TO:

MAIN OFFICE
REGIONAL OFFICES

SUPERSEDED BY EI 77-031
EFFECTIVE 5/1/1977

ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUBJECT: ROUNDING OF NEAT QUANTITIES FOR STRUCTURE ESTIMATES

Subject Code: 7.35

Distribution: [G] Main Office [G] Regions [ ] Special

APPROVED:

Deputy Chief Engineer (Structures)

Code: EI 72-87

Date: 8/29/72

Supersedes: Deputy Chief Engineer (Hwys) letter No. 63-37

Effective immediately the rounding rule as stated on page 21-4 in the "Highway Design Manual" Vol. 1, compiled by the Facilities Design Subdivision shall be used. The rule stated is as follows:

Rounding of neat quantities should be made to the next highest unit of ten to facilitate extensions, except when estimated quantities are small or are not subject to change, in which case rounding is undesirable. (Example: 43,542 neat, 43,550 proposal.)

Attached is a copy of page 21-11 (Figure 21-B) from the "Highway Design Manual" which illustrates a complete "Table of Quantities".

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK		13	119

HEMSTREET PARK – SCHAGHTICOKE – C.R. 71

RENSSELAER COUNTY

HEMSTREET PARK – SCHAGHTICOKE – COUNTY ROAD 71

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	HIGHWAY TOTAL		BRIDGE TOTAL		TOTAL COMBINED		FINAL
			NEAT	PROPOSAL	NEAT	PROPOSAL	NEAT	PROPOSAL	
1B	CLEARING AND GRUBBING, BURNING PERMITTED	L.S.	NEC.	NEC.			NEC.	NEC.	
1NB	SUPPLEMENTAL CLEARING AND GRUBBING	L.S.	NEC.	NEC.			NEC.	NEC.	
1M	MOBILIZATION	L.S.	NEC.	NEC.			NEC.	NEC.	
1W	FURNISHING WATER EQUIPMENT	L.S.	NEC	NEC.			NEC.	NEC.	
1WAD	APPLYING WATER	P.D.D.	300	300			300	300	
2A	EXCAVATION AND DISPOSAL OF EXCAVATED MATERIAL	C.Y.	521,816	521,820			521,816	521,820	
2B	EMBANKMENT IN PLACE	C.Y.	378,106	378,110			378,106	378,110	
2ECB	SELECTED FILL	C.Y.	20,722	20,730			20,722	20,730	
2EFB	SELECTED GRANULAR FILL	C.Y.	4,868	4,870	2,127	2,130	6,995	7,000	
2SP	GRANULAR FILL, SLOPE PROTECTION	C.Y.	13,268	13,270	539	540	13,807	13,810	
2UF	UNDERDRAIN FILTER	C.Y.	306	310	9	10	315	320	
3	SUBBASE COURSE GRANULAR MATERIAL	C.Y.	30,360	30,360			30,360	30,360	
5B	STRUCTURE EXCAVATION	C.Y.			1,012	1,020	1,012	1,020	
5T	TRENCH AND CULVERT EXCAVATION	C.Y.	6,011	6,020			6,011	6,020	
6	LABORATORY BUILDING	EA	1	1			1	1	
6BA	CONCRETE CYLINDER CURING BOX	EA.	1	1			1	1	
6EZ	ENGINEERS OFFICE (TYPE B)	L.S.	NEC.	NEC.			NEC.	NEC.	
7	TRIMMING ROAD SECTION	L.F./RD.	29,723	29,730			29,723	29,730	
8	PREPARING FINE GRADE	S.Y.	117,902	117,910			117,902	117,910	
11H6	PERF. CORR. METAL PIPE UNDERDRAIN, 6" DIA.	L.F.	4,272	4,275	163	165	4,435	4,440	
14-24	REINF. CONC. PIPE, CLASS IV, 24" DIA.	L.F.	1,332	1,340			1,332	1,340	
14ES24	REINF. CONC PIPE END SECTIONS	EA.	38	38			38	38	
14MQ12	CULVERT PIPE OPT., 12" DIA.	L.F.	676	680			676	680	
14MQ18	CULVERT PIPE OPT., 18" DIA.	L.F.	174	180			174	180	
14ESM12	END SECTION OPTIONAL, 12" DIA.	EA.	43	43			43	43	
14ESM18	END SECTION OPTIONAL, 18" DIA.	EA.	8	8			8	8	
16	FURNISHING & APPLYING CALCIUM CHLORIDE	TON	130	130			130	130	
18	CLASS A CONCRETE FOR STRUCTURES	C.Y.			98	100	98	100	
18MA	CLASS A CONCRETE FOR STRUCTURES	S.F.			7,687	7,690	7,687	7,690	
20	CLASS B CONCRETE FOR STRUCTURES	C.Y.	8	10	267	270	275	280	
24A	BAGGED SCREENED AGGREGATE	C.Y.			24	24	24	24	
28	BAR REINFORCEMENT FOR STRUCTURES	LB.	1,099	1,100	13,514	13,520	14,613	14,620	
28B	STUD SHEAR CONNECTORS	EA.			3,376	3,380	3,376	3,380	
29	STRUCTURAL STEEL	LB.			167,960	167,960	167,960	167,960	
30C	FRAMES AND GRATES, CASTINGS	S.F.	71	72			71	72	
32DG	CABLE GUIDE RAIL (BEAM POSTS)	L.F.	14,400	14,400			14,400	14,400	
32DDC	ANCHOR UNITS FOR CABLE GUIDE RAIL	EA.	36	36			36	36	
32DDR	ANCHOR UNITS FOR CABLE GUIDE RAIL (DRIVEWAYS)	EA.	13	13			13	13	
33AF	BOX BEAM GUIDE RAIL	L.F.	679	680			679	680	
33AFDR	BOX BEAM GUIDE RAIL END ASSEMBLY	EA.	6	6			6	6	
33AFY	BOX BEAM GUIDE RAIL (SHOP CURVED)	L.F.	425	430			425	430	
34A	GUIDE POST (WOOD)	EA.	13	13			13	13	
37S12)	STEEL BRIDGE RAIL (2 RAIL)	L.F.			522	530	522	530	
45SP	BASE COURSE ASPHALT CONCRETE, TYPE 1A	TON	12,376	12,380			12,376	12,380	
51MFZ	ASPHALT CONCRETE (TOP COURSE)	TON	4,228	4,230			4,228	4,230	

HEMSTREET PARK – SCHAGHTICOKE – COUNTY ROAD 71

ESTIMATE OF QUANTITIES

ITEM NO	ITEM	UNIT	HIGHWAY TOTAL		BRIDGE TOTAL		TOTAL COMBINED		FINAL
			NEAT	PROPOSAL	NEAT	PROPOSAL	NEAT	PROPOSAL	
51M-F	ASPHALT CONCRETE	TON	425	430			425	430	
51MDX	ASPHALT CONCRETE DRIVEWAYS AND SIDEWALKS	TON	275	280			275	280	
55S	SURFACE COURSE FOR STABILIZED SHOULDERS	S.Y	42,938	42,940			42,938	42,940	
59WWB	BITUMINOUS STABILIZED COURSE (INCL SHOULDERS)	C.Y.	15,832	15,840			15,832	15,840	
60S	SURFACE TEXTURE & COLOR CONTRAST COURSE FOR STAB SHLDRS	S.Y	29,936	29,940			29,936	29,940	
61	BITUMINOUS MATERIAL	GAL.			35	35	35	35	
67DX	BITUMINOUS MAT A – LIQUID MEDIUM CURING	GAL.	284,976	284,980			284,976	284,980	
69MAX	BITUMINOUS MAT. A – CUTBACK RAPID CURING	GAL.	26,147	26,150			26,147	26,150	
70B	BITUMINOUS MAT. A - EMULSION	GAL	3,003	3,010			3,003	3,010	
76	MAINTENANCE AND PROTECTION OF TRAFFIC - REQ.C	L.S.	NEC.	NEC			NEC.	NEC.	
78BZ	MEDIUM STONE FILLING	C.Y	3,147	3,150			3,147	3,150	
81A	REMOVING EXISTING SUPERSTRUCTURE	L.S.			NEC.	NEC.	NEC.	NEC.	
83ST	TEMPORARY STEEL SHEET PILING	S.F.			692	700	692	700	
83TXS	TEMPORARY SHEET PILING	S.F.	3,859	3,860	4,436	4,440	8,295	8,300	
85C	CAST IN PLACE CONCRETE PILES	L.F.			3,230	3,230	3,230	3,230	
85PH	PREAUGERING FOR DRIVING PILES	L.F.			1,150	1,150	1,150	1,150	
87	FURNISHING EQUIPMENT FOR DRIVING PILES	L.S.			NEC.	NEC.	NEC.	NEC.	
94SVB	STONE CURB - BRIDGE TYPES	L.F.			684	690	684	690	
97BB	CONCRETE CURB, TYPE BB	L.F.	2,714	2,720			2,714	2,720	
97X1	CONCRETE CURB, TYPE X	L.F.	104	110			104	110	
102DR1	DROP INLETS, TYPE A	L.F.	49	50			49	30	
102DR2	DROP INLETS, TYPE B	L.F.	12	12			12	12	
104	RIGHT OF WAY MARKERS	EA	263	263			263	263	
104X	PERMANENT SURVEY MARKERS	EA.	4	4			4	4	
105	CONCRETE SIDEWALK	C.Y.	115	115			115	115	
113HB	HIGHWAY BARRICADE (WOOD POSTS)	L.F	90	90			90	90	
116	PROJECT SURVEY AND STAKEOUT	L.S.	NEC.	NEC.			NEC.	NEC.	
122	APPLYING SOIL CONDITIONERS	TON	25	25			25	25	
123	SEEDING	ACRES	51	51			51	51	
124	SODDING	S.Y.	2,837	2,840	118	120	2,955	2,960	

ESTIMATE OF QUANTITIES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
HEMSTREET PARK - SCHAGHTICOKE

DRAWING NO.	SCALE	DATE	CONSULTING ENGINEERS