

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- All Reinforcement including the Welded Wire Fabric shall be Epoxy Coated.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See special provisions.
- Welded Wire Fabric shall be according to AASHTO 55M.
- The stresses developed in the Precast Panels and Posts during shipping, storage, transportation and erection shall be accounted for. It is the responsibility of the Contractor to provide additional reinforcement or bracing if necessary to address these items as suitable to his operations subject to approval by the Engineer. Cost included with Noise Abatement Wall, Ground Mounted.
- Existing fence along the ROW shall remain. Any damage to the fence shall be repaired by the contractor at no additional expense to the Department.
- Contractor to space drilled shafts to avoid existing and proposed underground utilities and drainage structures.
- The contractor shall verify and consider the locations of overhead utilities prior to wall erection.
- All panel tops shall be placed horizontally with any changes in elevation accomplished by stepping adjacent panel sections at posts. Steps shall not exceed 1 ft. in height, except within the last 50 ft. where 2 ft. steps will be permitted. See special provisions.
- Any removal of existing trees and utilities are to be performed prior to construction of Noise Abatement Wall. Refer to General Notes and Project Commitments Sheet for additional information.

LOADING

Wind = 25 pst (Ground Mounted)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges
1989 Guide Specifications for Structural Design of
Sound Barriers with 1992 and 2002 interims.

DESIGN STRESSES

FIELD UNITS

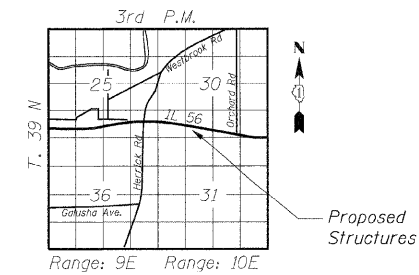
$f'_c = 3,500$ psi
 $f'_c = 3,500$ (Drilled Shafts)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel) (M270 Grade 50)

PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 65,000$ psi (Welded Wire Fabric)

ADDITIONAL DESIGN CRITERIA

- The architectural rustication to an extent of the maximum groove depth on each face of the Panel is considered structurally ineffective and shall not be considered for strength except when checking for crack control.
- (a) Post Base Plate and connection to Drilled Shafts shall be designed for strength for both erection loads and service loads.
(b) Shop or field welding of reinforcement bars is not allowed.
(c) Grouted pockets in the Post on Panel shall be considered ineffective for strength or serviceability design.
(d) The coefficient of friction between steel and grout is 0.45.



LOCATION SKETCH

TOTAL BILL OF MATERIAL

Item	Unit	Total
Noise Abatement Wall, Ground Mounted	Sq. ft	95,140

Note: For the method of measurement of the Noise Abatement Wall, see sheet N20 of N30 and Special Provisions.

**GENERAL DATA
NOISE ABATEMENT WALL**

DESIGNED - RJT
CHECKED - MRB
DRAWN - MB
CHECKED - MRB

benesch

alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0460 Job No. 3733

SHEET NO. N18 N30 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	365	(57 & 58)WRS-2	DUPAGE	681	417
CONTRACT NO. 62419				ILLINOIS FED. AID PROJECT	