LATITUDE: 39°08′ 44.07″ N LONGITUDE: 84°27′25.18″ W

		SCA	ALE IN MI	LES		
	0	1	2	3	4	N
PORTION	TO BE I	MPROVED				_
INTERST	ATE HIGH	WAY				_
FEDERAL	ROUTES					_
STATE R	OUTES					
COUNTY	& TOWNS	HIP ROAD	05			_
OTHER R	OADS					
//						_

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HAM-71-6.03 DANA AVE RAMP STORM SEWER REPLACEMENT

COLUMBIA TOWNSHIP HAMILTON COUNTY

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PROJECT DESCRIPTION

REPLACE 15" STORM SEWER IN INFIELD OF DANA AVENUE TO I-71S RAMP AND RECONNECT TO EXISTING 108" COMBINED SEWER.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.12 ACRES ESTIMATED CONTRACTOR EARTH DISTURBED AREA: O ACRES NOTICE OF INTENT EARTH DISTURBED AREA: NOI NOT

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO. DEPARTMENT OF TRANSPORTATION. INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

DESIGN EXCEPTIONS

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PLAN PREPARED BY: OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 8 - ENGINEERING

## 195.45 1/17/20 ## 195.30 1/19/19 ## 195.30 7/			STANDARD CONSTRUCTION D	DRAWINGS	SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
ENGINEERS SEAL: MT-95.30 7/19/19 MT-98.20 4/19/19 MAXWELL L. BAILEY E-78411 SIGNED: MGM. AB		MT-95.45 1/17/20			832 10/19/18	
ENGINEERS SEAL: MT-95.30 7/19/18 MT-98.20 4/19/19 MAXWELL L. BAILEY E-78411 FORMAL ENGINEERS SONAL ENGINEERS AND STREED WITH THE STREET CONTROLLED TO THE STREET C		MT-98.28 1/17/20			800-2020 4/17/20	
MAXWELL L. BAILEY E-78411 William Registration of the state of the st						
MAXWELL L. BAILEY E-78411 Footstered	ENGINEERS SEAL .					
MAXWELL L. BAILEY E-78411 E-78411 AND MORE RECEIVED TO THE PROPERTY OF THE P		MT-98.20 4/19/19				
DATE: 5/8/20	MAXWELL L. BAILEY E-78411					
Unit	DATE: 5/8/2020					

PPROVED_		
ATE	DIRECTOR, DEPARTMENT ()F
	TRANSPORTATION	

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REVIEW OF DRAINAGE FACILITIES

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BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM 503 COFFERDAMS & EXCAVATION BRACING, AS PER PLAN

PROVIDE TEMPORARY EXCAVATION SUPPORT AS NEEDED FOR REPLACEMENT OF STORM SEWERS. TEMPORARY EXCAVATION SUPPORT, INCLUDED BUT NOT LIMITED TO SHEET PILE WALLS AND SOLDIER PILE WALLS, SHALL BE DESIGNED WITH THE REQUIREMENT THAT DURING WALL SERVICE, THE TOP OF WALL DEFLECTION WILL BE THE LESSER OF 1% OF THE WALL HEIGHT OR 1". ALL TEMPORARY WALL DESIGNS SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER OF RECORD AND SHALL BE DESIGNED PER THE LATEST LRFD GUIDELINES. SUBMIT ALL DESIGN CALCUALTIONS. WITH CONCURRENCE BY THE GEOTECHNICAL ENGINEER OF RECORD, TO THE DEPARTMENT AS OUTLINED IN CMS 501.05.

ITEM 611 - CONDUIT, MISC .: VIDEO LOG

PERFORM A VIDEO LOG OF THE 108" DIAMETER COMBINED SEWER AFTER THE COMPLETION OF THE STORM SEWER REPLACEMENTS AND CONNECTION TO THE 108" COMBINED SEWER AS SHOWN ON SHEETS 4 AND 7. THE VIDEO LOG OF THE 108" COMBINED SEWER SHALL CONSIST OF 100 FT CENTERED ON EACH OF THE 15" DIAMETER AND 12" DIAMETER STORM SEWER CONNECTIONS. CONTRACTOR IS TO FIELD VERIFY THAT THE NEAREST ACCESS TO THE 108" COMBINED SEWER IS APPROXIMATELY 600 FT TO THE SOUTHWEST OF THE 15" STORM SEWER CONNECTION.

IF A BLOCKAGE IS ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND THE VIDEO LOG SHALL BE SUSPENDED UNTIL THE PIPE HAS BEEN THROUGHLY CLEANED OUT.

IF A COLLAPSE OR FAILURE OF THE PIPE IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND THE VIDEO LOG AND NOTIFY THE ENGINEER.

FURNISH THE VIDEO RECORDING IN A DIGITAL, REPRODUCIBLE FORMAT ON ONE OF THE FOLLOWING MEDIA TYPES: DVD, CD, OR OTHER MEDIA APPROVED BY THE ENGINEER.

THE VIDEO LOG OF THE CONDUIT SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 611, CONDUIT MISC .: VIDEO LOG. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE ABOVE STATED WORK.

200 FT

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

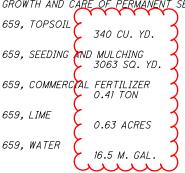
611, CONDUIT, MISC.: VIDEO LOG:

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 WORK LIMITS.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:



SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT, QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 202- PIPE REMOVED, OVER 24", AS PER PLAN

APPROXIMATELY 40 FT OF THE EXISTING ABANDONED 2.5' BRICK SEWER SHALL BE REMOVED TO ACCOMODATE EXCAVATION BRACING. ENDS SHALL BE PLUGGED OR SEALED PER CMS 202.04 .

REMOVAL OF THE EXISTING ABANDONED 2.5' BRICK SEWER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 611, CONDUIT MISC .: CUT AND PLUG EXISTING BRICK SEWER. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE ABOVE STATED WORK.

ITEM 614, MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED)

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN YPROGRESS. Y

DELINEATION OF PORTABLE BARRIER

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BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALL ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 EXPECT THAT SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

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

ITEM 626, BARRIER REFLECTOR TYPE 1 (ONE-WAY), 12 EACH

ITEM 614, OBJECT MARKER, ONE-WAY, 12 EACH

ITEM 622. PORTABLE BARRIER, UNANCHORED, 600 FT

#### NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICA-TION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVE-MENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE DURATION OF NOTICE DUE TO PERMITS & PIO CL OSURF

RAMP & >= 2 WEEKS ROAD CLOSURES

21 CALENDAR DAYS PRIOR TO CLOSURE

> 12 HOURS 14 CALENDAR DAYS & < 2 WEEKS PRIOR TO CLOSURE

<= 12 HOURS 4 CALENDAR DAYS PRIOR TO CLOSURE

>= 2 WEEKS 14 CALENDAR DAYS CLOSURES & PRIOR TO CLOSURE RESTRICTIONS

5 BUSINESS DAYS < 2 WEEKS PRIOR TO CLOSURE

START OF N/A 14 CALENDAR DAYS CONSTRUCTION & PRIOR TO TRAFFIC PATTERN **IMPLEMENTATION** CHANGES

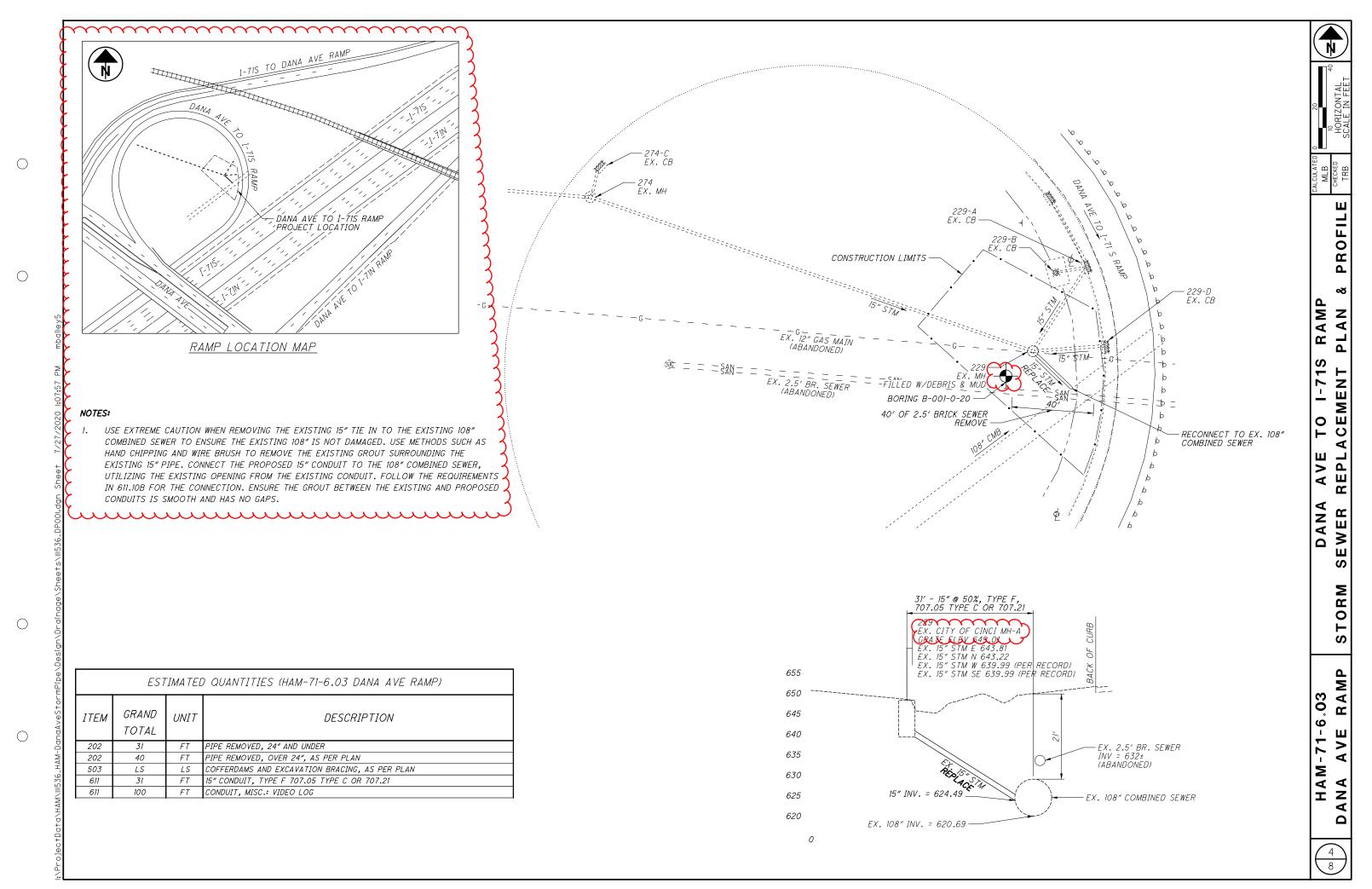
ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY İTEMIZED IN THE PLAN.

#### ACCESS BEHIND GUARDRAIL

REMOVE AND RE-ERECT GUARDRAIL AS NECESSARY FOR ACCESS TO A WORK LOCATION. REMOVE GUARDRAIL ONLY WHEN IT CAN BE REPLACED ON THE SAME DAY, OBTAIN APPROVAL FROM THE ENGINEER FOR EACH LOCATION, PRIOR TO PERFORMING THE WORK. THIS WORK INCLUDES REMOVAL OF EXISTING GUARDRAIL AND POSTS AND RE-ERECTION OF THE SAME MATERIALS. EXISTING RAIL ELEMENTS AND BARRIER REFLECTORS MAY BE REUSED. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614. MAINTAINING TRAFFIC.

|        |               | $\sim$   | ~~~  | `            | <b>SHI</b> | EET N | UM. |         |  |          | PART          | ITEM                 | ITEM                  | GRAND       | UNIT   | DESCRIPTION                                      | SEE<br>SHEET | ALCULATED MLB CHECKED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------|---------------|----------|------|--------------|------------|-------|-----|---------|--|----------|---------------|----------------------|-----------------------|-------------|--------|--------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2      | 4             | 6        | 7    | Ź            |            |       |     |         |  |          | 01/IMS/0      | ) IIEW               | EXT                   | TOTAL       | I ONLI | DESCRIPTION                                      | NO.          | CALCU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|        |               | -        |      | <del>}</del> |            |       |     |         |  |          |               | ~~~                  | ~~~                   | $\sim$      | $\sim$ | ROADWAY                                          |              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               | LS       |      | ζ .          |            |       |     |         |  |          | LS            | 201                  | 11000                 | LS          |        | CLEARING AND GRUBBING PIPE REMOVED, 24 AND UNDER |              | ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | 31            | 77       | 26   | X            |            |       |     |         |  |          | LS<br>134     | 201                  | 11000<br>35100        | 134         |        | PIPE REMOVED, 24 AND UNDER                       |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        | 40            | _        |      | Х.           |            |       |     |         |  |          | 748           | ~808~                | 35201                 | V48V        | VFV    | PTRE REMOVED OVER 24", AS PER PLAN               | 2            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        | (             |          | 1    | λ            |            |       |     |         |  |          | 1             | 202                  | 58100                 | 1           | EACH   | CATCH BASIN REMOVED                              |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | LS            | LS       | LS   | 2            |            |       |     |         |  |          | ريير)         | Y SON                | WHOW .                | New Y       |        | SOFFERDAMS AND EXCAVATION BRACING, AS PER PLAN   | 2            | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | (             |          |      | 2            |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| $\sim$ |               |          |      | )            |            |       |     |         |  |          |               |                      |                       |             |        | EROSION CONTROL                                  |              | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 340    | <u>'</u>      | [        |      | )            |            |       |     |         |  |          | 340           | 659                  | 00300                 | 340         | CY     | TOPSOIL                                          |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3,063  | ) (           |          |      | )            |            |       |     |         |  |          | 3,063         | 659                  | 10000                 | 3,063       | SY     | SEEDING AND MULCHING                             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 0.41   | 1             |          |      | )            |            |       |     |         |  |          | 0.41          | 659                  | 20000                 | 0.41        | TON    | COMMERCIAL FERTILIZER                            |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 0.63   | 13            |          |      | )            |            |       |     |         |  |          | 0.63          | 659                  | 31000                 | 0.63        | ACRE   | LIME                                             |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 16.5   | 1             |          |      | )            |            |       |     |         |  |          | 16.5          | 659                  | 35000                 | 16.5        | MGAL   | WATER                                            |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | Ι             | <u> </u> |      | Κ            |            |       |     |         |  |          | 6,000         | 832                  | 30000                 | 6,000       | EACH   | EROSION CONTROL                                  |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | Κ             | -        |      | Κ            |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | Κ             |          |      | Κ            |            |       |     |         |  |          | arr           | ALLL                 | dere de               | 2222        | XXXX   | THE PROPERTY OF A STANDAGE                       |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | Ι             |          | 26   | K            |            |       |     |         |  |          | 26            | 611                  | 05200<br>06700        | 26          | FT     | 12" CONDUIT, TYPE F 707.05 TYPE C OR 707.21      |              | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | 31            | 77       |      | <b>Χ</b>     |            |       |     |         |  |          | 708           | 611                  | 06700                 | 708         |        | 15 CONDUIT, 14PE F 707.05 TIPE COR 707.21        |              | <b>-</b>   ≻                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 200    | $\mathcal{L}$ |          |      | Z            |            |       |     |         |  |          |               |                      |                       | <b>1200</b> | C FV   | CONDUTY, MISK.: YVINEO, LOG                      | 2            | <b>⊢</b> ∕α                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|        | ) (           | 1        | 1    | )            |            |       |     |         |  | \        | 1             | 611                  | 98300                 | 1           | EACH   | CATCH BASIN, NO. 5                               |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        | )             | ىدىا     | ىنىا | )            |            |       |     |         |  | <u> </u> | $\mathcal{A}$ | $\psi \omega \omega$ | $\mu \nu \nu \lambda$ |             |        |                                                  |              | ⊴                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        | )             |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        | TRAFFIC CONTROL                                  |              | ] ≥                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 12     | )             |          |      |              |            |       |     |         |  |          | 12            | 626                  | 00102                 | 12          | EACH   | BARRIER REFLECTOR, TYPE 1 (ONE-WAY)              |              | <b>≥</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|        | 7             |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | <b>∃</b> =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        | K             |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        | MAINTENANCE OF TRAFFIC                           |              | \ \cdot \cdo |
| 12     | K             |          |      |              |            |       |     |         |  |          | 12            | 614                  | 13350                 | 12          | EACH   | OBJECT MARKER, ONE WAY                           |              | 1 "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 600    | K             |          |      |              |            |       |     |         |  |          | 600           | 622                  | 41100                 | 600         |        | PORTABLE BARRIER, UNANCHORED                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ريار   | <b>/</b>      |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        | ,                                                |              | <b></b> ⊲                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        | INCIDENTALS                                      |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          | LS            | 614                  | 11000                 | LS          |        | MAINTAINING TRAFFIC                              |              | 1 Շ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|        |               |          |      |              |            |       |     |         |  |          | LS            | 624                  | 10000                 | LS          |        | MOBILIZATION                                     |              | ┨╒                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|        |               |          |      |              |            |       |     |         |  |          |               | 027                  | 70000                 |             |        | MODILIZATION                                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  | -            | ت ا⊤                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | <b>⊣</b> ~                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | $\dashv$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|        |               |          |      |              |            |       |     | <b></b> |  |          |               | 1                    | 1                     |             |        |                                                  |              | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | ⊣ ღ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | <b>⊣</b> ુ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | ⊣്യ്                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | ⊣ĭ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | _ ب                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | <b>⊣</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | ⊢ <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | Σ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | _ ∢                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | <b>□</b>   エ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               | 1        | 1    |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | $\sqrt{3}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|        |               |          |      |              |            |       |     |         |  |          |               |                      |                       |             |        |                                                  |              | $\frac{1}{3}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



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|                                                                                                                      | - 33.                                   | 100                                    | -            | ;      | 1                        |         | 2        | :              | ;     | 8   |              |                             |        |           |        |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|--------------|--------|--------------------------|---------|----------|----------------|-------|-----|--------------|-----------------------------|--------|-----------|--------|
| START: 3/23/20 END: 3/23/20 SAMPLING METH                                                                            | rhod:                                   | SPT                                    | ENE          | ERGY R | ENERGY RATIO (%): 89.5 L | 89.t    |          | LAT / LONG: 39 | ONG:  | S S | 39.145547,   | 547, -84.45701 <sup>7</sup> | 4.4570 | 1000      | 1 OF 1 |
| AND NOTES CESTS DEPTHS ST                                                                                            | 653.8                                   | DEPTHS                                 | ROD          | z<br>Z | (%)                      | MPLE TI | f) GR    | SS             | S SI  | 7   |              |                             | wc     | ODOT      | SEALED |
| MEDIUM STIFF TO STIFF, BROWN, SILTY CLAY, LITTLE SAND, TRACE ASPHAIT FRAGMENTS, TRACE ORGANICS (FILL), MOIST TO DAMP | 85                                      |                                        | 2 4 4        | 0      | 29                       | 1.75    | - 2      | 1              | 1     | 1   |              |                             | 16     | A-6b (V)  |        |
|                                                                                                                      |                                         |                                        |              | 12     | 28                       | 2.00    | - 00     | 1              | '     |     | '            | '                           | 16     | A-6b (V)  |        |
|                                                                                                                      |                                         |                                        | 2            |        | +                        |         |          |                | +     |     | +            |                             |        |           |        |
|                                                                                                                      |                                         |                                        | 9 1          | o      | 26                       | 1.5     | .50 0    | 12 1           | 15 38 | 35  | 33           | 13 20                       | 19     | A-6b (12) |        |
|                                                                                                                      |                                         |                                        |              | 9      | 26                       | 1.00    | - 00     | 1              | '     |     | + '          | <u> </u>                    | 23     | A-6b (V)  |        |
|                                                                                                                      |                                         |                                        | 6            |        |                          |         |          |                |       |     |              |                             |        |           |        |
| @10.0°; GRADES TO GRAYISH BROWN, TRACE COBBLES                                                                       |                                         |                                        | 11 - 50/2"   |        | 100                      | 1.2     | -        | 1              |       |     | 1            |                             | 20     | A-6b (V)  |        |
| @12.5; GRADES TO REDDISH BROWN                                                                                       |                                         |                                        | 13 - 2 3     | Ç      | 83                       | 100     | 0        |                | 17    | 43  | 25           | 17 23                       | 9      | A-6h (13) |        |
|                                                                                                                      |                                         |                                        |              |        | 88                       | D.      |          |                | _     |     |              | _                           | ٥      | A-60 (13) |        |
|                                                                                                                      |                                         |                                        | 15 2 2       | 9      | 29                       | 1.25    | - 5      | 1              | '     |     | '            |                             | 20     | A-6b (V)  |        |
| SOFT TO MEDIUM STIFF, BROWN, SILTY CLAY, SOME                                                                        | 636.3                                   |                                        | _            |        |                          |         |          |                |       |     |              |                             |        |           |        |
| SAND, TRACE GRAVEL, MOIST                                                                                            |                                         |                                        | 1 2 1 2      | 4      | 90                       | c.0     | -<br>06: | 1              | · ·   |     |              |                             | 50     | A-6b (V)  |        |
|                                                                                                                      |                                         |                                        | 20 0 4 5     | 13     | 83                       | 0.50    | - 09     | 1              | 1     | ı   | '            | '                           | 41     | A-6b (V)  |        |
| LOOSE, BROWN, COARSE AND FINE SAND, LITTLE<br>CLAY, TRACE SILT, MOIST                                                | 631.3                                   |                                        | 22 — 3       |        | 29                       | 1       | 0        | 32 5           | 50 5  | 5   | 19           | 17 2                        | 17     | A-3a (0)  |        |
|                                                                                                                      | 628.8                                   |                                        | 25           |        |                          |         |          |                |       |     |              | ++                          |        |           |        |
| MEDIOW DENDE TO DENDE, BROWN, COARSE AND FINE SAND, LITTLE TO SOME SILT, TRACE CLAY, MOIST TO WET                    |                                         |                                        | 26 3 5       | 12     | 29                       | '       | 1        | 1              | 1     |     |              | '                           | 19     | A-3a (V)  |        |
|                                                                                                                      |                                         |                                        | 28 3 4 7     | 16     | 67                       | '       |          | 1              | '     |     |              |                             | 10     | A-3a (V)  |        |
|                                                                                                                      |                                         |                                        | 30   9 7     | 61     | 29                       | '       | -        |                |       |     | <del> </del> | <u>'</u>                    | 10     | A-3a (V)  |        |
|                                                                                                                      |                                         | € 621.3                                | 32 5         |        |                          |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      |                                         |                                        | 33 3 5       | 12     | 29                       | 1       | 0        | 2 0            | 75 21 | 4   | dN NP        | P NP                        | 9      | A-3a (0)  |        |
|                                                                                                                      |                                         | لـــــــــــــــــــــــــــــــــــــ | 35 3         | 8      | 100                      | '       | '        |                | '     |     | '            | '                           | 23     | A-3a (V)  |        |
|                                                                                                                      | • • • • • • • • • • • • • • • • • • • • | 111                                    |              |        | +                        |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      |                                         |                                        | 38 10        | 37     | 100                      | 1       | •        | 1              | '     |     | -            |                             | 21     | A-3a (V)  |        |
|                                                                                                                      |                                         |                                        | 40 10 41 417 | 43     | 100                      | '       | 0        | 5 8            | 80 10 | 2   | N PN         | ₽<br>P                      | 19     | A-3a (0)  |        |
|                                                                                                                      |                                         |                                        |              |        |                          |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      | ********<br>*******                     | Ĺ                                      | 44 10        | 98     | 100                      | •       |          |                |       |     |              | ·                           | 19     | A-3a (V)  |        |
|                                                                                                                      |                                         |                                        | 46 10        | 78     | 100                      | '       |          |                | ' '   | •   | ,            | -                           | 18     | A-3a (V)  |        |
| MEDIUM DENSE, GRAY, <b>SANDY SILT,</b> TRACE CLAY,                                                                   | 605.3                                   |                                        | 9 5          | ų,     | 5                        | '       |          |                |       |     |              |                             | 17     | \$ 6 P    |        |
| MOIST                                                                                                                | 603.8                                   | -E08                                   |              | 38     | 100                      |         |          |                | -     |     | -            | <u> </u>                    | 17     | A-4a (V)  |        |
|                                                                                                                      |                                         |                                        |              |        |                          |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      |                                         |                                        |              |        |                          |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      |                                         |                                        |              |        |                          |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      |                                         |                                        |              |        |                          |         |          |                |       |     |              |                             |        |           |        |
|                                                                                                                      |                                         |                                        |              |        |                          |         |          |                |       |     |              |                             |        |           |        |

HAM-71-6.03 DANA AVE RAMP

TEST BORING HAM-71-DANA





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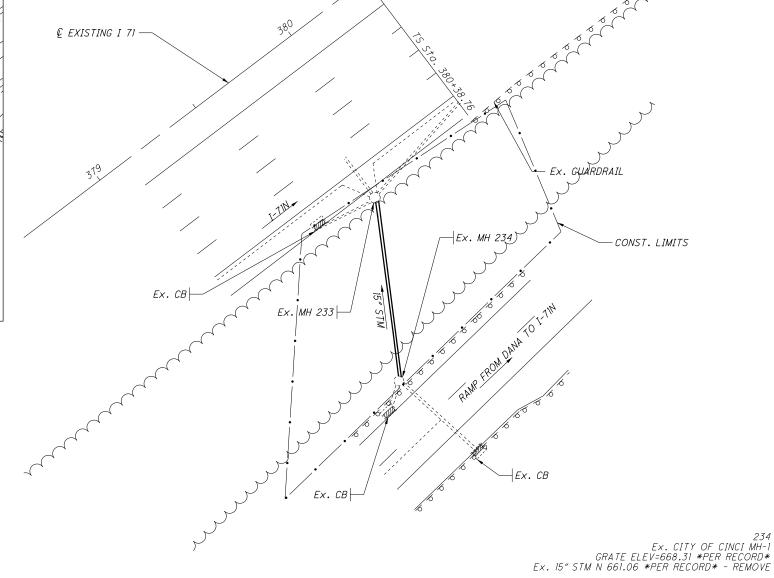
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| 1-71S TO DANA AVE RAMI  |        |
|-------------------------|--------|
| 1-715 10 5 //           | 9      |
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| RAMP                    | $\geq$ |
|                         |        |
| DANA AVE TO I-TIN RAMP  |        |
| PROJECT LOCATION,       |        |
|                         |        |
|                         |        |
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|                         |        |
| (1)                     |        |
| 121/1 10 V              |        |
| DAMA ANTE TO ITAM PRAMP |        |
| // Ok.                  |        |

RAMP LOCATION MAP



Ex. CITY OF CINCI MH-A GRATE ELEV 650.07 \*PER RECORD\* Ex. 15" STM E 641.60 \*PER RECORD\* - REMOVE

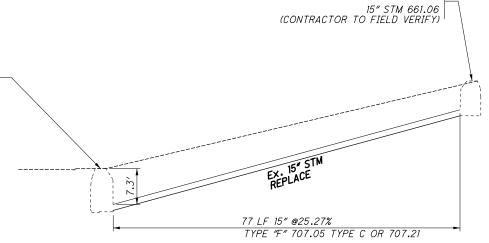
15" STM E 641.60 (CONTRACTOR TO FIELD VERIFY)

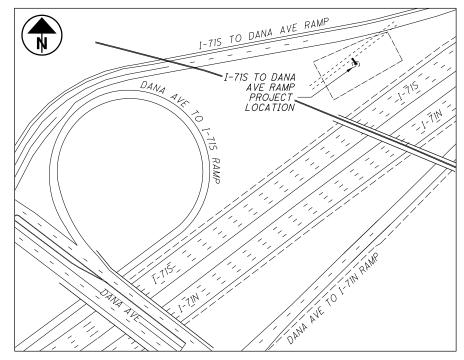
|      | ESTIMATE       | D QUAI                         | NTITIES (HAM-71-6.03 - DANA AVE TO I-71N RAMP) |
|------|----------------|--------------------------------|------------------------------------------------|
| ITEM | GRAND<br>TOTAL | UNIT                           | DESCRIPTION                                    |
| 202  | 77             | FT                             | PIPE REMOVED, 24" AND UNDER                    |
|      |                |                                |                                                |
| 503  | LS             | LS                             | COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN |
| 611  | 77             | FT                             | 15" CONDUIT, TYPE F 707.05 TYPE C OR 707.21    |
|      | 202<br>503     | ITEM GRAND TOTAL 202 77 503 LS | ITEM GRAND UNIT TOTAL  202 77 FT  503 LS LS    |

#### EXISTING STRUCTURE VERIFICATION

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DETAILS AND DIMENSIONS SHOWN ON THESE PROPOSED PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, SUCH DETAILS AND DIMENSIONS ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04. BASE THE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.





RAMP LOCATION MAP

#### NOTES:

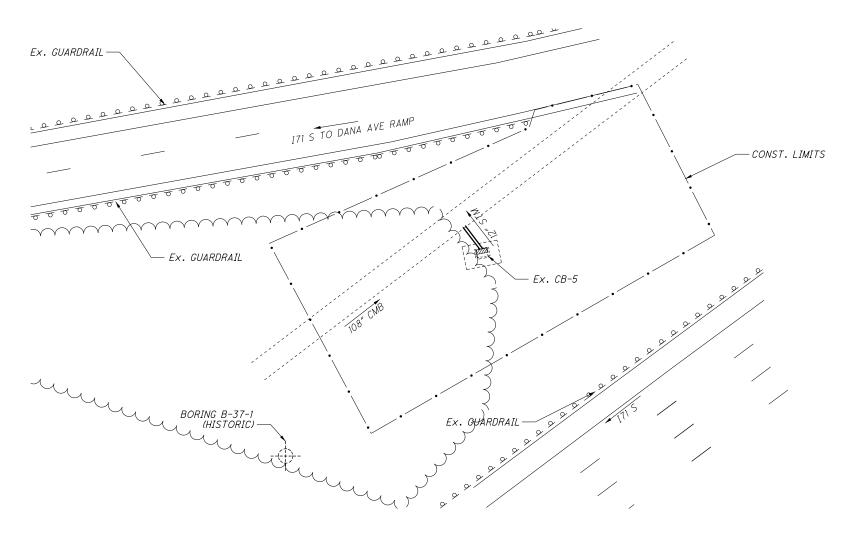
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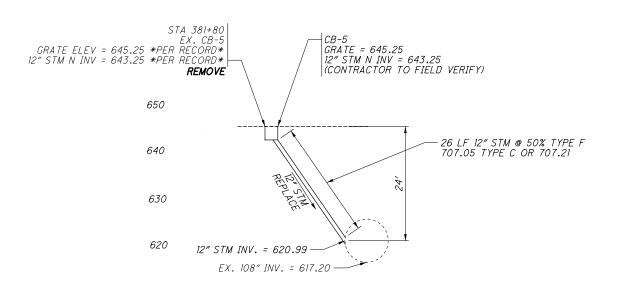
1. USE EXTREME CAUTION WHEN REMOVING THE EXISTING 12" TIE IN TO THE EXISTING 108"
COMBINED SEWER TO ENSURE THE EXISTING 108" IS NOT DAMAGED. USE METHODS SUCH AS
HAND CHIPPING AND WIRE BRUSH TO REMOVE THE EXISTING GROUT SURROUNDING THE
EXISTING 12" PIPE. CONNECT THE PROPOSED 15" CONDUIT TO THE 108" COMBINED SEWER,
UTILIZING THE EXISTING OPENING FROM THE EXISTING CONDUIT. FOLLOW THE REQUIREMENTS
IN 611.10B FOR THE CONNECTION. ENSURE THE GROUT BETWEEN THE EXISTING AND PROPOSED
CONDUITS IS SMOOTH AND HAS NO GAPS.

|      | ESTIMATE       | ED QUAI | NTITIES (HAM-71-6.03 - I-71S TO DANA AVE RAMP) |
|------|----------------|---------|------------------------------------------------|
| ITEM | GRAND<br>TOTAL | UNIT    | DESCRIPTION                                    |
| 202  | 26             | FT      | PIPE REMOVED, 24" AND UNDER                    |
| 202  | 1              | EA      | CATCH BASIN REMOVED                            |
| 503  | LS             | LS      | COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN |
| 611  | 26             | FT      | 12" CONDUIT, TYPE F 707.05 TYPE C OR 707.21    |
| 611  | 100            | FT      | CONDUIT, MISC.: VIDEO LOG                      |
| 611  | 1              | EA      | CATCH BASIN, NO. 5                             |

#### EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PROPOSED PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, SUCH DETAILS AND DIMENSIONS ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04. BASE THE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.





FORTH NO. 304----10-58

# THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD CINCINNATI 26, OHIO

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TESTING ENGINEERS AND SOILS CONSULTANTS B-1949 jlt 1-27-66

"AS A MUTUAL PROTECTION TO CLENTS, THE PUBLIC, AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS, OR EXTRACTS FROM OR REGAINING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL."

## TEST BORING REPORT Field

1-16-66 B-37-1 99.831 ORDER No. to Burwood Ave. HOLE No. PROJECT 0535 NEXY HAM-71 - 5.18 Montgomery Rd. LOCATION Station 380+62, 128' Left Ohio City of Cincinnati Martin W. DRILLER CLIENT

1-17-66 3011 FALL FALL DATE COMPLETED\_ DATE STARTED. HAMMER WT. 140# UPON COMPLETION. HAMMER WT. DRILL No. 18 632.0 - Footer Ele. 660.0 2" O.D. Split Spoon Hollow Stem Auger 5 CASING: DIAMETER 3.5" I.D. DEPTH TO WATER; IMMEDIATE. SAMPLER: DIAMETER & TYPE\_ ELEVATION REFERENCE

| DEPTH TO WATER             | WATER | DAYS  | DAYS AFTER COMPLETION BECKILLIED                                           | WATER USED IN |                 | DRILLING from        | om 10'          |            |
|----------------------------|-------|-------|----------------------------------------------------------------------------|---------------|-----------------|----------------------|-----------------|------------|
| ELEVATION                  | DEPTH |       | DESCRIPTION OF MATERIALS                                                   | SAMPLE<br>No. | SAMPLE<br>DEPTH | TYPE<br>OF<br>SAMPLE | BLOWS PER 6. ON | Re-        |
| Ī                          | 1     |       |                                                                            |               |                 |                      | or % Core Nec.  | LCOVETY    |
| ļ                          |       | 2.5   | Cinders and brick, (fill) moist - medium dense                             | 1             | 0-1.5           | SS                   | 7-8-10          |            |
| 629.5                      | 2.5   | 2.5   | Brown sand clay with cinders<br>and gravel (fill), moist -<br>medium stiff | 2             | 2.5-4           | SS                   | 4-5-6           | 16"        |
| 627.0                      | 5.0   | 5.0'  | Brown sandy clay with fine<br>sand layers, wet - soft                      | m             | 5-6.5           | S<br>S               | 1-2-2           | 17"        |
| 622.0 10.0                 | 10.01 | 15.0' | Brown fine sand, wet -                                                     | <u></u>       | 10-11.5         | လ လ<br>လ လ           | 5-8-11          | 181        |
| 607.01 25.01               | 25.01 |       | medium dense                                                               | 9             |                 | SS                   | 10-11-13        | 18"<br>17" |
|                            |       | 10.01 | Gray silty sand, wet - medium dense                                        | ∞             | 30-31.5         | SS                   | 12-14-16        | 18"        |
| 597.0                      | 35.0  | 5.01  | Gray silty clay with silt<br>layers, wet - medium stiff                    | 6             | 35-36.5         | SS                   | 4-2-6           | 15"        |
| 592.0' 40.0'               | -0.0  |       |                                                                            | 10            | 40-41.5         | 888                  | 5-9-13          | 18"        |
| 577.0'   55.0'<br>REMARKS: | 55.01 | 15.01 | Gray sandy silt with silty clay layers, wet - medium dense                 |               | 56.             | SS SS                | 5-9-11          | 18,,       |
|                            |       |       |                                                                            |               |                 |                      |                 |            |

As a mutual protection to the owners and ourselves, the engineer in the owner's behalf shall check this report with the samples submitted prior to the purchase of property, or designing of structures.

00 THE H. C. NUTTING C Respectfully