STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DESIGN SPECIFICATIONS

2002 A.A.S.H.T.O. Specifications & Supplements

DESIGN STRESSES

Precast Units fy = 60,000 psi f'c = 5,000 psi (Precast)

Field Units fy = 60,000 psi (Reinforcement) fy = 50,000 psi (AASHTO M270 Gr. 50)

DESIGNED JMW CHECKED DFM DRAWN CTH

CHECKED DFM

TOTAL BILL OF MATERIALS

DESCRIPTION	UNIT	QTY.
Structure Excavation	Cu. Yd.	3,478
Name Plates	Each	1
Pipe Underdrains for Structures 4"	Foot	1,359
Concrete Gutter, Type A (Modified)	Foot	1,359
Furnishing Soldier Piles (W Section)	Foot	6,501
Geocomposite Wall Drain	Sq. Yd.	2,358
Temporary Soil Retention System	Sq. Ft.	4,645
Drilling & Setting Soldier Piles (In Soil)	Cu. Ft.	6,156
Drilling & Setting Soldier Piles (In Rock)	Cu. Ft.	12,436
Retaining Wall (Special)	Sq. Ft.	22,994
Staining Concrete Structures	Sq. Yd.	2,196



TEMPORARY SOIL RETENTION SYSTEM DETAIL

GENERAL NOTES

A706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Concrete shall be painted in accordance with special provisions. The color shall be selected by the engineer.

Exposed steel wide flange/pile shall be painted with an inorganic zinc rich primer/acrylic/acrylic paint system for shop and field painting except for portions located more than 4 feet below the finished arade at the front face of the wall. The finished coat shall be only applied to the exposed surfaces of the steel piles after the concrete panels have been installed. The color of the final finish coat shall be approved by the Resident Engineer and Project Engineer. See special provisions for Cleaning and Painting New Metal Structures.

After placement of bottom precast panel, fill must be placed equally on both sides in order to continue construction of wall and place additional panels. Backfill at front face of wall must be at finished grade.

All form liners required for the precast concrete panels are included in the pay item "Retaining Wall (Special)".

Installation of the name plate shall be in accordance with Highway Standard 515001-03 and Article 515 of the Standard Specifications. The location of the name plate to be determined by the Resident Engineer.

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

Method used for cutting piles to their final length shall result in a smooth and neat appearance. Jagged edges shall not be acceptable.

LEFT STATION 727+02 TO 740+58 BUILT 20___ BY STATE OF ILLINOIS F.A.P. RTE. 742 SEC. 37R-4 STRUCTURE NO. 071-7004

> NAME PLATE See Std. 515001

> > SHEET NO 23 SHEE

Howard R. Green Company

Reinforcement Bars shall conform to the requirements of ASTM

GENERAL PLAN & ELEVATION STRUCTURE NO. 071-7004

NO.6	F.A.P. RTE.	SECTION						COL	JNTY	TOTAL SHEETS	SHEET NO.
	742	742 37R-4						00	GLE	867	218
ETS							CONTRACT NO. 64E17				
	FED. RO	DAD	DIST.	NO.	7	ILLINOIS	FED. A	ID PROJE	CT		