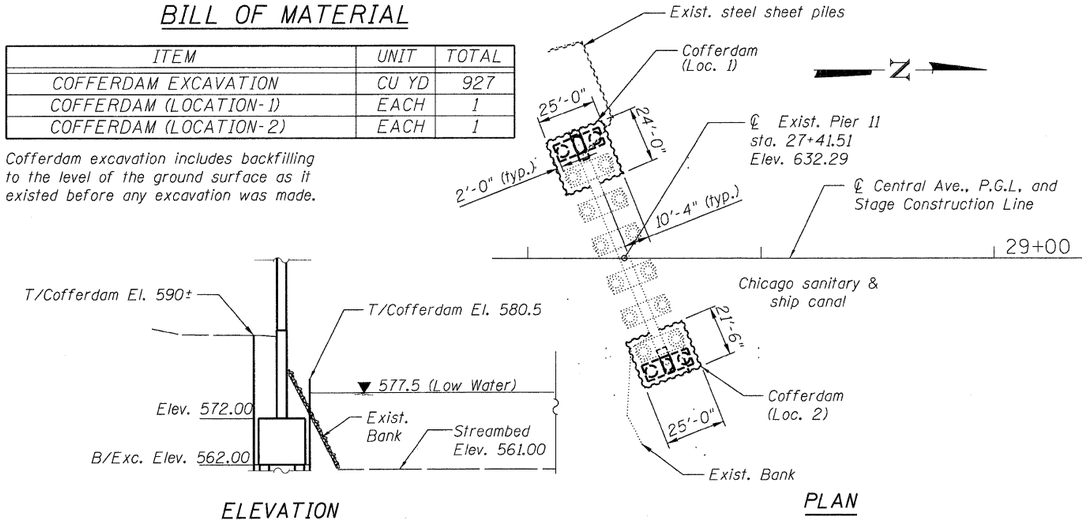
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL

ITEM	UNIT	TOTAL
COFFERDAM EXCAVATION	CU YD	927
COFFERDAM (LOCATION-1)	EACH	1
COFFERDAM (LOCATION-2)	EACH	1

Cofferdam excavation includes backfilling to the level of the ground surface as it existed before any excavation was made.



ELEVATION

PLAN

DRILLED SHAFT SCHEDULE

DRILLED SHAFT SCHEDULE

Pier	Size		Reinforcement				Top of Shaft Elevation	Bottom of Shaft Elevation	Allowable Bearing Presure (tsf)	
	Shaft Diameter	Shaft Length"L"	Vertical Bars "A"	Vertical Bars "B"	Dowel Bars "C"	Spiral Bars			Exist	New
7	4'-0"	73'-0"	19-#9 $V_{601}(E)$	19-#9 $V_{601}(E)$	19-#9 $n_{601}(E)$	#5 $sp_{601}(E)$	589.50	516.50	20.0	15.6
8	5'-0"	75'-6"	16-#9 $V_{612}(E)$	16-#9 $V_{612}(E)$	16-#9 $n_{611}(E)$	#5 $sp_{611}(E)$	595.00	519.50	20.0	17.9
9	4'-9"	75'-6"	19-#11 $V_{623}(E)$	19-#11 $V_{623}(E)$	19-#11 $n_{620}(E)$	#5 $sp_{621}(E)$	595.00	519.50	20.0	17.6
10	6'-6"	72'-0"	31-#11 $V_{632}(E)$	31-#11 $V_{632}(E)$	31-#11 $n_{630}(E)$	#5 $sp_{631}(E)$	592.00	520.00	20.0	16.8
11	5'-6"	42'-6"	22-#9 $V_{643}(E)$	--	22-#9 $n_{641}(E)$	#5 $sp_{640}(E)$	562.00	519.50	20.0	15.8

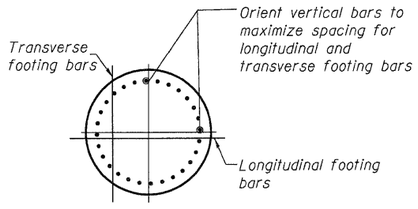
1

NOTES:

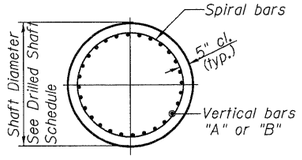
1. Drilled shafts shall be installed according to article 516 of the Standard Specifications.
2. Elevations, shaft lengths, and reinforcement lengths shown are estimates and should be verified and adjusted in the field as directed by the engineer.
3. In constructing the drilled shafts, the Contractor may encounter pavements, fill, foundations, abandoned utilities, boulders, and other obstructions. No separate payment will be made for removal for of any such obstructions, and the cost for removing such obstructions shall be included in the contract unit price for caisson shafts.
4. Adjacent new caissons may be constructed simultaneously provided that they are not closer than 16.5 feet on centers. At least 36 hours shall have elapsed after the completion of a caisson before excavation for adjacent caissons closer than 16.5 feet on center is started.
5. Temporary casing specified shall be used to mitigate soil and ground water contamination, and to ensure that adjacent existing caissons and/or piles are not undermined during excavation for new caissons. The Contractor shall submit, for the Engineer's approval, his/her proposed methods, equipment and procedures for the installation and removal of the temporary casing so as not to undermine or damage the existing caissons and piles. The extraction of the casing shall be performed so as not to disturb the caisson reinforcing cage or impair the structural integrity of the constructed caisson.
6. If field conditions dictate a shorter shaft length than shown, the Contractor shall cut the reinforcement bars to the required length. If the shaft length is longer than indicated, the Contractor shall extend the reinforcement by providing additional reinforcement of equal size and lapping with the minumum lap length shown. either mechanically spliced or lapped splice in accordance with Section 516.11.

1

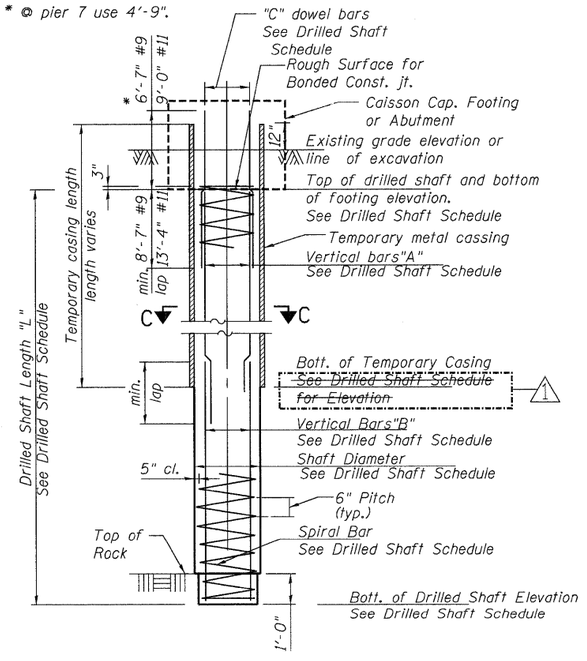
9. The caisson shaft and reinforcement shall be adjusted as required by the Engineer. These additonal quantities required by the Engineer and furnished by the Contractor will be paid for at the unit price bid for the work.
10. At all locations where reinforcements bar laps are not in direct contact, the Contractor shall provide sufficient spacing between the vertical bars, equal to the size of the largest concrete aggregate plus ½".
11. For location of drilled shafts See sheets 55 thru 64.
12. For Bill of Material see sheets 2.



TOP PLAN
Showing orientation of vertical bars



SECTION C-C



CAISSON SECTION

DRILLED SHAFTS
STRUCTURE NO. 016-3240

TYLIN INTERNATIONAL

DESIGNED	- DY, LS
CHECKED	- AMD, LS
DRAWN	- DY, LS
CHECKED	- AMD, LS
DATE	- 03/25/2011

REVISIONS	
NAME	DATE
⚠Revised A.M.D.	06/03/2011

SHEET NO. 65
73 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	0711.2R & 1011.1BR	COOK	741	668
		CONTRACT NO. 60999		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

$TIME$
$FILE$
$DATE$