 days prior to such closures or whenever roads are impassable.
4. Implement closing of vehicle or pedestrian thoroughfares in accordance with the construction drawings and the approved Traffic Control Plan.
5. The Contractor will immediately notify the County of any vehicular or pedestrian safety or efficiency problems incurred as a result of the construction of the Project.

C. General Traffic Control.

1. Sequence the Work in a manner that will minimize disruption of vehicular and pedestrian access through and around the construction area.
2. Traffic planning and control for the maintenance and protection of pedestrian and vehicular traffic affected by the Contractor's Work includes, but is not limited to:
 - a. Construction and maintenance of any necessary detour equipment and facilities.
 - b. Providing necessary facilities for access to residences and businesses.
 - c. Furnishing, installing, and maintenance of traffic control and safety devices (e.g. signage, barricades, barriers, message boards, uniformed police officers, temporary signal devices, etc.), and flag persons as appropriate during Construction.
 - d. Control of snow removal, water runoff, dust, road plate and/or road cut trench maintenance and any other special requirements for safe and expeditious movement of traffic.
3. Planning, maintenance and control of traffic including both vehicular and pedestrian throughout the project area shall be provided at the Contractor's expense.
4. The Contractor shall ensure all personnel involved in traffic control are capable of communicating with the public.
5. The Contractor may be required to hire off-duty uniformed police officers, in addition to flag persons, to direct and maintain traffic. Locations and conditions requiring such uniformed police officers shall be as directed by the County and or the municipality in which the work is being executed. The Contractor shall always be required to use uniformed police officers for work within ODOT

maintained ROW's, road closures affecting school traffic and during all night work involving a road closure or crossing on nonresidential roads.

6. The Contractor shall remove temporary equipment and facilities when no longer required and restore grounds to original, or to specified conditions.

D. Maintenance.

1. Unless otherwise provided, all roads within the limits of the Work will be kept open to all traffic by the Contractor. The Contractor will keep the portion of the project being used by public traffic in such condition that traffic will be adequately accommodated.
2. The Contractor will provide and maintain in a safe condition temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages and farms.
3. The Contractor will provide emergency access to all residences and businesses at all times. Residential and business access will be restored and maintained at all times outside of the Contractor's normal working hours.
4. Traffic is to be maintained on one section of existing pavement, proposed pavement, or a combination thereof. Alternating one-way traffic may be utilized and limited to a maximum length of 500-feet during construction hours. Lane width for alternating one-way traffic will be kept to a minimum width of 10-feet, or as directed by the County.
5. Travel lanes and pedestrian access will be kept reasonably smooth, dry, and in a suitable condition at all times. Fall protection devices shall be used for all excavations. All excavations shall be back filled or covered by road plate(s) at the end of each work day.
6. The Contractor will make provisions at all "open cut" street crossings to allow for free, smooth passage of vehicles and pedestrians, either by bridging or other temporary crossing structures. Such structures will be of adequate strength and proper construction and will be maintained by the Contractor in such a manner as not to constitute an undue traffic hazard.
7. The Contractor will keep all signs in proper position, clean, and legible at all times. Care will be taken so that weeds, shrubbery, construction materials, equipment, and soil are not allowed to obscure any sign, light, or barricade. Signs that do not apply to construction conditions should be removed or adjusted so that the legend is not visible to approaching traffic.
8. Retroreflective materials required on cones, drums, and other equipment in accordance with ODOT requirements, shall be kept clean and in good condition.
9. The County may determine the need for, and extent of, additional striping removal and restriping.
10. Excavated material, spoil banks, construction materials, equipment and supplies will not be located in such a manner as to obstruct traffic, as practicable. The Contractor will immediately remove from the site all demolition material, exercising such precaution as may be directed by the County. All material excavated shall be disposed of so as to minimize traffic and pedestrian inconvenience and to prevent damage to adjacent property.

11. During any suspension of Work, the Contractor will make passable and open to traffic such portions of the Project and/or temporary roadways as directed by the County for accommodation of traffic during the anticipated period of suspension. Passable conditions will be maintained until issuance of an order for the resumption of construction operations. When Work is resumed, the Contractor will replace or renew any Work or materials lost or damaged because of such temporary use in every respect as though its prosecution had been continuous and without interferences.

E. Removal of Materials. The Contractor shall remove temporary equipment and facilities when no longer required and restore grounds to original, or to specified conditions.

5.0 ELECTRICAL. This section is not applicable.

6.0 QUALITY ASSURANCE. Work covered herein is intended to be all materials, labor and equipment required for complete maintenance of traffic.

A. Testing. This section is not applicable.

B. Observation.

1. SCMSD designated representative will visually observe the work performed. The representative will notify the Engineer of any discrepancies with the contract documents in the course of the Contractor performing the work. The progress observations by the SCMSD do not waive any rights or remedies, nor divest the Contractor of any responsibility for contract compliance or liability for damage.

C. Certifications. This section is not applicable.

7.0 MEASUREMENT. This section is not applicable.

8.00 PAYMENT. The lump sum price stipulated for maintenance of traffic shall include all items of work listed.

<u>Item</u>	<u>Unit</u>	<u>Description</u>
58	LS	Maintenance of Traffic

END OF SECTION