

ENGINEER

THE TERM "ENGINEER" AS NOTED IN THE PLANS SHALL BE CONSIDERED THE "VILLAGE OF PLYMOUTH ENGINEER".

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC/WATER/SEWER

VILLAGE OF PLYMOUTH
49 WEST BROADWAY STREET
PLYMOUTH, OHIO 44865
419-687-4331
ATTN: JEFF BURTON

COMMUNICATIONS

FRONTIER COMMUNICATIONS
3126 NORTH McCORD ROAD
TOLEDO, OHIO 43617
419-841-7281 / 740-396-2306
ATTN: AMY ROTH / ERIC MASSENGILL
Amy.l.roth@ftr.com / eric.massengill@ftr.com

GAS

COLUMBIA GAS OF OHIO
1021 NORTH MAIN STREET
MANSFIELD, OHIO 44903
419-427-3216
ATTN: NATHAN KLAIBER
nklaiber@nisource.com

COMMUNICATIONS

CHARTER COMMUNICATIONS
1575 LEXINGTON AVENUE
MANSFIELD, OHIO 44907
419-756-3338
ATTN: JON PUCKETT
Jonathan.Puckett@charter.com

COMMUNICATIONS

EVERSTREAM
1228 EUCLID AVENUE, SUITE 250
CLEVELAND, OHIO 44115
234-521-2999
ATTN: JOSEPH GIRDLESTONE
jgirdlestone@everstream.net

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C. THE CONTRACTOR SHALL VERIFY OWNERSHIP AND LOCATION PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN PROXIMITY OF UTILITIES.

PREPARATION OF BID

THE BID DOCUMENTS MAY INCLUDE ALTERNATE BIDS. THE CONTRACTOR SHALL SUBMIT BID PRICES FOR ALL ITEMS IN THE BID FOR UNIT PRICE CONTRACT. THE OWNER RESERVES THE RIGHT TO INCLUDE ALTERNATES IN THE ANALYSIS OF THE BID.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE CONSTRUCTION LIMITS.

ROLLER RESTRICTIONS

ROLLER REQUIREMENTS WITHIN THE VILLAGE LIMITS: WITHIN THE LIMITS OF THE VILLAGE OF PLYMOUTH, THE CONTRACTOR SHALL NOT USE VIBRATORY ROLLERS FOR THE COMPACTION OF ANY MATERIAL IN PROXIMITY OF EXISTING UNDERGROUND VILLAGE UTILITIES THAT WILL REMAIN.



ADDENDUM		
1	2/10/26	SUPPLEMENT RAMP NOTE
3	5/4/26	REVISE ROLLER RESTRICTION NOTE

CLEARING AND GRUBBING, AS PER PLAN

UNLESS SPECIFICALLY DESIGNATED "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS AS APPROVED BY THE ENGINEER UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING, AS PER PLAN. ALL PROVISIONS AS SET FORTH IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS UNDER THIS ITEM SHALL BE ADHERED TO.

IN ADDITION, THERE MAY BE ADDITIONAL ITEMS DELINEATED ON THE PLANS OR IN THE FIELD BY THE ENGINEER FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT. ALL PROVISIONS AS SET FORTH IN THE ODOT SPECIFICATIONS UNDER ITEM 201 IN ADDITION TO THE REMOVAL AND PROPER DISPOSAL OF MISCELLANEOUS OBSTRUCTIONS INCLUDING PARKING BLOCKS, ROCKS, FENCE, FENCE POSTS, CONCRETE BARRIER, ETC. WITHIN THE PROJECT LIMITS AND AS APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN.

PRIOR TO THE REMOVAL OF ANY MISCELLANEOUS OBSTRUCTIONS, WHICH MAY BE PERSONAL PROPERTY LOCATED WITHIN THE RIGHT OF WAY, THE CONTRACTOR SHALL CONTACT THE PROPERTY OWNER FORTY-EIGHT (48) HOURS IN ADVANCE OF THE NEED FOR REMOVAL TO ALLOW THE PROPERTY OWNER AN OPPORTUNITY TO REMOVE THE OBSTRUCTION PRIOR TO THE REMOVAL BY CONTRACTOR FORCES. ALL COSTS ASSOCIATED WITH THIS COORDINATION AND REMOVAL SHALL BE INCLUDED WITH ITEM 201.

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE ADJACENT BUSINESS OWNERS WILL REVIEW AND RECORD INCLUDING PROJECT VIDEO TAPING ALL PERSONAL PROPERTY ITEMS WITHIN THE PROJECT LIMITS (SEE ALSO VILLAGE OF PLYMOUTH ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION). PERSONAL PROPERTY INCLUDES SUCH ITEMS AS SIGNING, LANDSCAPING PLANTS, LANDSCAPING IRRIGATION SYSTEMS, PAVEMENT, PARKING LOT LIGHTING, AND THE UNDERGROUND PLUMBING AND OR CABLEING CONNECTING THESE SYSTEMS. NOTATIONS WILL BE MADE AS TO THE FUNCTIONALITY OF THE VARIOUS MECHANICAL AND ELECTRICAL SYSTEMS. A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT A REVIEW OF THE PERSONAL PROPERTY ITEMS WILL BE MADE TO ENSURE THAT THEY ARE FUNCTIONING AT THE SAME CAPACITY AS NOTED PRIOR TO THE CONSTRUCTION.

IN THE EVENT THAT PERSONAL PROPERTY ITEMS ARE LOCATED WITHIN THE CONSTRUCTION LIMITS THE CONTRACTOR SHALL IDENTIFY THE PERSONAL PROPERTY ITEM, NOTIFY THE PROJECT ENGINEER, DETERMINE IF IT WILL BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION ACTIVITIES, IF IT WILL BE IN CONFLICT SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER INDICATING THE MEANS AND METHODS TO AVOID OR MINIMIZE THE CONFLICT OR TO REMOVE, RELOCATE, ABANDON AND/OR RECONSTRUCT THE ITEM. THE WRITTEN REQUEST MUST CLEARLY IDENTIFY THE ITEM AND EXPLAIN THE PROPOSED INTENTIONS TO DEAL WITH THE PERSONAL PROPERTY ITEM CONFLICT.

THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO MODIFY THE PERSONAL PROPERTY ITEM.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

ITEM 608 - WALKWAY, MISC.: 18" REINFORCED CONCRETE WALK

IN ADDITION TO THE SPECIFICATIONS IN CMS 608 THIS WORK SHALL CONSIST OF INSTALLING AN 18" THICK REINFORCED CONCRETE WALKWAY AND RAILING IN FRONT OF THE MSE WALL AS DEPICTED AND, IN THE LOCATIONS, AS SHOWN IN THE PLANS.

ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 608 WALKWAY, MISC.: 18" REINFORCED CONCRETE WALK.

ITEM 608 - WALKWAY, MISC.: CONCRETE WHEELCHAIR RAMP

IN ADDITION TO THE SPECIFICATIONS IN CMS 608 THIS WORK SHALL CONSIST OF THE REMOVAL AND INSTALLATION OF A NEW ADA WHEELCHAIR ACCESS RAMP. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE WITH ODOT, THE VILLAGE, AND BUILDING OWNER TO REVIEW THE EXISTING FACILITY, THE INTERIM ADA ACCESS, AND THE PROPOSED NEW ADA WHEELCHAIR ACCESS RAMP. THE EXISTING WOOD RAMP AND CONCRETE STEPS SHALL BE REMOVED AND DISPOSED OF AS PER 105.16 OR 105.17.

THE INSTALLATION OF THE NEW CONCRETE WHEELCHAIR RAMPS AND FOUNDATION SHALL MEET ADA WHEELCHAIR RAMP REQUIREMENTS INCLUDING THE INSTALLATION OF HANDRAILING ALONG BOTH SIDES OF THE RAMP. THE COST FOR ALL NECESSARY HANDRAILS SHALL BE INCLUDED IN THIS ITEM.

ADA ACCESS TO THE FACILITY SHALL BE MAINTAINED AT ALL TIMES AS APPROVED BY THE ENGINEER. ACCESS SHALL BE MAINTAINED THROUGH THE USE OF STAGED/PHASED CONSTRUCTION, EXISTING ACCESS RAMP, TEMPORARY ADA WHEELCHAIR ACCESS RAMP TO THE SIDE DOOR, OR NEW ADA WHEELCHAIR RAMP.

ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO PERFORM THE WORK AND COORDINATION OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 608 WALKWAY, MISC.: CONCRETE WHEELCHAIR RAMP.

UNSTABLE SUBGRADE

IN ADDITION TO THE LIMITS IDENTIFIED IN THE SOILS REPORT AND PROVIDED FOR IN THE NOTE ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING THERE MAY BE UNSUITABLE MATERIAL WITHIN THE PROJECT LIMITS. WHERE UNSUITABLE SUBGRADE IS FOUND DURING CONSTRUCTION OF THE PROPOSED ROADWAY, THE CONTRACTOR SHALL, UNDER THE DIRECTION OF THE ENGINEER, UNDERCUT THE UNSUITABLE SUBGRADE MATERIAL AND REPLACE IT WITH ITEM 204, GRANULAR MATERIAL, TYPE B AND GEOTEXTILE FABRIC. THE LIMITS OF THE UNDERCUT SHALL BE THE EXTENTS OF THE UNSUITABLE MATERIAL TO A MAXIMUM DEPTH OF 36" BELOW THE TOP OF THE PROPOSED SUBGRADE AND 18" BEYOND THE EDGE OF PAVEMENT AS APPROVED BY THE ENGINEER.

AN ESTIMATED QUANTITY OF EXCAVATION, EMBANKMENT AND GEOTEXTILE FABRIC HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

204, EXCAVATION OF SUBGRADE	<u>500</u> CY
204, GRANULAR MATERIAL, TYPE B	<u>500</u> CY
204, GEOTEXTILE FABRIC	<u>100</u> SY

ITEM 204 - PROOF ROLLING

A QUANTITY IS PROVIDED IN THE CALCULATIONS AND CARRIED TO THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE PLAN SHEETS FOR ADDITIONAL INFORMATION.

EXISTING UNDERDRAINS

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE CONTRACTOR SHALL CONFIRM EXISTING UNDERDRAINS TO REMAIN AND OR CONNECTED TO ARE OPEN AND FUNCTIONING PROPERLY. NON-FUNCTIONING OR PLUGGED UNDERDRAINS SHALL BE REPLACED AT THEIR EXISTING LOCATION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:

611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, 707.41	<u>100</u> FT
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ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

- SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
- EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN IN THE TABLE BELOW. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL A-4B, WHICH IS TO BE UNDERCUT 3' BELOW THE SUBGRADE.

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
- COMPACT THE SUBGRADE ACCORDING TO 204.03.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.
- APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE AS DIRECTED. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
- PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
- FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.



REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	1/20/2023
AS-2-15	REVISED	7/21/2023
BR-2-15	REVISED	7/19/2024
CS-1-24	REVISED	7/19/2024
HL-50.21	REVISED	7/15/2022

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SS800	DATED	1/07/25
SS840	DATED	1/17/25
SS846	DATED	4/17/15

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 10TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, EFFECTIVE 2024 AND THE ODOT BRIDGE DESIGN MANUAL, 2020, EFFECTIVE JULY 2025.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

GALVANIZED STEEL REINFORCEMENT- MINIMUM YIELD STRENGTH 60 KSI

STEEL H PILES - ASTM A572 - YIELD STRENGTH 50 KSI

STEEL SHEET PILING - ASTM A572 GRADE 50 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD:

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILES TO BEDROCK:

DRIVE PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED WHEN THE PILE PENETRATION IS AN INCH OR LESS AFTER RECEIVING AT LEAST 20 BLOWS FROM THE PILE HAMMER. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO THE BEDROCK AND REFUSAL.

THE TOTAL FACTORED LOAD IS 75 KIPS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES. THE TOTAL FACTORED LOAD IS 125 KIPS PER PILE FOR THE PIER 1 AND PIER 2 PILES.

REAR ABUTMENT PILES :

HP10X42 PILES 90 FEET LONG, ORDER LENGTH

FORWARD ABUTMENT PILES:

HP10X42 PILES 85 FEET LONG, ORDER LENGTH

PIER 1 PILES:

HP10X42 PILES 75 FEET LONG, ORDER LENGTH

PIER 2 PILES:

HP10X42 PILES 70 FEET LONG, ORDER LENGTH

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING ABUTMENT PILES TO REFUSAL ON BEDROCK, CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE CONTRACTOR MAY PRE-DRIVE ABUTMENT PILES BEFORE CONSTRUCTING MSE WALLS. PRE-DRIVING CONSISTS OF INSTALLING THE ABUTMENT PILES INTO SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. PROVIDE AT LEAST 3-FT OF PILE ABOVE THE TOP OF THE PILE SLEEVE TO MEET REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO REFUSAL ON BEDROCK UNTIL AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED. DRIVE ABUTMENT PILES TO REFUSAL ON BEDROCK. DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5-IN.

IF NOT PRE-DRIVING ABUTMENT PILES, INSTALL THE ABUTMENT PILES THROUGH PILE SLEEVES (SEE SS840) AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED.

CONSTRUCTION CLEARANCE:

MAINTAIN A CONSTRUCTION CLEARANCE OF 6'-0" FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 18'-0" FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL, AND 6'-0" FEET FROM THE CENTER OF TRACKS, AT ALL TIMES.

ITEM 504 - STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN

TO SUPPORT THE EXCAVATION FOR THE BRIDGE PIERS AND TO PROTECT THE ASHLAND RAILROAD TRACK PERMANENT STEEL SHEET PILING WILL BE INSTALLED IN FRONT OF THE PIERS. IT IS TO REMAIN IN PLACE TO RESIST HORIZONTAL EARTH PRESSURE FROM STEEP EMBANKMENT SLOPE.

STEEL SHEET PILING SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS

SECTION MODULUS = 18 IN³

THICKNESS T=0.375 IN

HEIGHT = 9 IN

TOP ELEVATION = 1004.00

DRIVEN ELEVATION = 985.0

FOR FURTHER INFORMATION SEE SHEET 4/21

PAYMENT WILL BE PER ITEM 504 STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN PER SQUARE FOOT INSTALLED.

PILE SPLICES:

IN LIEU OF USING FULL PENETRATION BUTT WELDS SPECIFIED IN C&MS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION

8 WOOD HOLLOW RD. PLAZA 1

PARSIPPANY, NEW JERSEY 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED

1	1/23/26	REVISE NOTE
2	4/29/26	VERTICAL CLEARANCE
3	5/01/26	REVISE ITEM 530 SPECIAL NOTE

ITEM 530 SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION

MONITOR GROUND VIBRATIONS CAUSED BY PILE DRIVING TO MINIMIZE THE POTENTIAL FOR DAMAGE TO OCCUPIED STRUCTURES ON THE NORTHWEST, SOUTHWEST, NORTHEAST, SOUTHEAST CORNERS, AND THE RAILROAD TRACK ADJACENT TO THE PIERS.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO ESTABLISH THE ACCEPTABLE VIBRATION LIMITS AND TO PERFORM THE VIBRATION MONITORING. USE A VIBRATION SPECIALIST THAT IS AN EXPERT IN THE INTERPRETATION OF VIBRATION DATA, AND WHO MEETS ONE OF THE FOLLOWING CRITERIA: 1) IS A REGISTERED ENGINEER WITH AT LEAST TWO YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS, OR 2) HAS AT LEAST FIVE YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS. DO NOT USE A VIBRATION SPECIALIST THAT IS AN EMPLOYEE OF THE CONTRACTOR.

SUBMIT A RESUME OF THE CREDENTIALS OF THE PROPOSED VIBRATION SPECIALIST AT, OR BEFORE, THE PRECONSTRUCTION MEETING. INCLUDE IN THE RESUME A LIST OF CONSTRUCTION PROJECTS ON WHICH THE VIBRATION SPECIALIST WAS RESPONSIBLY IN CHARGE OF MONITORING THE VIBRATIONS. LIST A DESCRIPTION OF THE PROJECTS, WITH DETAILS OF THE VIBRATION INTERPRETATIONS MADE ON THE PROJECT. LIST THE NAMES AND TELEPHONE NUMBERS OF PROJECT OWNERS WITH SUFFICIENT KNOWLEDGE OF THE PROJECTS TO VERIFY THE SUBMITTED INFORMATION. OBTAIN THE ENGINEER'S ACCEPTANCE OF THE VIBRATION SPECIALIST BEFORE BEGINNING ANY PILE DRIVING WORK. ALLOW 30 DAYS FOR THE REVIEW OF THIS DOCUMENTATION.

USE SEISMOGRAPHS CAPABLE OF CONTINUOUSLY RECORDING THE PEAK PARTICLE VELOCITY FOR THREE MUTUALLY PERPENDICULAR COMPONENTS OF VIBRATION, AND OF PROVIDING A PERMANENT RECORD OF THE ENTIRE VIBRATION EVENT. USE A SUFFICIENT NUMBER OF SEISMOGRAPHS TO PROVIDE REDUNDANCY IN CASE ONE DEVICE SHOULD FAIL. SUBMIT A PLAN OF THE PROPOSED SEISMOGRAPH LOCATIONS TO THE ENGINEER FOR REVIEW.

THE VIBRATION SPECIALIST SHALL PERFORM THE FOLLOWING:

1. MEASURE THE AMBIENT GROUND VIBRATIONS NEAR EXISTING STRUCTURES BEFORE PILE DRIVING BEGINS.
2. ESTABLISH VIBRATION LIMITS TO MINIMIZE POTENTIAL DAMAGE TO EXISTING STRUCTURES AND EXPLAIN WHY THEY ARE BEING USED TO THE ENGINEER BEFORE DRIVING PILES NEAR EXISTING STRUCTURES.
3. MONITOR GROUND VIBRATIONS DURING PILE DRIVING.
4. IMMEDIATELY INFORM THE CONTRACTOR AND ENGINEER IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED.
5. FURNISH THE DATA RECORDED AND INCLUDE THE FOLLOWING:

- A. IDENTIFICATION OF SEISMOGRAPH.
- B. DISTANCE AND DIRECTION OF SEISMOGRAPH FROM PILE DRIVING.
- C. START TIME AND DURATION OF PILE DRIVING.
- D. LIST OF PILES DRIVEN DURING EACH MONITORING INTERVAL.

IMMEDIATELY SUSPEND ALL PILE DRIVING IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED. EVALUATE ALTERNATIVE CONSTRUCTION PROCEDURES, SUCH AS PREBORED HOLES, TO REDUCE THE VIBRATIONS.

SUBMIT THREE COPIES OF THE FINAL REPORT WHICH CONTAINS ALL MEASUREMENTS, INTERPRETATIONS, AND RECOMMENDATIONS TO THE ENGINEER.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM 530 SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION. THE DEPARTMENT WILL PAY THE FINAL TWENTY PERCENT AFTER THE ENGINEER RECEIVES THE FINAL REPORT.

THE DEPARTMENT WILL PAY ACCORDING TO C&MS 109.05 FOR ALTERNATIVE CONSTRUCTION PROCEDURES THAT THE ENGINEER DETERMINES ARE NECESSARY TO REDUCE VIBRATIONS.

BEFORE PILE DRIVING BEGINS, CONDUCT A CONDITION SURVEY OF ALL EXISTING BUILDINGS, STRUCTURES, AND UTILITIES WITHIN 200-FT OF THE PILE DRIVING WORK. THE PURPOSE OF THE SURVEY IS TO DOCUMENT THE CONDITION OF THE BUILDINGS, STRUCTURES, OR UTILITIES PRIOR TO PILE DRIVING, SO THAT CLAIMS OF DAMAGE CAUSED BY THE PILE DRIVING CAN BE VERIFIED.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO PERFORM OR SUPERVISE THE CONDITION SURVEY. USE A VIBRATION SPECIALIST THAT MEETS THE QUALIFICATION REQUIREMENTS FOR VIBRATION MONITORING.

RECORD THE CONDITION OF EXISTING STRUCTURES AND BUILDING MATERIALS, USING WRITTEN TEXT, PHOTOGRAPHS, AND VIDEO RECORDINGS. INSPECT INTERIOR WALLS, CEILINGS, AND FLOORS THAT ARE ACCESSIBLE. INSPECT THE EXTERIOR OF THE BUILDING THAT IS VISIBLE FROM GROUND LEVEL. ALSO RECORD THE LOCATION, SIZE, AND TYPE OF ALL CRACKS AND OTHER STRUCTURAL DEFICIENCIES.

IF OWNERS OR OCCUPANTS FAIL TO ALLOW ACCESS TO THE PROPERTY FOR THE PRECONSTRUCTION CONDITION SURVEY, SEND A CERTIFIED LETTER TO THE OWNER OR OCCUPANT. DOCUMENT THE NOTIFICATION EFFORT AND THE CERTIFIED LETTER IN THE REPORT.

SUBMIT THREE COPIES OF A REPORT TO THE ENGINEER THAT SUMMARIZES THE PRECONSTRUCTION CONDITION OF THE BUILDINGS, STRUCTURES, AND UTILITIES, AND THAT IDENTIFIES AREAS OF CONCERN.

PAYMENT FOR THE PRECONSTRUCTION CONDITION SURVEY IS INCLUSIVE OF THE CONTRACT LUMP SUM PRICE FOR ITEM 530 SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION.

ITEM 511 - CLASS QC2 CONCRETE, SIDEWALK, AS PER PLAN

THE CONCRETE ITEM CONSISTS OF THE 18 INCH THICK SIDEWALK MOMENT SLAB PLACED ON THE MSE WALL FILL MATERIAL SUPPORTING THE CONCRETE PARAPET WITH (TWIN STEEL TUBE RAILING) AT THE REAR APPROACH. THE CONCRETE SHALL BE PER CUBIC YARD WITH THE REINFORCING TABULATED IN THE REINFORCING LIST BUT INCLUDED WITH THE CONCRETE FOR PAYMENT.

ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, AS PER PLAN

PAYMENT FOR THE CONCRETE SIDEWALK ON THE APPROACH SLABS (INCLUDING REINFORCING) SHALL BE INCLUDED WITH THE APPROACH SLAB PER SQUARE YARD.

ABBREVIATIONS

ABUT. - ABUTMENT	JT. - JOINT
APPROX. - APPROXIMATELY	LT. - LEFT
BRG. - BEARING	MAX. - MAXIMUM
BOT. - BOTTOM	MID - MIDDLE
B/W - BETWEEN	MIN. - MINIMUM
C.A.S.P. - CRUSHED AGGREGATE SLOPE PROTECTION	MSE - MECHANICALLY STABILIZED EARTH
C/C - CENTER TO CENTER	NB - NORTHBOUND
C.I.P - CAST IN PLACE	NF - NEAR FACE
CJ - CONSTRUCTION JOINT	NO. - NUMBER
CLR. - CLEAR	O/O - OUT TO OUT
CONC. - CONCRETE	PCPP - PERFORATED CORRUGATED PLASTIC PIPE
CPP - CORRUGATED PLASTIC PIPE	PEJF - PREFORMED EXPANSION JOINT FILLER
DIA. - DIAMETER	PG - PROFILE GRADE
DIM. - DIMENSION	PROP. - PROPOSED
D.O. - DITTO	RA - REAR ABUTMENT
DWG. - DRAWING	RT. - RIGHT
EF - EACH FACE	SB - SOUTHBOUND
EL. OR ELEV. - ELEVATION	S.O. - SERIES OF
EOD - EDGE OF DECK	SHLDR. - SHOULDER
EOP - EDGE OF PAVEMENT	SPA. - SPACE OR SPACES
EQ. - EQUAL	STA. - STATION
EX. OR EXIST. - EXISTING	STD. - STANDARD
EXP. - EXPANSION	TEMP. - TEMPORARY
FA - FORWARD ABUTMENT	TOR - TOP OF ROCK
FF - FAR FACE	T/T - TOE TO TOE
FS - FIELD SPLICE	TYP. - TYPICAL
FWD. - FORWARD	VAR. - VARIES
INV. - INVERT	

SFN	3976086
DESIGN AGENCY	
DESIGNER	CHECKER
BLN	DHT
REVIEWER	
JRC	1/6/26
PROJECT ID	120504
SUBSET	TOTAL
2	21
SHEET	TOTAL
P.50	76