

SI = SPECIALTY ITEM

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	FED 80% STATE 20%	FED 80% STATE 20%	FED 80% STATE 20%	FED 80% STATE 20%	FED 80% STATE 20%	CITY 100%	CITY 100%	FED 80% STATE 20%	CITY 100%
				ROADWAY	ROADWAY	ROADWAY	BRIDGE	BRIDGE	HIGHWAY LIGHTING	TRAFFIC SIGNALS	TRAFFIC SIGNALS	CITY
				0003	0003	0003	0010	0010	0021	0021	0021	0043
				URBAN GRUNDY	RURAL GRUNDY	RURAL KENDALL	SN 032-0122	SN 032-0123	URBAN	PROLOGIS	GRANVILLE	URBAN
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	2917	2812	105							
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	1710	1492	218							
20101000	TEMPORARY FENCE	FOOT	3002	3002								
20200100	EARTH EXCAVATION	CU YD	71108	44772	16593	9743						
20200200	ROCK EXCAVATION	CU YD	570			570						
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	86043	58718	18141	9184						
20300100	CHANNEL EXCAVATION	CU YD	2860	27	171		2074	588				
20400800	FURNISHED EXCAVATION	CU YD	276120	186925	64124	23071						
20700220	POROUS GRANULAR EMBANKMENT	CU YD	289	217	72							
20800150	TRENCH BACKFILL	CU YD	3352	2505	818	29						
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	40469	38415	2054							
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	30318	19354	7860	3104						
21301052	EXPLORATION TRENCH 52" DEPTH	FOOT	43821	32968	7449	3404						
25000210	SEEDING, CLASS 2A	ACRE	44.75	28.50	10.75	5.50						



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EARTHWORK								
1	2	3	4	5	6	7	8	
LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	SUITABLE EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTH BALANCE WASTE(+) OR SHORTAGE(-)	TOPSOIL EXCAVATION & PLACEMENT	
STATION TO STATION	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	
URBAN GRUNDY								
STAGE 1								
IL 47								
6032+87 TO 6105+96	2183		728	1637	1362	275		
PROLOGIS PRKWY.								
1603+02 TO 1604+93	139		46	104	18	86		
STAGE 2								
IL 47								
6029+00 TO 6112+56	9157		15403	6868	24033	-17165	3037	
GRANVILLE RD.								
100+52 TO 107+21	1868		309	1401	56	1345	314	
STAGE 3								
IL 47								
6027+00 TO 6205+20	12383		38030	9287	126640	-117353	7228	
PROLOGIS PRKWY.								
1604+20 TO 1605+50	36		10	27		27	2	
NELSON RD.								
200+49 TO 208+48	228		1672	171	490	-319	382	
AIRPORT RD.								
300+00 TO 308+95	1519		228	1139	310	829	278	
MINOOKA RD.								
403+58 TO 408+59	476		1	357	380	-23	158	
STAGE 3A								
PROLOGIS PRKWY.								
1605+00 TO 1605+50	21		7	16		16		
STAGE 3B								
PROLOGIS PRKWY.								
1603+02 TO 1605+50	23		-19	17	84	-67	26	
STAGE 4								
IL 47								
6100+00 TO 6205+20	16340		1349	12255	66391	-54136	7584	
MINOOKA RD.								
409+38 TO 416+53	401		955	301	740	-439	345	
URBAN GRUNDY SUB-TOTAL								
	44772		58718	33579	220504	-186925	19354	
RURAL GRUNDY								
STAGE 3								
IL 47								
6205+20 TO 6257+48	6008		18550	4506	35565	-31059	2328	
SHERRILL RD.								
500+88 TO 508+59	651		-191	488	2810	-2322	408	
STAGE 4								
IL 47								
6205+20 TO 6257+48	9517		-1665	7138	38446	-31308	4837	
SHERRILL RD.								
509+39 TO 516+08	417		1447	313	1748	-1435	287	
RURAL GRUNDY SUB-TOTAL								
	16592		18141	12444	78569	-66125	7860	
RURAL KENDALL								
STAGE 1								
IL 47								
6282+03 TO 6292+78	307		102	230	248	-18		
STAGE 3								
IL 47								
6257+48 TO 6277+00	6765	570	7822	5644	22776	-17132	1985	
SB CONNECTOR								
22+00 TO 37+09	1097		1464	823	1865	-1042	390	

EARTHWORK								
1	2	3	4	5	6	7	8	
LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	SUITABLE EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTH BALANCE WASTE(+) OR SHORTAGE(-)	TOPSOIL EXCAVATION & PLACEMENT	
STATION TO STATION	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	
STAGE 4								
IL 47								
6257+48 TO 6266+00	1574		-204	1181	6059	-4878	729	
RURAL KENDALL								
	9743	570	9184	7877	30948	-23071	3104	
TOTAL								
	71108	570	86043	53901	330021	-276120	30318	

USE PAY ITEM TOTALS BELOW

INFORMATION:
 SHRINKAGE FACTORS: EARTH EXCAVATION: 25%
 ROCK EXCAVATION: 0%
 UC = UNDERCUT (FROM CROSS-SECTIONS)
 C = CUT (FROM CROSS-SECTIONS)
 TSE = TOPSOIL STRIPPING & EARTH EXCAVATION
 TSP = TOPSOIL EXCAVATION & PLACEMENT (COLUMN 8)

COLUMN 1 - LOCATION FROM PLANS
 COLUMN 2 - CUT QUANTITIES FROM CROSS SECTIONS (C) X 75%
 COLUMN 3 - QUANTITIES FROM CROSS SECTIONS
 COLUMN 4 - CUT MATERIAL THAT IS DETERMINED TO BE EITHER UNSTABLE OR UNSUITABLE FOR USE IN EMBANKMENT
 = UNDERCUT (UC) + [CUT (C) X 25%] + [TOPSOIL STRIPPING & EARTH EXCAVATION (TSE) - TOPSOIL EXCAVATION & PLACEMENT (TSP)]
 COLUMN 5 - [(COLUMN 2) X (1-EARTH EXCAVATION SHRINKAGE FACTOR)] + COLUMN 3 X (1-ROCK EXCAVATION SHRINKAGE FACTOR)]
 COLUMN 6 - QUANTITIES FROM CROSS SECTIONS
 COLUMN 7 - COLUMN 5 - COLUMN 6
 COLUMN 8 - QUANTITIES FROM CROSS SECTIONS, THESE QUANTITIES ARE NOT INCLUDED IN EARTH EXCAVATION OR EMBANKMENT

PAY ITEMS:
 COLUMN #2 IS EARTH EXCAVATION = 71108CU YD
 COLUMN #3 IS ROCK EXCAVATION = 570CU YD
 COLUMN #4 IS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL = 86043CU YD
 COLUMN #7 IS FURNISHED EXCAVATION = 276120CU YD
 COLUMN #8 IS TOPSOIL EXCAVATION & PLACEMENT = 30318CU YD

- NOTES:**
- THE TOP 12 INCHES OF THE EXISTING SOILS WITHIN THE LIMITS OF THE PROPOSED PAVEMENT SHALL BE REMOVED (TSE) AS SHOWN IN THE CROSS SECTIONS. THIS WORK SHALL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS, OR IF USED FOR TOPSOIL PURPOSES, TOPSOIL EXCAVATION AND PLACEMENT (TSP).
 - ALL SOILS SHALL BE TESTED BEFORE BEING INCORPORATED INTO THE NEW EMBANKMENT. THE ENGINEER RESERVES THE RIGHT TO RE-CLASSIFY ANY OF THE UNSUITABLE MATERIAL AND USE IT AS EMBANKMENT MATERIAL FOR SIDESLOPES OR IN SOD COVERED RAISED MEDIANS.
 - THE EXISTING SUBGRADE SOILS MAY BE PRONE TO SWELLING UPON WETTING. THEREFORE, AT LOCATIONS WHERE NEW EMBANKMENT FILL HEIGHT IS GREATER THAN 2 FEET AND LESS THAN 8 FEET, THE TOP 6 INCHES OF SUBGRADE SOILS SHOULD BE DISKED, DRIED, AND RECOMPACTED BETWEEN +2% AND +4% OF THE OPTIMUM MOISTURE CONTENT AND BETWEEN 90% AND 95% OF THE STANDARD DRY DENSITY.
 - BASED ON SOIL BORINGS, 25% OF THE EXCAVATED SOILS (BELOW THE 12" TSE) THROUGHOUT THE PROJECT AREA ARE EXPECTED TO HAVE HIGH PLASTICITY (LL AND PI) AND MAY BE PRONE TO SWELLING UPON WETTING. THESE SOILS ARE ASSUMED TO BE UNSUITABLE MATERIAL FOR EMBANKMENT AND SHOULD NOT BE USED AS EMBANKMENT FILL UNLESS THEY HAVE LL LESS THAN 50%, PI BETWEEN 12% AND 20%, A MAXIMUM DRY DENSITY GREATER THAN 90 PCF, AND ORGANIC CONTENT LESS THAN 10%.
 - REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL INCLUDES EXCAVATION OF MATERIAL.

TEMPORARY EROSION CONTROL SEEDING

STATION +/- TO STATION +/-	SIDE	SEEDING CLASS 7 ACRES	POUNDS PER APPLICATION PER ACRE	NUMBER OF APPLICATIONS	TOTAL POUND	MULCH METHOD 2 ACRE
URBAN GRUNDY						
6027+00.00 TO 6205+17.00	LT & RT	39.27	100	1	3927	39.27
STAGE 1						
6038+00.00 TO 6104+00.00	LT	0.80	100	1	80	0.80
STAGE 3						
6105+00.00 TO 6205+00.00	RT	3.10	100	1	310	3.10
URBAN GRUNDY SUB-TOTAL					4317	43.25
RURAL GRUNDY						
6205+17.00 TO 6257+48.00	LT & RT	16.44	100	1	1644	16.44
STAGE 3						
6206+00.00 TO 6257+47.00	RT	1.50	100	1	150	1.50
RURAL GRUNDY SUB-TOTAL					1794	18.00
RURAL KENDALL						
6257+48.00 TO 6277+00.00	LT & RT	8.65	100	1	865	8.65
STAGE 3						
6258+00.00 TO 6265+00.00	RT	0.20	100	1	20	0.20
RURAL KENDALL SUB-TOTAL					885	8.75
TOTAL					6996	70.00

MULCH METHOD 2 IS USED FOR TEMPORARY MULCHING