

ITEM SPECIAL, MISC.: PLATE PILES

DESCRIPTION OF WORK

THIS ITEM OF WORK PROVIDES SLOPE STABILIZATION BY USING A PROPRIETARY AND PATENTED SLOPE REINFORCEMENT TECHNOLOGY (METHOD). THE PATENTED GEOPIER SRT SYSTEM (PLATE PILE METHOD) USES AN ARRAY OF STEEL PILES DRIVEN INTO THE SLOPE IN STAGGERED AND UNIFORMLY SPACED ROWS. ADDITIONAL DETAILS ARE PROVIDED IN FIGURES 1 AND 2. THE CONTRACTOR SHALL CONTACT THE BELOW COMPANY TO COORDINATE THE FINAL SLOPE STABILIZATION WORK:

GEOPIER FOUNDATION COMPANY
 GEOPIER SRT SYSTEM
 335 WELLINGTON WAY
 SPRINGBORO, OH 45066
 CONTACT: MARK SALVETER
 OFFICE: 937-790-1084
 CELL: 513-516-1251

THE GEOPIER SRT SYSTEM (PLATE PILE METHOD) IS A DESIGN/BUILD PRODUCT AND SHALL BE PER THE RECOMMENDATIONS OF THE GEOPIER FOUNDATION COMPANY. GEOPIER WILL FINALIZE THE DESIGN AND THE INSTALLATION OF THE PLATE PILES.

IT SHOULD BE NOTED THAT PLATE PILES HAVE ALREADY BEEN PLACED FROM APPROX. STA. 26+00.00 TO STA. 27+00.00 WITH A PREVIOUS MAINTENANCE CONTRACT. CARE SHALL BE TAKEN AROUND THIS AREA TO NOT DAMAGE AND/OR DESTROY THESE PLATE PILES. DAMAGED PLATE PILES, AS DETERMINED BY THE PROJECT ENGINEER, SHALL BE REPLACED TO THE SATISFACTION OF THE PROJECT ENGINEER AT NO COST TO THE DEPARTMENT.

IN ADDITION TO THE SLOPE STABILIZATION WORK, THE CONTRACTOR WILL REGRADE THE SLOPE TO PROVIDE A UNIFORM SURFACE PRIOR TO THE INSTALLATION OF THE PLATE PILES. THIS SHALL BE PER THE RECOMMENDATIONS OF GEOPIER AND TO THE SATISFACTION OF THE PROJECT ENGINEER. QUANTITIES FOR ITEM 203, EXCAVATION AND ITEM 203, EMBANKMENT HAVE BEEN INCLUDED IN THE PLANS FOR THIS WORK.

PER THE PROVIDED CONCEPTUAL DETAILS, THE PLATE PILES WILL BE INSTALLED 4-FEET ON-CENTER IN THE HORIZONTAL DIRECTION (I.E. PARALLEL TO THE ROADWAY) AND AS INDICATED BELOW IN THE VERTICAL DIRECTION (I.E. PERPENDICULAR TO THE ROADWAY). PLATE PILE ROWS SHOULD BE STAGGERED TO ALIGN EACH PLATE BETWEEN THE PLATES IN THE UPPER ROW. THE FIRST ROW OF PLATE PILES SHOULD BE INSTALLED NEAR THE HEAD OF THE SLOPE AND SUBSEQUENT ROWS DOWNSLOPE SHOULD BE SPACED AS INDICATED.

FOLLOWING THE INSTALLATION OF THE PLATE PILES, THE CONTRACTOR WILL REGRADE ANY AREAS DISTURBED DURING PLATE PILE INSTALLATION PRIOR TO INSTALLING EROSION CONTROL MEASURES. THIS EMBANKMENT AND REGADING WORK SHALL BE PER THE RECOMMENDATIONS OF GEOPIER AND TO THE SATISFACTION OF THE PROJECT ENGINEER. QUANTITIES FOR ITEM 203, EXCAVATION AND ITEM 203, EMBANKMENT HAVE BEEN INCLUDED IN THE PLANS FOR THIS WORK.

FOLLOWING THE INSTALLATION OF THE PLATE PILES AND THE REGADING OF THE STABILIZED SLOPE, EROSION CONTROL AND VEGETATIVE PLANTING MUST BE PROVIDED BY THE CONTRACTOR TO ENSURE A FULLY FUNCTIONING SLOPE STABILIZATION SYSTEM. EROSION CONTROL MATTING PER STANDARD CONSTRUCTION DRAWING DM-4.2 AND SEEDING AND MULCHING SHALL BE PROVIDED. QUANTITIES FOR ITEM 670, SLOPE EROSION PROTECTION MAT, TYPE B AND SEVERAL ITEM 659 ITEMS HAVE BEEN INCLUDED IN THE PLANS TO PROVIDE EROSION CONTROL AND ESTABLISH VEGETATION ALONG AND BEYOND THE STABILIZED AND REGRADED SLOPES.

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MATERIALS

PLATE PILES SHALL BE CONSTRUCTED OF OF STEEL S3X5.7 S-SHAPES OR C4X5.4 C-SHAPES. PLATES SHALL BE A MINIMUM OF 0.25 IN. THICK.

METHOD OF MEASUREMENT

THE DEPARTMENT WILL MEASURE THE QUANTITY OF AREA REPAIRED UTILIZING THE PLATE PILES AS TOTAL SQUARE YARDS MEASURED IN THE FIELD BASED ON THE AREAS DESIGNATED IN THE PLANS. THE REPAIRED AREA IS TO BE MEASURED ALONG A HORIZONTAL PLANE, NOT ALONG THE SLOPE.

BASIS OF PAYMENT

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE BELOW NOTED WORK:

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PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE, UNLESS NOTED OTHERWISE, SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT 690 ITEMS.

SLIDE AREAS STATIONING		PILE LENGTH	HORIZONTAL SPACING	TRANSVERSE SPACING	PLATE DIMENSION	AREA TO BE STABILIZED
FROM	TO	FT	FT	FT	IN x IN x IN	SY
24+50	26+00	10	4	6	40 x 12 x ¼	968
27+04	29+00	10	4	6	40 x 12 x ¼	1004

FIGURE 1
 TYPICAL PLATE PILE CONFIGURATION

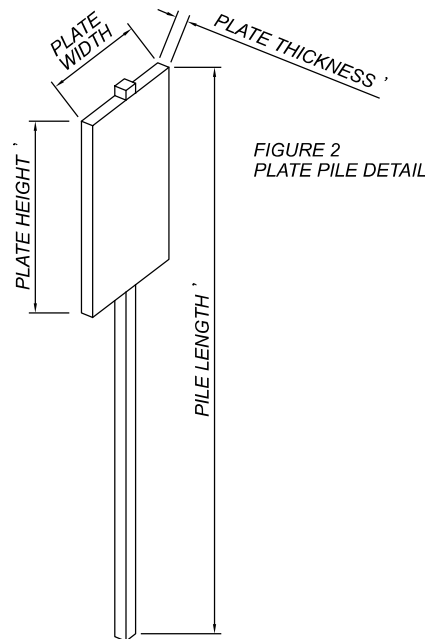
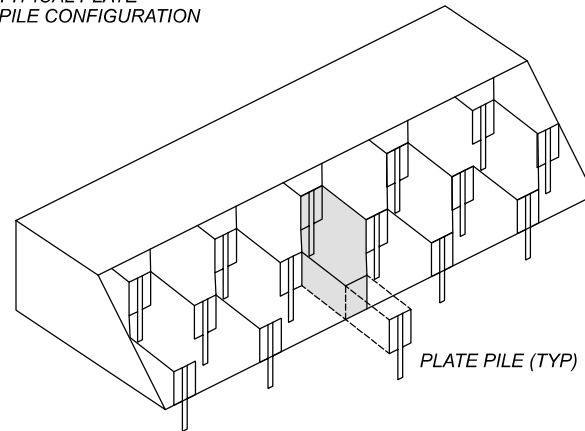


FIGURE 2
 PLATE PILE DETAIL