BEGIN PROJECT: SLM 13.94 END PROJECT: SLM 14.01 BEGIN PROJECT: SLM 13.82 END PROJECT: SLM 17.27 RAMP FROM/TO E MARKET ST BEGIN PROJECT: SLM 0.00 END PROJECT: SLM 0.57

LOCATION MAP

LATITUDE: 41°15'07" N LONGITUDE: 80°46'03" W

| PORTION TO BE IMPROVED |
|-------------------------|
| INTERSTATE HIGHWAY |
| FEDERAL ROUTES |
| STATE ROUTES |
| COUNTY & TOWNSHIP ROADS |
| OTHER ROADS |
| |

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION: URBAN OTHER FREEWAY AND EXPRESSWAY NHS PROJECT _____ YES

Contract Proposal available @ www.contracts.dot.state.oh.us

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS



PLAN PREPARED BY: ODOT DISTRICT 4 - CAPITAL PLANNING 2088 SOUTH ARLINGTON ROAD AKRON, OHIO 44306

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

TRU-5/82-13.94/13.88 PART 1

CITY OF WARREN BAZETTA AND HOWLAND TOWNSHIPS TRUMBULL COUNTY

FOR PART 2 SEE TRU-MYRON ST-SIDEWALKS

INDEX OF SHEETS:

STANDARD CONSTRUCTION DRAWINGS

1/17/20 TC-73.20

7/19/13 TC-74.10

7/17/20

10/18/13

10/18/13

10/18/13

10/18/13

1/15/21

1/17/20

7/19/19

1/17/14

7/21/17

1/19/18

7/20/18

TC-82.10

1/17/20

7/16/21

7/19/19

1/19/18 MT-105.10

SBR-1-20

1/19/18 MT-110.10

7/19/19 TC-41.20

1/17/20 TC-42.20

4/19/19 TC-41.30

1/17/20 TC-52.10

4/19/19 TC-52.20

1/17/20 TC-61.10

1/17/20 TC-61.30

1/17/20 TC-65.10

4/19/19 TC-65.11

1/17/20 TC-71.10

1/18/13

7/19/19

1/17/20 MGS-1.1

7/19/13 MGS-2.1

7/16/21 MGS-4.3

1/18/19 MT-95.30

1/15/21 MT-95.45

7/17/20 MT-98.10

7/16/21 MT-98.20

1/15/16 MT-98.22

1/15/16 MT-98 28

1/15/21 MT-99.20

7/19/02 MT-99.50

MT-95.31

MT-97.10

MT-98.29

MT-101 90

7/17/20

DM-1.2

DM-4.3

ENGINEER'S SEAL:

1/10/21

P.1 TITLE SHEET TYPICAL SECTIONS P.2-3 GENERAL NOTES MAINTENANCE OF TRAFFIC P.5-7 GENERAL SUMMARY P.8 PAVEMENT CALCULATIONS P.9-10 RPM SUBSUMMARY P.11 PAVEMENT MARKINGS SUBSUMMARY P.12 P.13-17

FEDERAL PROJECT NUMBER

E190(727)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

RESURFACING OF TRU SR 5 FROM 13.94 TO 14.36 AND TRU SR 82 FROM 13.89 TO 17.36. INCLUDES MINOR BRIDGE WORK.

EARTH DISTURBED AREAS

PROJECT EDA: ESTIMATED CONTRACTOR EDA: 0.25 ACRES NOTICE OF INTENT EDA:

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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET 7 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

CONFORMED SET

TRANSPORTATION

DATE 1110/22 DISTRICT DEPUTY BIRECTOR

CMW ИАС 11-29-2⁻ 101248

P.1

SHEET

TITLE

1/21/22 4/20/12 10/19/18 1/15/16 4/20/1: DATE 3/21/22 DIRECTOR, DEPARTMENT OF

SPECIAL

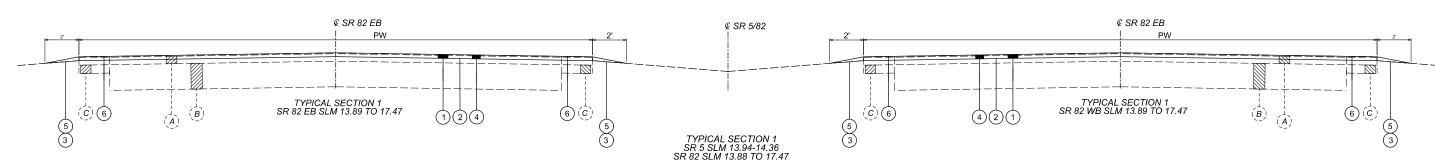
PROVISIONS

SUPPLEMENTAL

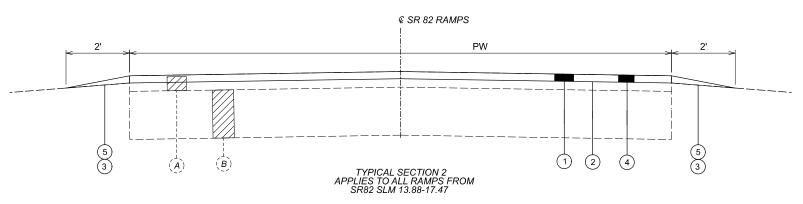
SPECIFICATIONS

800-2019





| | TYPICAL SECTION 1 | | | | | | | | |
|----------|-------------------|---------------|----------------|-------------|--|--|--|--|--|
| ROUTE | SL | .M | LENCTH (MILES) | D\A/ /EEET\ | | | | | |
| ROUTE | FROM | TO | LENGTH (MILES) | PW (FEET) | | | | | |
| SR 5 EB | 13.94 | 14.01 | 0.07 | 38 | | | | | |
| SR 82 EB | 13.88 | 16.72 | 2.84 | 38 | | | | | |
| SR 82 EB | 16.79 | 17.14 | 0.35 | 38 | | | | | |
| SR 82 EB | 17.19 | .19 17.40 0.2 | | 38 | | | | | |
| SR 82 WB | 13.82 | 15.65 | 1.83 | 38 | | | | | |
| SR 82 WB | 15.65 | 16.55 | 0.90 | 48 | | | | | |
| SR 82 WB | 16.55 | 16.88 | 0.33 | 38 | | | | | |
| SR 82 WB | 16.96 | 17.27 | 0.31 | 38 | | | | | |



| TYPICAL SECTION 2 | | | | | | | |
|------------------------|----------------|-----------|--|--|--|--|--|
| RAMP | LENGTH (MILES) | AW (FEET) | | | | | |
| ELM RD TO W SR 82 | 0.36 | 23 | | | | | |
| W SR 82 TO ELM RD | 0.32 | 22 | | | | | |
| ELM RD TO E SR 82 | 0.41 | 24 | | | | | |
| E SR 82 TO ELM RD | 0.34 | 24 | | | | | |
| E SR 82 TO E MARKET ST | 0.28 | 23 | | | | | |
| E MARKET ST TO W SR 82 | 0.33 | 20 | | | | | |

LEGEND

- ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T = 1.5")
 - ITEM 407, NON-TRACKING TACK COAT @ 0.05 GAL/SY
- ITEM 408, PRIME COAT, AS PER PLAN @ 0.4 GAL/SY
- ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5mm TYPE A (447), AS PER PLAN (T = 1.5")

- ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T=2")
- ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE)

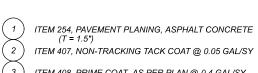
- A EXISTING ASPHALT SURFACE COURSE (3.75")
- B) EXISTING REINFORCED CONCRETE BASE (10")
- (c) EXISTING AGGREGATE BASE
- D EXISTING ASPHALT SURFACE COURSE (3.5")
- E ` EXISTING REINFORCED CONCRETE BASE (9")
- F EXISTING CURB TYPE 6
- EXISTING GUARDRAIL



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101248

P.2 TOTAL



LEGEND

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T = 1.5")

5

ITEM 408, PRIME COAT, AS PER PLAN @ 0.4 GAL/SY

ITEM 442, ASPHALT CONCRETE SURFACE COURSE. 12.5mm TYPE A (447), AS PER PLAN (T = 1.5")

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T=2")

€ SR 82

F

RAMP

RAMP F/T E MARKET EB

RAMP F/T E MARKET WB

G

TYPICAL SECTION 3 SR 82 CENTER SLM 16.85-17.42

TYPICAL SECTION 3

LENGTH (MILES) PW (FEET)

24

24

0.60

0.61

24'

1 2 4

ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE)

24'

4 2 1

(G) EXISTING GUARDRAIL

| (A) | EXISTING ASPHALT SURFACE COURSE (3.75") |
|------------------------------------|---|
| $\binom{B}{}$ | EXISTING REINFORCED CONCRETE BASE (10") |
| (c) | EXISTING AGGREGATE BASE |
| $\left(\overline{D}\right)$ | EXISTING ASPHALT SURFACE COURSE (3.5") |
| $\left(\stackrel{\circ}{E}\right)$ | EXISTING REINFORCED CONCRETE BASE (9") |
| $\left(\overbrace{F}\right)$ | EXISTING CURB TYPE 6 |
| G | EXISTING GUARDRAIL |

CMW MAC 11-29-21

101248 SHEET TOTAL P.3 17

RU-5/82-13.94/13.88

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER. OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS. BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

CENTURY LINK / LUMEN ATTN: ALAN PETERS 3801 ELM RD. WARREN, OH 44483 330-841-1309 (O), 330-219-3306 (C) Alan.L.Peters@lumen.com relocations@lumen.com

DIVERSIFIED GAS & OIL PLC ATTN: JEFF SHEPHERD PIPELINE TECHNICIAN 1026A COOKSON AVE. SE NEW PHILADELPHIA, OH 44663 740-485-1839 (C) jshepherd@dgoc.com

CITY OF NILES PROJECT MANAGER / PUBLIC UTILITIES INFRASTRUCTURE COORDINATOR ATTN: KEVIN ROBINSON 34 W STATE ST. NILES, OH 44446 330-550-9000 ext. 1171 (O) 330-717-0872 (C) KRobertson@thecityofniles.com

CITY OF WARREN (WATER DEPARTMENT) ATTN: GREG DELLIMUTI 540 LAIRD AVE. WARREN, OH 44484 330-841-2702 gdellimuti@warren.org

DOMINION FAST OHIO ATTN: MICAH RISACHER 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OH 44333 330-664-2638 Micah.J.Risacher@dominionenergy.com relocation@dominionenergy.com

OHIO EDISON ATTN: BRIAN MULICHAK 730 SOUTH AVE. YOUNGSTOWN, OH 44502 330-261-0073 (C) bmulichak@firstenergycorp.com

TRUMBULL COUNTY SANITARY ENGINEER ATTN: SCOTT VERNER 842 YOUNGSTOWN-KINGSVILLE RD. VIENNA. OH 44473 330-675-7787 severner@co.trumbull.oh.us

LINEAR GRADING

AREAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE OF PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE. THIS WORK WILL ONLY BE PERFORMED IN AREAS NECESSARY AND WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. AREAS FOR THE WORK WILL BE MARKED BY THE PROJECT ENGINEER UNDER NO CIRCUMSTANCES WILL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY OTHER OPERATION

GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

SEEDING AND MUCHING, FERTILIZER AND LIME WILL BE PERFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER THE LINEAR GRADING.

THE QUANTITY OF ITEM 209 IS NOT PERMITED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

209, LINEAR GRADING, 802 STA.

659, SEEDING AND MULCHING, 22,279 SQ YD

659. COMMERCIAL FERTILIZER. 3.00 TON

659. LIME, 4,61 ACRES

659, WATER, 120.30 M. GAL.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

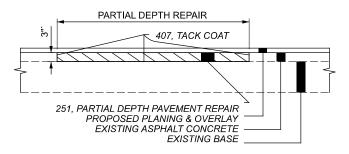
| SIEVE | TOTAL PERCENT PASSIN | ٧G |
|---------|----------------------|----|
| 1- 1/2" | 100 | |
| 3/4" | 50-100 | |
| NO. 4 | 35-70 | |
| NO. 30 | 9-33 | |
| NO. 200 | 0-13 | |
| | | |

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'. UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 5 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

SR 82 SLM 13.89-17.47

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 5,000 SQ. YD.



CATCH BASIN ADJUSTED TO GRADE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

611, CATCH BASIN ADJUSTED TO GRADE, 2 EACH

BARRIER REEL ECTORS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS DIRECTED BY THE ENGINEER FOR INSTALLING/REPLACING BARRIER REFLECTORS ON ALL EXISTING BARRIER RUNS WITHIN THE PROJECT LIMITS

626, BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL), 210 EACH

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

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.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447), AS PER PLAN

THE REQUIREMENTS OF 442 AND 446 WILL APPLY; DEVIATIONS FROM THESE ARE AS FOLLOWS:

THE PERCENTAGE OF RECLAIMED MATERIAL PROPOSED FOR USE WILL BE INCLUDED IN THE MIX DESIGN PROCESS TO ESTABLISH THE JOB MIX FORMULA (JMF) IN ACCORDANCE WITH 401.04.

MATERIALS: THE MATERIALS SHALL BE: AGGREGATES 703.05*

*THE VIRGIN COARSE AGGREGATE PORTION OF THE MIXTURE WILL CONTAIN 50% AIR COOLED BLAST FURNACE SLAG (ACBFS) AND MEET THE REQUIREMENTS OF 703.05.

USE AN NDES OF 50 AN NMAX OF 75 AND THE COMBINATION OF NEW AGGREGATES, NEW ASPHALT BINDER, AND RECLAIMED MATERIAL SHALL BE AS REQUIRED TO PRODUCE A COMPOSITION CONTAINING A MINIMUM OF 6.0% NEW ASPHALT BINDER RESULTING IN A MINIMUM TOTAL BINDER OF 6.5%.

703.05 DO NOT USE ANY FINE OR COARSE AGGREGATE WITH A 'SR' OR 'SRH' DESIGNATION ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

[add the following where traffic data is not provided in the plan]

THE CONTRACTOR SHALL USE THE APPROPRIATE COUNTY, ROUTE AND SECTION TO OBTAIN TRAFFIC DATA, TO BE USED IN THE DESIGN OF THE JMF, AT THIS WEB SITE LOCATION:

http://www.odotonline.org/techservapps/traffmonit/ countinformation/default.htm

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

| ROUTE | S.L.M. TO | S.L.M. | LANE WIDTH |
|----------|-----------|--------|------------|
| SR 5 EB | 13.94 | 14.01 | 12' |
| SR 82 EB | 13.88 | 14.40 | 12' |
| SR 82 WB | 13.82 | 17.27 | 12' |



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MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION. THE SPECIFICATIONS AND THE FOLLOWING:

- 1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
- 2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
- 3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
- 4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
- 5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE [1] MILE URBAN.
- 6. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.
- 7. A QUANTITY OF 20 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
- 8. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
- 9. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP]
 PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUCTD 6F.45;
 AND W6-3 [TWO-WAY TRAFFIC] PER OMUTCD 6F.32. PAYMENT FOR
 THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE
 MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS

10. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

SIGNS W8-H7 [LOOSE GRAVEL/ FRESH TAR], AND W13-1 [SPEED PLAQUE] SHALL BE PLACED PER STANDARD CONSTRUCTION DRAWING MT-97.12 (MT-97.11), AND PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614- MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE 1: MILLED SURFACE

614, WORK ZONE LANE LINE, CLASS I, 642 PAINT, 9.20 MILE 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT, 64 FT 614, WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT, 3,450 FT 614, WORK ZONE MARKING SIGN,(ALL PHASES) 40 EACH

PHASE 2: SURFACE COURSE
614, WORK ZONE LANE LINE, CLASS III, 642 PAINT, 9.20 MILE
614, WORK ZONE STOP LINE, CLASS III, 642 PAINT, 64 FT
614, WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT, 3,450 FT

TO BE USED AS DIRECTED BY THE ENGINEER
614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT, 20.32 MILE

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER. TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REP-RESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISS-ING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS
OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED
WHERE THE OMUTCO INTENDS THAT ELAGGERS BE USED

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSI-BILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CON-SIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

IN GENERAL LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO DARTIES

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINT-ENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 250 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) IN-CURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 5 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$10,000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

DESIGN AGEN



CMW
REVIEWER
MAC 11-29-21
PROJECT ID
101248

P.5 TOTAL

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 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 NOTIFICATION 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 PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

| | NOTIFICATION | ON TIME TABLE | | | |
|------------------|------------------------|--|--|--|--|
| ITEM | DURATION OF CLOSURE | NOTICE DUE TO PERMITS & PIO | | | |
| ROAD & RAMP | >= 2WEEKS | 21 CALENDAR DAYS PRIOR TO CLOSURE | | | |
| CLOSURES | > 12 HOURS & < 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE | | | |
| CLOSUNES | <12 HOURS | 4 BUSINESS DAYS PRIOR TO CLOSURE | | | |
| | | | | | |
| | >=2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE | | | |
| RESTRICTIONS | < 2 WEEKS | 5 BUSINESS DAYS PRIOR TO CLOSURE | | | |
| | | | | | |
| START OF | | | | | |
| CONSTRUCTION & | N/A | 14 CALENDAR DAYS PRIOR TO IMPLEMENTATION | | | |
| TRAFFIC PATTERNS | , | THE CHECKES WITCH THE TENER THE TENE | | | |
| 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.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMIT-TED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT: http://plcm.dot.state.oh.us

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIRE-MENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$5,000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

DETOUR NOTIFICATION [TRUMBULL COUNTY / CITY OF WARREN]

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND THE CITY OF WARREN (330-841-2562) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A PORTABLE CHANGEABLE MESSAGE SIGN, THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCE OF 800 FEET AND 650 FEET RESPECTIVELY.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHALL BE LOCATED. IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF. ADDITIONALLY WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CONTRACTOR. A LIST OF ALL PROPOSED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE LINE PRESENTATION FORMATS WITH UP TO OF SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA
LINK WHICH WILL [IN ACTIVE CELLULAR AREAS] ALLOW
REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES,
MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY
PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION
OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.07. THE CONTRACTOR SHALL PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THEIR USE. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 18 SIGN MONTH

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT THE FOLLOWING PROJECTS MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE LIMITS OF THIS PROJECT:

TRU-5/82-8.30/13.89 (PID: 110710)

THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

DETOUR NOTIFICATION [TRUMBULL COUNTY/HOWLAND TOWNSHIP]

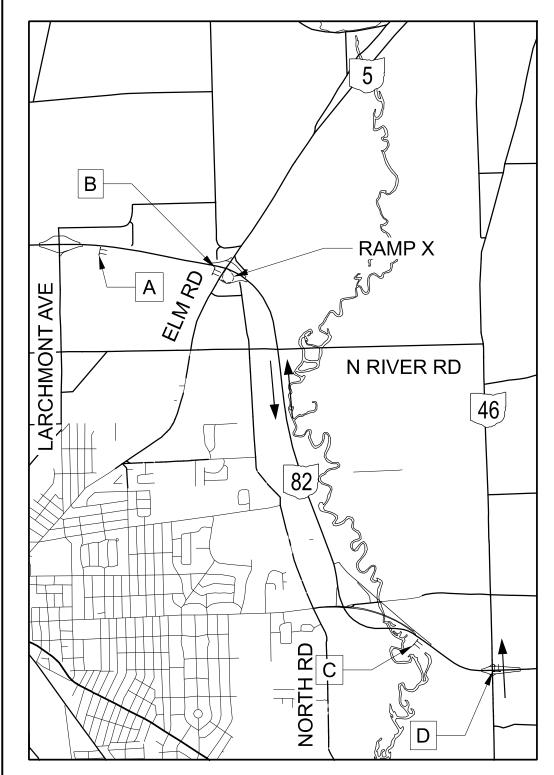
THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148), TRUMBULL COUNTY (300-675-2253), AND HOWLAND TOWNSHIP (330-856-2340) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

DESIGN AGEN



CMW
REVIEWER
MAC 11-29-21
PROJECT ID
101248

P.6 TOTAL



DETOUR PLAN FOR LOOP RAMP (SR 82 EB TO SR 5/ELM RD)

NOT TO SCALE

| RAMP CLOSURES | | | | | | | | | |
|--|------|--|--|-----------------------------|----------------------------|--|--|--|--|
| RAMP LENGTH (MILES) | | AVERAGE DURATION (PER WIDTH (FEET) PLCM) | | DETOUR ROUTE | DISINCENTIVES (PER MINUTE) | | | | |
| LOOP RAMP X SR 82 EB TO SR 5/ELM RD | 0.75 | 28 | 2 CONSECUTIVE NIGHTS 9:00 PM - 6:00 AM | SR 82 EB / SR 46 / SR 82 WB | \$175 | | | | |

PORTABLE CHANGEABLE MESSAGE SIGN MESSAGES:

1. RAMP TO **ELM RD** CLOSED

1. DETOUR **ELM RD**

> 2. USE SR 46

1. RAMP TO ELM RD **CLOSED**

> 2. FOLLOW SR 82 EB

D 1. DETOUR **ELM RD**

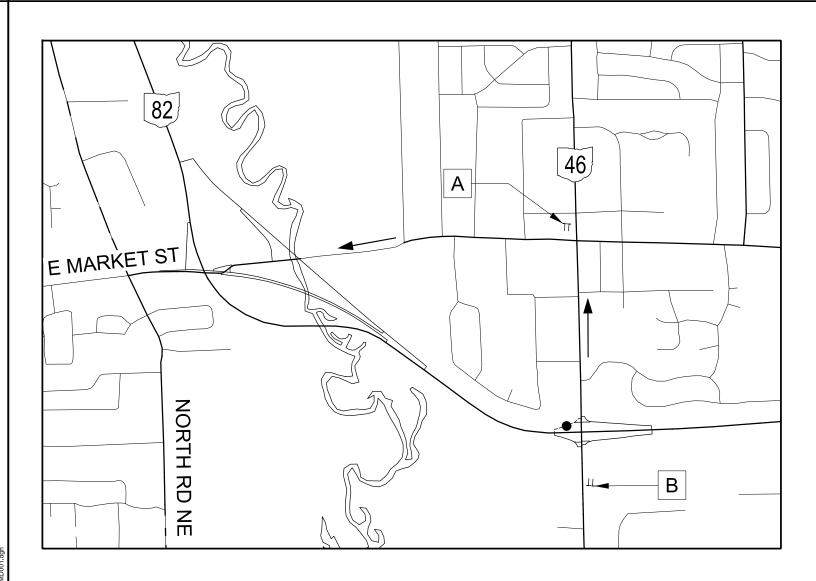
> 2. FOLLOW **SR 82 WB**

CLOSE RAMP X AS PER STD. DWG. MT-98.29

OFFICIAL DETOUR ROUTE LOOP RAMP: SR 82 EB / SR 46 / SR 82 WB







PORTABLE CHANGEABLE MESSAGE SIGN MESSAGES:

1. RAMP TO **SR 82 WB** CLOSED

> 2. USE **E MARKET**

В 1. DETOUR SR 82

> 2. USE 46 N TO **E MARKET**

DETOUR PLAN FOR RAMP (SR 46 TO SR 82 WB RD)



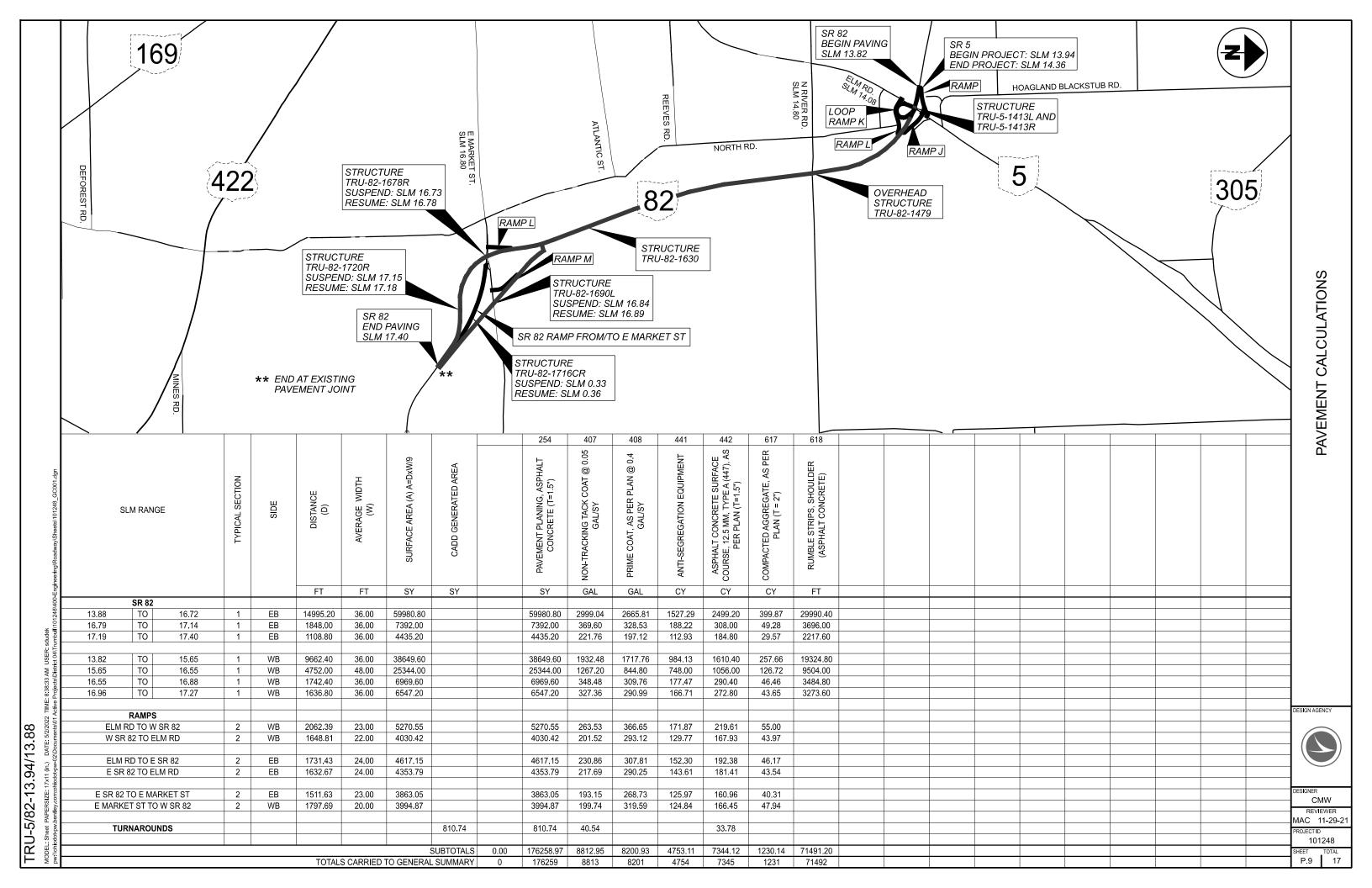
CLOSE RAMP AS PER STD. DWG. MT-98.30

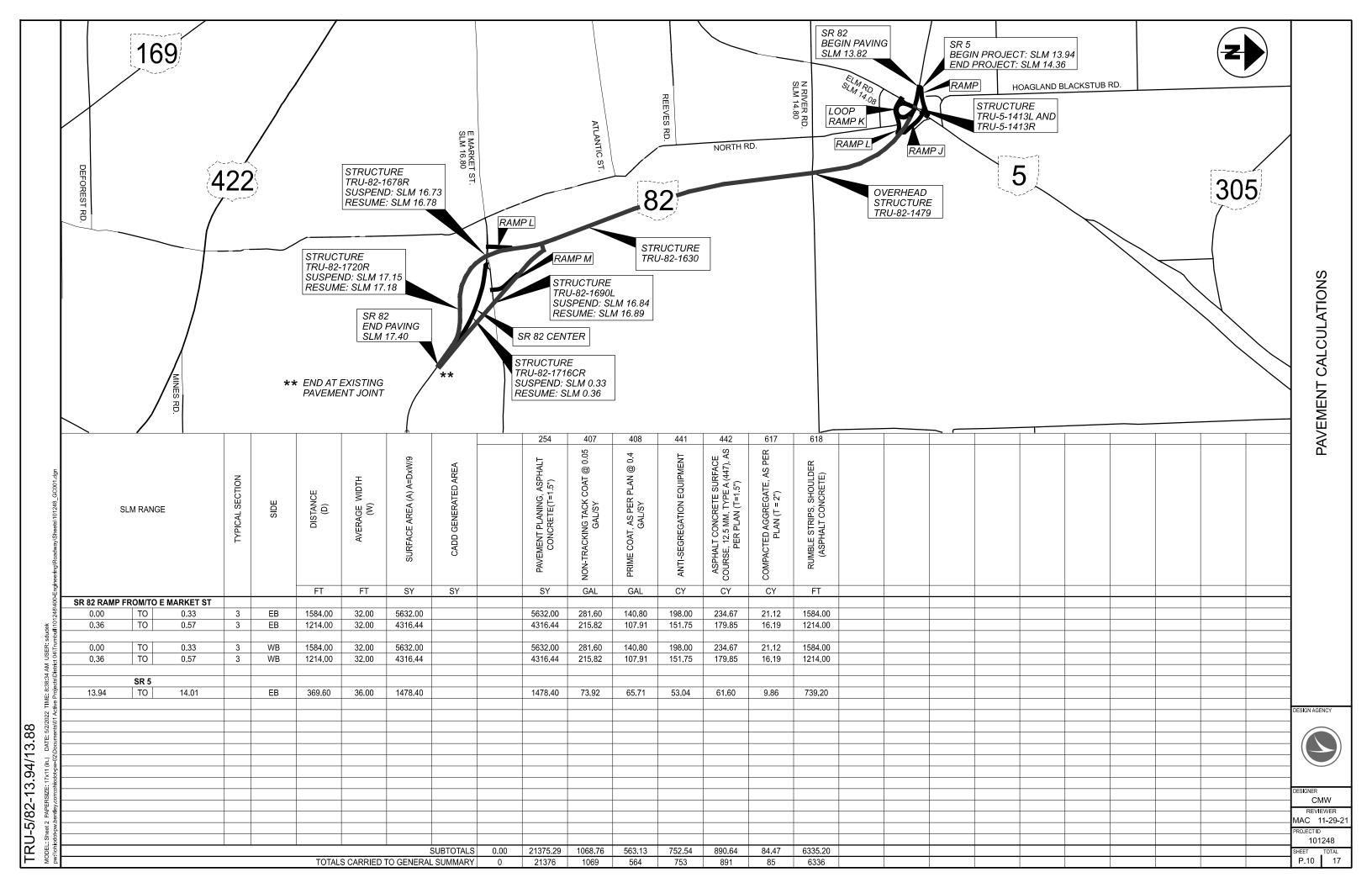
OFFICIAL DETOUR ROUTE LOOP RAMP: E MARKET ST / SR 46

| RAMP CLOSURES | | | | | | | | | |
|--------------------------------|-------------------|-------------------------|-------------------------------|------------------|----------------------------|--|--|--|--|
| RAMP | LENGTH (MILES) | AVERAGE WIDTH (FEET) | DURATION (PER PLCM) | DETOUR ROUTE | DISINCENTIVES (PER MINUTE) | | | | |
| RAMP FROM SR 46 TO SR 82 WB | 0.12 | 35 | 6 NIGHTS 9:00 PM - 6:00 AM | E MARKET / SR 46 | \$175 | | | | |



P.7A TOTAL 17





| | | LOCATIO | N | | 621 | 621 | 621 | 621 | 621 | | |
|------------------------------|-------------------|-------------------------------------|--|----------------|---------------------|-----------------|-------------|------------------|-----------------------------------|--------------------------------------|---------------------------------|
| | COUNTY | ROUTE | SECTIOI (S.L.M.) | | RPM (YELLOW/YELLOW) | RPM (WHITE/RED) | RPM (WHITE) | RPM (YELLOW/RED) | RAISED PAVEMENT MARKER REMOVED | REMARKS | |
| | | | FROM | TO | EACH | EACH | EACH | EACH | EACH | | |
| | TRU TRU | 82 EB 82 WB | 13.88 13.82 | 17.40 17.27 | | 295 219 | | | 236 175 | | ≿ |
| | TRU TRU | RAMP F/T E MARKET RAMP F/T E MARKET | 0.00 0.00 | 0.57 0.57 | | 25 25 | | | 20 20 | | SUMMARY |
| | TRU TRU | | LM RD TO W SR 82 SR 82 TO ELM RD | | | 47 41 | | 38 30 | | PER SCD TC-73.20 PER SCD TC-73.20 | |
| | TRU TRU | | LM RD TO E SR 82 SR 82 TO ELM RD | | | 55 47 | | 38 38 | | PER SCD TC-73.20 PER SCD TC-73.20 | SUB |
| | TRU TRU | | R 82 TO E MARKET ST ARKET ST TO W SR 82 | | | 42 39 | | 28 39 | | PER SCD TC-73.20 PER SCD TC-73.20 | |
| | TRU | 5 EB | 13.94 | 14.01 | | 9 | | | 7 | | PAVEMENT MARKING |
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| ⊢ M M | TOTALS CARRIED TO | GENERAL SUMMARY | | | | | 1057 | | 845 | P | P.11 17 |

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

DS-1-92 DATED (REVISED) 7/18/03

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

DATED 1/15/16

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUC-TURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASURE-MENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXIST-ING 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 CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAM-INATION OF THE EXISTING STRUCTURE. HOWEVER, THE DE-PARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK

TRU-5-1410L

- -SEAL DECK AND APPROACH SLABS WITH GRAVITY-FED RESIN -PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH EPOXY URETHANE
- -PATCH ALL UNSOUND AREAS OF THE CONCRETE RAILING -RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS -REPAIR MINOR EROSION AROUND REAR WINGWALLS -REMOVE AND REPLACE EPOXY-URETHANE SEALING ON CONCRETE
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-5-1413R

- -SEAL DECK AND APPROACH SLABS WITH GRAVITY-FED RESIN -PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH FPOXY LIRETHANE
- -PATCH ALL UNSOUND AREAS OF THE CONCRETE RAILING -REMOVE AND REPLACE EPOXY-URETHANE SEALING ON CONCRETE
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-82-1473

- -SEAL DECK AND APPROACH SLABS WITH GRAVITY-FED RESIN -PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH EPOXY URETHANE
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

-CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-82-1674R

- -SEAL DECK WITH GRAVITY-FED RESIN
- -REMOVE EXISTING OVERLAY OVER APPROACH SLABS
- -PLACE ASPHALT OVERLAY OVER APPROACH SLABS
- -PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL WITH EPOXY URETHANE
- -PATCH ALL UNSOUND AREAS OF THE CONCRETE RAILING
- -REMOVE AND REPLACE EPOXY-URETHANE SEALING ON CONCRETE
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-82-1705L

- -SEAL DECK WITH GRAVITY-FED RESIN
- -REMOVE EXISTING OVERLAY OVER APPROACH SLABS
- -PLACE ASPHALT OVERLAY OVER APPROACH SLABS
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE
- -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

- -SEAL DECK AND APPROACH SLABS WITH GRAVITY-FED RESIN -REPAIR AND REPLACE APPROACH GUARDRAIL AND ANCHOR ASSEMBLIES AT REAR OF STRUCTURE
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-82-1716R

- -SEAL DECK WITH GRAVITY-FED RESIN
- -REMOVE EXISTING OVERLAY OVER APPROACH SLABS
- -PLACE ASPHALT OVERLAY OVER APPROACH SLABS
- -CLEARING AND GRUBBING 15 FEET AROUND THE STRUCTURE -PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

EROSION REPAIR

THE FOLLOWING QUANTITIES SHALL BE USED TO REPAIR THE EROSION AT STRUCTURE TRU-5-1410L.

ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

OBJECT MARKERS AND STRUCTURE/CULVERT IDENTIFICATION SIGNS

OBJECT MARKERS WILL BE PLACED ON EACH APPROACH OFF THE LEFT AND RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. ONE OM-3L AND ONE OM-3R WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND SHALL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41 20 MOST CURRENT REVISION EACH POST WILL BE 10.5 FT IN LENGTH.

STRUCTURE IDENTIFICATION SIGNS (I-H25b) WILL BE INSTALLED ON THE SAME POST AND DIRECTLY BELOW THE OBJECT MARKER OFF THE RIGHT SHOULDER ON EACH APPROACH. A QUANTITY OF ONE SIGN WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

TRU-5-1410L (2 APPROACH)

TRU-5-1410R (2 APPROACH)

TRU-82-1473 (2 APPROACH) TRU-82-1625 (2 APPROACH)

TRU-82-1674R (2 APPROACH)

TRU-82-1705L (2 APPROACH)

TRU-82-1711CR (2 APPROACH)

TRU-82-1716R (2 APPROACH)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH **APPROACH**

ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT

ITEM 630 - SIGN, FLAT SHEET, 6 SQ ET

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 21 FT ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL,

ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 2 EACH

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PRO-PERLY ALIGN BRIDGE BEARINGS, AS WELL AS THEIR CLEARNING AND PAINTING. INCLUDED SHALL BE THE DIS-ASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), IN-STALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY RE-MOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES FARENHEIT, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATIFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE. AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIRE-MENTS DEFINED IN THE PROJECT PLANS. SUBMIT CON-STRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF DURING THE JACKING OPERATIONS CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS THE BRIDIGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPT-ABLE METHODS INCLUDE: HIGH-PRESSURE WATER BLAST-ING WITH, OR WITHOUT, ABRASIVES IN THE WATER. ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

TRU-82-1625

NOTES TRU-82-1

RAL I

GENE

STRUCTURE

TR

U-82-1716R

-5-1413F L, TRU-8

-1690L,

TRU-82-

-410I

8 674R,

BRIDGE NO, TRU-82-16



CMW MAC 11-29-21 101248 P.13

STRUCTURE TRU-5-1410L (SFN:7801084) THE EXISTING SIGN SHOWS 1413L. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1410L.

STRUCTURE TRU-82-1473 (SFN:7804636) THE EXISTING SIGN SHOWS 1479. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1473.

STRUCTURE TRU-82-1625 (SFN:7804660) THE EXISTING SIGN SHOWS 1630. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1625.

STRUCTURE TRU-82-1674R (SFN:7804679) THE EXISTING SIGN SHOWS 1678R. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1674R

STRUCTURE TRU-82-1705L (SFN:7804695) THE EXISTING SIGN SHOWS 1690L. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1705L.

STRUCTURE TRU-82-1711CR (SFN:7804709) THE EXISTING SIGN SHOWS 1716CR. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1711CR.

STRUCTURE TRU-82-1716R (SFN:7804717) THE EXISTING SIGN SHOWS 1720R. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1716R.

STRUCTURE GENERAL NOTES
BRIDGE NO, : TRU-5-410L, TRU-5-1413R, TRU-82-1473, TRU-82-1625, TRU-82-1674R, TRU-82-1690L, TRU-82-1716R, TRU-82-1716CR

DES**I**GN AGEN



DESIGNER
CMW
REVIEWER
MAC 11-29-21
PROJECT ID
101248
SUBSET TOTAL
2 5
SHEET TOTAL
P.14 17

TRU-5/82-13.94/13.88

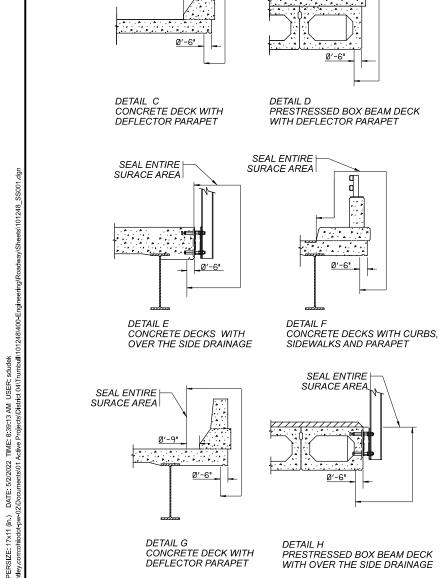
MODEL: Sheet 2 PAPERSIZE: 17x11 (h.) DATE: 5/22022 TIME: 8:36:58 AM USER: sdudek

STRUCTURE ESTIMATED QUANTITIES BRIDGE NO, : TRU-5-410L, TRU-5-1413R, TRU-82-1473, TRU-82-1625, TRU-82-1674R, TRU-82-1690L, TRU-82-1716R, TRU-82-1716CR

DESIGNER CMW REVIEWER MAC 11-29-21 PROJECT ID 101248

SUBSET TOTAL
3 5
SHEET TOTAL
P.15 17

| | ESTIMATED QUANTITIES | | | | | | | | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|------|-----------|--------|--|--------------|
| | | BRIDGI | E NO. / STR | UCTURE F | ILE NO. | | | | | | | |
| TRU-5-1410L 7801025 02/NHS/BR | TRU-5-1413R 7801025 02/NHS/BR | TRU-82-1473 7804636 02/NHS/BR | TRU-82-1625 7804660 03/NHS/BR | TRU-82-1674R 7804679 02/NHS/BR | TRU-82-1705L 7804695 02/NHS/BR | TRU-82-1711CR 7804717 02/NHS/BR | TRU-82-1716R 7804709 02/NHS/BR | ITEM | EXTENSION | UNIT | DESCRIPTION | SEE SHEET |
| LUMP | LUMP | LUMP | LUMP | LUMP | LUMP | LUMP | LUMP | 201 | 11001 | LS | CLEARING AND GRUBBING, AS PER PLAN | 12 |
| LOWII | LOWII | LOWII | LOWII | 222 | LOWII | LOWII | LOWI | 202 | 23000 | SY | PAVEMENT REMOVED | 12 |
| | | | | | | 300 | | 202 | 38000 | FT | GUARDRAIL REMOVED | |
| | | | | | | 1 | | 202 | 42000 | EACH | ANCHOR ASSEMBLY REMOVED, TYPE A | |
| | | | | | | 1 | | 202 | 47000 | EACH | BRIDGE TERMINAL ASSEMBLY REMOVED | |
| | | | | | | | | 202 | 11 000 | 27.011 | BALL OF TEACHING TO THE MOVES | |
| 1279 | 1674 | 992 | | 1111 | 1153 | 1999 | 867 | 512 | 73500 | SY | TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN | |
| 416 | 407 | 33 | | 461 | 1100 | 1000 | 40 | 512 | 10100 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) | |
| 416 | 407 | 33 | | 461 | | | 40 | 512 | 74000 | SY | REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES | |
| 10 | 707 | - 00 | | 701 | | | 10 | 516 | 45305 | EACH | REFURBISH BEARING DEVICE, AS PER PLAN | |
| LUMP | | | | | | | | 516 | 47001 | LS | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | 12 |
| LOWII | | | | | | | | 010 | 47001 | LS | WAGNING THE PENN GIVEN GOT ON GOT ENGINEERING TENT ENTERN | 12 |
| 100 | 100 | 200 | | 300 | | | 162 | 519 | 11101 | LS | PATCHING CONCRETE STRUCTURE, AS PER PLAN | 14 |
| 5 | 100 | 200 | | 000 | | | 102 | 601 | 27000 | LS | DUMPED ROCK FILL, TYPE C | 17 |
| | | | | | | 300 | | 606 | 15050 | LS | GUARDRAIL, TYPE MGS | |
| | | | | | | 1 | | 606 | 26150 | EACH | ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016 | |
| | | | | | | 1 | | 606 | 35000 | EACH | BRIDGE TERMINAL ASSEMBLY, TYPE 1 | |
| | | | | | | ! | | 000 | 33000 | LAOIT | DRIDGE TERMINAL ACCEMBET, THE T | |
| | | | | | | 10 | | 626 | 00110 | EACH | BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL) | |
| 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 630 | 02100 | FT | GROUND MOUNTED SUPPORT, NO. 2 POST | |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 630 | 80100 | SF | SIGN, FLAT SHEET, 730.20 | |
| 2 | 2 | | | | | | 2 | 630 | 84900 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL | |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 630 | 86002 | EACH | REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | |
| | | | | | | | | 030 | 00002 | LACIT | INCINIO VAL OF GROOND WOONTED FOOT SOFF ORT AND DISTOGAL | |
| 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 630 | 80100 | SF | SIGN, FLAT SHEET | |
| 50 | 50 | 50 | 12 | 50 | 12 | 12 | 50 | 843 | 50000 | SF | PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR | |
| 30 | 30 | 30 | | 30 | | | 30 | 043 | 30000 | 01 | TATOTING CONCILIE STRUCTURES WITH TROWLEADED MORTAR | |
| | | | | | | | | | | | | |
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SEAL ENTIRE SURACE AREA

DETAIL A CONCRETE DECKS WITH OVER THE SIDE DRAINAGE

SEAL ENTIRE SURFACE AREA

SEAL ENTIRE SURACE AREA

SEAL ENTIRE SURFACE AREA

DETAIL B CONCRETE DECKS WITH CURBS, SIDEWALKS AND PARAPET

| | | | | | ESTIMA | ATED QUAI | NTITIES | |
|---------------|--------------------------|--|-------------------------|-----------------|-----------------|------------------|--------------------|------------------|
| BRIDGE NUMBER | STRUCTURE TYPE | PROPOSED SEALING | FEDERAL COLOR NUMBER | ABUT (SQ YD) | PIER (SQ YD) | SUPER (SQ YD) | GENERAL (SQ YD) | TOTAL (SQ YD) |
| TRU-5-1410L | STEEL BEAM CONTINUOUS | SEAL ALL PATCHED AREAS SEAL PARAPETS PER DETAIL G | PER CMS | | | 400 | 17 | 416 |
| | | | | | | | | |
| TRU-5-1413R | STEEL BEAM CONTINUOUS | SEAL ALL PATCHED AREAS SEAL PARAPETS PER DETAIL G | PER CMS | | | 391 | 17 | 407 |
| | | | | | | | | |
| TRU-82-1479 | STEEL BEAM CONTINUOUS | SEAL ALL PATCHED AREAS | PER CMS | | | | 33 | 33 |
| | | | | | | | | |
| TRU-82-1678R | STEEL BEAM CONTINUOUS | SEAL ALL PATCHED AREAS SEAL PARAPETS PER DETAIL G | PER CMS | | | 411 | 50 | 461 |
| | | | | | | | | |
| TRU-82-1716R | STEEL BEAM CONTINUOUS | SEAL DECK EDGES PER DETAIL E | PER CMS | | | 40 | | 40 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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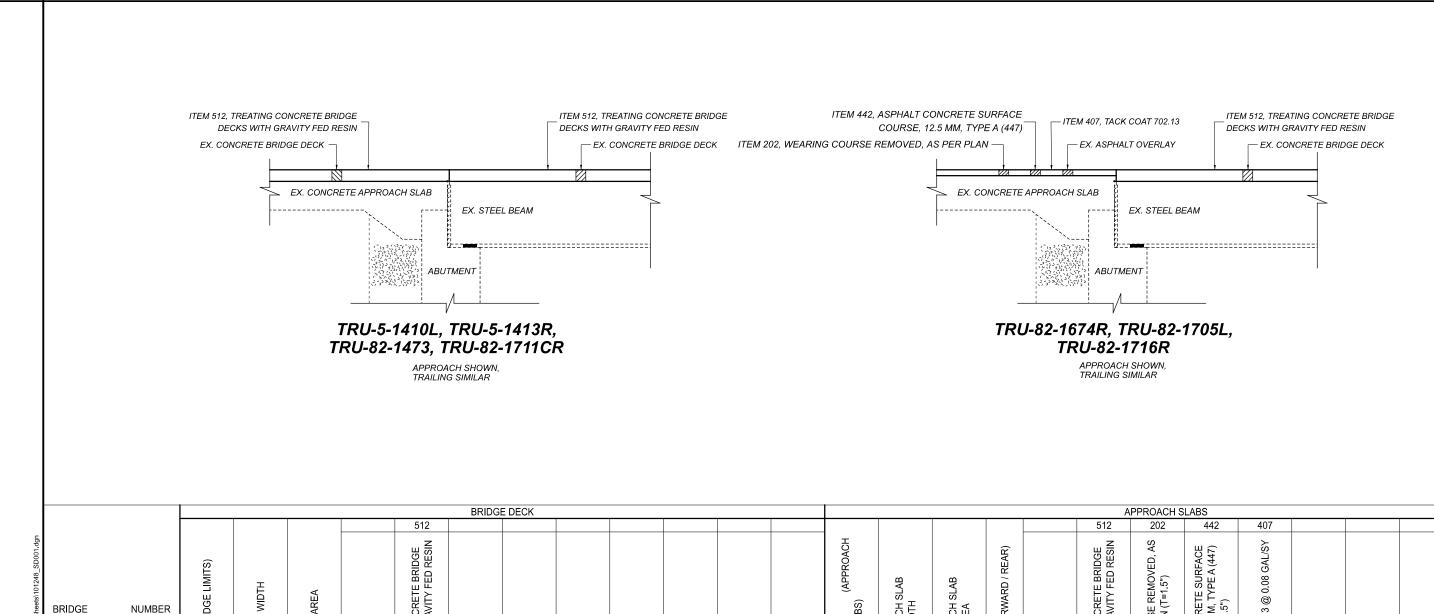
STRUCTURE DETAILS BRIDGE NO, : TRU-5-410L, TRU-5-1413R, TRU-82-1473, TRU-82-1625, TRU-82-1674R, TRU-82-1690L, TRU-82-1716R, TRU-82-1716CR



CMW MAC 11-29-21

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SHEET TOTAL P.16 17



| | | DEC | | NCRETE BRIDGI AVITY FED RESII GE DECK → | | DECKS WITH GRAVITY FED F | RESIN | | | 2.5 MM, TYPE A (447) AS PER PLAN — | TIEM 407, TACK EX. ASPHAL | COAT 702.13 | TIEM 512, TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN EX. CONCRETE BRIDGE DECK | |
|--------|----------|------------------------|--------------|---|---|--------------------------|-------|---------------------|------------------------|--|---|--|---|----------------------|
| | | | | | | | | | - | EX. CONCRETE APPL | ROACH SLAB | EX. STEEL BEAM | | |
| | | | | TF TR | RU-5-1410L, TRU-5-1 U-82-1473, TRU-82-1 APPROACH SHOWN, TRAILING SIMILAR | 413R, 711CR | | | | TRU-8 | | RU-82-1705L 716R | -, | TURE SEALING DETAILS |
| | | | | | BRIDGE D | DECK | | | | | Α | APPROACH SLABS | | STRUCTURE |
| BRIDGE | NUMBER | LENGTH (BRIDGE LIMITS) | BRIDGE WIDTH | DECK AREA | TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN 212 | | | TH (APPROACH SLABS) | APPROACH SLAB WIDTH | APPROACH SLAB AREA APPROACH (FORWARD / REAR) | TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN T | NG COURSE REMOVED, AS OR PER PLAN (T=1.5") ALT CONCRETE SURFACE SE, 12.5 MM, TYPE A (447) T=1.5" | COAT, 702.13 @ 0.08 GAL/SY & | o |
| | | FT | FT | SQ YD | SY SY | | | LENGTH | FT | SQYD | SA DECK | WEARII ASPH, | Y GAL | |
| TRU-5 | -5-1410L | 222.00 | 42.00 | 1036.00 | 1036.00 | | | 25.00 27.00 | 42.00 42.00 | 116.67 FORW 126.00 REAR | 116.67 126.00 | | | |
| TRU-5 | 5-1413R | 223.00 | 54.50 | 1350.39 | 1350.39 | | | 28.00 25.00 | 61.00 48.00 | 189.78 FORW 133.33 REAR | 189.78 133.33 | | | |
| TRU-8 | -82-1473 | 200.00 | 38,00 | 844.44 | 844.44 | | | 28.00 25.00 | 26.00 24.00 | 80.89 FORW 66.67 REAR | 80.89 66.67 | | | DESIGN |
| TRU-82 | 32-1674R | 250.00 | 40.00 | 1111.11 | 1111.11 | | | 25.00 25.00 | 38.50 38.50 | 106.94 FORW 106.94 REAR | | 106.94 53.47 106.94 53.47 | | |
| | 82-1705L | 266.00 | 39.00 | 1152.67 | 1152.67 | | | 25.00 25.00 | 38.50 38.50 | 106.94 FORW 106.94 REAR | | 106.94 53.47 106.94 53.47 | | DESIG |
| | 2-1711CR | 205.00 | 70.00 | 1594.44 | 1594.44 | | | 26.00 26.00 | 70.00 70.00 | 202.22 FORW 202.22 REAR | 202.22 | | | F MAC |
| TRU-83 | 32-1716R | 120.00 | 65.00 | 866.67 | 866.67 | | | 25.00 25.00 | 40.71 | 113.08 FORW 113.08 REAR | | 113.08 56.54 113.08 56.54 | | SUBSE 5 |
| | | | | TOTALS | 7956 | | | | | TOTALS | 1118 | 654 327 | 53 | P.1 |

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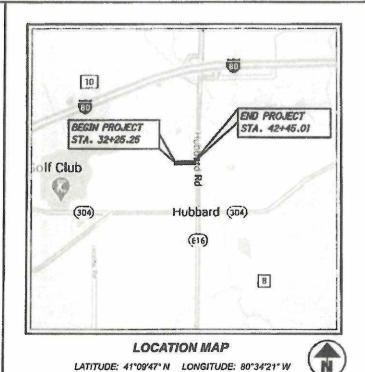
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PART



STATE OF OHIO **DEPARTMENT OF TRANSPORTATION** TRU-MYRON ST-SIDEWALK PART 2

CITY OF HUBBARD TRUMBULL COUNTY FOR PART 1, SEE TRU-5/82-13.94/13.88

INDEX OF SHEETS:

| TITLE SHEET | P.1 |
|------------------------|-------------|
| TYPICAL SECTIONS | P.2 |
| GENERAL NOTES | P.3 - P.4 |
| MAINTENANCE OF TRAFFIC | P.5 |
| GENERAL SUMMARY | P.6 |
| SUBSUMMARY | P.7 |
| PLAN AND PROFILE | P.8 - P.10 |
| CROSS SECTIONS | P.11 - P.18 |
| INTERSECTION DETAILS | P.19 - P.20 |
| DRIVE DETAILS | P.21 - P.22 |
| RETAINING WALLS | P.23 - P.26 |
| TRAFFIC CONTROL | P.27 - P.28 |
| RIGHT-OF-WAY PLANS | P.29 - P.37 |
| SOIL BORING LOG | P.38 - P.39 |

FEDERAL PROJECT NUMBER

E190727

RAILROAD INVOLVEMENT

PROJECT DESCRIPTION

PROJECT CONSISTS OF THE CONSTRUCTION OF 955 FT OF SIDEWALK ALONG MYRON STREET IN THE CITY OF HUBBARD, OHIO.

ADDITIONAL WORK INCLUDES RETAINING WALL, CURBING, CURB RAMPS, DRIVE IMPROVEMENTS, FIRE HYDRANT RELOCATIONS AND MAINTENANCE OF TRAFFIC.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.31 ACRES ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.13 ACRES NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)

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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

PORTION TO BE IMPROVED INTERSTATE HIGHWAY FEDERAL ROUTES STATE ROUTES COUNTY & TOWNSHIP ROADS OTHER ROADS **DESIGN DESIGNATION** CURRENT ADT (20) DIRECTIONAL DISTRIBUTION N/A TRUCKS (24 HOUR B&C) N/A

DESIGN FUNCTIONAL CLASSIFICATION: 07 LOCAL ROADS (URBAN) NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

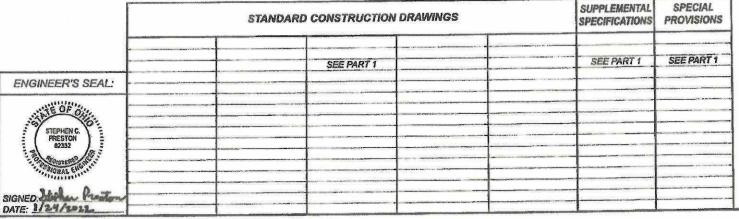
ADA DESIGN WAIVERS

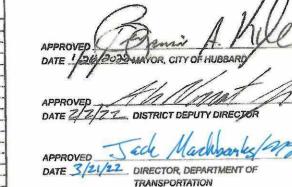
NONE



PLAN PREPARED BY: ms consultants, inc.

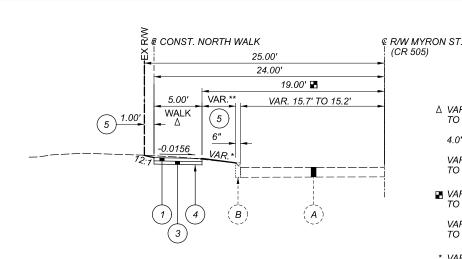
ENGINEERS, ARCHITECTS & PLANNERS
338 E, FEDERAL STREET
YOUNGSTOWN, OHIO 44503
PHONE (200) 744-5521





MASN WG 12/13/21

101248 P.1 39



Δ VARIES FROM 5.0' @ STA. 10+30.51 TO 4.0' @ STA. 10+31.51

4.0' FROM STA. 10+31.51 TO STA. 10+36.51

VARIES FROM 4.0' @ STA. 10+36.51 TO 5.0' @ STA. 10+37.51

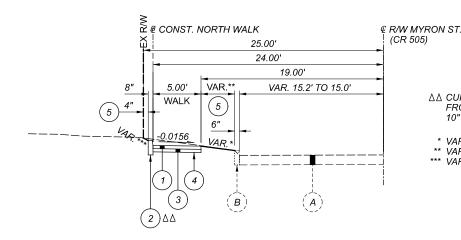
■ VARIES FROM 19.0' @ STA. 10+30.51 TO 18.0' @ STA. 10+31.51

VARIES FROM 18.0' @ STA. 10+36.51 TO 19.0' @ STA. 10+37.51

* VARIES FROM -0.075 TO -0.143 ** VARIES FROM 2.6' TO 3.4'

MYRON STREET NORTH WALK TYPICAL SECTION

Sta. 10+12.04 TO Sta. 10+47.00



 $\Delta\Delta$ CURB, TYPE 7 HEIGHT TRANSITIONS FROM 0" AT STA. 10+47.00 TO 10" AT STA. 10+58.34

* VARIES FROM -0.143 TO -0.0763

** VARIES FROM 3.4' TO 3.6'

*** VARIES FROM 12:1 to 7:1

MYRON STREET NORTH WALK TYPICAL SECTION

Sta. 10+47.00 TO Sta. 10+63.34

EXISTING LEGEND

- (A) EXISTING PAVEMENT
- (B) EXISTING CURB

PROPOSED LEGEND

- (1) ITEM 608 4" CONCRETE WALK, AS PER PLAN
- (2) ITEM 609 CURB, TYPE 7, AS PER PLAN
- (3) ITEM 304 AGGREGATE BASE (4" DEPTH) ♦
- (4) ITEM 204 SUBGRADE COMPACTION
- (5) ITEM 659 SEEDING AND MULCHING
- (6) ITEM 609 CURB, TYPE 6

■■ VARIES FROM 18.0' @ STA. 24+08.52 TO 13.7' @ STA. 24+33.43

■■■ *VARIES FROM 14.1'* @ STA. 23+28.65

13.7' FROM STA. 24+33.43 TO STA. 25+14.87

VARIES FROM 13.95' @ STA. 26+06.88 TO 18.0' @ STA. 26+31.79

TO 13.1' @ STA. 25+14.88

VARIES FROM 13.0' @ STA. 25+96.88 TO 13.7' @ STA. 28+49.48

FOR STA. 28+49.48 TO STA. 29+00.24 SEE INTERSECTION DETAIL SHEET P.17

* VARIES FROM 0.01 TO 0.111

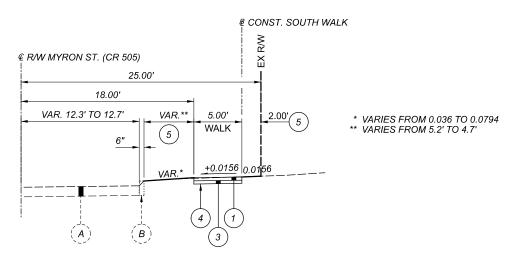
** 2:1 FROM STA. 23+92.64 TO STA. 25+14.87

€ R/W MYRON ST. (CR 505) 25.00' ΔΔΔ CURB, TYPE 6 FROM STA. 19+98.34 18.00 TO STA. 20+15.51 VAR. 12.1' TO 12.3' VAR.** 2.00'(5) 5.00' * VARIES FROM 0.06 to 0.0763 WALK ** VARIES FROM 5.4' TO 5.2' +0.0156 YAR.*-T PROP. WALL $(6)\Delta\Delta\Delta$ **MYRON STREET**

₽ CONST. SOUTH WALK

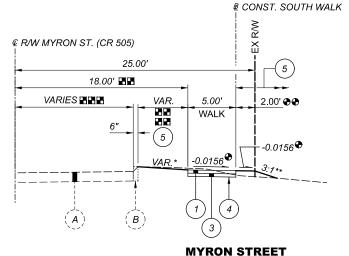
SOUTH WALK TYPICAL SECTION

Sta. 20+00.00 TO Sta. 20+57.30



MYRON STREET SOUTH WALK TYPICAL SECTION

Sta. 20+57.30 TO Sta. 22+69.87



SOUTH WALK TYPICAL SECTION

Sta. 23+28.65 TO Sta. 25+14.88 Sta. 25+96.88 TO Sta. 28+49.48 ◆ VARIES FROM -0.0156 AT Sta. 24+60.00 TO +0.0156 AT Sta. 24+83.00

+0.0156 FROM Sta. 24+83.00 TO Sta. 25+14.87

VARIES FROM +0.0156 AT Sta. 25+96.88 TO -0.0156 AT Sta. 26+06.88

♦♦ VARIES FROM 2.0' @ STA. 24+08.52 TO 6.8' @ STA. 24+33.43

6.8' FROM STA. 24+33.43 TO STA. 25+14.87

VARIES FROM 6.6' @ STA. 25+96.88 TO 2.0' @ STA. 26+31.79

■■ VARIES FROM 4.5' @ STA. 24+08.52 ■■ TO 0'@ STA. 24+33.43

> 0' FROM STA. 24+33.43 TO STA. 25+14.87 AND FROM STA. 25+96.88 TO STA. 26+06.88

VARIES FROM 0' @ STA. 26+06.88 TO 3.8' @ STA. 26+31.79

FOR DROPPED CURB LOCATIONS SEE DRIVE DETAIL SHEETS P.21 TO P.22

♦ PER CMS 608.09, COST OF PROVIDING AND PLACING AGGREGATE BASE IS INCLUDED IN THE COST OF THE CONC.

ms

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P.2 39

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT

UTILITIES

CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE

DOMINION ENERGY OHIO 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OHIO 44333 ATTN: UMBERTO POLIZZI EMAIL: UMBERTO.POLIZZI@DOMINIONENERGY.COM PH 330-812-7355

CITY OF HUBBARD ELECTRIC DEPARTMENT 820 NORTH MAIN STREET HUBBARD, OHIO 44425-0307 ATTN: EDWARD PALESTRO, FOREMAN PH: 330-534-6281

CITY OF HUBBARD WATER DEPARTMENT 820 NORTH MAIN STREET HUBBARD, OHIO 44425-0307 ATTN: BOB DIETZ, FOREMAN PH: 330-534-3636

CITY OF HUBBARD WASTEWATER DEPARTMENT 2651 ELMWOOD DRIVE EXT HUBBARD, OHIO 44425-0307 ATTN: MARK CICCONE, SUPERINTENDENT PH: 330-534-6291

THE OHIO BELL TELEPHONE COMPANY ATTN: TORRICE ROBINSON 50 W BOWERY STREET **6TH FLOOR AKRON, OH 44308** EMAIL: TR3463@ATT.COM PH: 330-384-9851 CELL: 330-734-5117

CHARTER COMMUNICATIONS D.B.A. SPECTRUM 4352 YOUNGSTOWN ROAD, SE WARREN, OHIO 44484 ATTN: FRANK DILLON EMAIL: FRANK.DILLON@CHARTER.COM PH: 330-369-7164

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ODOT UTILITY COORDINATOR MATTHEW STEELE (330) 786-4832

MS CONSULTANTS, INC. JUSTIN KUCZYNSKI, P.E (330)744-5321

DOMINION ENERGY OHIO

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN LATERAL AND SUBJACENT SUPPORT OF DOMINION'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION AND SHORTING). ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DOMINION ENERGY OHIO (DEO) EXISTING (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES AND DEVICES, VALVE BOXES, ETC.). DEO FACILITIES MUST BE PROTECTED WITH A TARP DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL DEO EXISTING FACILITIES. ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF DEO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING DEO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (990-266-2121), RICK McDONALD (330-266-2122), OR AL HUMRICHOUSER (330-478-3757).

CONSTRUCTION NOISE

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

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. USE THE FOLLOWING PROJECT CONTROL. VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

ODOT VRS DATA COLLECTION PER 502.2.H OF SURVEY MANUAL POSITIONING METHOD: MONUMENT TYPE: PROJECT CONTROL MONUMENT VERTICAL POSITIONING ORTHOMETRIC HEIGHT DATUM: NAVD88

GEOID 12B

GEOID:

HORIZONTAL POSITIONING REFERENCE FRAME: NAD83 (2011) ELLIPSOID: LAMBERT CONFORMAL CONIC MAP PROJECTION: COORDINATE SYSTEM: **OHIO STATE PLANE** NORTH ZONE (3401) COMBINED SCALE FACTOR: 1.0000000000 ORIGIN OF SCALE (X,Y): EASTING (X): 0, NORTHING (Y): 0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623. UNITS ARE IN U.S. SURVEY FEET.

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

- 1) IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
- a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
- b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
- c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ITEM SPECIAL - SURVEY CONTROL VERIFICATION (CONT.)

- 2) IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
- a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
- b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDE IN
- c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM FOR ITEM SPECIAL - SURVEY CONTROL VERIFICATION.

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.

CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

| SIZES | NO. TREES | NO. STUMPS | TOTAL |
|-------|-----------|------------|-------|
| 18" | | 2 | 3 |
| 30" | 2 | | 2 |

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL THE CONSTRUCTION LIMITS ARE IDENTIFIED ON THE PLAN SHEETS.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

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

DRIVEWAY REMOVAL

THE CONTRACTOR SHALL EXERCISE CARE IN THE REMOVAL OF EXISTING DRIVES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING DRIVEWAY MATERIAL. INSTALL TOPSOIL AND SEED AND MULCH PER ODOT ITEM 659 AROUND EACH DRIVEWAY AS NEEDED. PAYMENT FOR ALL WORK NECESSARY TO PERFORM THE ABOVE RESTORATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE ITEM. ANY GRADE ADJUSTMENT REQUIRING EXCAVATION OR EMBANKMENT SHALL BE INCLUDED UNDER ITEM 204- LINEAR GRADING. AS PER PLAN. DRIVEWAYS OR CONCRETE CURB TO BE REMOVED SHALL BE SAW CUT. FULL DEPTH, AT THE REMOVAL LIMITS TO PROVIDE A STRAIGHT, CLEAN LINE FOR RESTORATION AS DIRECTED BY ODOT CMS SECTION 202.05.

COMMUNITY NOTIFICATION

THE CITY OF HUBBARD WILL NOTIFY THE LOCAL PUBLIC SERVICES AND COMMUNITY A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE OF THE START OF PROJECT CONSTRUCTION.

SAFETY OF ADJACENT STRUCTURES

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO ENSURE THE SAFETY OF EXISTING STRUCTURES AND SHALL NOT CAUSE EXCESSIVE VIBRATIONS. IF ANY DAMAGE IS DONE DUE TO WORK OPERATIONS THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGES AND SHALL REPLACE OR REPAIR SUCH DAMAGE AS DIRECTED BY THE OWNER AND AT THE CONTRACTOR'S EXPENSE.

SITE AND STREET CLEANING

AS THE WORK PROGRESSES, KEEP THE WORK AREA AND STRUCTURES FREE FROM ACCUMULATION OF WASTE MATERIALS AND RUBBISH. TEAR DOWN AND REMOVE ALL TEMPORARY STRUCTURES CONSTRUCTED BY THE CONTRACTOR AND REPAIR ANY EXISTING FACILITIES THAT WERE DAMAGED DURING THE CONSTRUCTION PROCESS. REMOVE ALL DEBRIS FROM THE SITE AS FREQUENTLY AS JOB CONDITIONS AND SAFETY ASPECTS REQUIRE, BUT IN NO CASE LESS THAN DAILY, CLEAN ALL STRUCTURES AND EQUIPMENT TO ENSURE THAT THE GROUNDS ARE IN A CLEAN AND NEAT CONDITION.

REMOVE AS REQUIRED, BUT NOT LESS THAN DAILY, ALL MUD. SOIL AND DEBRIS THAT MAY BE DEPOSITED ONTO THE EXISTING ROADWAYS, STREETS, DRIVES OR WALKS BY ANY PROJECT CONTRACTOR OR SUPPLIER, OR AS DIRECTED BY THE OWNER.

ITEM 204 - EXCAVATION OF SUBGRADE, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE, REGARDLESS OF MATERIAL, TO AN AVERAGE DEPTH OF 6 INCHES BEYOND THE DEPTH NECESSARY FOR PROPOSED SIDEWALK AND AGGREGATE BASE OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. THE EXCAVATED AREA SHALL BE BACKFILLED WITH GRANULAR MATERIAL, TYPE B. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 204. EXCAVATION OF SUBGRADE. AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 204, EXCAVATION OF SUBGRADE, AS PER PLAN ITEM 204. GRANULAR MATERIAL. TYPE B

15 CY 15 CY

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ITEM 209 - LINEAR GRADING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 209, THE CONTRACTOR SHALL PERFORM THE GRADING, INCLUDING ALL PROJECT EXCAVATION AND EMBANKMENT CONSTRUCTION FOR SIDEWALK, CURB RAMPS, CURB, WALL, AND DRIVE CONSTRUCTION REGARDLESS OF THE MATERIAL ENCOUNTERED IN ACCORDANCE WITH THE TYPICAL SECTIONS AND DETAILS. THE CONTRACTOR SHALL PROVIDE FOR POSITIVE DRAINAGE TO CATCH BASINS AND OPEN CONDUIT.

THIS ITEM INCLUDES GRADING THE AREAS TO BE SEEDED MADE NECESSARY BY THE REMOVAL OF THE EXISTING WALK. CONSTRUCTION OF THE NEW WALK, DRIVE ADJUSTMENTS, CURB, WALL, AND CURB RAMPS.

THE FOLLOWING QUANTITY HAS BEEN ESTABLISHED FROM THE PLAN SHEETS AND HAS BEEN CARRIED TO THE GENERAL

ITEM 209-LINEAR GRADING, AS PER PLAN

10 STA.

PAYMENT SHALL INCLUDE ALL EXCAVATION, EMBANKMENT, LABOR. EQUIPMENT AND MATERIAL COMPLETE IN PLACE TO THE SATISFACTION OF THE ENGINEER TO PERFORM THE WORK AS DESCRIBED ABOVE, SHOWN IN THE TYPICAL SECTIONS AND SHOWN IN THE CROSS SECTIONS.

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN <u> ITEM 608 - 6" CONCRETE WALK, AS PER PLAN</u> ITEM 608 - 8" CONCRETE WALK, AS PER PLAN

IN ADDITION TO PLACING THE EXPANSION JOINT MATERIAL AS SPECIFIED IN CMS ITEM 608, THE CONTRACTOR SHALL INSTALL 1/2-INCH THICK EXPANSION JOINT MATERIAL (705.03) AT ALL LOCATIONS WHERE THE WALK ABUTS ROADWAY AND DRIVE CEMENT CONCRETE PAVEMENT, CURB, AND EXISTING SIDEWALK IN BOTH THE TRANSVERSE AND LONGITUDINAL DIRECTIONS RELATIVE TO THE WALK. ALSO, THE CONTRACTOR SHALL INSTALL 1/2-INCH THICK EXPANSION JOINT MATERIAL (705.03) WHERE THE 4" CONCRETE WALK SECTIONS ABUT THE 6" AND 8" CONCRETE WALK SECTIONS AND IN A TRANSVERSE DIRECTION AT MAXIMUM INTERVALS OF 20 FT ALONG THE LENGTH OF THE WALK. AN ESTIMATED QUANTITY OF 360 FT. OF ADDITIONAL 1/2-INCH THICK EXPANSION JOINT MATERIAL IS NEEDED TO COMPLETE THE WORK AS DESCRIBED. THE CONTRACTOR SHALL VERIFY THIS QUANTITY PRIOR TO PLACING HIS BID AND WILL NOT BE SUBJECT TO ADDITIONAL COMPENSATION IF THE ACTUAL QUANTITY OF EXPANSION JOINT MATERIAL DIFFERS FROM THIS ESTIMATED AMOUNT.

ALSO, FOR THE 6" CONCRETE WALK, AS PER PLAN AND 8" CONCRETE WALK, AS PER PLAN ITEMS, IN ORDER TO REDUCE THE LENGTH OF TIME RESIDENTS AND BUSINESSES WILL NOT HAVE ACCESS TO THEIR DRIVES, THE CONCRETE WALK THROUGH THE DRIVE LIMITS QUANTIFIED AS ITEM 608 - 6" CONCRETE WALK, AS PER PLAN AND ITEM 608 - 8" CONCRETE WALK. AS PER PLAN WILL BE CONSTRUCTED USING CLASS OC MS CONCRETE, CURING TIMES WILL FOLLOW THE REQUIREMENTS SPECIFIED FOR THIS CONCRETE TYPE.

ITEM 609 - CURB, TYPE 7, AS PER PLAN

THIS ITEM OF WORK IS TO BE CONSTRUCTED PER ITEM 609 AND AS DETAILED IN SCD BP-5.1, EXCEPT FOR THE FOLLOWING:

- THE TOTAL DEPTH OF THE CURB BENEATH THE WALKING SURFACE SHOULD BE A MINIMUM OF 10".
- THE HEIGHT OF THE CURB SHALL MATCH THE VARIANCE INDICATED IN THE TYPICAL SECTIONS.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 609 CURB, TYPE 7, AS PER PLAN.

SEEDING AND MULCHING

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

| 659, SOIL ANALYSIS TEST | 2 EACH |
|----------------------------------|----------|
| 659, TOPSOIL | 169 CY |
| 659, REPAIR SEEDING AND MULCHING | 76 SY |
| 659, INTER-SEEDING | 76 SY |
| 659, COMMERCIAL FERTILIZER | 0.21 TON |
| 659, LIME | 0.31 AC |
| 659, WATER | 8 MGAL |
| | |

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.

ENDANGERED SPECIES HABITAT -INDIANA BAT/NORTHERN LONG-EARED BAT

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED AT THE PROJECT LOCATION FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THE CONTRACTOR SHALL DEMARCATE CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE FNDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT. WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

REVIEW OF DRAINAGE FACILITIES

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

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS

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

611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS 50 FT 605, 6" UNCLASSIFIED PIPE UNDERDRAINS 50 FT

UNRECORDED STORM WATER DRAINAGE

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT UNDER NEW WALK THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

611 - 4" CONDUIT, TYPE E (FOR DRAINAGE CONNECTION) 611 - 6" CONDUIT, TYPE E (FOR DRAINAGE CONNECTION)

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

THIS ITEM OF WORK SHALL BE IN ACCORDANCE WITH ODOT ITEM 253 AND AS SPECIFICALLY AMENDED HEREIN.

THE INTENT OF THIS ITEM OF WORK IS TO ENSURE EXISTING PAVEMENT MEETS GRADE BREAK REQUIREMENTS AT CURB RAMPS AND TO REPAIR SURFACE COURSE PAVEMENT DAMAGE WHERE SAWCUTTING AND REMOVAL OCCURS IN ASSOCIATION WITH CURB, CURB RAMP, AND DRIVEWAY CONSTRUCTION IN LOCATIONS AS DIRECTED BY THE ENGINEER.

THE DEPTH OF PAVEMENT REPAIR SHALL BE 1.5". TRIM THE LIMITS TO FORM A VERTICAL FACE.

REPLACEMENT ASPHALT SHALL BE ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22. ITEM 407 TACK COAT SHALL BE APPLIED TO ALL NEWLY EXPOSED SURFACES (0.08 GAL/SY) PRIOR TO PLACING ASPHALT. COST OF THE SURFACE COURSE AND TACK COAT ARE INCLUDED IN THE PAVEMENT REPAIR, AS PER PLAN ITEM.

THE FOLLOWING QUANTITY HAS BEEN ADDED TO THE GENERAL SUMMARY FOR USE. AS DIRECTED BY THE ENGINEER.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

35 SY

SIDEWALK NOTES:

- ALL PROPOSED CONCRETE WALK SHALL BE 5'-0" WIDE UNLESS INDICATED OTHERWISE.
- 2. CONCRETE AND OR ASPHALT REMOVED IS TO BE HAULED OFFSITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR. EXCAVATED SOIL MATERIAL IS TO BE USED ONSITE AS DIRECTED BY THE ENGINEER, EXCESS MATERIAL NOT USED IS TO BE REMOVED OFFSITE AND DISPOSED OF BY THE CONTRACTOR.
- 3. IF CONTRACTOR CONSTRUCTS WALK DURING PERIODS OF COLD TEMPERATURES, THE WALK MUST BE PROTECTED FROM FROST AND COLD BY COVERING THE WALK WITH BLANKETS, ESPECIALLY AT NIGHT, THIS WORK SHALL BE DONE AT NO ADDITIONAL COST TO THE PROJECT.



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ST-SIDEWALK PART **RU-MYRON**

ITEM 614, MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), CURRENT EDITION, LATEST REVISION, ODOT C&MS SPECIFICATIONS, AND AS FOLLOWS.

- 1. A MINIMUM OF ONE 10 FT. LANE SHALL BE MAINTAINED ON MYRON STREET AT ALL TIMES DURING ACTIVE WORKING HOURS UTILIZING FLAGGERS PER MT-97.10. DURING NON-WORKING HOURS, BOTH LANES OF MYRON STREET SHALL REOPEN TO TRAFFIC.
- 2. IN THE EVENT THAT THE SOUTHBOUND CURB LANE OF N. MAIN STREET (SR 7/US 62) MUST BE CLOSED DURING WORKING HOURS TO RECONSTRUCT THE CURB RAMP ON THE SW CORNER OF N. MAIN ST. & MYRON ST., THE LANE SHALL BE CLOSED UTILIZING MT-95.31. ALL LANES OF N. MAIN ST. SHALL BE OPEN TO TRAFFIC DURING NON-WORKING HOURS
- 3. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
- 4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
- 5. ALL PULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS PER STANDARD CONSTRUCTION DRAWING MT-101.90.

MAINTAINING SIDE STREETS

ALL SIDE STREETS SHALL HAVE CONTINUOUS, 2 LANE, BI-DIRECTIONAL ACCESS TO MYRON STREET, EXCEPT DURING CURB RAMP CONSTRUCTION WITHIN THE INTERSECTION AND ON THE SIDE STREET. TRAFFIC MAY BE RESTRICTED TO A SINGLE, BI-DIRECTIONAL LANE. THIS REQUIRES FLAGGER OPERATION IN ACCORDANCE WITH STANDARD DRAWING MT-97.10.

LOCAL ACCESS

INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL RESIDENTIAL AND COMMERCIAL PROPERTIES. DRIVEWAY CLOSURE MAY BE NECESSARY TO ENABLE WORK ON OR IN FRONT OF A DRIVE AND THAT ACCESS MAY BE RESTRICTED FOR A LIMITED AMOUNT OF TIME TO COMPLETE THE DRIVE WORK WITH SUFFICIENT TIME FOR CONCRETE STRENGTH GAIN. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING OWNERS, RESIDENTS, OR BUSINESS OPERATORS IN WRITING AT LEAST 48 HOURS BUT NOT MORE THAN 72 HOURS PRIOR TO CLOSURE. THE ENGINEER SHALL BE GIVEN A LIST OF THE PERSONS THAT WERE GIVEN NOTICES WITH THE DATE OF NOTICE INCLUDED. PROPERTIES WITH MULTIPLE DRIVES MAY HAVE ONE DRIVE CLOSED AT A TIME, WHILE WORK IS PERFORMED IN THE AREA OF THE CLOSED DRIVE.

INDIVIDUAL DRIVE CLOSURES SHALL BE KEPT TO THE MINIMUM TIME NEEDED FOR CONSTRUCTION ACTIVITIES. EVERY EFFORT MUST BE MADE TO ACCOMMODATE THE OWNER'S NEED FOR

PEDESTRIAN SAFETY

THE SAFETY OF PEDESTRIAN TRAFFIC SHALL BE CONSIDERED AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE LIGHTS, SIGNS, BARRICADES, AND OTHER DEVICES TO WARN AND PHYSICALLY SEPARATE THE PEDESTRIANS FROM HAZARDS INCIDENTAL TO THE CONSTRUCTION AND/OR INSTALLATION OF THE REQUIRED TRAFFIC CONTROL AND ROADWAY ITEMS SUCH AS ANCHOR BOLTS, OPEN EXCAVATIONS. ETC. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, SUCH PEDESTRIAN PROTECTION SHALL UTILIZE, BUT NOT BE LIMITED TO, DRUMS, TEMPORARY FENCE, TYPE 1, TYPE 2 OR TYPE 3 BARRICADES. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH STANDARD DRAWING MT-110.10.

PAYMENT

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 ITEMIZED IN THE

ITEM 614 MAINTAINING TRAFFIC

LUMP SUM

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER

1 MGAL

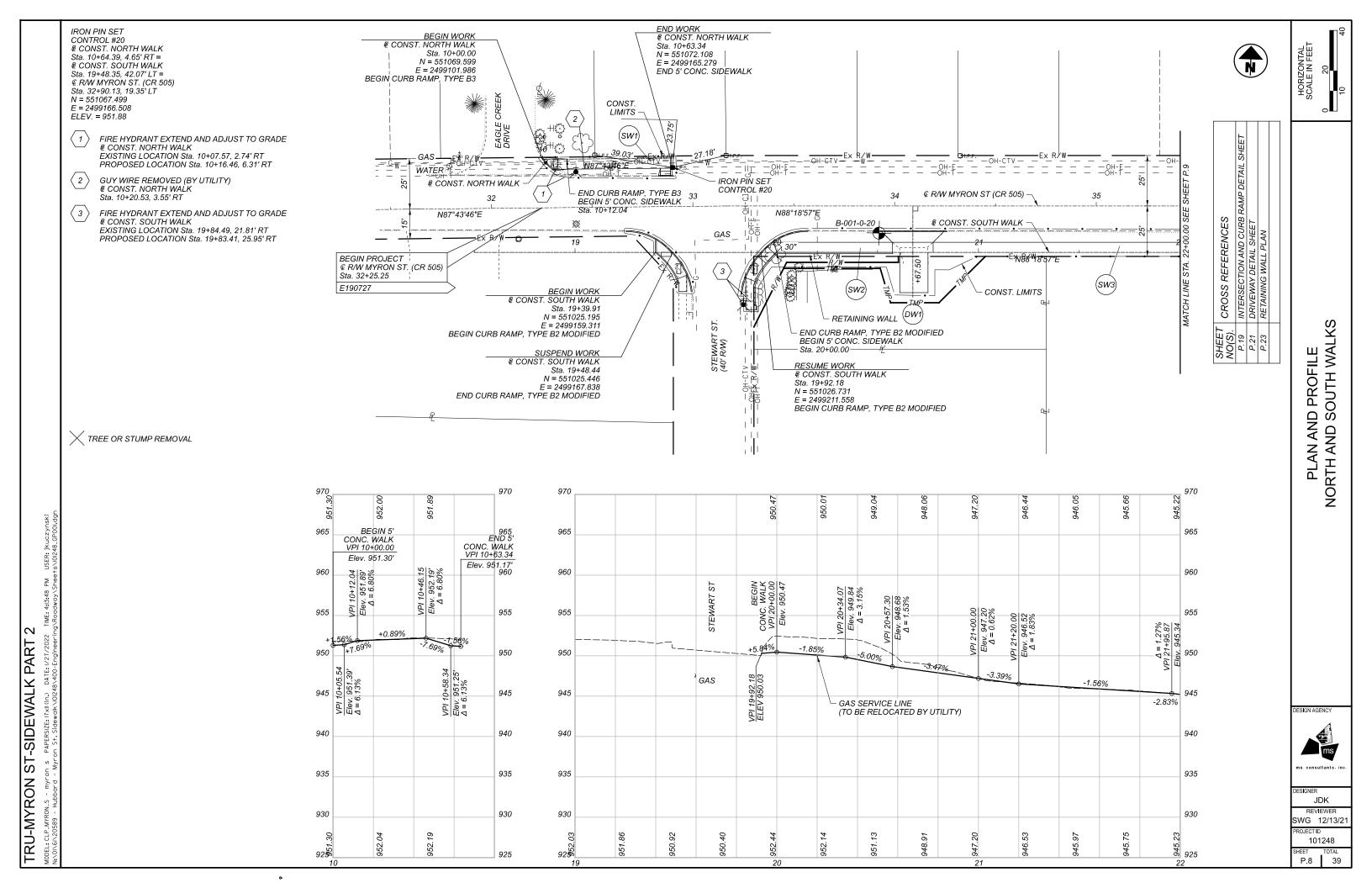


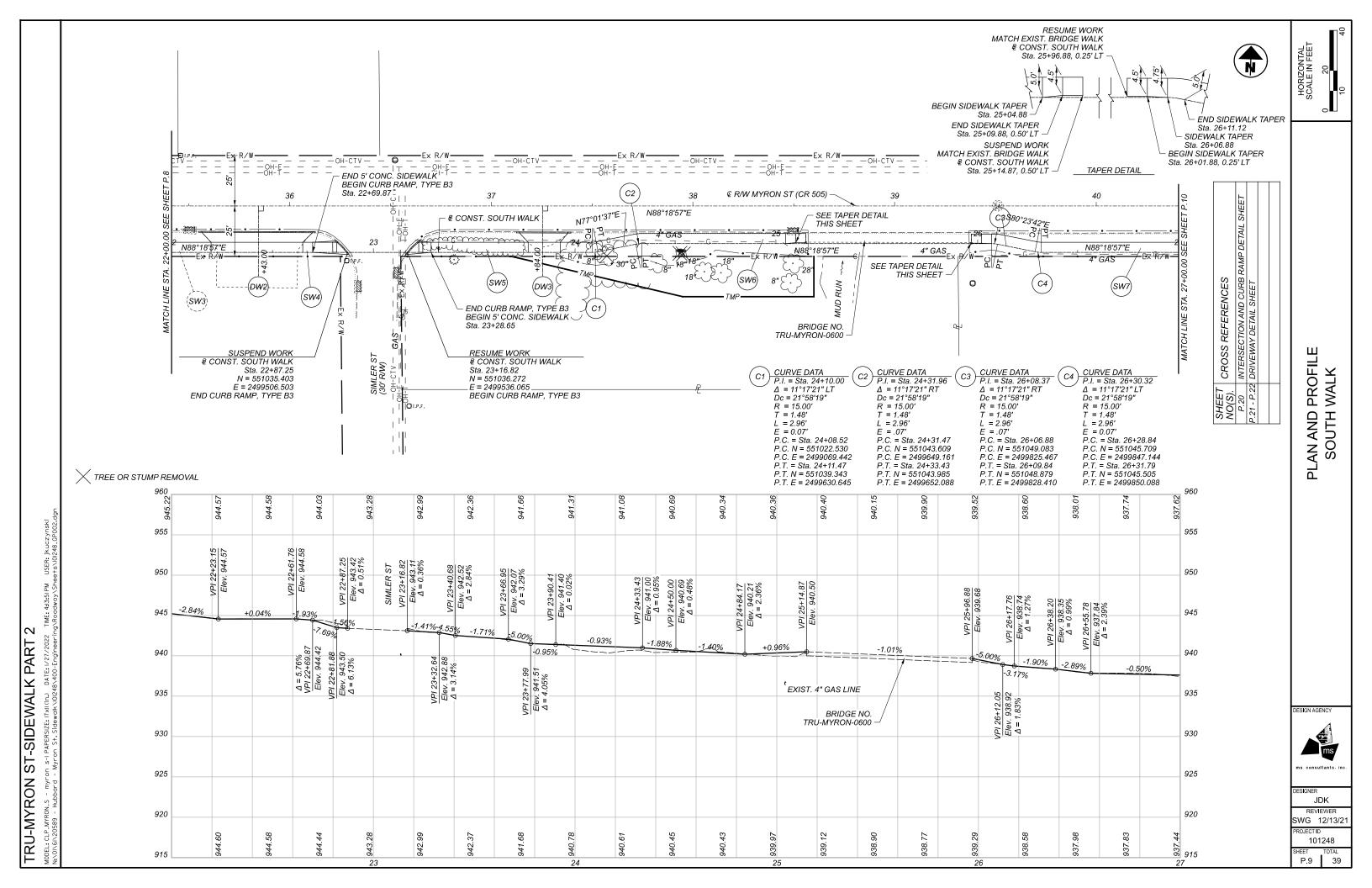
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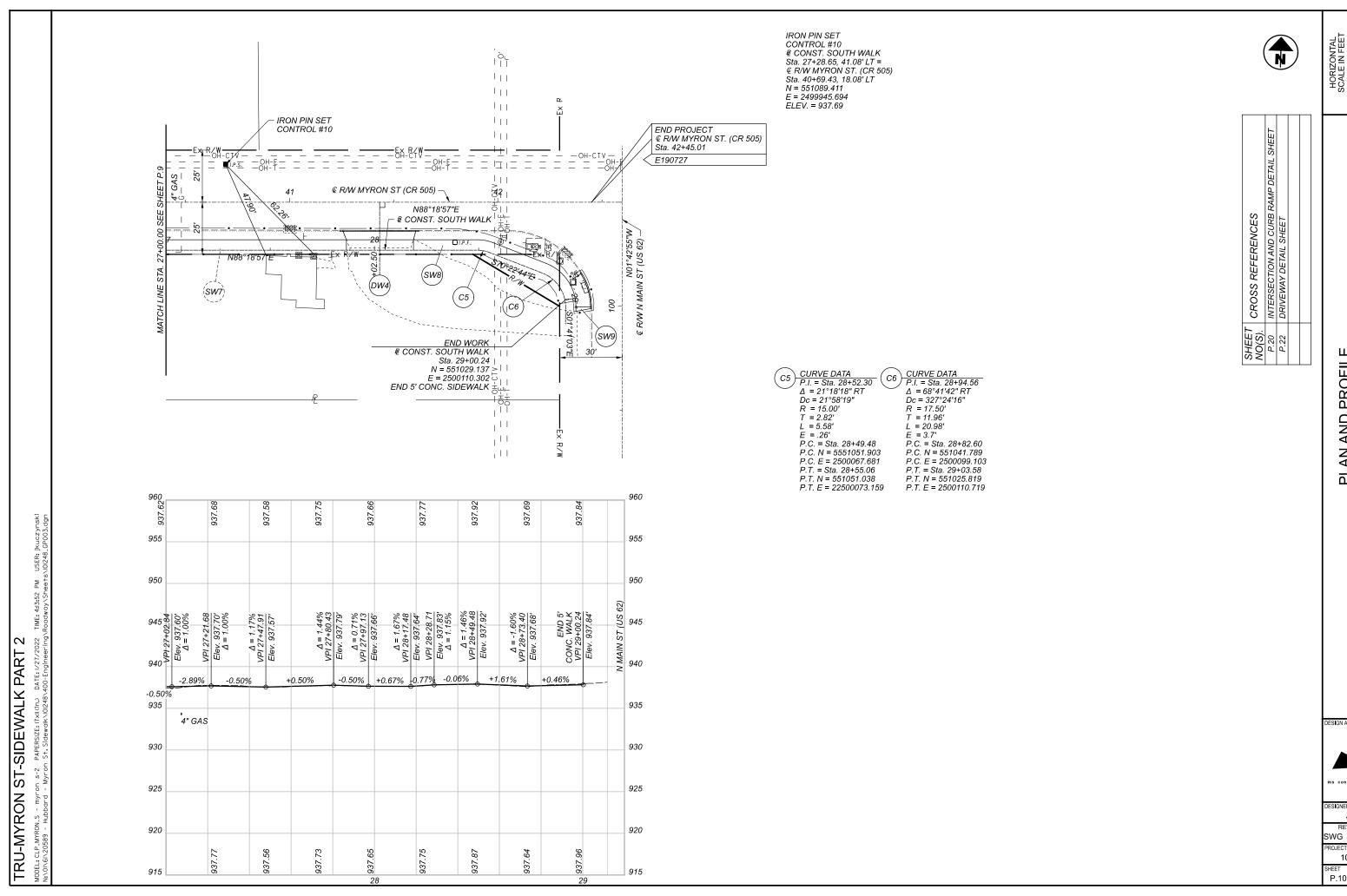
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|---|--|---|--|--|--|--|---|---|--|
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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE | EACH 1 | | | 1 | | | | | |
| CURB, TYPE 7, AS PER PLAN 69 | FT | 22 | | | | | | | |
| CURB, TYPE 6 | FT | | 16 9 | 9 19 | | | | 1 | |
| CURB RAMP 809 | SF 59 | 51 | 155 | 157 | 91 | 58 | | 106 | |
| 4" CONCRETE WALK, AS PER PLAN 809 | 225 | | | | 19 287 710 25 | 241 612 | 949 408 | 10 | |
| SUBGRADE COMPACTION P02 | SY 25 | | | | 2 32 79 3 | 27 68 | 105 45 | 1 | |
| CURB REMOVED | FT 10 | 7 | 49 | 51 | 10 | 10 | | 19 | |
| WALK REMOVED | SF | | 57 | 87 | | | 96 | | |
| TATION TO STATION | NORTH WALK LT TO 10+06.07 RT RT TO 10+58.34 RT T/RT RT | LT TO 10+63.34 RT RT TO 10+64.34 RT RT SOUTH WALK | T/RT TO 19+58.05 RT LT TO 19+58.05 RT LT TO 19+58.05 RT T/RT RT TO 19+55.38 RT | RT TO 20+15.51 LT RT TO 19+84.18 RT LT TO 20+15.51 LT RT RT TO 19+88.90 LT T/RT | RT TO 19+89.90 RT LT TO 20+57.30 LT LT TO 22+19.53 LT LT TO 22+69.87 LT T/RT LT TO 22+87.83 RT | RT TO 23+22.99 LT T/RT LT TO 23+76.73 LT LT TO 25+14.87 LT | LT TO 27+86.54 LT LT TO 29+00.24 LT LT TO 29+05.56 LT | LT TO 29+04.31 LT LT TO 29+04.31 LT LT TO 29+05.56 LT | |
| 10. | | 10+47.00 10+57.34 | 19+48.44 | 19+83.41 19+84.65 | 19+84.65 20+00.00 20+77.54 22+65.00 22+81.88 | 23+16.23 23+22.53 23+28.65 | 25+96.88 28+18.72 28+93.32 | 28+93.32 28+97.73 29+03.58 29+03.58 | |
| SHEE | R1 1 SW1 CR1 1 | C1 1 R2 1 CR2 1 | R3 1 1 C2 1 C3 1 CR3 1 R4 1 | R5 1 1 C4 1 C5 1 1 FH2 1 1 CR6 1 CR4 1 1 | W10 1 SW2 SW3 8 SW4 CR5 2 R7 2 | R8 2 CR6 2 SW5 | SW7 9- SW8 1 | R10 2 CR7 2 C6 2 SW9 1 | |







PLAN AND PROFILE SOUTH WALK

ms

JDK

SWG 12/13/21 101248

P.10 TOTAL 39

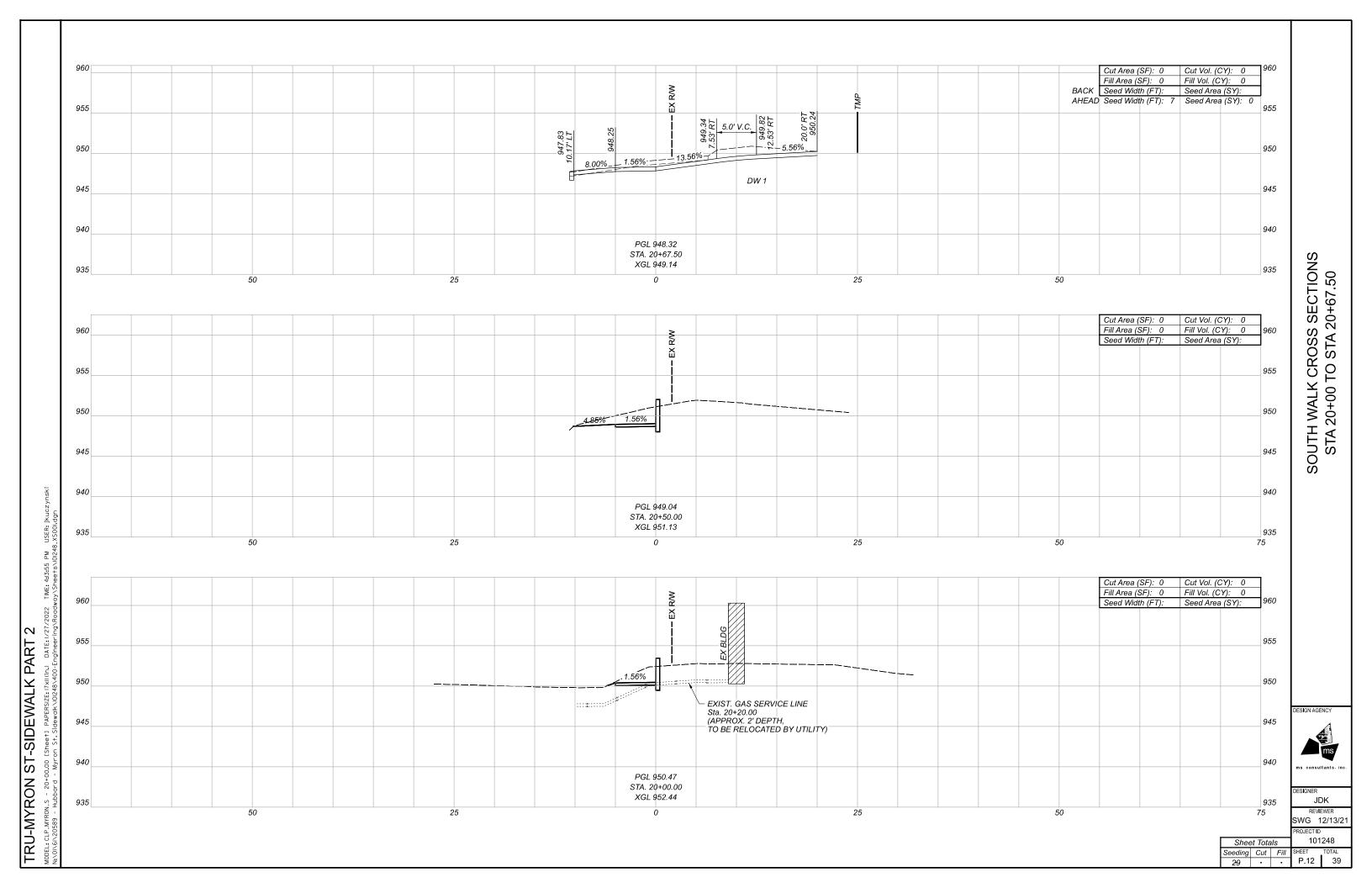
NOTE: ALL EMBANKMENT AND EXCAVATION WILL BE INCLUDED WITH ITEM 209 - LINEAR GRADING, AS PER PLAN. SEE GENERAL NOTES. NORTH SIDEWALK TOTALS SEEDING AND MULCHING, CLASS 1 24 TOTALS CARRIED TO CROSS SECTION SHEET P.18 Cut Area (SF): 0 Cut Vol. (CY): 0 960 Fill Area (SF): 0 Fill Vol. (CY): 0 Seed Area (SY): Seed Width (FT): 955 955 7:1 950 950 ∘ EXIST. GAS ∘ EXIST. WATER 945 945 PGL 951.18 STA. 10+63.00 XGL 952.05 940 940 25 25 50 75 Cut Area (SF): 0 Cut Vol. (CY): 0 Fill Area (SF): 0 Fill Vol. (CY): 0 Seed Width (FT): Seed Area (SY): 955 955 950 950 o EXIST. GAS o EXIST. WATER 945 945 PGL 951.89 TIME: 4:13:54 PM STA. 10+50.00 XGL 952.19 940 940 50 25 50 75 Cut Area (SF): 0 Cut Vol. (CY): 0 TRU-MYRON ST-SIDEWALK PART 2 Fill Area (SF): 0 Fill Vol. (CY): 0
Seed Width (FT): Seed Area (SY): 960 960 Ä 955 955 1.56% 7.50% 12:1-950 950 ∘ EXIST. GAS o EXIST. WATER 945 945 PGL 951.89 STA. 10+12.04 XGL 951.80 50 50 25 25 75 Sheet Totals Seeding Cut Fill
24 • •

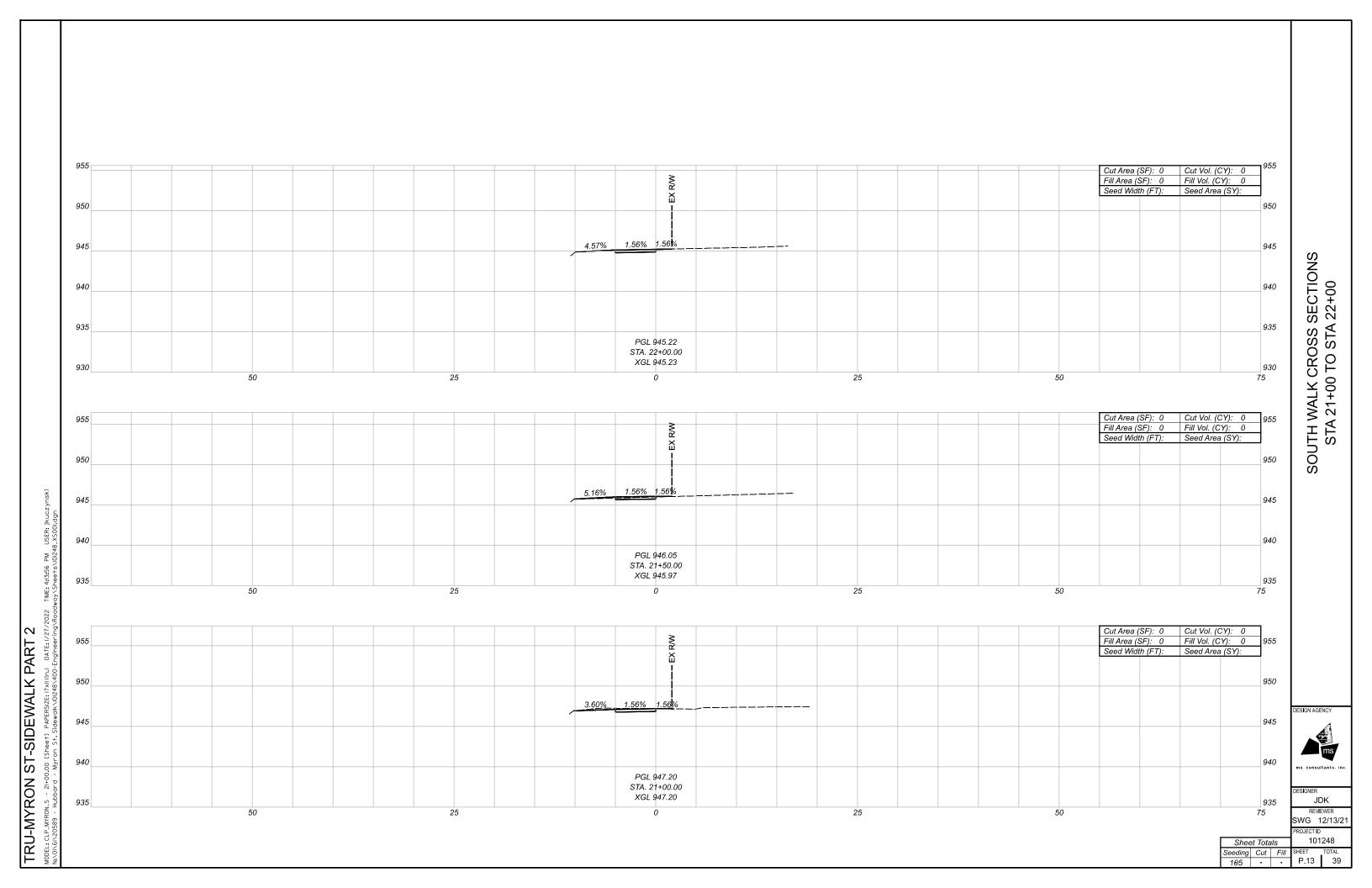
NORTH WALK CROSS SECTIONS STA 10+12.04 TO STA 10+63

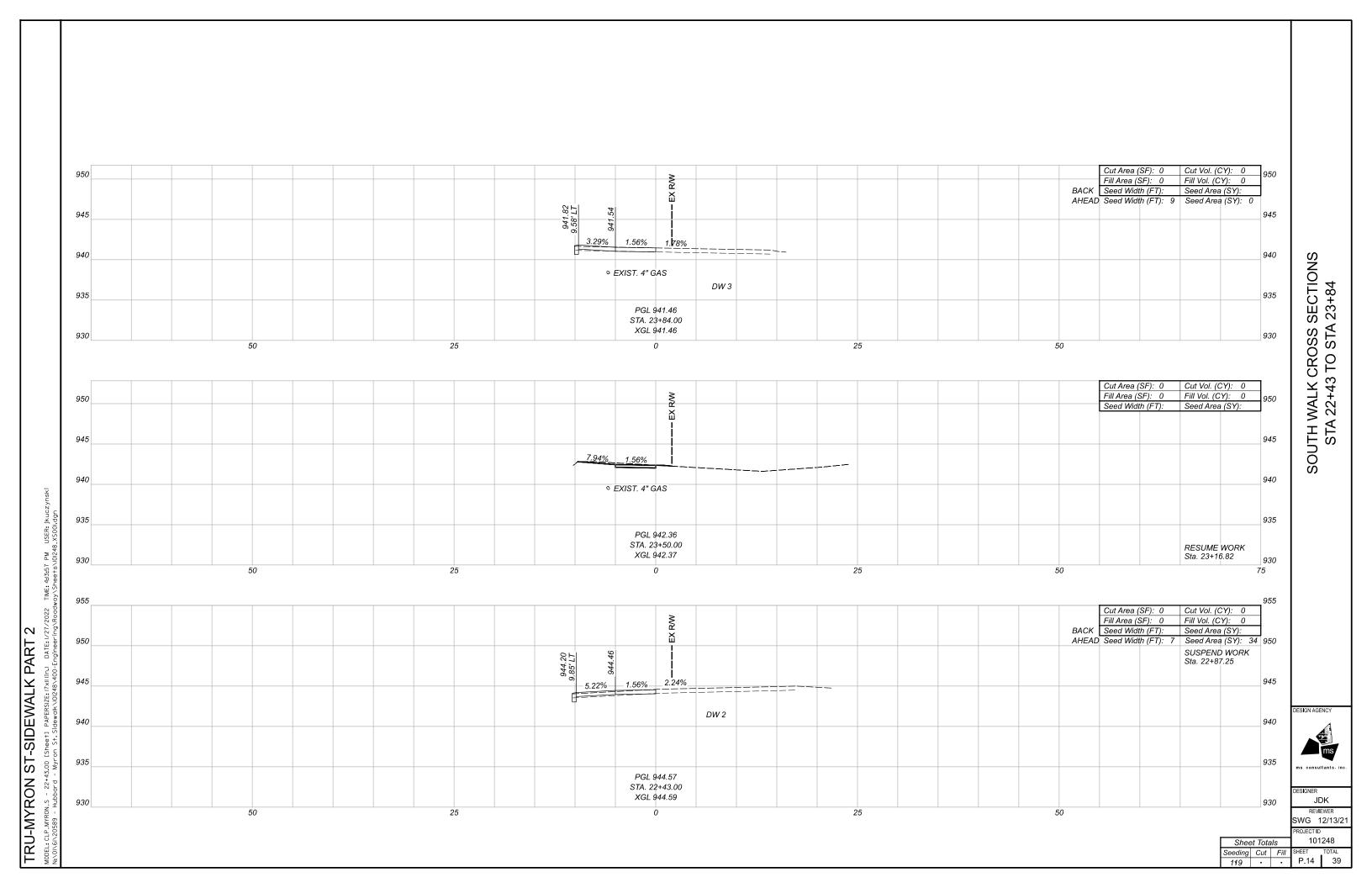
ms

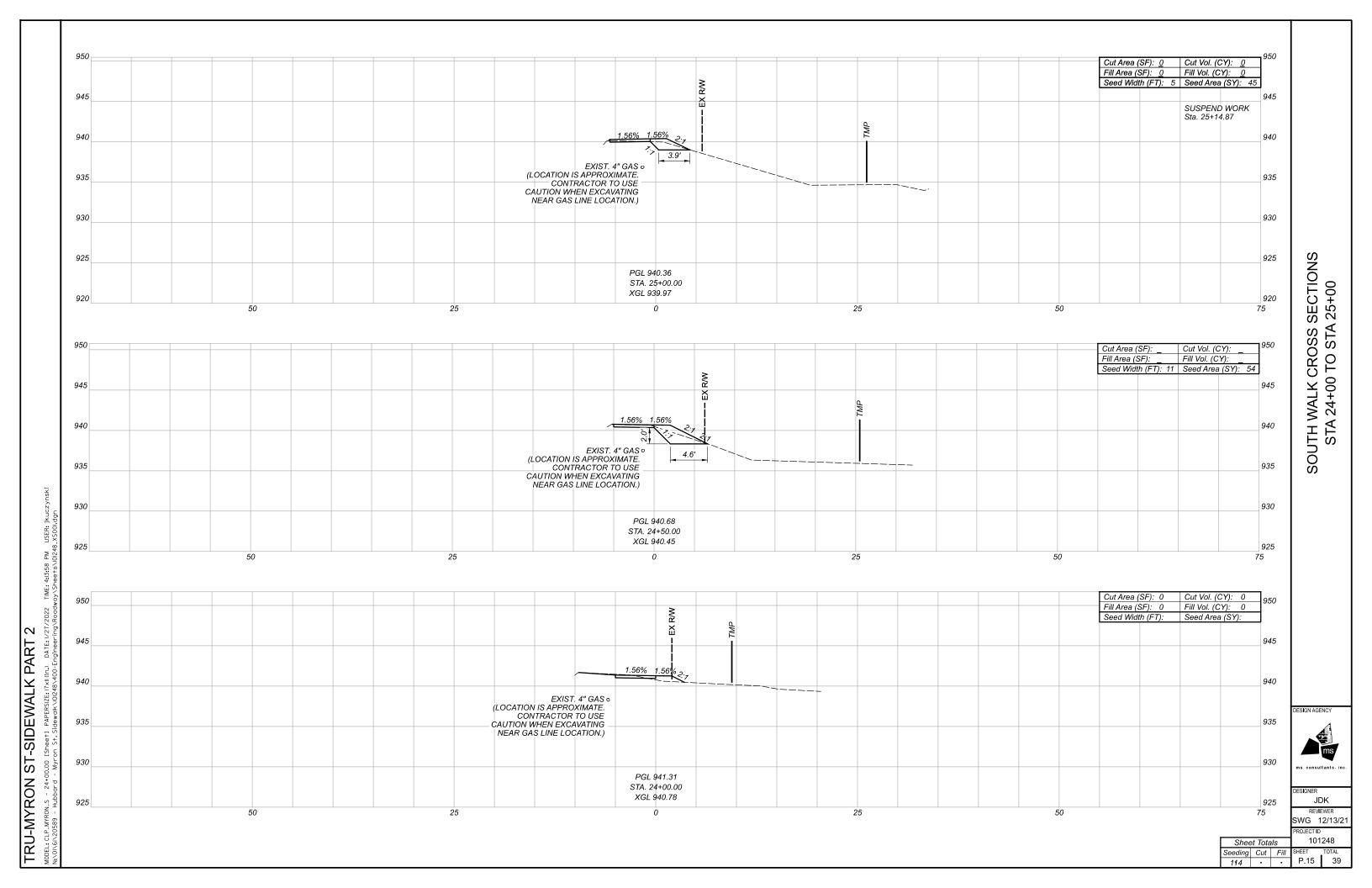
JDK

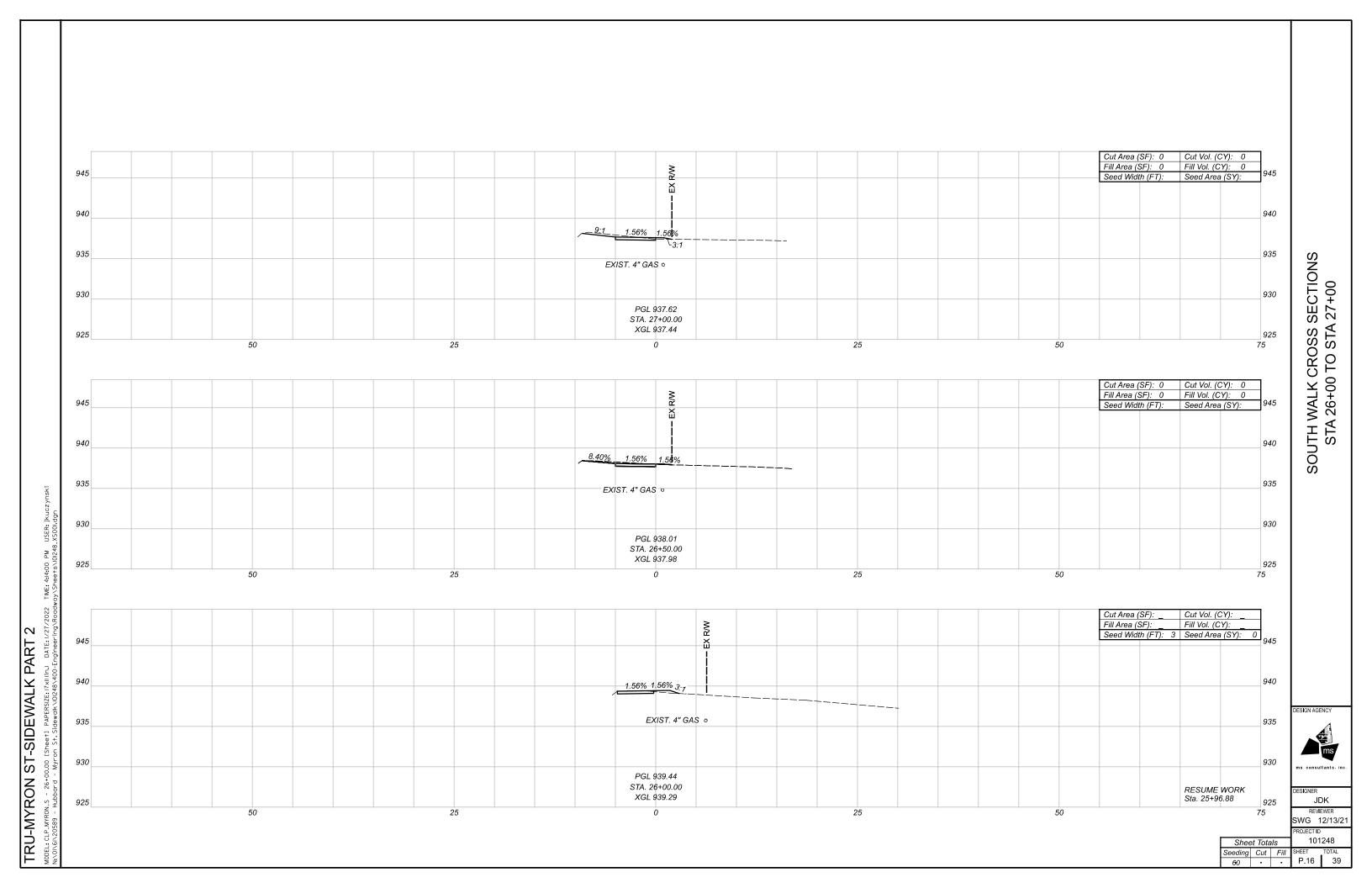
SWG 12/13/21 101248 P.11 TOTAL 39

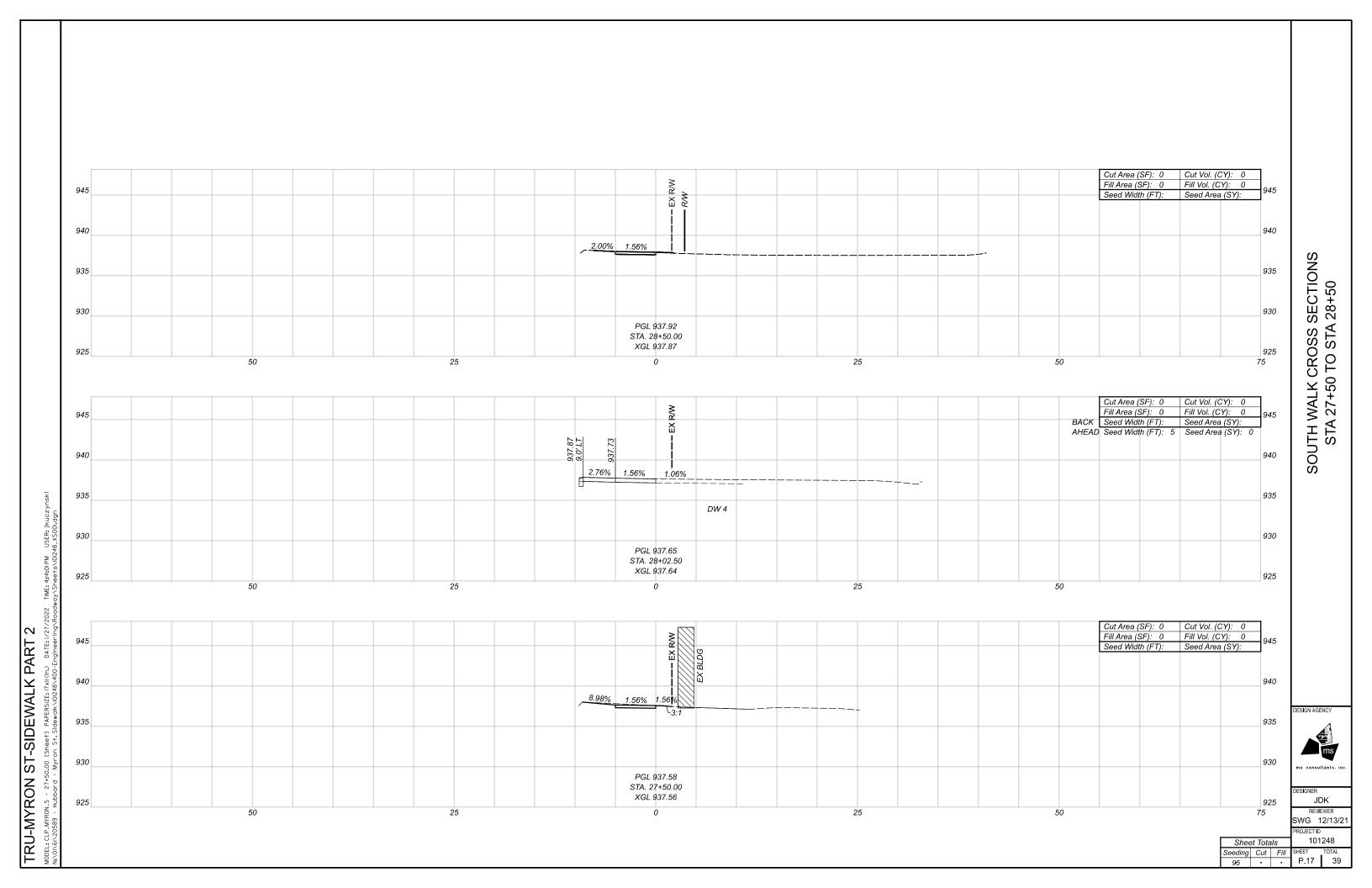












SOUTH WALK CROSS SECTIONS STA 29+00

101248

Sheet Totals

 Seeding
 Cut
 Fill
 SHEET
 TOTAL

 20
 •
 •
 P.18
 39

SEEDING AND MULCHING QUANTITY SUB-SUMMARY

SEEDING AND MULCHING, CLASS 1

24

542

566 SY

542 SY

SHEET (SY)

P.11

P.18 SOUTH SIDEWALK

TOTALS CARRIED TO GENERAL SUMMARY

NORTH SIDEWALK

ITEM 659 SEEDING AND MULCHING, CLASS 1

SOUTH SIDEWALK TOTALS

TOTALS CARRIED TO THIS SHEET

| 5 | | | R/W | | | Cut Area (SF): 0 Cut Vol. (CY): Fill Area (SF): 0 Fill Vol. (CY): Seed Width (FT): Seed Area (S) | 0 |
|----|----|------------------------|--------------------|----|----|--|-----------|
| | | | EX EX | | | | |
| | | <u>/- 1.56% 1.56% </u> | | | | | 940 DES |
| | | | | | | | 935 |
| | | PGL STA | 937.84 29+00.00 | | | | 930 ms |
| 50 | 25 | XGL | 937.96 | 25 | 50 | | 925 75 |

TRU-MYRON ST-SIDEWALK PART 2

TRU-MYRON ST-SIDEWALK PART 2

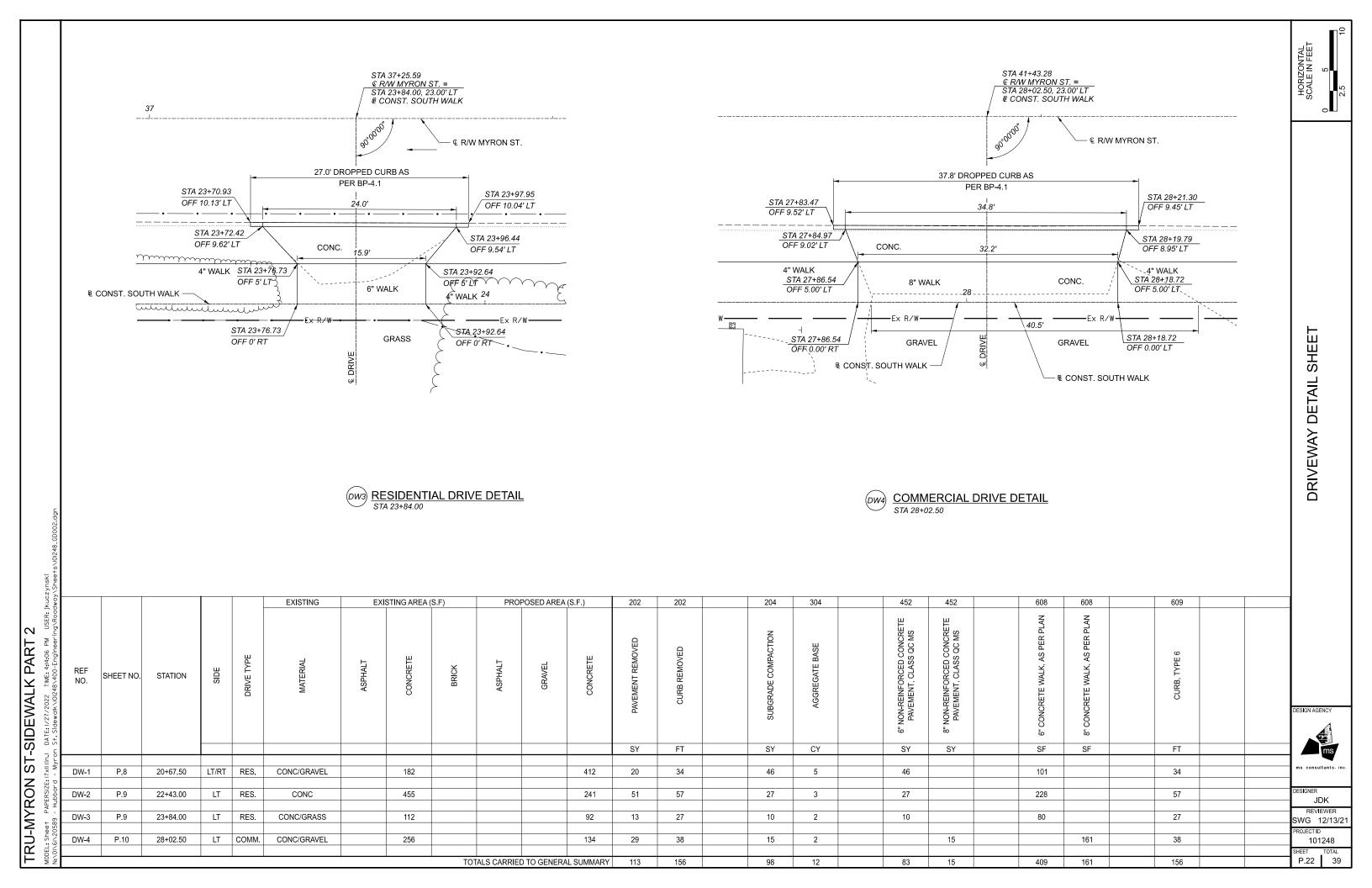
+ SAWCUT INCLUDED WITH ITEM 202 - PAVEMENT REMOVED

| EXISTING MATERIALS | PROPOSED COMMERCIAL DRIVES | PROPOSED RESIDENTIAL DRIVES | L |
|-----------------------|---|--|----------|
| ASPHALT | ITEM 441 - 1½" ASPHALT CONCRETE SURFACE COARSE, TYPE 1, (448), PG64-22 (DRIVEWAYS) ITEM 407 - NON-TRACKING TACK COAT @ 0.06 GAL./S.Y. ITEM 441 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) (DRIVEWAYS) ITEM 304 - 8" AGGREGATE BASE | ITEM 441 - 2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (DRIVEWAYS) ITEM 304 - 6" AGGREGATE BASE | DE m |
| CONCRETE | ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS ITEM 304 - 4" AGGREGATE BASE | ITEM 452 - 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS ITEM 304 - 4" AGGREGATE BASE | DE |
| GRAVEL & DIRT | ITEM 304 - 10" AGGREGATE BASE | ITEM 304 - 8" AGGREGATE BASE | S\ PR |
| | | | ■ SP |

DESIGN AGENCY

ms consultants. inc.

DESIGNER
JDK
REVIEWER
SWG 12/13/21
PROJECT ID
101248
SHEET TOTAL
P.21 39



HORIZONTAL SCALE IN FEET

<u>LEGEND</u>

* - EXISTING GAS (TO BE RELOCATED BY UTILITY)

NOTES:

1. SEE SHEET P.26/39 FOR SECTION A-A.

DESIGN AGENCY

ms

TVB
REVIEWER
WER 12/14/21

PROJECT ID

101248
SHEET TOTAL

SHEET TOTAL P.23 39

TRU-MYRON ST-SIDEWALK PART 2

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, 9TH

EDITION AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN DATA: THE FOLLOWING DESIGN DATA IS USED,

INTERNAL ANGLE OF FRICTION = 30 DEGREES COEFFICIENT OF FRICTION = 0.35 UNIT WEIGHT OF SOIL = 120 PCF UNIT WEIGHT OF CONCRETE = 150 PCF SLOPE OF BACKFILL = LEVEL

CONCRETE CLASS QC1: COMPRESSIVE STRENGTH 4000 PSI

REINFORCING STEEL:

DESIGN SPECIFICATIONS

ASTM A615, A616, OR A617 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI (ALL REINFORCING STEEL SHALL BE EPOXY COATED)

FOUNDATION BEARING RESISTANCE

RETAINING WALL FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.1 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 1.3 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 2 KIPS PER SQUARE FOOT.

| | | | | ESTIMATED QUANTITIES | |
|------------|----------------|----------------|----------|---|---------------------|
| ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
| | | | | RETAINING WALL (REINFORCED CONCRETE) | |
| 503 | 21100 | 91 | CY | UNCLASSIFIED EXCAVATION | |
| 509 | 10000 | 3112 | LB | EPOXY COATED REINFORCING STEEL | |
| 511 | 46210 | 30 | CY | CLASS QC1 CONCRETE, RETAINING/WINGWALL INCLUDING FOOTING | |
| 512 | 10100 | 37 | SY | | |
| 512 | 33000 | 3 | SY | TYPE 2 WATERPROOFING | |
| 518 518 | 21200 40000 | 24 88 | CY FT | POROUS BACKFILL WITH GEOTEXTILE FABRIC 6" PERFORATED CORRUGATED PLASTIC PIPE | |
| 518 | 40012 | 165 | FT | 6" NON-PERFORATED CORRUGATED PLASTIC PIPE | |
| | 1 | | | | 1 |

DESIGN AGENCY



ms consultants, i

JSP REVIEWER WER 12/14/21

101248

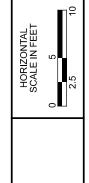
P.24 TOTAL 39

RETAINING WALL PLAN AND ELEVATION STA. 1+06.62 TO STA. 1+93.93

JSP WER 12/14/21

101248

P.25 TOTAL 39







WER 12/14/21

101248 SHEET TOTAL P.26 39

€ CONST. SOUTH WALK VARIES 12.1' TO 12.3' VARIES 5.2' TO 5.4' 5'-0" SIDEWALK (SEE ROADWAY PLANS) LIMITS OF EPOXY-URETHANE CONCRETE SEALER INCLUDE COST FOR ALL LABOR, EXIST. R/W MATERIAL AND INCIDENTIALS WITH ITEM 512-SEALING OF CONCRETE - ∉ R/W MYRON ST. (CR 505) SURFACES (EPOXY-URETHANE) F503 REINFORCED CONCRETE RETAINING WALL 2" CLŔ. (TYP. U.N.O.) PROPOSED PAVEMENT (SEE ROADWAY PLANS) -POROUS BACKFILL W/ GEOTEXTILE FABRIC TYPE A (712.09) INCLUDE COST FOR ALL LABOR,

10"

- #5 BAR @ 18" MAX.

FOOTING

REINFORCED CONCRETE

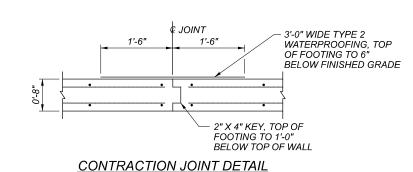
– F505 @ 18" MAX.

#5 BAR @ 18" E.F.

4'-0"

CONTRACTION JOINT F507 6" PERF. C.P.P. F506 F505 (TYP.)

FOOTING STEP DETAIL



| 14454 | TOTAL | LENGTH | WEIGHT | 7.05 | | | DIMEN | ISIONS | | |
|-------|---------|---------|---------|---------|-----------|-------|-------|--------|---|----------|
| MARK | NUMBER | LENGTH | WEIGHT | HT TYPE | Α | В | С | D | E | INC. |
| | | | | | WALL BARS | 3 | | | | |
| | | | | | | | | | | |
| W501 | 18 | 29'-8" | 557 | ST | | | | | | |
| W502 | 10 | 27'-0" | 282 | ST | | | | | | |
| W503 | 2 | 11'-5" | 24 | 19 | 3'-11" | 7'-5" | 1'-1" | | | |
| W504 | 26 | 5'-10" | 158 | 1 | 4'-11" | 1'-0" | | | | |
| | 2 | 5'-10" | | | 4'-11" | | | | | |
| W505 | SER. OF | TO | 81 | 1 | TO | 1'-0" | | | | 0'-3" |
| | 6 | 7'-1" | | | 6'-2" | | | | | |
| W506 | 8 | 7'-0" | 58 | 1 | 6'-1" | 1'-0" | | | | |
| | 2 | 6'-6" | | | 5'-7" | | | | | |
| W507 | SER. OF | TO | 296 | 1 | TO | 1'-0" | | | | 0'-5/16" |
| | 21 | 7'-0" | | | 6'-1" | | | | | |
| | 2 | 7'-9" | | | 6'-10" | | | | | |
| W508 | SER. OF | TO | 148 | 1 | TO | 1'-0" | | | | 0'-3/8" |
| | 9 | 8'-0" | | | 7'-1" | | | | | |
| | 2 | 6'-7" | | | 5'-8" | | | | | |
| W509 | SER. OF | TO | 179 | 1 | TO | 1'-0" | | | | 0'-11/4" |
| | 12 | 7'-9" | | | 6'-10" | | | | | |
| | | | | | | | | | | |
| | | TOTAL = | = 1,783 | | | | | | | - |

TRU-MYRON ST-SIDEWALK PART

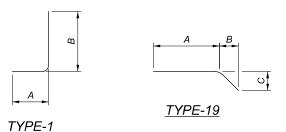
- PROPOSED CURB (SEE ROADWAY PLANS)

1'-0" MIN.

(TYP.)

SECTION A-A

| DIMENSIONS | | | | TOTAL | | |
|-------------|----------|------|--------|--------|---------|------|
| B C D E INC | Α | TYPE | WEIGHT | LENGTH | NUMBER | MARK |
| ARS | OTING BA | FC | | | | |
| | | | | | | |
| | | ST | 76 | 9'-2" | 8 | F501 |
| | | | | 25'-2" | 2 | |
| 2' | | ST | 236 | TO | SER. OF | F502 |
| | | | | 31'-5" | 4 | |
| | | ST | 243 | 29'-1" | 8 | F503 |
| | | ST | 225 | 27'-0" | 8 | F504 |
| | | ST | 497 | 3'-8" | 130 | F505 |
| 2'-7" | 3'-3" | 1 | 24 | 5'-9" | 4 | F506 |
| 2'-7" 2'-7" | 3'-1" | 19 | 28 | 6'-8" | 4 | F507 |
| | | 1 | | | - | |

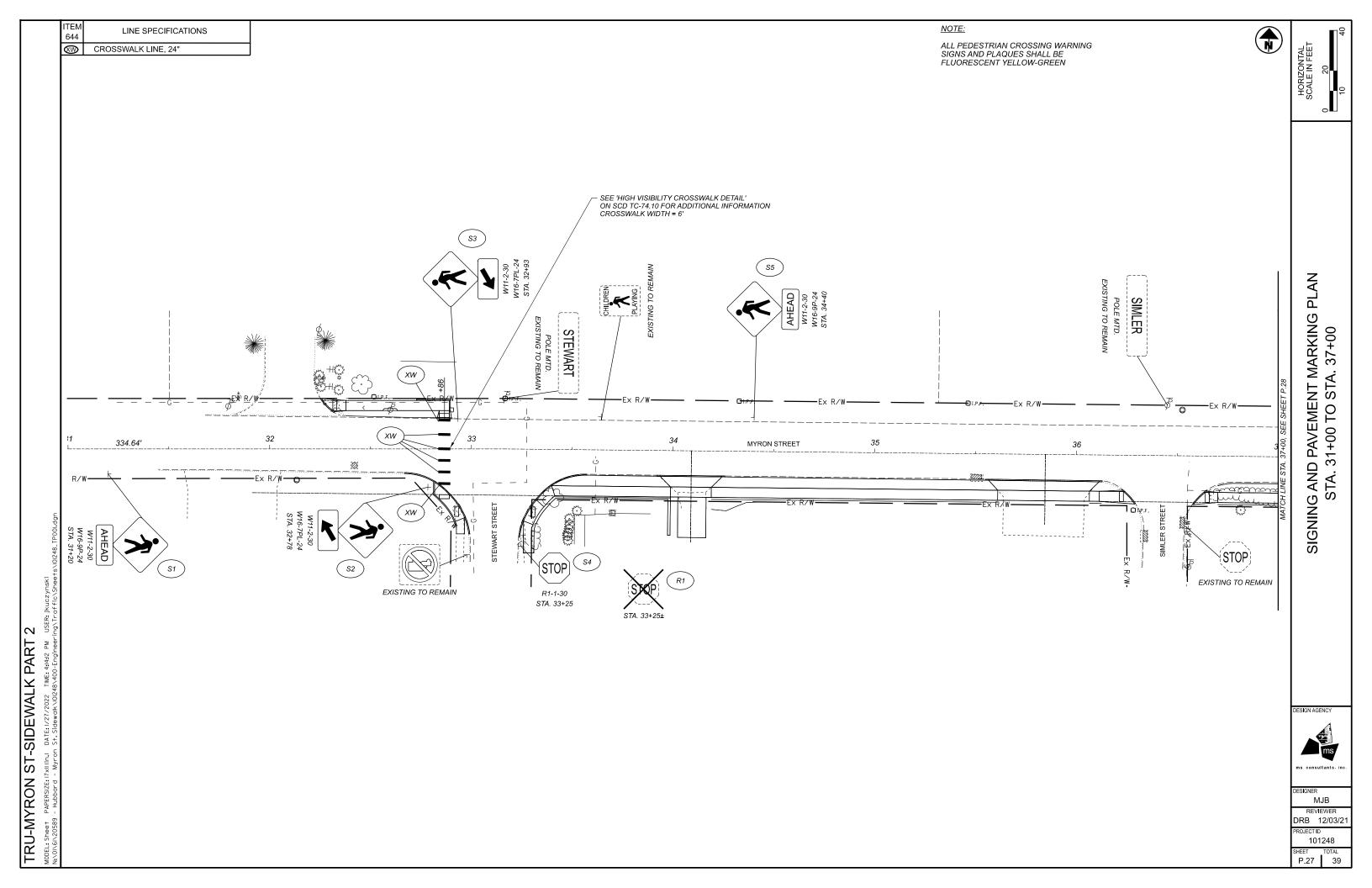


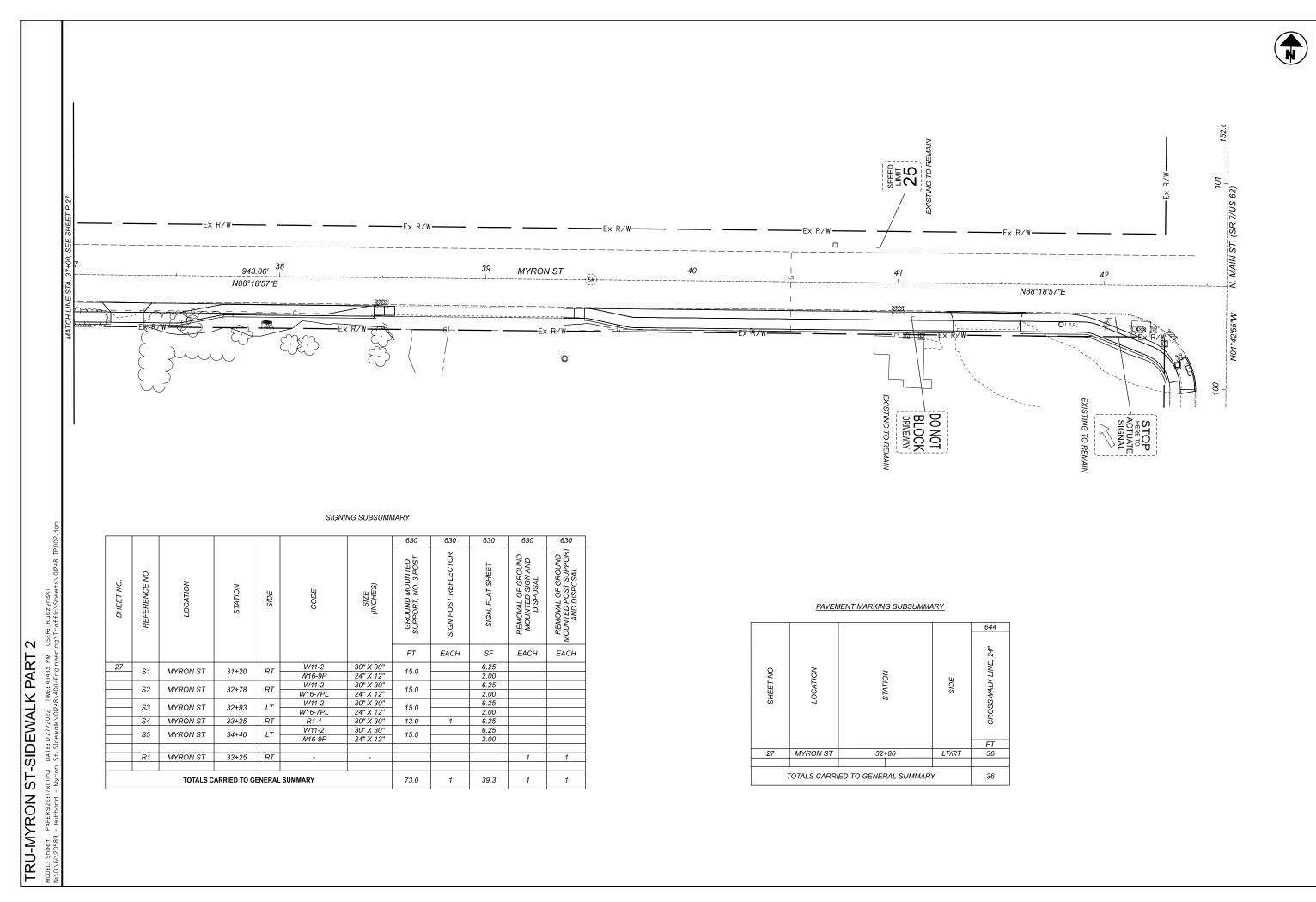
MATERIAL AND INCIDENTIALS WITH ITEM 518-POROUS BACKFILL WITH GEOTEXTILE FABRIC

- 6" PERFORATED PVC DRAINAGE PIPE (707.33). PROVIDE 6" NON-PERFORATED PVC PIPE AT THE END OF WALL TO OUTLET TO

NOTES:

1. SEE SHEET P.23/39 FOR RETAINING WALL PLAN.





SIGNING AND PAVEMENT MARKING PLAN STA. 37+00 TO STA. 42+60

HORIZONTAL SCALE IN FEET

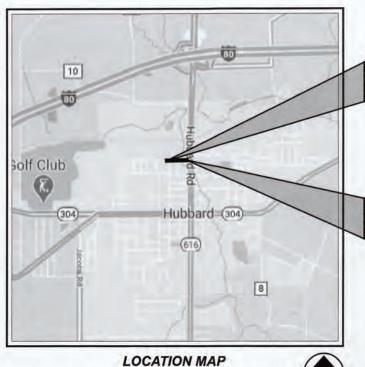
DESIGN AGENCY

ms
ms consultants. inc.

DESIGNER
MJB
REVIEWER
DRB 12/03/21

101248

SHEET TOTAL P.28 39



BEGIN ACQUISITION STA. 33+30.23

LEGEND SHEET TRU-SR 0082-13.89 PART 2

END ACQUISITION STA. 42+29.68

CITY OF HUBBARD TRUMBULL COUNTY TWP. 3N, RANGE 1W CONNECTICUT WESTERN RESERVE

RIGHT OF WAY

PROJECT DESCRIPTION

PROJECT CONSISTS OF THE CONSTRUCTION OF 965 FT OF SIDEWALK ALONG MYRON STREET IN THE CITY OF

ADDITIONAL WORK INCLUDES RETAINING WALL, CURBING. CURB RAMPS, DRIVE IMPROVEMENTS, FIRE HYDRANT RELOCATIONS AND MAINTENANCE OF TRAFFIC.

PLANS PREPARED BY:

FIRM NAME: ms consultants, inc.

R/W DESIGNER: MATT S. NEIDER

R/W REVIEWER: CHAD S. SNOW

FIELD REVIEWER: BYRON W. HARNISHFEGER

PRELIMINARY FIELD REVIEW DATE: 4-28-2021

TRACINGS FIELD REVIEW DATE: 7-13-2021

OWNERSHIP UPDATED BY: CHAD S. SNOW

DATE COMPLETED:_

PLAN COMPLETION DATE:

LATITUDE: 41°09'47" N LONGITUDE: 80°34'21" W

STRUCTURE KEY

RESIDENTIAL

COMMERCIAL

OUT-BUILDING

TYPES OF TITLE LEGEND: WL = FEE SIMPLE WITH LIMITATION OF ACCESS WD = WARRANTY DEED PRW = PROPERTY RIGHT FEE SIMPLE SH = STANDARD HIGHWAY EASEMENT LA = LIMITED ACCESS EASEMENT T = TEMPORARY EASEMENT CH = CHANNEL EASEMENT A = AFRIAL FASEMENT SL = SLOPE EASEMENT PRE = PROPERTY RIGHT EASEMENT

INDEX OF SHEETS:

LEGEND SHEET

PROPERTY MAP SUMMARY OF ADDITIONAL R/W

R/W TOPOGRAPHIC SHEETS R/W BOUNDARY SHEETS

4-8 (EVEN NUMBERS) 5-9 (ODD NUMBERS)

UTILITY OWNERS

DOMINION ENERGY OHIO 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OHIO 44333 ATTN: 2ND FLOOR RELOCATION DESIGN EMAIL: RELOCATION@DOMINIONENERGY.COM PH: 330-664-2409

CITY OF HUBBARD ELECTRIC DEPARTMENT 820 NORTH MAIN STREET HUBBARD, OHIO 44425-0307

ATTN: EDWARD PALESTRO, FOREMAN PH: 330-534-6281

CITY OF HUBBARD WATER DEPARTMENT 820 NORTH MAIN STREET HUBBARD, OHIO 44425-0307 ATTN: BOB DIETZ, FOREMAN PH: 330-534-3636

CITY OF HUBBARD WASTEWATER DEPARTMENT 2651 ELMWOOD DRIVE EXT HUBBARD, OHIO 44425-0307 ATTN: MARK CICCONE, SUPERINTENDENT PH: 330-534-6291

50 W BOWERY STREET AKRON, OHIO 44308 ATTN: HAROLD L MAYNARD EMAIL: HM2147@ATT.COM PH: 330-384-8974

CHARTER COMMUNICATIONS D.B.A. SPECTRUM 4352 YOUNGSTOWN ROAD, SE WARREN, OHIO 44484 ATTN: GREG REITER

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

CONVENTIONAL SYMBOLS

Edge of Shoulder (Ex)

County Line Township Line Edge of Shoulder (Pr) Section Line Ditch / Creek (Ex) Corporation Line Ditch / Creek (Pr) Tree Line (Ex) Center Line Ownership Hook Symbol Z, Example Property Line Symbol 2, Example Right of Way (Ex) Right of Way (Pr) Tree (Pr) , Tree (Ex) , Shrub (Ex) Tree (Remove) X , Shrub (Remove) X Evergreen (Ex) Evergreen (Remove) , Stump (Remove) + Post (Ex) ○, Mailbox (Ex) № , Mailbox (Pr) № Guardrail (Ex) ♥ ♥ ♥ ♥ ♥ ♥ (Pr) • • • • • Light (Ex) ♥, Telephone Marker (Ex) +TEL Fire Hydrant (Ex) 🙇 , Water Meter (Ex) 🌃 Water Valve (Ex) , Utility Valve Unknown (Ex.) Edge of Pavement (Ex) Telephone Pole (Ex) ϕ , Power Pole (Ex) ϕ Edge of Pavement (Pr)

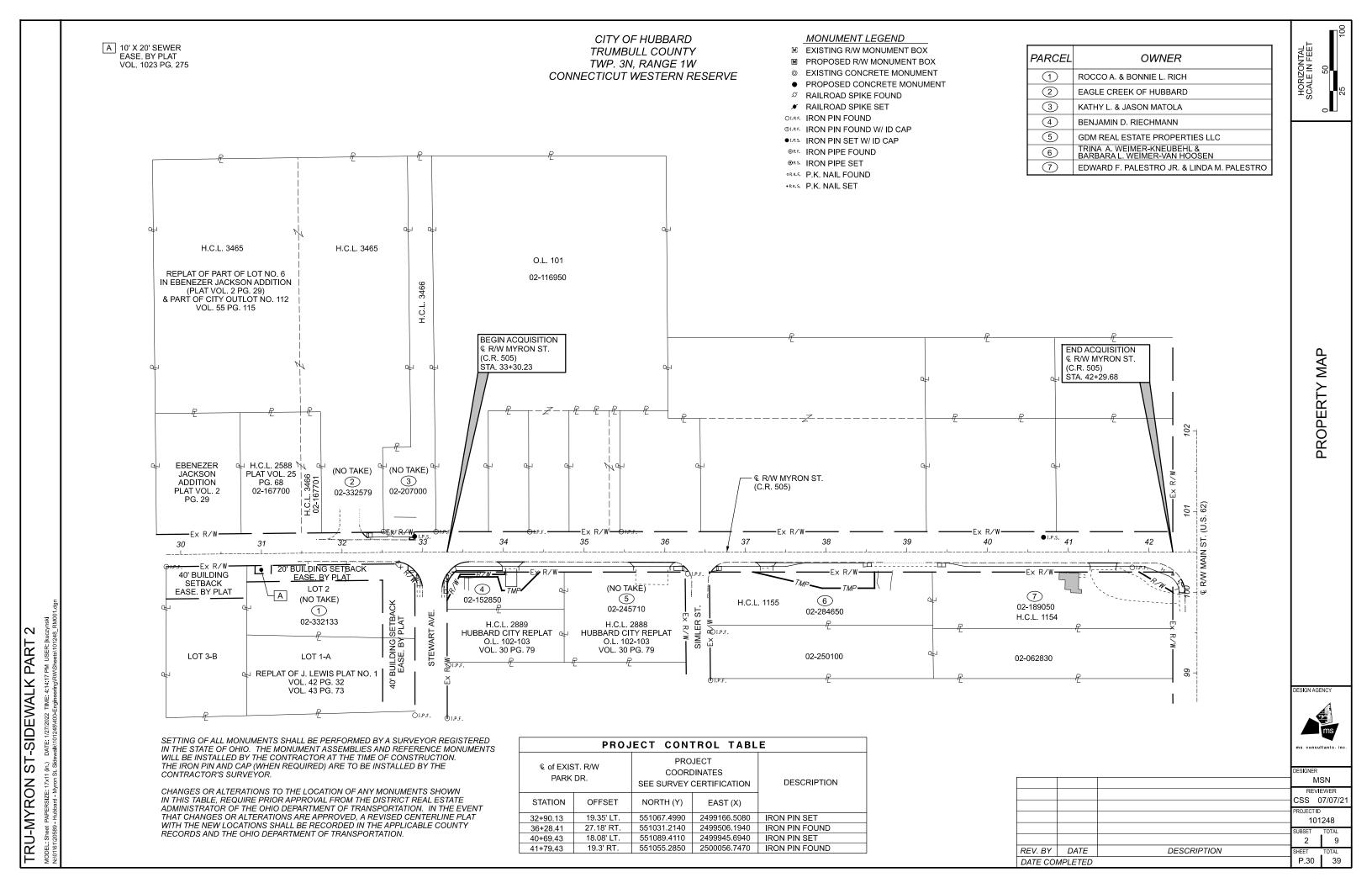
I, Chad S. Snow, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation in February 2021. The results of that survey are contained herein. The horizontal coordinate expressed herein are based on the Ohio State Plane Coordinate System, North Zone (3401) on NAD 83 (2011) datum. The Project Coordinates (US Survey feet) are relative to State Plane Grid Coordinates (meters or US Survey feet) by a Project Adjustment Factor multiplier of 1.000000000. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for property takes contained herein. All of my work contained herein was conducted in accordance with Ohio Administrative Code 4733-37 commonly known as "A Minimum Standards for Boundary Surveys in the State of Ohio" unless noted. The words I and my as used herein are to mean either myself or someone working under my direct supervision.

Chad S. Snow, Professional Land Surveyor No. 8559

SURVEYORS SEAL

MSN REVIEWER CSS 07/07/2 101248

P.25 | P.33



4 PARCELS

3 OWNERSHIPS 0 TOTAL TAKES

0 OWNERSHIPS W/ STRUCTURES INVOLVED

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE NET TAKE = GROSS TAKE - PRO IN TAKE GRANTEE:

ALL RIGHT OF WAY ACQUIRED IN THE NAME OF THE CITY OF HUBBARD

UNLESS OTHERWISE SHOWN.

* DENOTES RIGHT OF WAY ENCROACHMENT

| PARCEL | OWNER | SHEET | | RECORD | AUDITOR'S | RECORD | TOTAL | GROSS | P.R.O. IN | NET | STRUC- | | ESIDUE | TYPE | DEMARKS | AS ACC | |
|--------|----------------------------------|---------|-----------|---------------|------------|--------|--------|-------|-----------|-------|--------|------|--|------|------------------------------|--------|------|
| NO. | OWNER | NO. | воок | PAGE | PARCEL | AREA | P.R.O. | TAKE | TAKE | TAKE | TURE | LEFT | RIGHT | FUND | REMARKS | воок | PAGE |
| 1 | ROCCO A. & BONNIE L. RICH | 4-5 | 733 | 733 | 02-332133 | 0.4339 | | | | | | | | CITY | NO TAKE | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | T | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 2 | EAGLE CREEK OF HUBBARD | 4-5 | #2013090 | 050021154 | 02-332579 | 2.29 | | | | | | | | | NO TAKE | | |
| _ | | 1 | | | | 1 | | | | | 1 1 | | | | | | |
| | | | | | | 1 | | | | | | | | | | | |
| | | | | | | | | | | | 1 | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 3 | KATHY L. & JASON MATOLA | 4-5 | 1267 | 995 | 02-207000 | 0.4046 | | | | | | | | | NO TAKE | | |
| 3 | NATITI E. & DAGON MATOLA | +-3 | 1201 | 990 | 02-207000 | 0.4040 | | | | | | | | | NOTANE | | |
| | | | | | | 1 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 1 | | | | | | |
| | | + | | | | 1 | | | | | | | | | | | |
| 4-WD | BENJAMIN D. RIECHMANN | 4-5 | #2006081 | 100023258 | 02-152850 | 0.1531 | 0.000 | 0.011 | 0.000 | 0.011 | | | 0.1421 | | TO CONSTRUCT CURB RAMP, WALL | | |
| | | | | | | | | | | | | | | | TAKE HEDGES | | |
| | | | | | | | | | | | | | | | | | |
| 4-T | | 4-5 | | | | | | 0.023 | | 0.023 | | | | | RECONSTRUCT DRIVE, GRADING | | |
| | | | | | | | | | | | | | | | TAKE BUSH | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 5 | GDM REAL ESTATE PROPERTIES LLC | 4-7 | #2014112 | 240023390 | 02-245710 | 0.3871 | | | | | | | | | NO TAKE | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 6-T | TRINA A. WEIMER-KNEUBEHL & | 6-7 | #2019120 | 050022721 | 02-284650 | 0.4182 | 0.000 | 0.049 | | 0.049 | | | | | TAKE *(2) STUMPS, TREES | | |
| - , | BARBARA L. WEIMER-VAN HOOSEN | - · · · | 112010120 | 1 | 02 20 7000 | 0.7702 | 0.000 | 0.070 | | 0.010 | | | | | THE (2) OTOMIN O, THEEO | | |
| | BITTER TO CE. WEIMER WITTE COLLY | | | | | + + | | | | | + + | | | | | | |
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| 7.14/0 | | | #0040400 | 220000750 | 00.400050 | 0.4004 | 0.000 | 0.040 | 0.000 | 0.040 | | | 0.4704 | OUTV | TO COMPTRUCT WALK | | |
| 7-WD | EDWARD F. PALESTRO JR. & | 6-9 | #2012120 | 130029756 | 02-189050 | 0.4821 | 0.000 | 0.012 | 0.000 | 0.012 | | | 0.4701 | CITY | TO CONSTRUCT WALK | | |
| | LINDA M. PALESTRO | | | | | 1 | | | | | 1 1 | | | | | | |
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NOTE: ALL PERMANENT PARCELS WILL BE IN THE NAME OF THE CITY OF HUBBARD UNLESS OTHERWISE NOTED.

NOTE: ALL TEMPORARY PARCELS TO BE OF 6 MONTH DURATION.

UNLESS NOTED OTHERWISE.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY
EASEMENTS TO BE USED FOR STORAGE OF
MATERIAL OR EQUIPMENT BY THE CONTRACTOR

TYPES OF TITLE LEGEND:
WL = FEE SIMPLE WITH LIMITATION OF ACCESS
WD = WARRANTY DEED
PRW = PROPERTY RIGHT FEE SIMPLE
SH = STANDARD HIGHWAY EASEMENT
LA = LIMITED ACCESS EASEMENT
T = TEMPORARY EASEMENT
CH = CHANNEL EASEMENT
A = AERIAL EASEMENT
SL = SLOPE EASEMENT
PRE = PROPERTY RIGHT EASEMENT

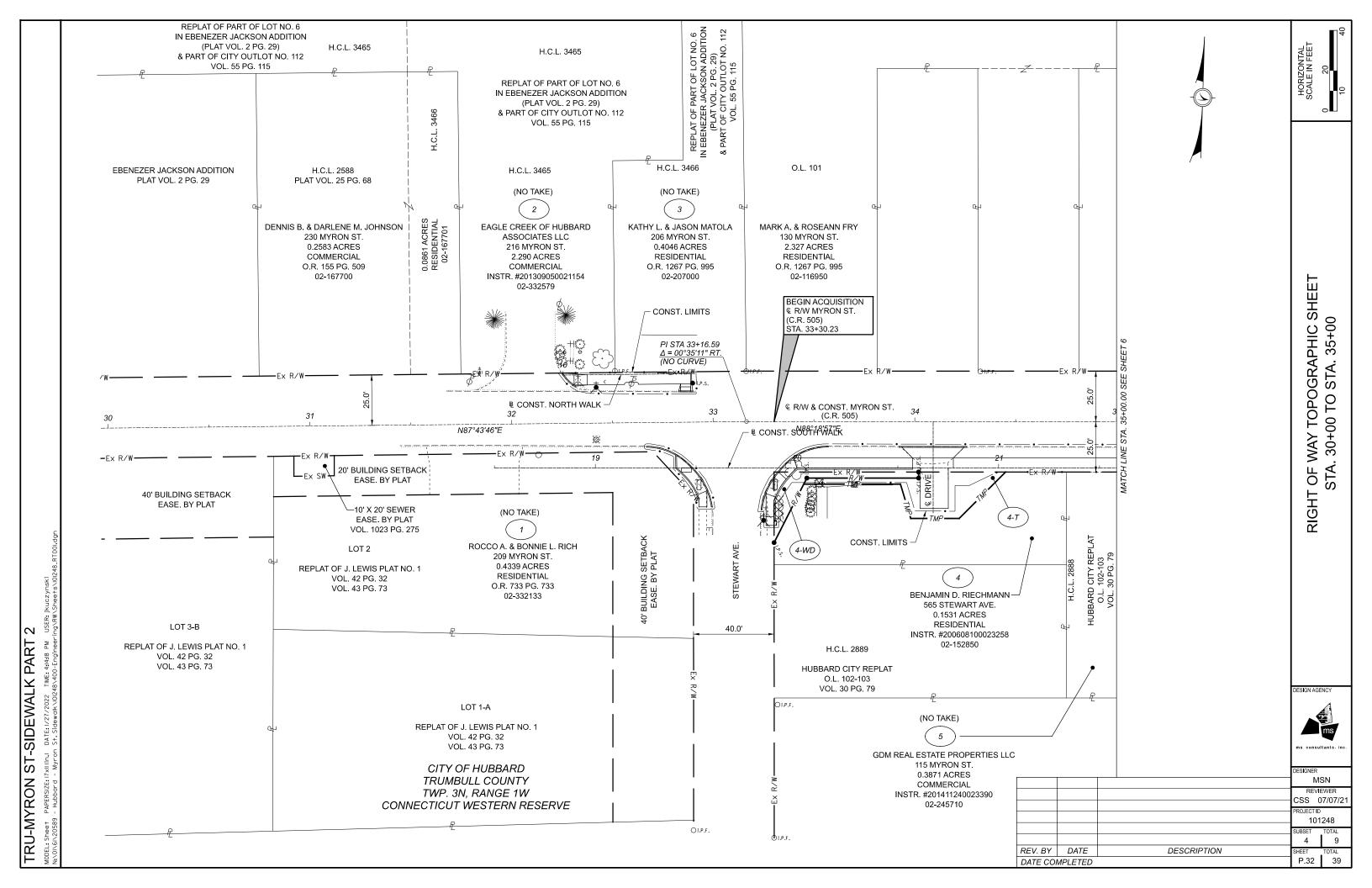
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| REV. BY | DATE | DESCRIPTION | SHEET | TOTAL |
| DATE CO | MPLETED | | P.31 | 39 |

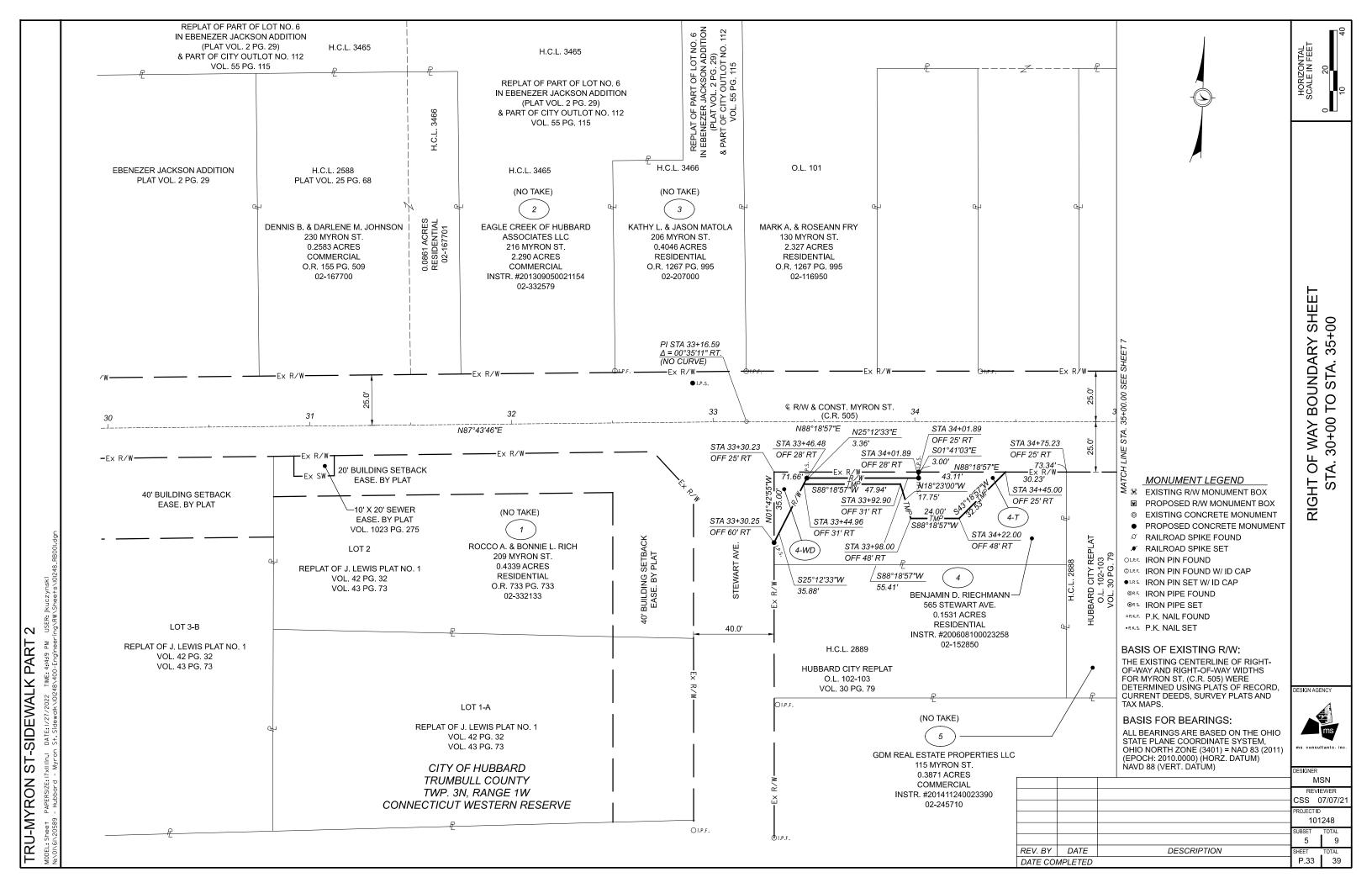
SUMMARY OF ADDITIONAL RIGHT OF WAY

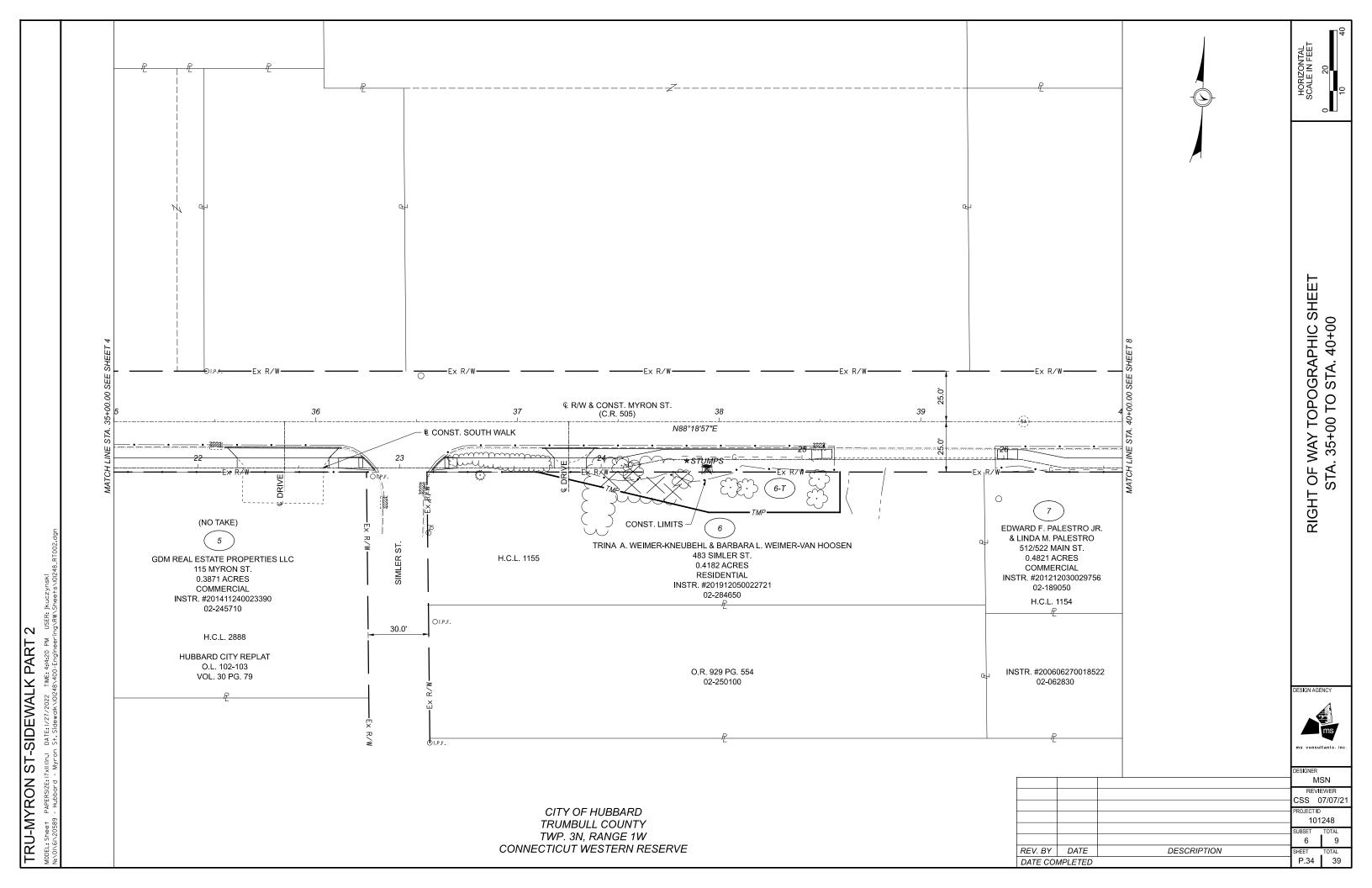
TRU-MYRON ST-SIDEWALK PART 2

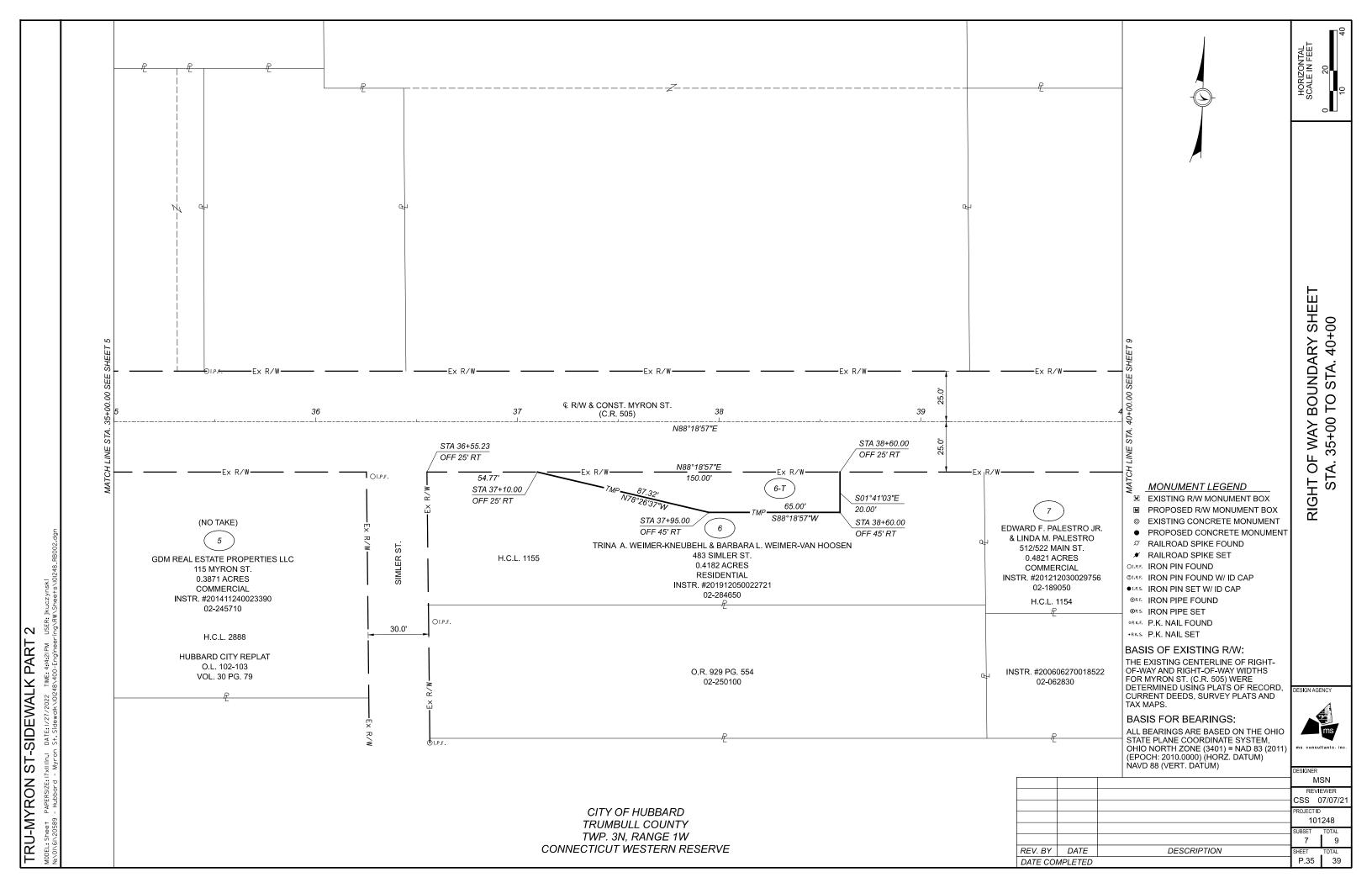
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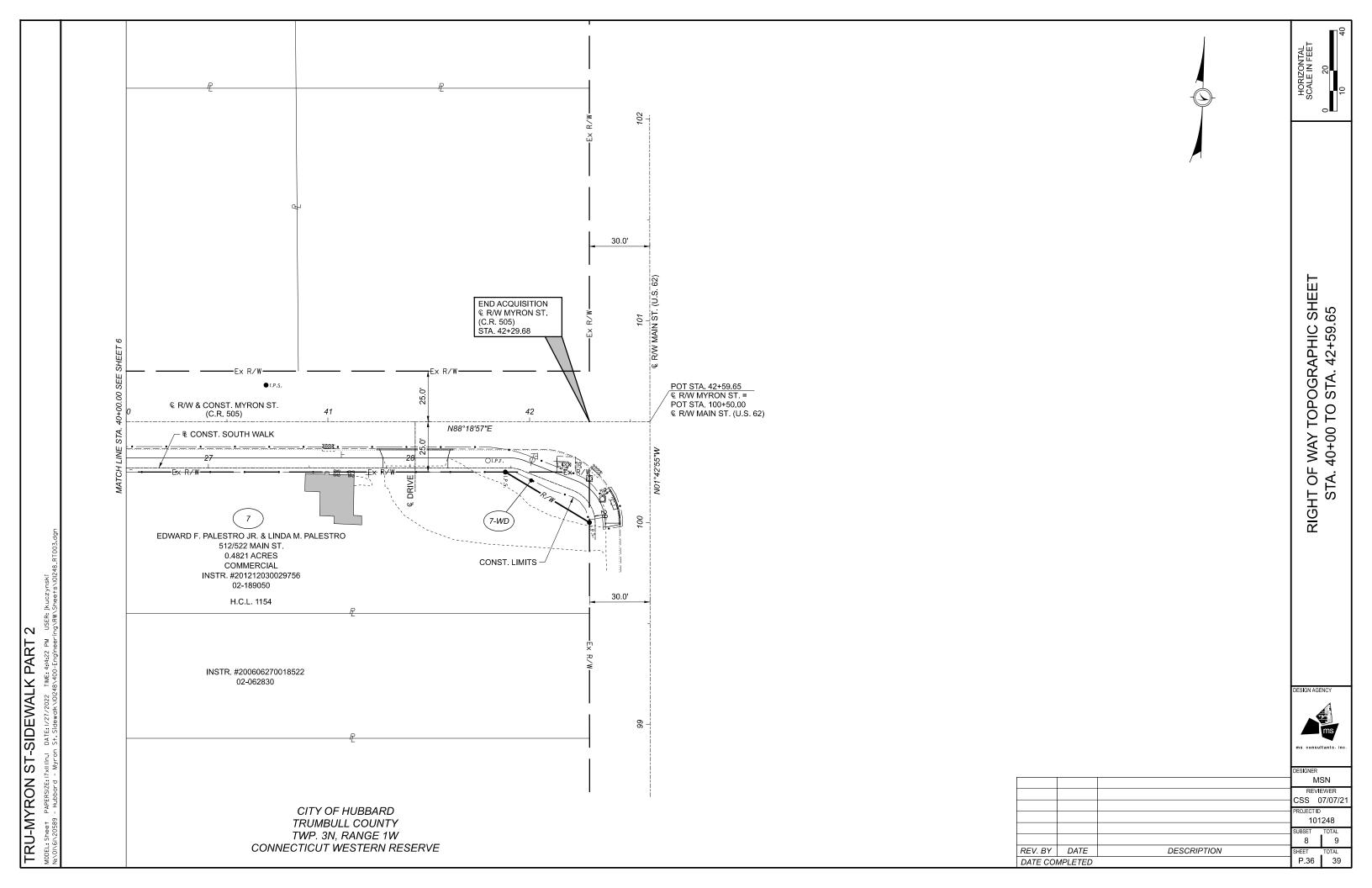
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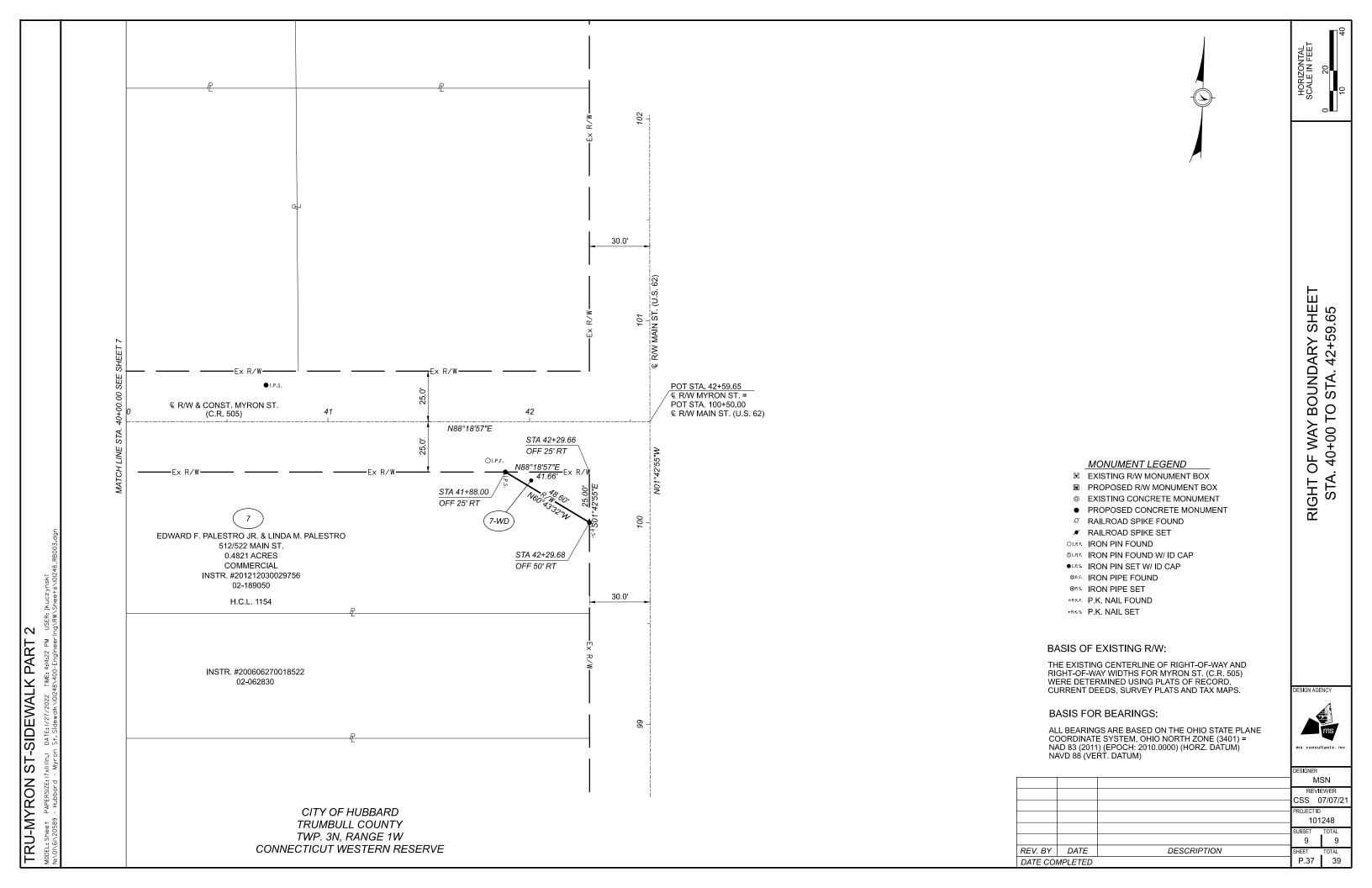












PROJECT DISCRIPTION

THIS PROJECT INCLUDES THE CONSTRUCTION OF A NEW RETAINING WALL TO RETAIN THE RESIDENCE YARDS. THE WALL IS ANTICIPATED TO CONSIST OF MODULAR CONCRETE BLOCKS APPROXIMATLEY 3 FEET IN HEIGHT. MINOR GRADING TO THE YARDS WILL BE REQUIRED.

HISTORIC RECORDS

ODOT GEOTECHNICAL BORING LOGS WERE PROVIDED TO US FOR THE MYRON STREET BRIDGE REPLACEMENT PROJECT DATED MAY 22, 2018. THE BORING LOGS SHOW FILL SOILS FOR THE TOP 10 FEET OF THE BORINGS.

GEOLOGY

THE SITE LIES IN THE GLACIATE PORTION OF OHIO WITHIN THE PENNSYLVANIAN ROCKS. THE PENNSYLVANIAN ROCKS CONSIST OF SEDIMENTARY ROCKS: MAINLY SANDSTONE, SILTSTONE, SHALE, AND CONGLOMERATE WITH SOME COAL AND LIMESTONE. THE SOILS ARE PRIMARILY DERIVED FROM GLACIALLY DEPSOSITED OUTWASH MATERIALS.

RECONNAISSANCE

A SITE VISIT WAS MADE BY ACA ENGINEERING, INC. ON MARCH 25, 2021, TO OBSERVE THE SITE AND VERIFY THE FIELD MARKED BORING LOCATION. ON MARCH 29, 2021, ACA ENGINEERING COMMENCED DRILLING OPERATIONS. THE HOME WHERE THE RETAINING WALL IS TO BE CONSTRUCTED WAS GRADUALLY SLOPING TOWARDS THE ROADWAY. UTILITIES WERE OBSERVED NEAR THE BORING LOCATION.

SUBSURFACE EXPLORATION

ON MARCH 29, 2021, ACA ENGINEERING PERFORMED ONE (1) TEST BORING TO A DEPTH OF 15 FEET BELOW EXISTING ELEVATIONS. A TRUCK MOUNTED ROTARY DRILL RIG USING A 2.25-INCH I.D. HOLLOW STEM AUGER WAS USED TO ADVANCE THE BORING. STANDARD PENETRATION TESTING WAS PERFORMED IN ACCORDANCE WITH STANDARD PENETRATION TEST (AASHTO T206) AT 2.5 FOOT INTERVALS FOR THE FULL DEPTH OF THE BORING. THE HAMMER ON THE DRILL RIG THAT WAS CALIBRATED ON JULY 29, 2019, HAS A DRILL ROD RATIO OF 83.7%. THE BORING TERMINATION DEPTH WAS 15 FEET.

EXPLORATION FINDINGS

IN THE BORING, 10 INCHES OF TOPSOIL AND GRASS WERE ENCOUNTERED. FILL MATERIALS WERE ENOUNTERED IN BORING B-001-0-20 TO A DEPTH OF 3 FEET BELOW EXISTING ELEVATIONS. THE FILL MATERIALS CONSISTED OF COARSE AND FINE SAND (A-3a).

UNDERLYING THE FILL MATERIALS, NATURAL SOILS WERE ENCOUNTERED TO TERMINATION DEPTHS OF THE BORING. THE NATURAL SOILS CONSISTED OF SILT (A-4b), AND FINE SAND (A-3). IN ADDITION, VARYING AMOUNTS OF CLAY, SAND, GRAVEL, INNER LAYERS OF SAND, AND COAL FRAGMENTS WERE ENCOUNTERED IN THE NATURAL SOILS.

NO GROUNDWATER WAS ENCOUNTERED; HOWEVER, WATER SEEPAGE WAS ENCOUNTERED AT A DEPTH OF 11 FEET BELOW EXISTING ELEVATIONS

FOLLOWING DRILLING OPERATIONS, THE HOLE CAVED AT 12.5 FEET BELOW EXISTING ELEVATIONS.

SPECIFICATIONS

THE GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORATION, OFFICE OF GEOTECHNICAL ENGINEERING SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED MARCH 2021.

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN ON THE GEOTECHNICAL EXPLORATION SHEETS HAS BEEN REPORTED. A COPY OF THIS DATA AND THE GEOTECHNICAL REPORT CAN BE FOUND ON THE OHIO DEPARTMENT OF TRANSPORTATION WEBSITE.

| LEGEND | | | | | | | | | | |
|--|---|-----------------------------|------------------|---|--|--|--|--|--|--|
| | DISCRIPTION | ODOT CLASS | CLASS MECH./\ | | | | | | | |
| £\$. | FINE SAND | A-3 | | 1 | | | | | | |
| | COARSE AND FINE SAND | A-3a | | 1 | | | | | | |
| + | SILT | A-4b | 2 | 2 | | | | | | |
| | SOD AND TOPSOIL = X = APPR | OXIMATE TH | ICKNESS | | | | | | | |
| → | BORING LOCATION - PLAN VIEV | BORING LOCATION - PLAN VIEW | | | | | | | | |
| WC | INDICATES WATER CONTENT II | N PERCENT | | | | | | | | |
| N ₆₀ | INDICATES STANDARD PENETF NORMALIZED TO 60% DRILL RO | | | | | | | | | |



LOCATION MAP

LATITUDE: 41°09'47" N LONGITUDE: 80°34'21" W



PARTICAL SIZE DEFINITIONS

| 1: | 2" | 3" | 2.0 mm | 0.42 | mm | 0.074 | mm | 0.00 | 5 mm |
|----------|------------------|----|-----------------|----------------|---------|-------|------|------|------|
| BOULDERS | BOULDERS COBBLES | | /EL | COARSE SAND | FINE SA | ND | SILT | | CLAY |
| | • | | No. 10 SIEVE | No. | | No. | | | • |

DESIGN AGENCY



DESIGNER

JDK

REVIEWER

GNC 07/26/21

PROJECT ID

101248 HEET TOTAL P.38 39

HORIZONTAL SCALE IN FEET A-4b (V) A-4b (8) A-3 (V) 20 20 € R/W MYRON ST (CR 505) -33 35 Ρ Ρ 물 Ŗ Μ Ā 24 9 53 78 22 - SOIL PROFILE SHEET MYRON STREEET SIDEWALK RETAINING WALL 0 0 STEWART (40' R/W) 3.00 4.00 3.00 4.5+ SS-6 SS-1 100 100 61 89 89 78 4 7 22 DRILLING FIRM / OPERATORIDGEWAY / P. SIMPS SAMPLING FIRM / LOGGER: ACA / G. CHAMMAS DRILLING METHOD: 2.25" HSA SAMPLING METHOD: SPT 1 2 2 4 950.01 946.44 946.05 949.04 950. TIME: 4:14:26 PM USER: jkuczynski ELEV. 948.9 948.1 965 965 960 960 STEWART ST MEDIUM DENSE, BROWN, **FINE SAND**, DAMP TO MOIST TOPSOIL, -10" MEDIUM DENSE, BROWN AND GRAY, COARSE AND FINE SAND, FILL, DAMP TO MOIST MEDIUM DENSE, GRAY, **SILT**, LITTLE CLAY, TRAC! SAND, MOIST TO DAMP 955 955 $\Delta = 1.27\%$ VPI 21+95.87 Elev. 945.340056 MEDIUM DENSE, BROWN, **SILT**, SOME SAND, CLAY, MOIST TO WET ROJECT: TRU-MYRON STREET. YPE: RETAINING WALL ID: 101248 SFN: 3/29/21 END: 3/29/21 MATERIAL DESCRIP AND NOTES TRU-MYRON ST-SIDEWALK PART -5.00% 950 -3.47% GAS -1.56% 14 945 GAS SERVICE LINE (TO BE RELOCATED BY UTILITY) – -2.83% 11 20 22 👯 20 ms 940 940 24 FS 6 PROJECT: TYPE: PID: 1012 START: 3 20 935 935 28 STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 7/27/21 19:36 - C:\USERSIPUBLIC\DOCUMENTS\BENTLEY\GINTCL\PROJECTS\TRU MYRON STREET RETAINING WALL.GPJ N₆₀ WC JDK B-001-0-20 9.5' LT TOPSOIL = 0.8' 930 SNC 07/26/2 951.13 950.92 925.03 40 53 945.97 945.75 945.23 101248 SHEET TOTAL P.39