

# ALLEGAN COUNTY ROAD COMMISSION

## 118TH AVENUE REHABILITATION PROJECT INDUSTRIAL DRIVE TO 24TH STREET

### ALLEGAN TOWNSHIP

#### UTILITY CONTACTS

**ELECTRIC**  
CONSUMERS ENERGY  
4000 CLAY AVE, SW  
GRAND RAPIDS, MI 49548  
317-445-8814  
COLE ROCHOVIAK  
hamstcivimp@cseenergy.com

**GAS TRANSMISSION**  
MICHIGAN GAS UTILITIES  
1708 EATON DRIVE  
GRAND HAVEN, MI 49417  
616-844-7514  
SETH PURUCKER  
seth.purucker@michigangasutilities.com

**TELEPHONE**  
FRONTIER COMMUNICATIONS  
269-370-4046  
LANCE WEBLEY  
lance.webley@ftr.com

**FIBER**  
ZAYO FIBER  
616-443-9027  
JOHN LUNDELL  
john.lundell@zayo.com

\*MISS DIG\* 811

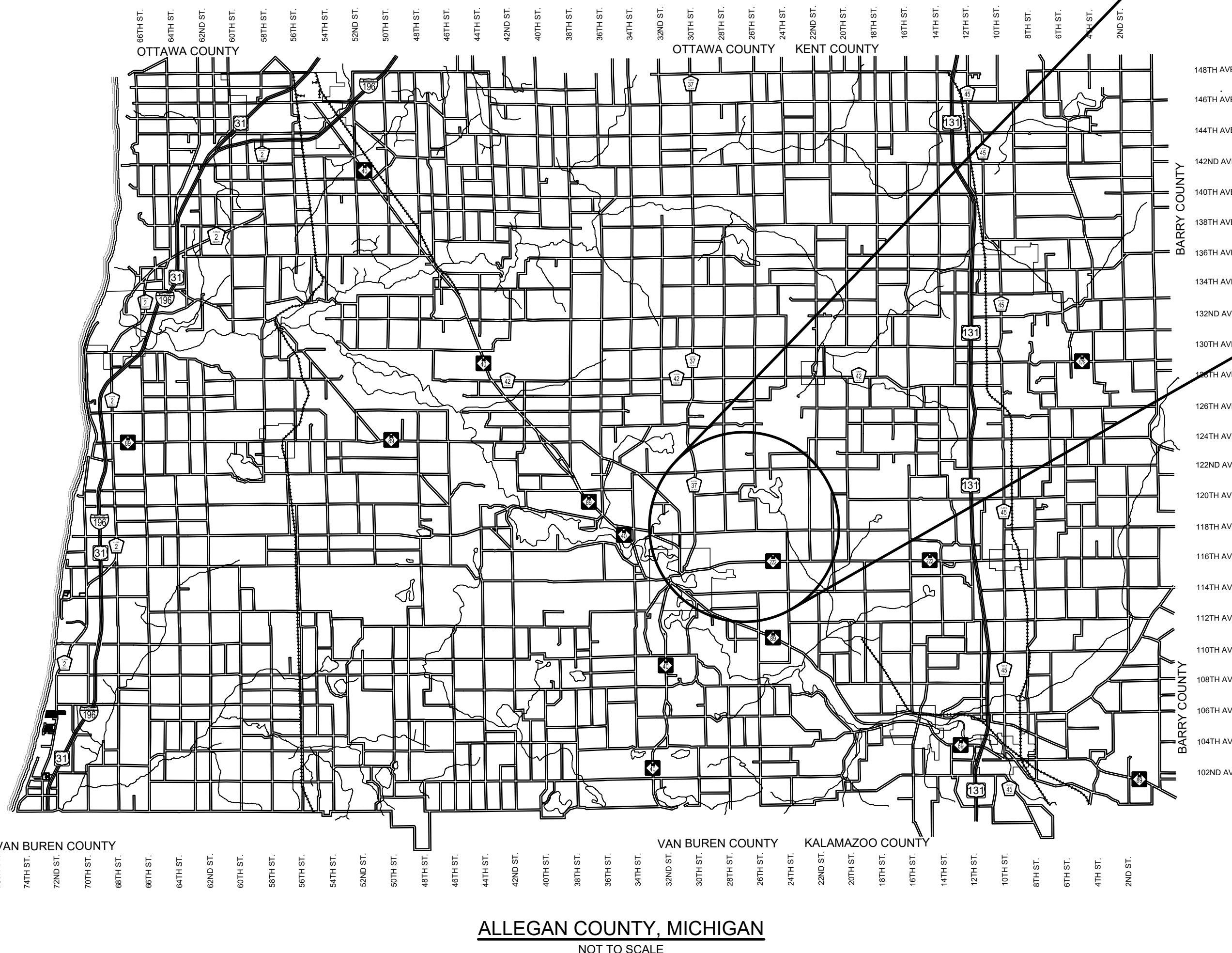
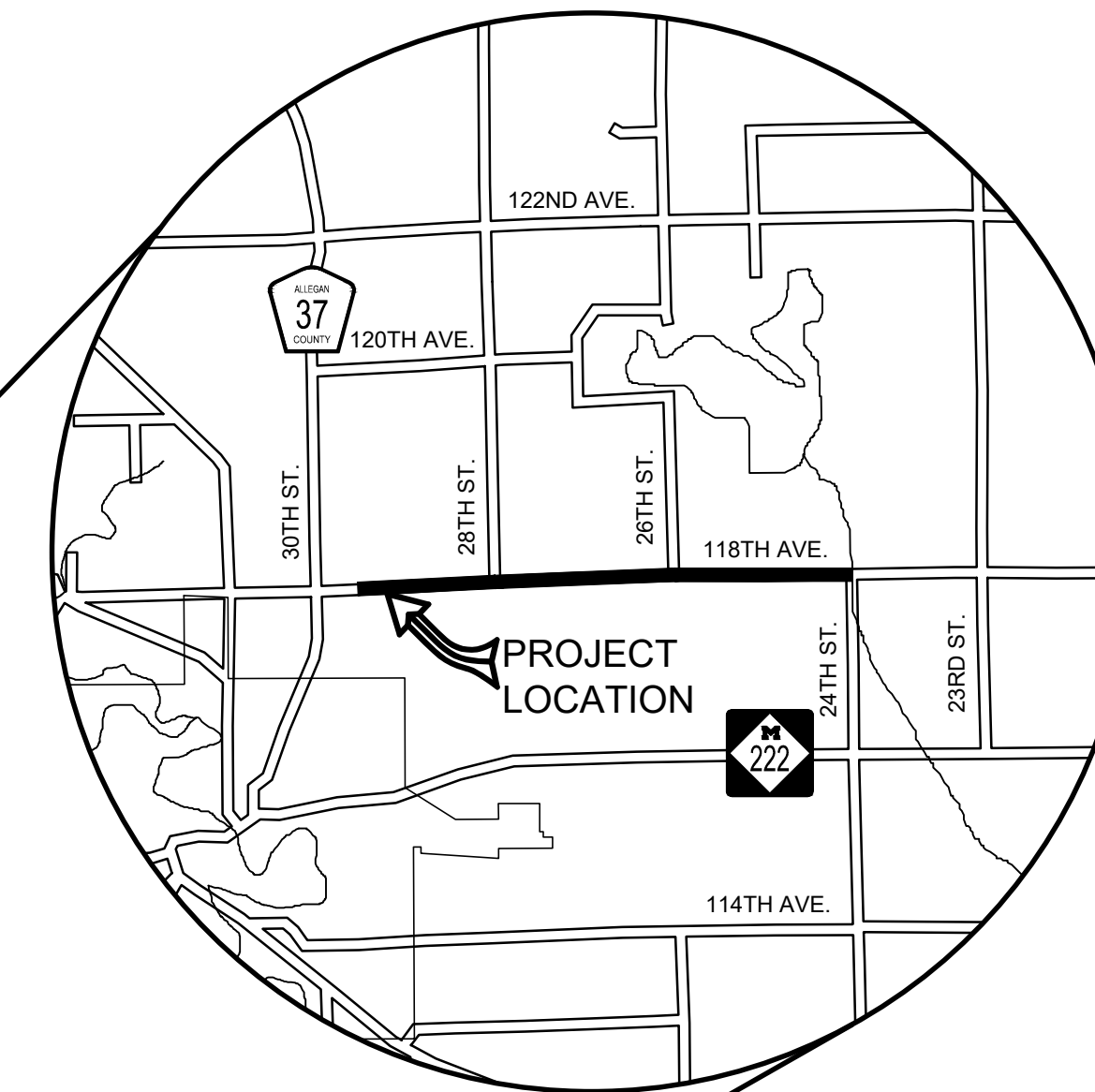
**Board of County Road Commissioners  
Of Allegan County**  
1308 LINCOLN ROAD  
ALLEGAN, MICHIGAN 49010-9762  
TELEPHONE (269) 673-2184 www.alleganroads.org FAX (269) 673-5922

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

THE IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2011 EDITION, A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.

THE CONTRACTOR SHALL DIAL MISS DIG @ 811 FOR PROTECTION OF UNDER GROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.



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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

COVER SHEET

#### CONTRACT FOR ROAD IMPROVEMENTS

2.77 MILES OF ROADWAY REHABILITATION INCLUDING CLEARING, TRENCHING, CRUSHING AND SHAPING, WIDENING, AGGREGATE BASE, CULVERT REPLACEMENTS, HMA PAVING, AND RESTORATION ON 118TH AVENUE FROM INDUSTRIAL DRIVE TO 24TH STREET IN ALLEGAN TOWNSHIP, ALLEGAN COUNTY.

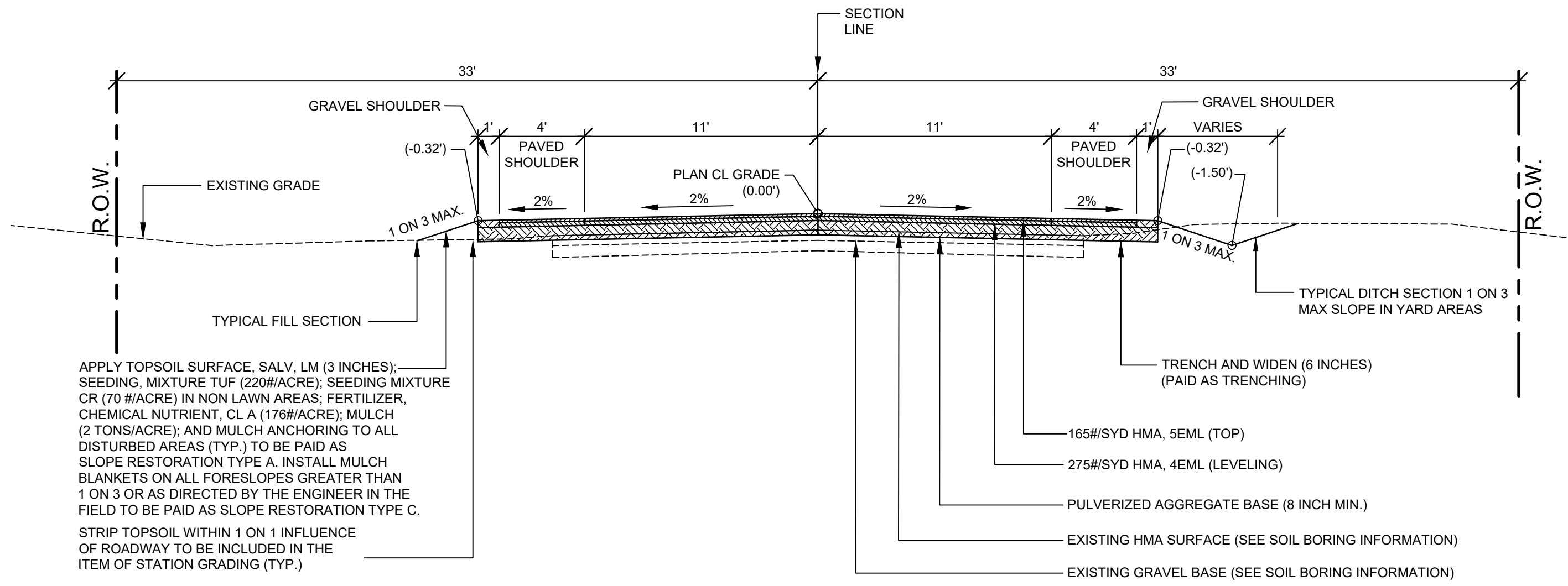
PREPARED UNDER THE SUPERVISION OF:



ADDISON C. WOLF  
REGISTERED PROFESSIONAL ENGINEER No. 6201310174

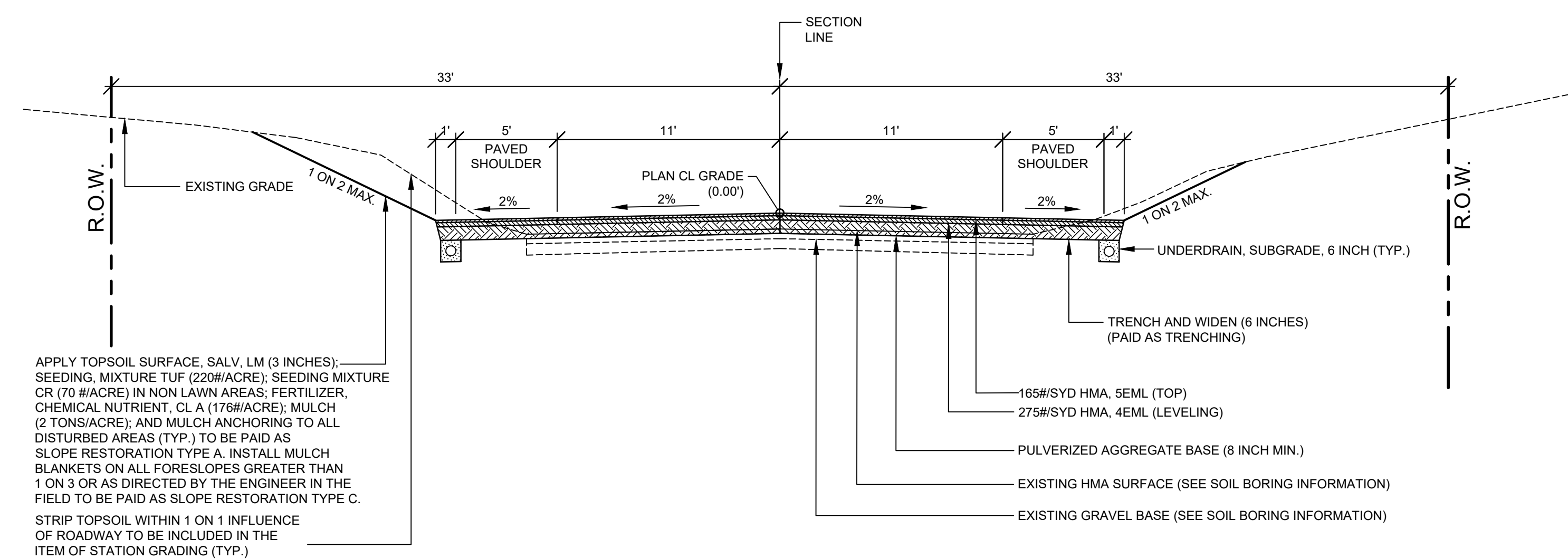
DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: NONE

PH 300038 1



**TYPICAL SECTION - 118TH AVENUE**

SCALE: 1" = 5'  
 THIS SECTION APPLIES TO:  
 P.O.B. TO P.O.E.  
 28TH STREET APRON  
 26TH STREET APRON  
 24TH STREET APRON



**TYPICAL VALLEY GUTTER SECTION - 118TH AVENUE**

SCALE: 1" = 5'  
 THIS SECTION APPLIES TO:  
 STA. 112+00 TO 115+00 LT  
 STA. 127+00 TO 131+00 RT

ITEM	AWI	YIELD	PERFORMANCE GRADE
HMA, 5EML (TOP)	220	165#/SYD	P.G. 64 - 28
HMA, 4EML (LEVELING)		275#/SYD	P.G. 64 - 28
HMA BOND COAT (NOT A PAY ITEM)		0.05 TO 0.15 GAL/SYD	SS - 1h

**HMA APPLICATION TABLE**

**PROJECT NOTES**

THE "2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND "STANDARD PLANS" BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) ARE HEREBY INCORPORATED INTO THESE CONTRACT DOCUMENTS. COPIES OF THESE STANDARDS ARE AVAILABLE FOR INSPECTION AT THE OFFICE OF THE ENGINEER.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE ALLEGAN COUNTY ROAD COMMISSION TO NOTIFY THEM THAT WORK IS COMMENCING.

THE CONTRACTOR SHOULD NOTE THAT STATION GRADING WILL INCLUDE THE REMOVAL OF FENCES, CULVERTS, BRUSH, TREES SMALLER THAN 6", CONCRETE FOUNDATIONS, AND MISCELLANEOUS ITEMS AS REQUIRED AND WILL ALSO INCLUDE ALL EARTH EXCAVATION, EMBANKMENT, AND ALL OTHER OPERATIONS NECESSARY TO DEVELOP THE DESIRED CROSS SECTION. ALL TOPSOIL AND OTHER UNSUITABLE MATERIAL LOCATED BENEATH THE PROPOSED PAVEMENT SECTION WILL BE REMOVED TO THE SUBGRADE ELEVATION AS PART OF STATION GRADING. ALL TOPSOIL REMOVED MAY BE STOCKPILED AND REUSED AS TOPSOIL SURFACE, SALV. LM.

ALL FILL FOR THIS PROJECT MUST BE OBTAINED AND FURNISHED BY THE CONTRACTOR. ALL REQUIRED FILL SHALL BE SELECTED EXCAVATED MATERIAL FROM THE SITE APPROVED BY THE ENGINEER. OR MDOT CLASS II GRANULAR MATERIAL FROM BORROW. EXCESS FILL WILL BE REMOVED FROM SITE BY THE CONTRACTOR. NO BORROW OR SOIL REMOVAL ARRANGEMENTS HAVE BEEN PREARRANGED FOR THIS PROJECT AND WILL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR.

THE SOIL BORINGS WERE TAKEN BY GREAT LAKES DRILLING COMPANY, P.O. BOX 51, ALLEGAN, MI 49010 ON JANUARY 10, 2023. THE TEST BORINGS REPRESENT POINT INFORMATION AND MAY NOT HAVE ENCOUNTERED ALL THE TYPES AND MATERIALS WHICH ARE PRESENT AT THE SITE. THESE BORING LOGS DO NOT CONSTITUTE A GUARANTEE OF THE SOIL OR GROUNDWATER CONDITIONS, OR THAT THE TEST BORINGS ARE AN EXACT REPRESENTATION OF THE SOIL OR GROUNDWATER CONDITIONS AT ALL POINTS ON THE SITE.

SEE PLAN SHEETS FOR SOIL BORING DATA.

DRIVE REPLACEMENT WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

AS PART OF THIS PROJECT THE CONTRACTOR WILL COORDINATE WITH THE ALLEGAN COUNTY ROAD COMMISSION TO PRESERVE AND RESET ALL GOVERNMENT CORNERS WITHIN THE PROJECT LIMITS.

CONTRACTOR WILL RELOCATE ALL MAILBOXES TO A TEMPORARY CENTRAL LOCATION APPROVED BY THE POSTAL SERVICE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL INSTALL A 1" x 3" STAKE WITH THE RESPECTIVE PROPERTY ADDRESS WRITTEN ON IT IN THE FRONT YARD OF EACH RESIDENCE TO ASSIST WITH IDENTIFICATION FOR EMERGENCY VEHICLES. PAYMENT FOR RELOCATION WILL BE INCLUDED IN THE ITEM OF PROJECT CLEANUP. AT THE COMPLETION OF THE PROJECT SAID MAILBOXES SHALL BE RESET AT THEIR APPROPRIATE LOCATIONS.

ALL DISTURBED AREAS NOT TO BE PAVED WILL BE RESTORED WITH TOPSOIL SURFACE, SALV. LM (3 INCHES), MDOT SEED MIXTURE TUF (220#/ACRE); SEEDING MIXTURE CR (70#/ACRE) IN NON LAWN AREAS; FERTILIZER, CHEMICAL NUTRIENT, CL A (176#/ACRE); AND MULCH AND MULCH ANCHORING (2 TON/ACRE) TO BE PAID AS SLOPE RESTORATION, TYPE A. AREAS TO USE HIGH VELOCITY MULCH BLANKET, TO BE PAID AS SLOPE RESTORATION TYPE C WILL BE DIRECTED BY THE ENGINEER IN THE FIELD.

ADEQUATE DUST CONTROL MEASURES WILL BE MAINTAINED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE VARIOUS ITEMS OF WORK.

MULCH BLANKET, HIGH VELOCITY WILL BE PLACED ON THE BOTTOM OF ALL DITCHES WHEN THE LONGITUDINAL GRADE IS GREATER THAN OR EQUAL TO 2.00% UNLESS OTHERWISE NOTED, OR AS DIRECTED BY THE ENGINEER IN THE FIELD TO BE PAID AS SLOPE RESTORATION TYPE C.

WHEN FIELD DRAIN TILES ARE ENCOUNTERED IN THE EXISTING DITCHES, THE CONTRACTOR WILL EXTEND THEM AS REQUIRED WITH UNDERDRAIN, SUBGRADE 4" OR 6" AND ADJUST THE DITCH GRADES AS NECESSARY TO PROVIDE POSITIVE DRAINAGE AS DIRECTED BY THE ENGINEER IN THE FIELD. THE COST OF THE CONNECTION WILL BE INCLUDED IN THE NEW PIPE ITEM. IF THE ENGINEER DETERMINES THAT AN EXISTING TILE IS TOO LONG THE CONTRACTOR WILL REMOVE THE TILE AS NECESSARY, TO BE INCLUDED IN THE ITEM OF STATION GRADING.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING DRAINAGE PATTERNS, AND WILL RESOLVE ANY DRAINAGE PROBLEMS ON ADJACENT PROPERTIES WHICH MAY RESULT FROM THE CONTRACTOR'S ACTIVITIES.

DATUM REFERS TO NAVD88 DATUM.

DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.

**UTILITY NOTES**

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR WILL CONTACT "MISS DIG" AT 811, A MINIMUM OF 72 HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE CONTRACTOR WILL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND WILL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

PRELIMINARY UTILITY COORDINATION WAS PERFORMED AND ALL UTILITIES HAVE VERIFIED LOCATIONS. CONSUMERS ELECTRIC IS WORKING TO RELOCATE POLES IN CONFLICT WITH THE PROJECT (AS IDENTIFIED IN PLAN & PROFILE OFFSET NOTES). FRONTIER COMMUNICATIONS IS WORKING TO RELOCATE CONDUIT IN CONFLICT WITH THE PROJECT. ZAYO FIBER IS WORKING TO RELOCATE CONDUIT IN CONFLICT WITH THE PROJECT.

**MISCELLANEOUS QUANTITIES**

DESCRIPTION	QUANTITY	UNIT
SUBGRADE UNDERCUTTING, TYPE II	2500	CYD
AGGREGATE, 6A	50	TON
GEOTEXTILE STABILIZATION	1500	SYD
RIPRAP, PLAIN	40	SYD
EROSION CONTROL, SILT FENCE	1250	FT
APPROACH, CL II	200	TON
APPROACH, HMA MILLINGS	100	TON
CULV. CL F, CONC, 18 INCH	48	FT
CULV. END SECT, CONC, 18 INCH	2	EA
CULV. CL F, 12 INCH	400	FT
CULV. CL F, 18 INCH	200	FT

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REVISIONS	1	2	3	4	5	6	7

**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

TYPICAL SECTIONS, DETAILS, & NOTES

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: NOVEMBER 2022  
 SCALE: AS NOTED

PH 300038 2

**SOIL BORINGS**

<b>SB #1</b>	0' - 7"	ASPHALT
	7' - 22"	BROWN & DARK BROWN SAND & FINE TO COARSE GRAVEL
	22" - 42"	DARK BROWN FINE TO MEDIUM SAND
	42" - 66"	GREY SILTY, VERY SANDY, CLAY (SOFT)
	66" - 84"	BROWN CLAYEY, VERY SILTY FINE SAND
	84" - 120"	GREY, SILTY FINE SAND
	120"	END OF BORING
<b>SB #2</b>	0' - 8"	ASPHALT
	8" - 35"	BROWN, TRACE DARK BROWN, MEDIUM SAND; SOME FINE TO COARSE GRAVEL
	35" - 60"	BROWN FINE SAND - MOIST TO WET
	60" - 84"	DARK BROWN, VERY SANDY PEAT WITH WOOD
	84" - 120"	BROWNISH GREY FINE TO MEDIUM SAND
	120"	END OF BORING

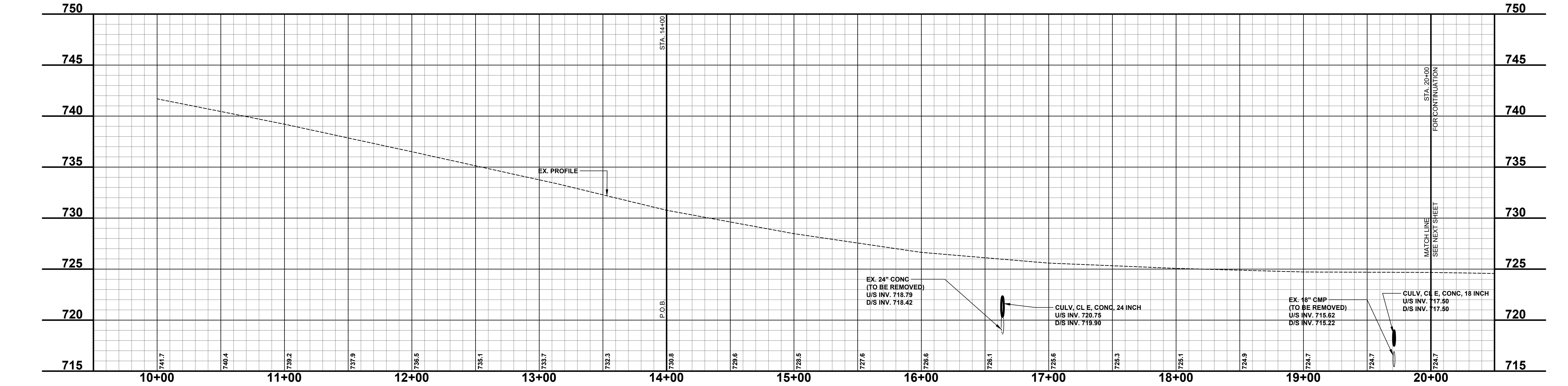
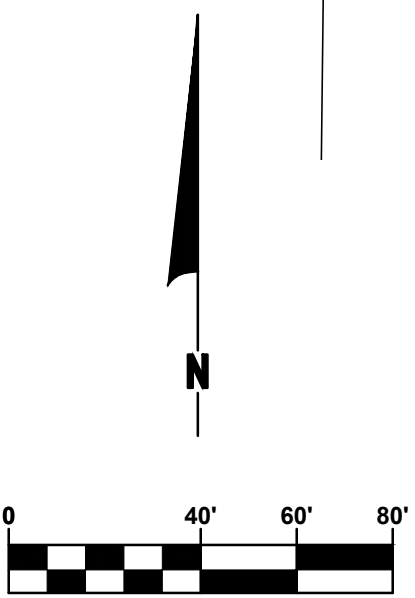
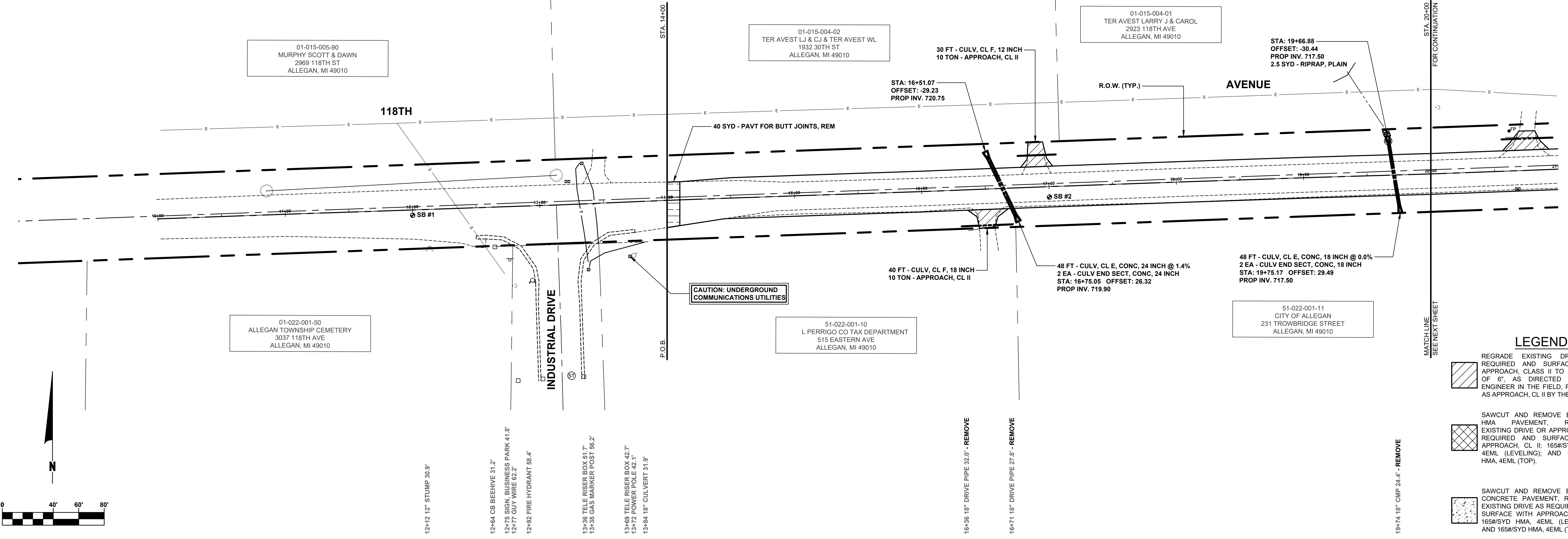
10x68 TREE LINE 16.9'

13x14 TREE LINE 23.4'  
13x22 MAILBOX 29.9' 18.1'  
13x34 TELE RISER BOX 31.8'

REMOVE - 16x54 24" CULVERT 22.1'

19x37 6" PVC 62.2'

REMOVE - 19x42 6" PVC 42.0'  
REMOVE - 19x64 6" PVC 38.1'  
REMOVE - 19x47 18" CMP 26.6'



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).

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REVISIONS

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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

118TH AVENUE PLAN - STA. P.O.B. TO STA. 20+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V

**SOIL BORINGS**

SB #3	0 - 5.5'	ASPHALT
	5.5' - 13'	BROWN MEDIUM SAND; SOME FINE TO COARSE GRAVEL
	13' - 40'	DARK BROWN MEDIUM SAND; SOME FINE TO COARSE GRAVEL
	40' - 60'	BROWN W/ GREY CLAY, TRACE FINE GRAVEL
	60'	END OF BORING

SB #4	0 - 7'	ASPHALT
	7' - 15'	BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	15' - 30'	DARK BROWN FINE SAND
	30' - 60'	BROWN W/ GREY SANDY CLAY
	60'	END OF BORING

20+06 GUY WIRE 52.0'

REMOVE - 20+60 12" CMP 26.5'  
20+63 FENCE POST 31.4'

REMOVE - 20+80 12" CMP 25.4'

23+49 POWER POLE 34.2'

REMOVE - 26+02 18" CPP 22.8'

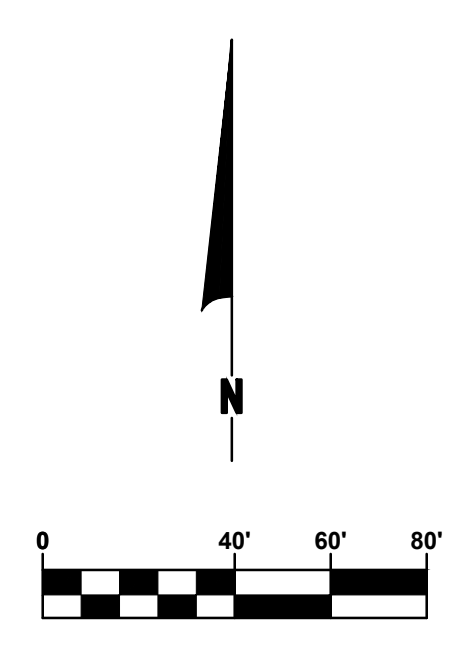
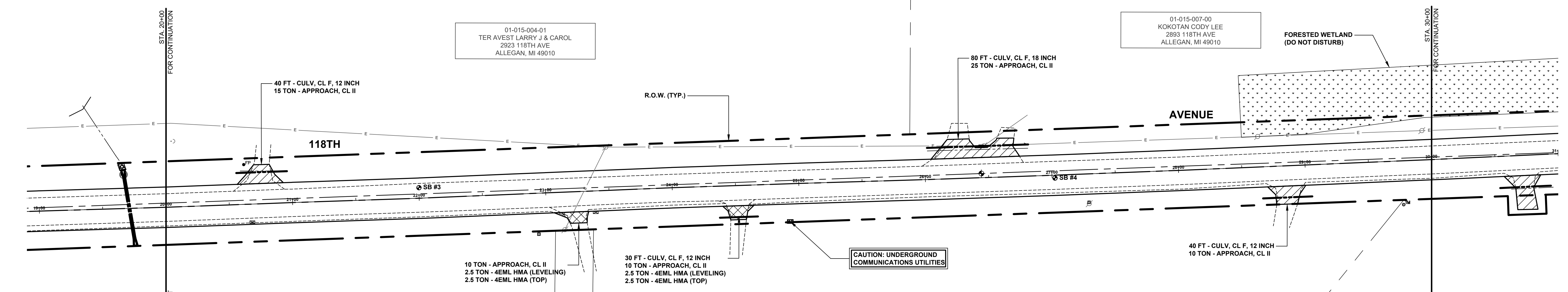
RELOCATE - 26+45 MAILBOX 2893 25.0'  
RELOCATE (BY OTHERS) - 26+47 POWER POLE 25.1'

26+79 4" PVC 26.2'  
26+82 18" CPP 22.1'

REMOVE - 26+82 18" CPP 22.1'

RELOCATE (BY OTHERS) - 28+64 POWER POLE 24.1'

RELOCATE (BY OTHERS) - 29+93 POWER POLE 23.2'



20+68 MAILBOX 2923 14.3' - RELOCATE

22+93 TELE RISER BOX 32.4'

23+14 POWER POLE 29.7'

23+39 MAILBOX 2910 17.0' - RELOCATE

24+92 VLT FIBER 29.8'

27+29 TELE RISER BOX 22.5'

27+29 POWER POLE 23.5'

28+76 TMP 34.7'

01-015-004-01  
TER AVEST LARRY J & CAROL  
2923 118TH AVE  
ALLEGAN, MI 49010

51-022-001-11  
CITY OF ALLEGAN  
231 TROWBRIDGE STREET  
ALLEGAN, MI 49010

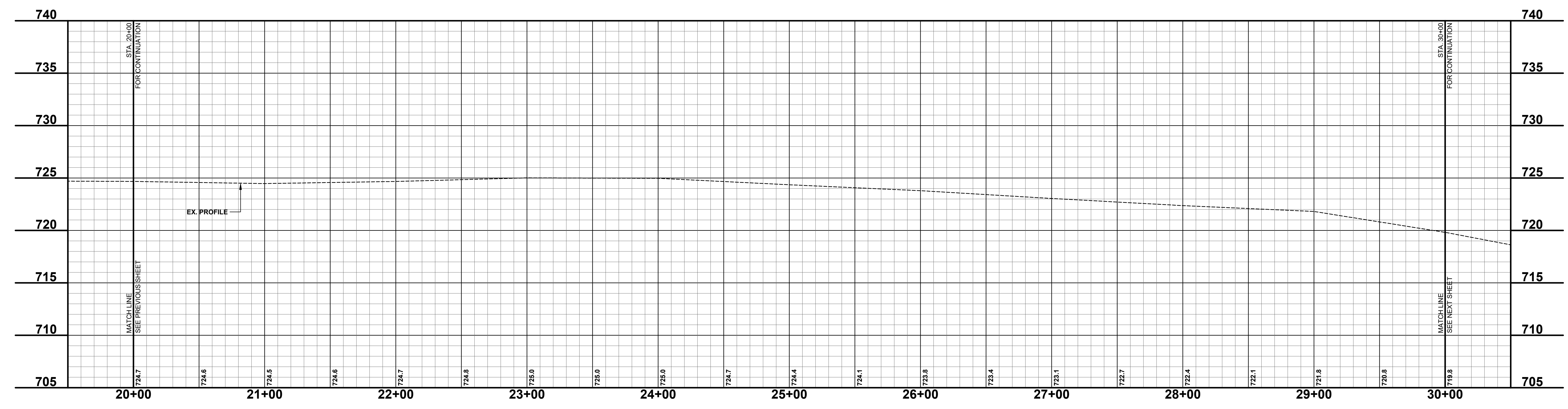
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MCKEE TIMOTHY & JACQUELYN  
2910 118TH AVE  
ALLEGAN, MI 49010

01-015-007-00  
KOKOTAN CODY LEE  
2893 118TH AVE  
ALLEGAN, MI 49010

CAUTION: UNDERGROUND COMMUNICATIONS UTILITIES

**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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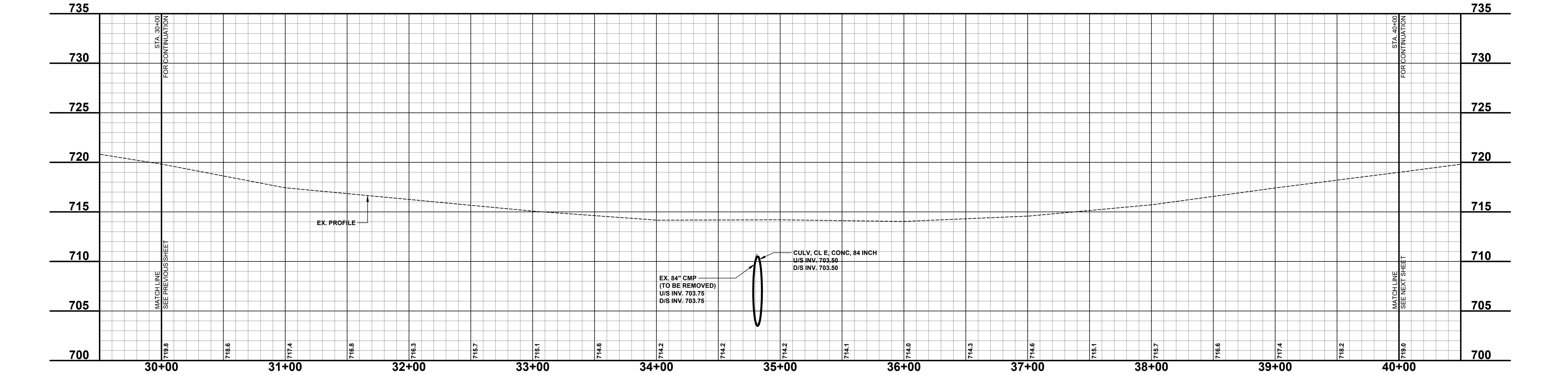
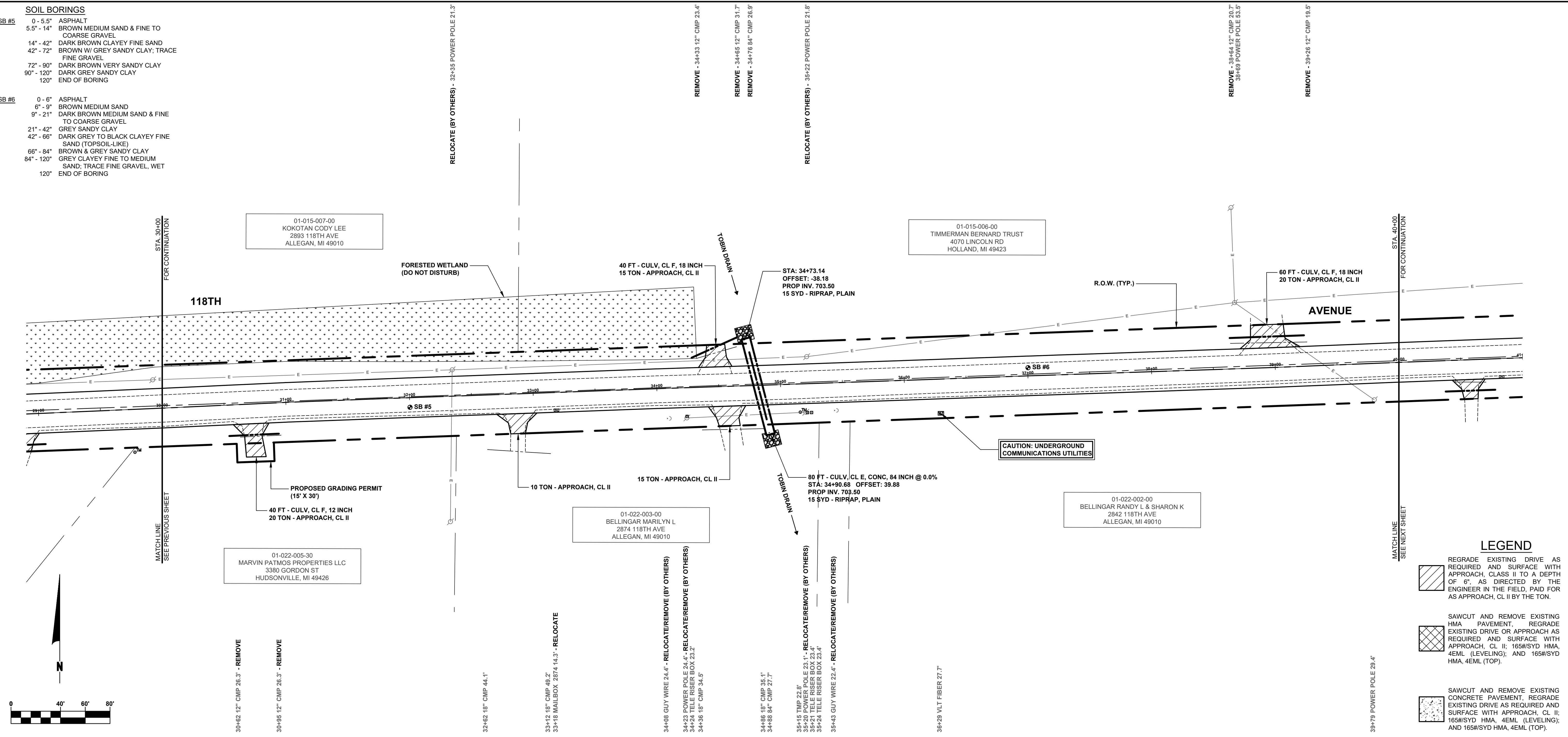
**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
118TH AVENUE PLAN - STA. 20+00 TO STA. 30+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V

PH 300038 4

**SOIL BORINGS**

SB #5	SB #6
0 - 5.5' ASPHALT	0 - 6" ASPHALT
5.5' - 14' BROWN MEDIUM SAND & FINE TO COARSE GRAVEL	6" - 9" BROWN MEDIUM SAND
14' - 42' DARK BROWN CLAYEY FINE SAND	9" - 21" DARK BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
42' - 72' BROWN W/ GREY SANDY CLAY; TRACE FINE GRAVEL	21' - 42' GREY SANDY CLAY
72' - 90' DARK BROWN VERY SANDY CLAY	42' - 66" DARK GREY TO BLACK CLAYEY FINE SAND (TOPSOIL-LIKE)
90' - 120" DARK GREY SANDY CLAY	66" - 84" BROWN & GREY SANDY CLAY
120" END OF BORING	84" - 120" GREY CLAYEY FINE TO MEDIUM SAND; TRACE FINE GRAVEL, WET
	120" END OF BORING



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REVISIONS

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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

118TH AVENUE PLAN - STA. 30+00 TO STA. 40+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1" = 40'H, 5V

**SOIL BORINGS**

**SB #7**  
 0 - 7" ASPHALT  
 7" - 22" BROWN MEDIUM SAND; TRACE FINE TO COARSE GRAVEL  
 22" - 36" DARK BROWN FINE SAND; TRACE FINE TO COARSE GRAVEL  
 36" - 60" BROWN W/ GREY SANDY CLAY; TRACE FINE GRAVEL  
 60" END OF BORING

**SB #8**  
 0 - 6" ASPHALT  
 6" - 12" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 12" - 22" DARK BROWN FINE TO MEDIUM SAND; SOME FINE TO COARSE GRAVEL  
 22" - 28" BROWN MEDIUM SAND; SOME FINE GRAVEL  
 28" - 60" BROWN W/ GREY SANDY CLAY  
 60" END OF BORING

01-015-006-00  
 TIMMERMAN BERNARD TRUST  
 4070 LINCOLN RD  
 HOLLAND, MI 49423

01-015-001-00  
 TIMMERMAN FARMS LLC  
 4098 M-40 HWY  
 HOLLAND, MI 49423

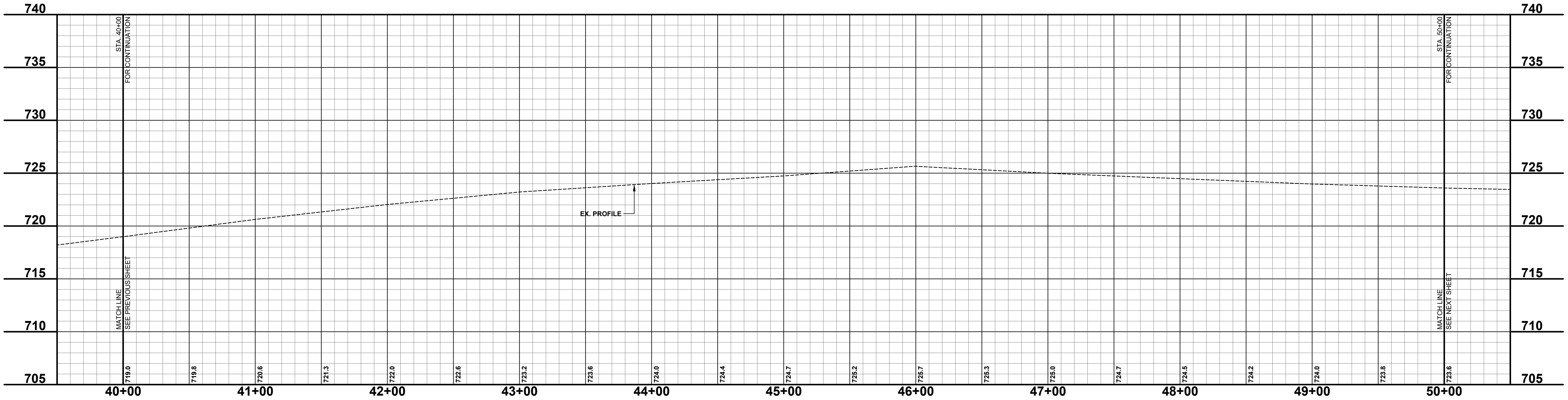
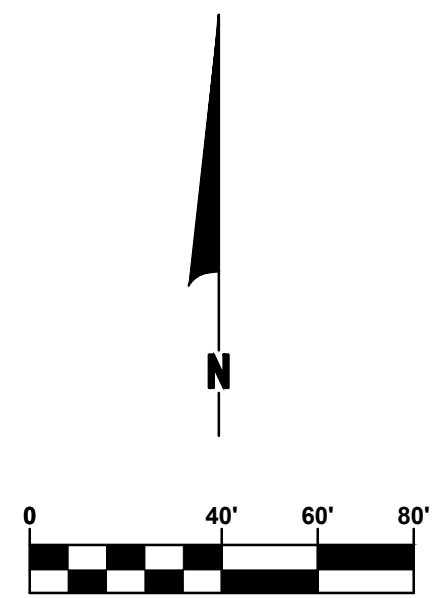
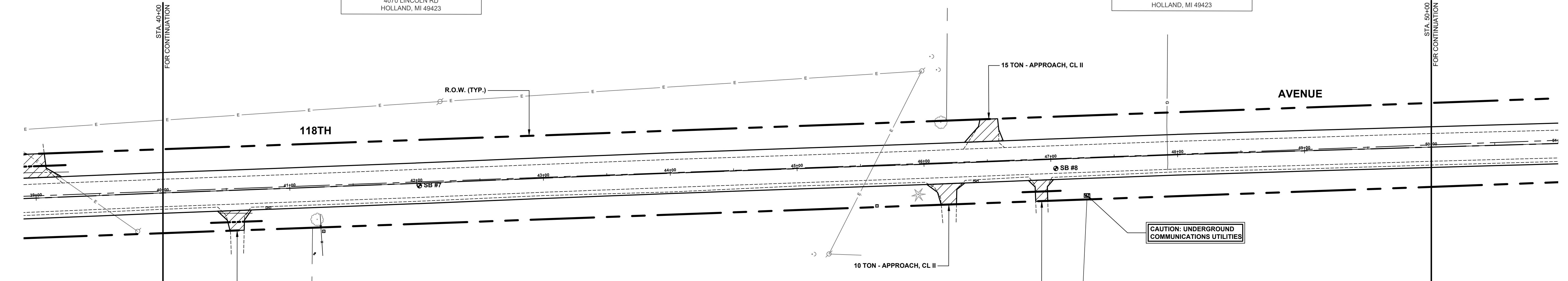
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 TER AVEST LARRY J & CAROL J TRUST  
 2923 118TH AVE  
 ALLEGAN, MI 49010

01-022-001-10  
 TER AVEST LARRY J & CAROL J TRUST  
 2923 118TH AVE  
 ALLEGAN, MI 49010

01-022-002-00  
 BELLINGAR RANDY L & SHARON K  
 2842 118TH AVE  
 ALLEGAN, MI 49010

- 40x45 12" CMP 17.6' - REMOVE
- 40x70 12" CMP 18.6' - REMOVE
- 40x83 MAILBOX 2842 14.8' - RELOCATE
- 44x41 WELL 82.2'
- 44x21 WET MARLE 296.4' - REMOVE
- 41x23 FENCE 21.8' - RELOCATE
- 41x24 FENCE 63.9'
- 41x28 TELE RISER BOX 34.9'

- 45x10 GUY WIRE 67.6'
- 45x23 POWER POLE 68.0'
- 45x50 GP WOOD POST 22.5' - REMOVE
- 45x62 TELE RISER BOX 31.4'
- 45x95 12" PINE 23.6' - REMOVE
- 46x40 MAILBOX 2826 15.1' - RELOCATE
- 47x28 VLT FIBER 29.5'



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6\"/>
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).

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 ALLEGAN, MICHIGAN 49010-9762  
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REVISIONS	
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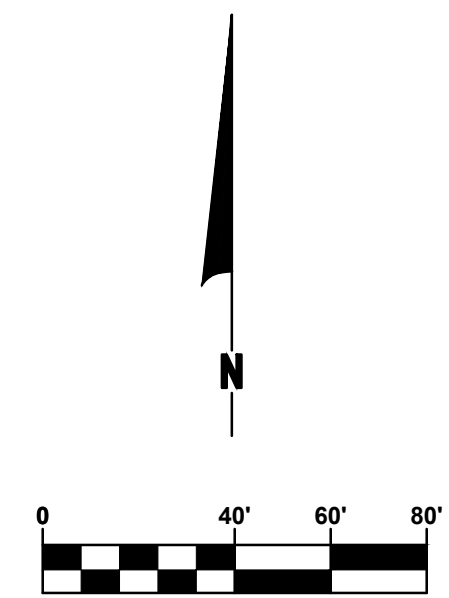
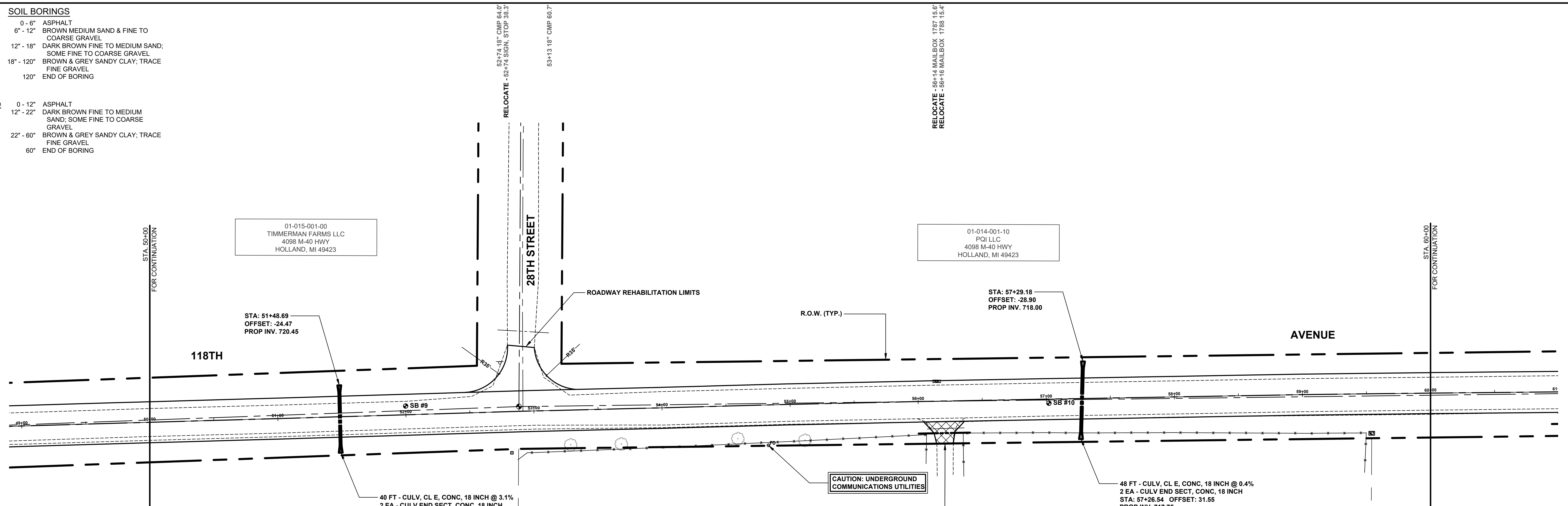
**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
 118TH AVENUE PLAN - STA. 40+00 TO STA. 50+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1"= 40'H, 5V

PH 300038 6

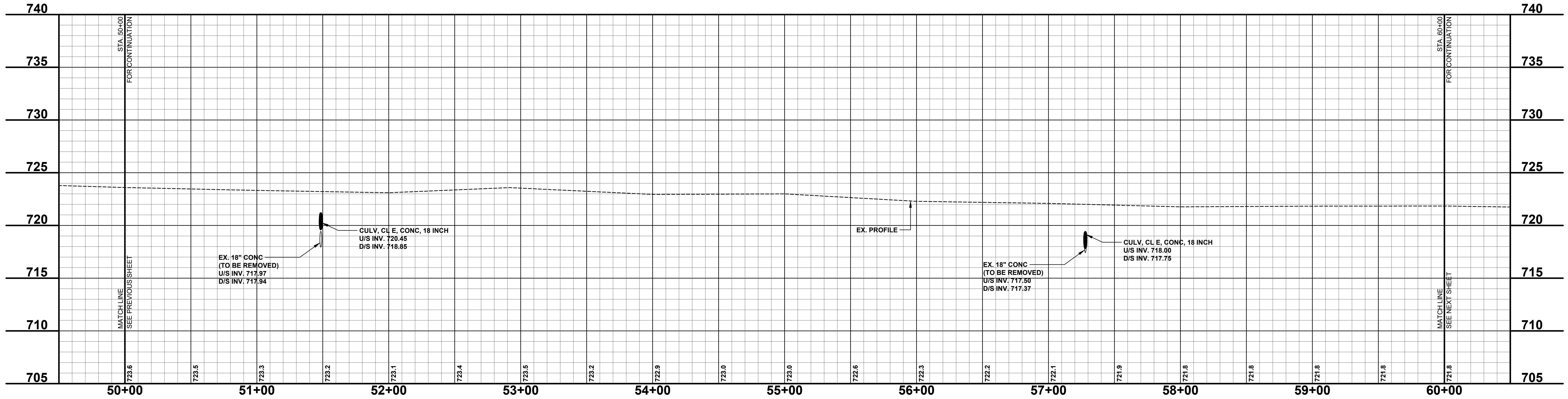
**SOIL BORINGS**

- SB #9**  
 0 - 6" ASPHALT  
 6" - 12" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 12" - 18" DARK BROWN FINE TO MEDIUM SAND; SOME FINE TO COARSE GRAVEL  
 18" - 120" BROWN & GREY SANDY CLAY; TRACE FINE GRAVEL  
 120" END OF BORING
- SB #10**  
 0 - 12" ASPHALT  
 12" - 22" DARK BROWN FINE TO MEDIUM SAND; SOME FINE TO COARSE GRAVEL  
 22" - 60" BROWN & GREY SANDY CLAY; TRACE FINE GRAVEL  
 60" END OF BORING



CAUTION: UNDERGROUND COMMUNICATIONS UTILITIES

- LEGEND**
- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
  - SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
  - SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
 118TH AVENUE PLAN - STA. 50+00 TO STA. 60+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1" = 40'H, 5V

PH 300038 7

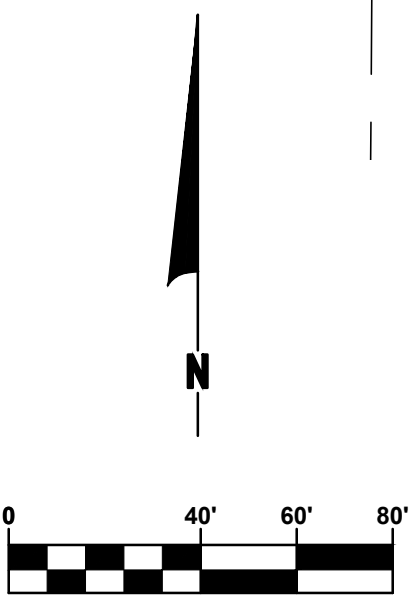
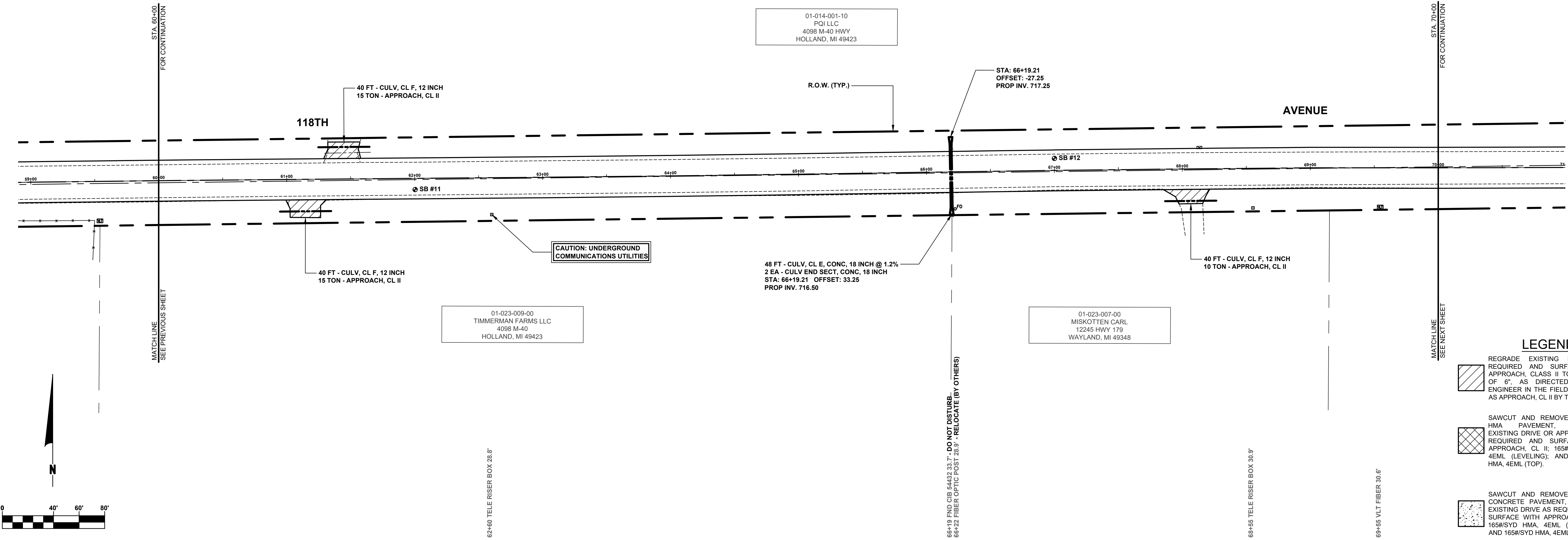
**SOIL BORINGS**  
 SB #11 0 - 5" ASPHALT  
 5" - 16" ASPHALT OR ASPHALT MILLINGS  
 16" - 22" DARK BROWN FINE TO MEDIUM SAND;  
 SOME FINE TO COARSE GRAVEL  
 22" - 60" BROWN W/ GREY CLAY, TRACE FINE  
 GRAVEL  
 60" END OF BORING

SB #12 0 - 9.5" ASPHALT  
 9.5" - 21" BROWN MEDIUM SAND & FINE TO  
 COARSE GRAVEL  
 21" - 36" DARK BROWN CLAYEY FINE TO  
 MEDIUM SAND  
 36" - 60" BROWN SANDY CLAY  
 60" END OF BORING

REMOVE - 61+30 12" CMP 20.3'

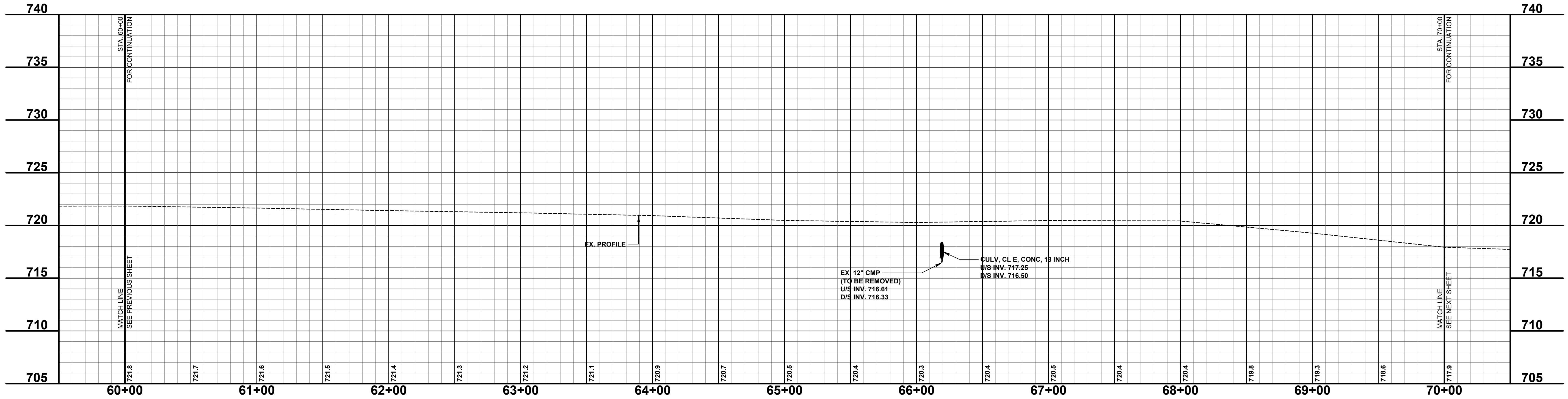
REMOVE - 61+66 12" CMP 20.7'

RELOCATE - 68+13 MAILBOX 27'44.16.6'



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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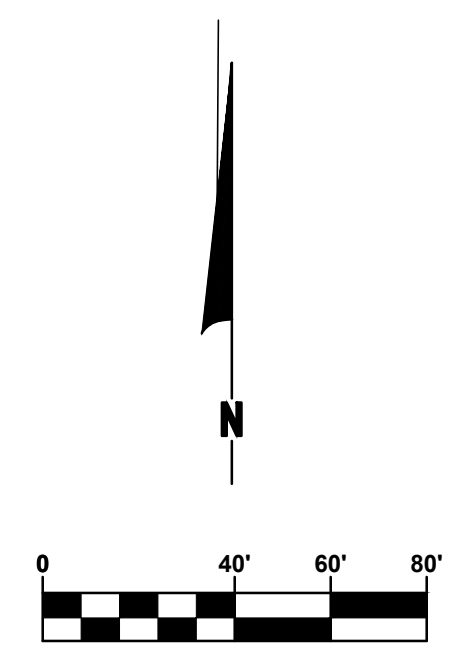
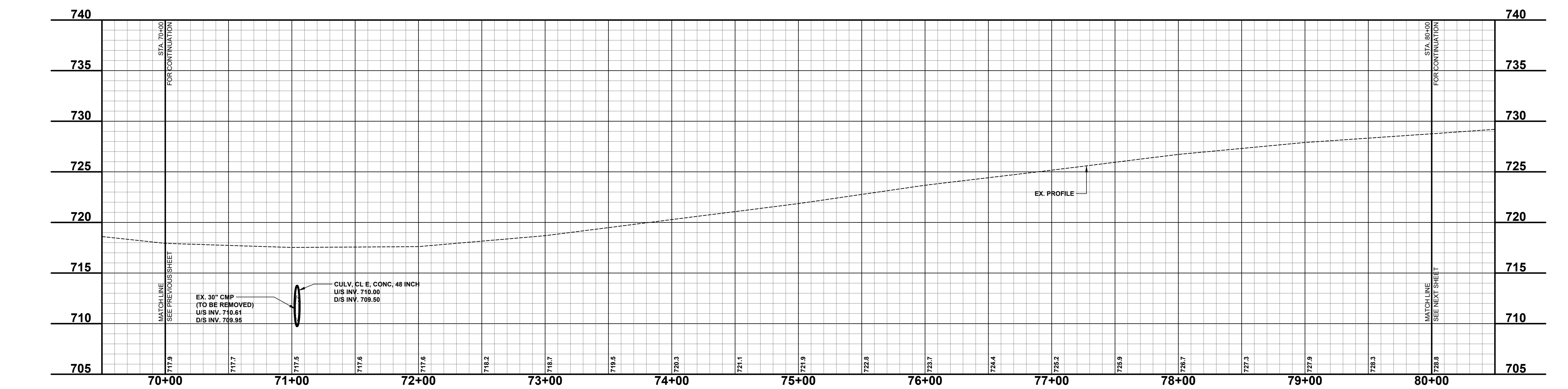
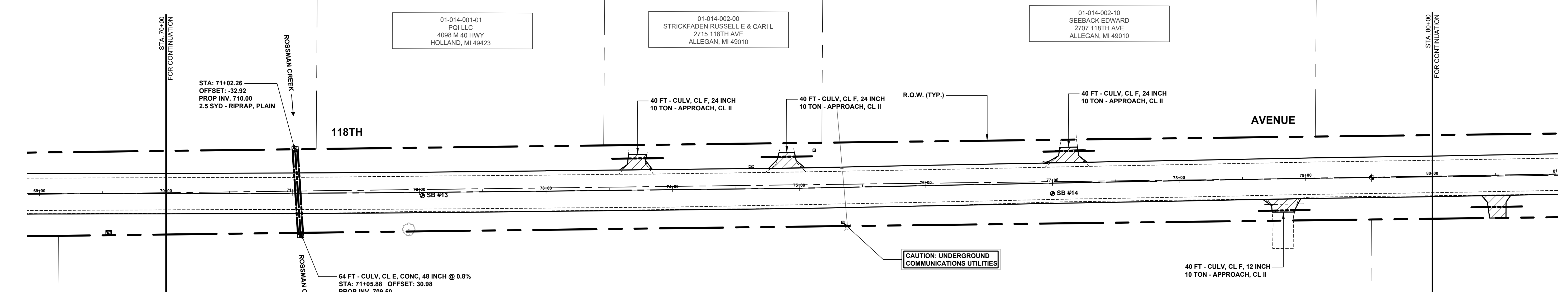
**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
 118TH AVENUE PLAN - STA. 60+00 TO STA. 70+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1"= 40'H, 5V



**SOIL BORINGS**

<b>SB #13</b>	0 - 11" ASPHALT
	11" - 20" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	20" - 42" DARK BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
	42" - 60" DARK GREY & DARK BROWN SANDY CLAY
	60" END OF BORING
<b>SB #14</b>	0 - 9" ASPHALT
	9" - 12" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	12" - 26" DARK BROWN CLAYEY FINE SAND
	26" - 60" BROWN W/ GREY CLAY; TRACE FINE GRAVEL
	60" END OF BORING



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6". AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).

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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
118TH AVENUE PLAN - STA. 70+00 TO STA. 80+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V

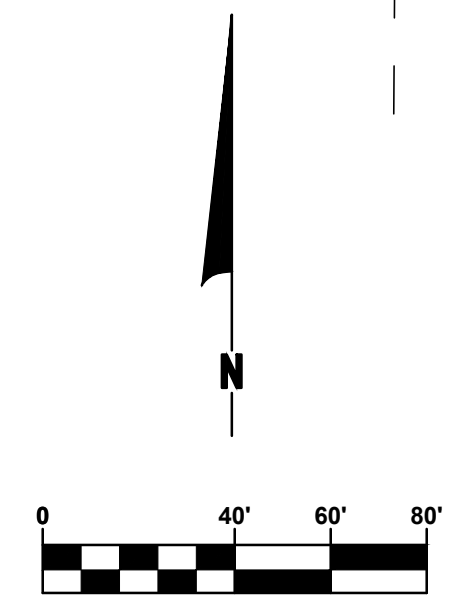
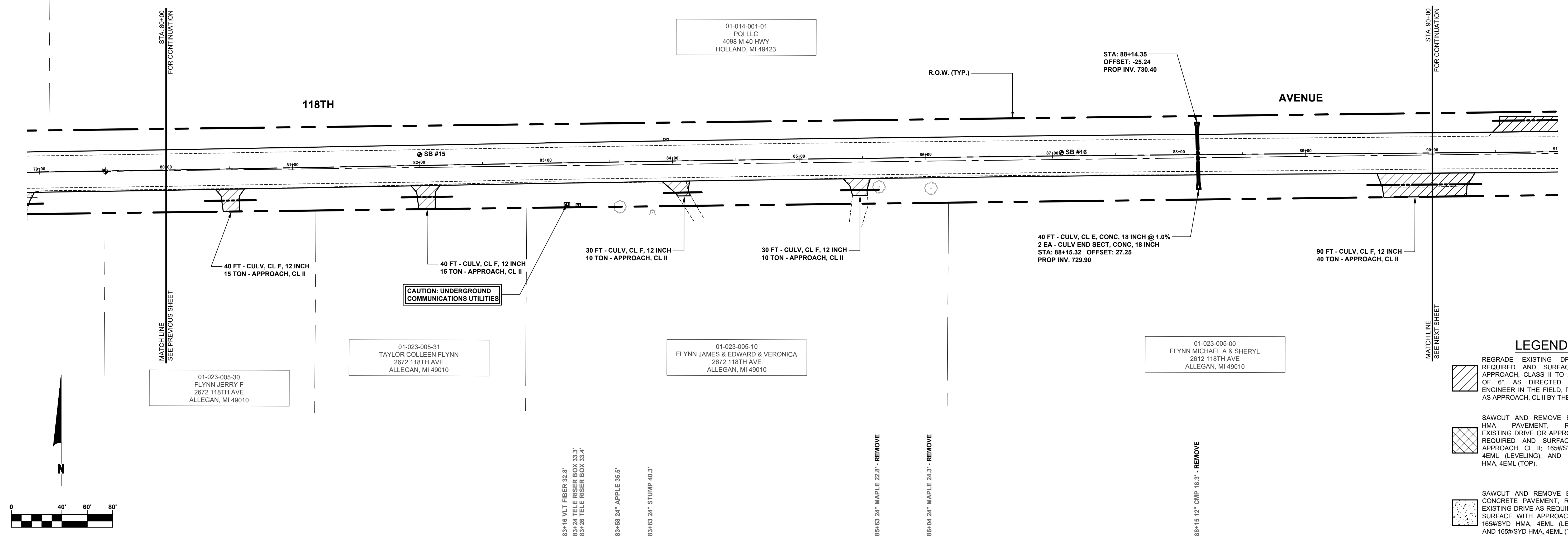
PH 300038 9

**SOIL BORINGS**

<b>SB #15</b>	0 - 12" ASPHALT
	12" - 22" DARK BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	22" - 60" BROWN, TRACE GREY, CLAY
	60" END OF BORING
<b>SB #16</b>	0 - 7" ASPHALT
	7" - 27" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	27" - 60" BROWN W/ GREY SILTY, SANDY CLAY
	60" END OF BORING

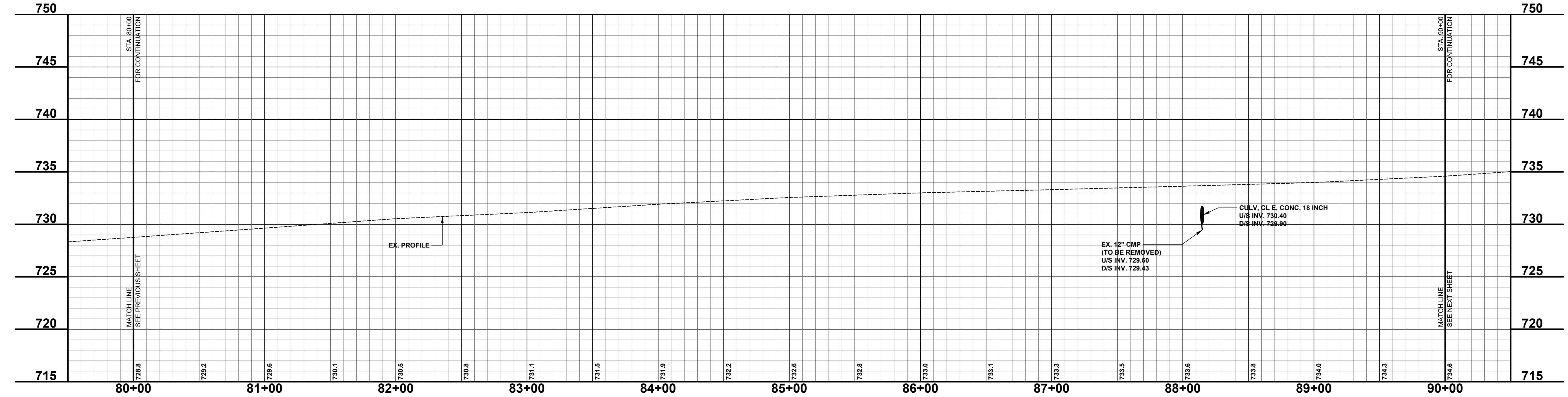
RELOCATE - 83+95 MAILBOX 2672 17.1'

REMOVE - 88+14 12" CMP 17.8'



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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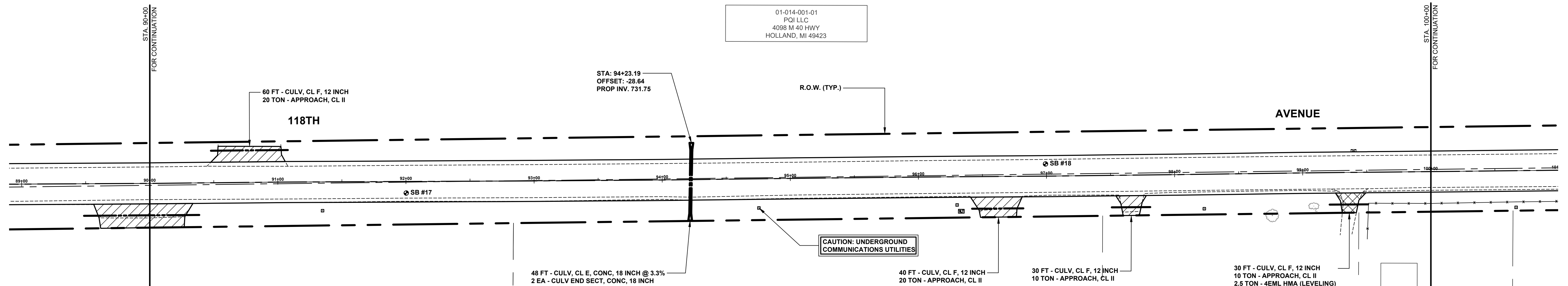
**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
118TH AVENUE PLAN - STA. 80+00 TO STA. 90+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V

PH 300038 10

**SOIL BORINGS**  
**SB #17**  
 0 - 7.5" ASPHALT  
 7.5" - 28" BROWN & DARK BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 28" - 60" GREY & BROWN VERY SANDY CLAY; TRACE SILT (MOIST)  
 60" END OF BORING

**SB #18**  
 0 - 9" ASPHALT  
 9" - 18" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 18" - 34" BROWN SANDY CLAY  
 34" - 60" BROWN & DARK BROWN CLAYEY MEDIUM SAND; SOME FINE GRAVEL  
 60" END OF BORING



01-014-001-01  
 POJ LLC  
 4098 M 40 HWY  
 HOLLAND, MI 49423

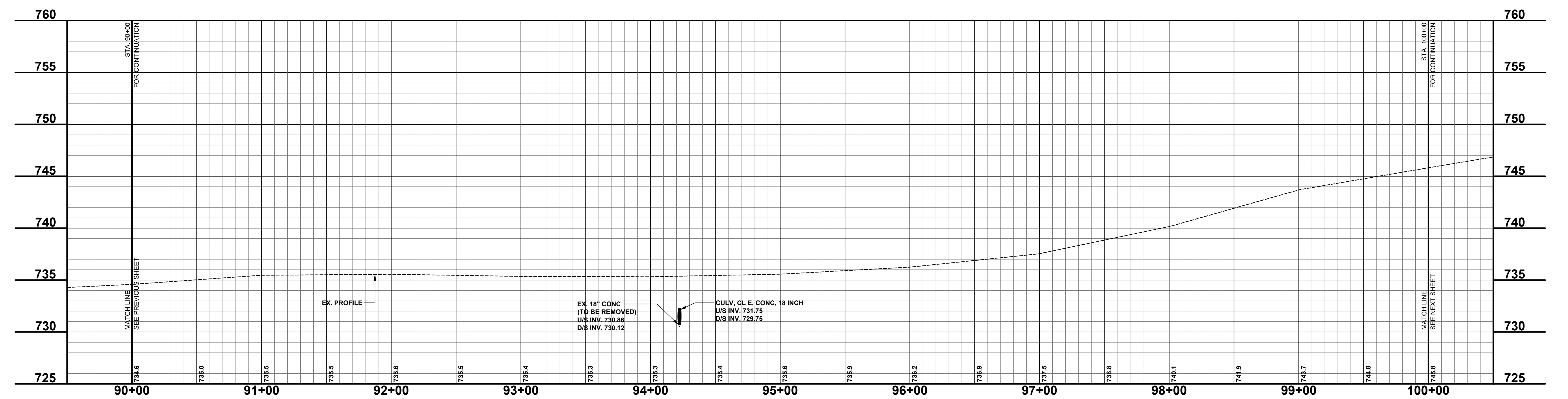
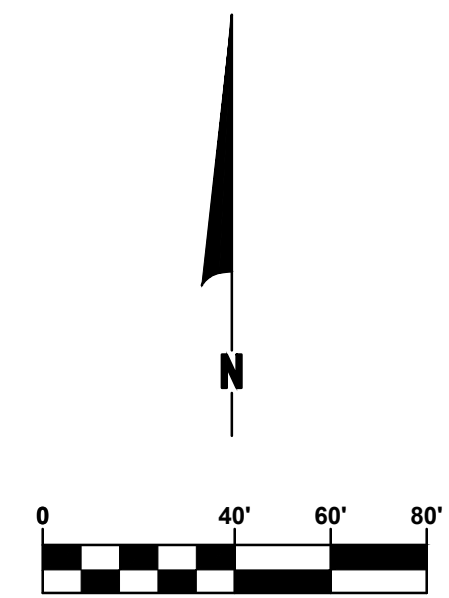
01-023-005-00  
 FLYNN MICHAEL A & SHERYL  
 2612 118TH AVE  
 ALLEGAN, MI 49010

01-023-004-00  
 ZUGEL JOHN M & DELPHINE TRUST  
 2484 WEGNAR DR  
 ALLEGAN, MI 49010

01-023-003-00  
 BREON RODNEY  
 2626 118TH AVE  
 ALLEGAN, MI 49010

01-023-001-00  
 FLYNN MICHAEL & SHERYL  
 2612 118TH AVE  
 ALLEGAN, MI 49010

- LEGEND**
- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
  - SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
  - SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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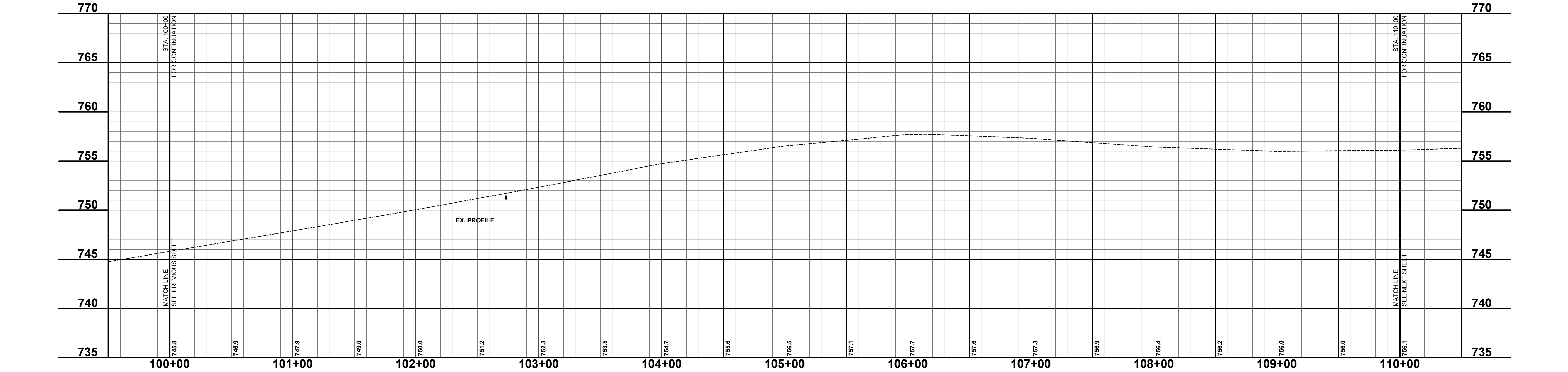
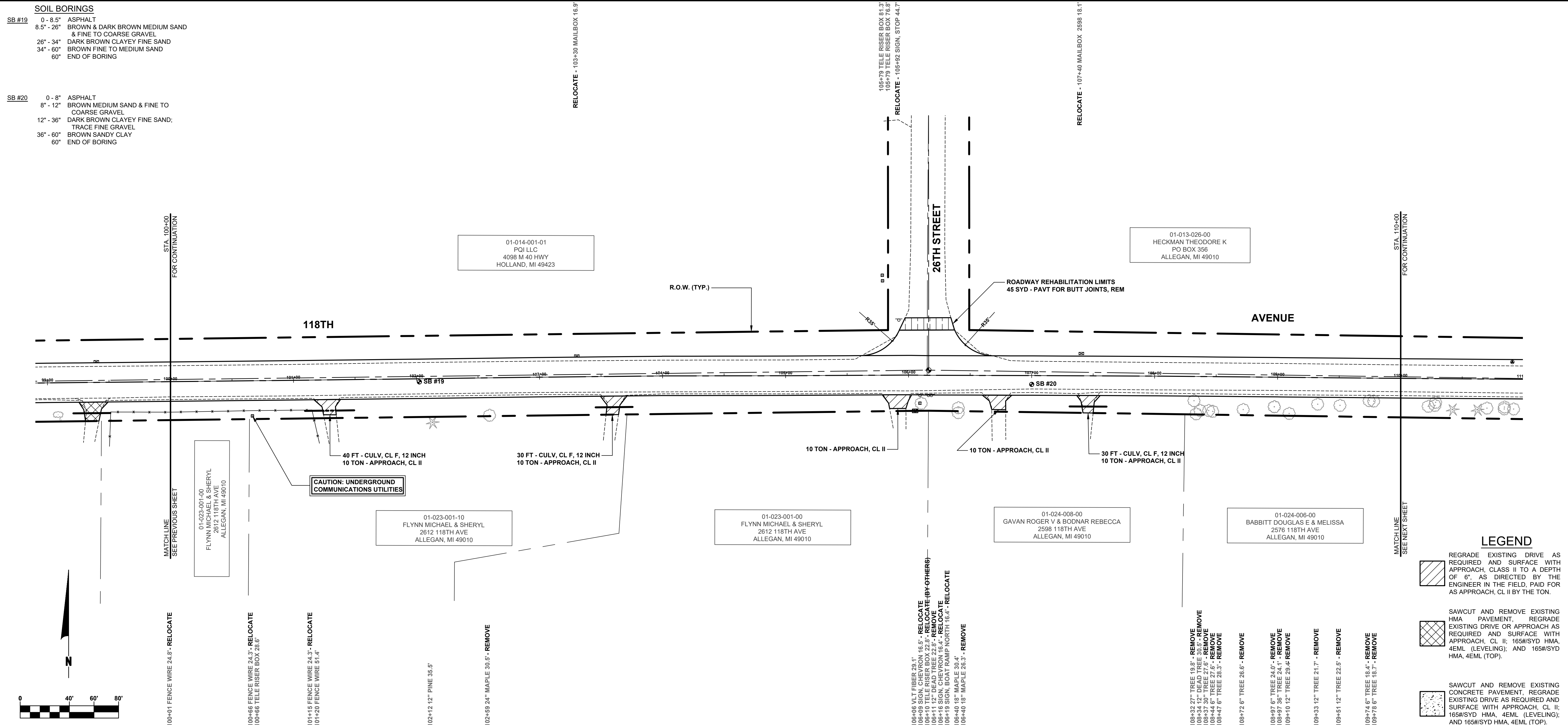
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**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
 118TH AVENUE PLAN - STA. 90+00 TO STA. 100+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1"= 40'H, 5V

**SOIL BORINGS**  
**SB #19**  
 0 - 8.5" ASPHALT  
 8.5" - 26" BROWN & DARK BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 26" - 34" DARK BROWN CLAYEY FINE SAND  
 34" - 60" BROWN FINE TO MEDIUM SAND  
 60" END OF BORING

**SB #20**  
 0 - 8" ASPHALT  
 8" - 12" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 12" - 36" DARK BROWN CLAYEY FINE SAND, TRACE FINE GRAVEL  
 36" - 60" BROWN SANDY CLAY  
 60" END OF BORING



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6". AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).

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**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
 118TH AVENUE PLAN - STA. 100+00 TO STA. 110+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1"= 40'H, 5V

**SOIL BORINGS**

**SB #21**  
 0 - 7" ASPHALT  
 7" - 14" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 14" - 42" BROWN MEDIUM TO COARSE SAND; SOME FINE GRAVEL  
 42 - 60" BROWN VERY SANDY CLAY  
 60" END OF BORING

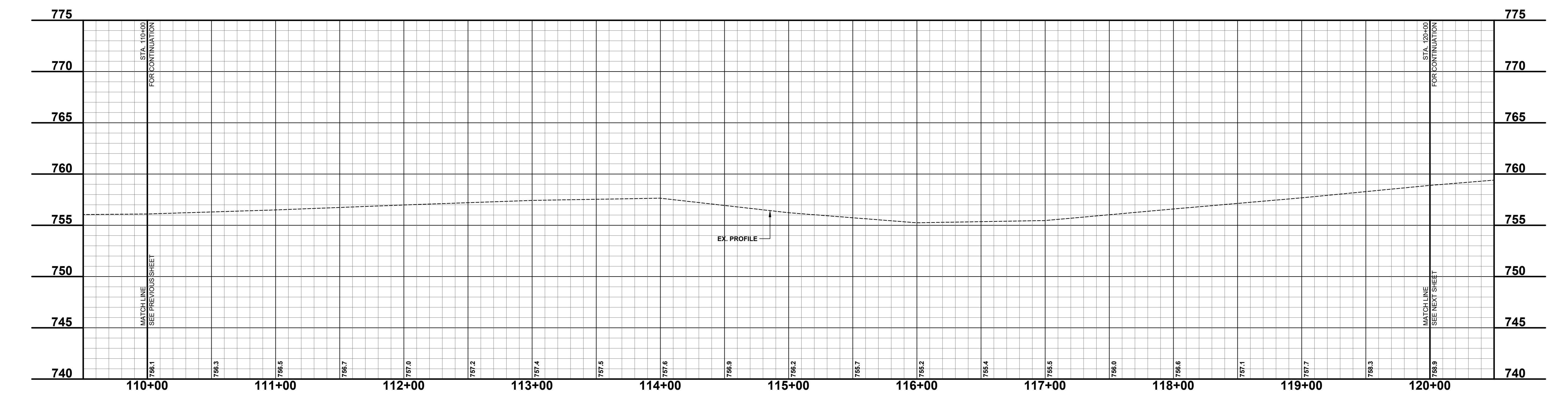
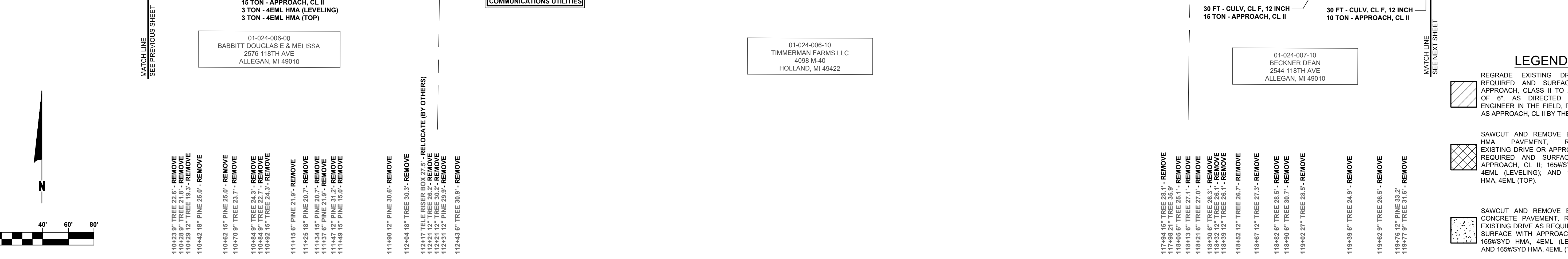
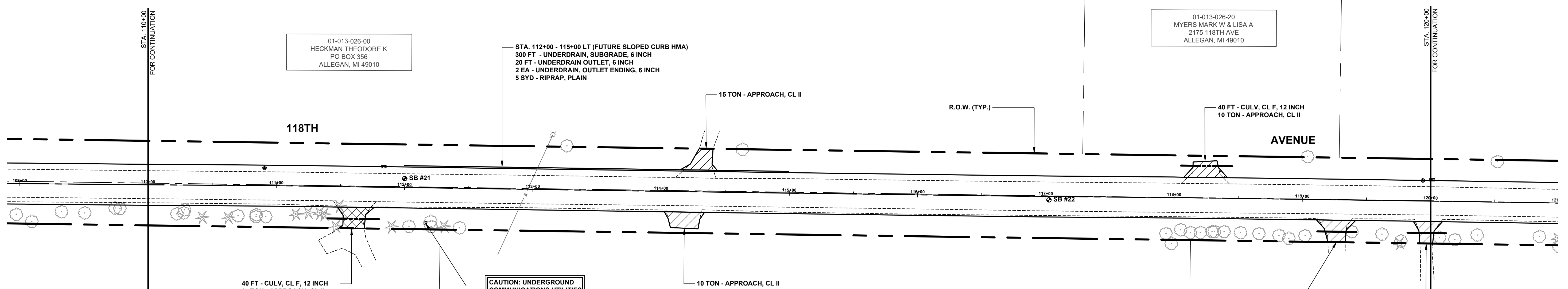
**SB #22**  
 0 - 5" ASPHALT  
 5" - 10" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 10" - 24" DARK BROWN CLAYEY FINE TO MEDIUM SAND; SOME COARSE GRAVEL  
 24" - 60" BROWN SANDY CLAY  
 60" END OF BORING

RELOCATE - 111+83 MAILBOX 2576 16.9'

113+15 POWER POLE 43.0'  
 113+26 18" MAPLE 34.3'

114+63 42" TREE 33.6'

DO NOT DISTURB - 119+04 MAPLE SAPLING 33.3'



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).

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**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

118TH AVENUE PLAN - STA. 110+00 TO STA. 120+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1"= 40'H, 5V

PH 300038 13

**SOIL BORINGS**

<b>SB #23</b>	0 - 10" ASPHALT
	10" - 29" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	29" - 60" BROWN SANDY CLAY
	60" END OF BORING
<b>SB #24</b>	0 - 4" ASPHALT
	4" - 14" BROWN & DARK BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	14" - 42" DARK BROWN CLAYEY FINE SAND; TRACE TOPSOIL
	42" - 60" BROWN & GREY SANDY CLAY; TRACE FINE GRAVEL
	60" END OF BORING

RELOCATE - 120+01 MAILBOX 2544 16.6'

REMOVE - 120+52 42" TREE 31.6'

124+16 36" TREE 36.9'

REMOVE - 124+93 18" CMP 24.6'

125+53 FENCE 38.2'

126+39 FENCE 38.0'

126+63 FENCE 38.1'

127+36 18" PINE 34.5'  
127+37 FENCE 37.7'  
127+42 POWER POLE 35.5'

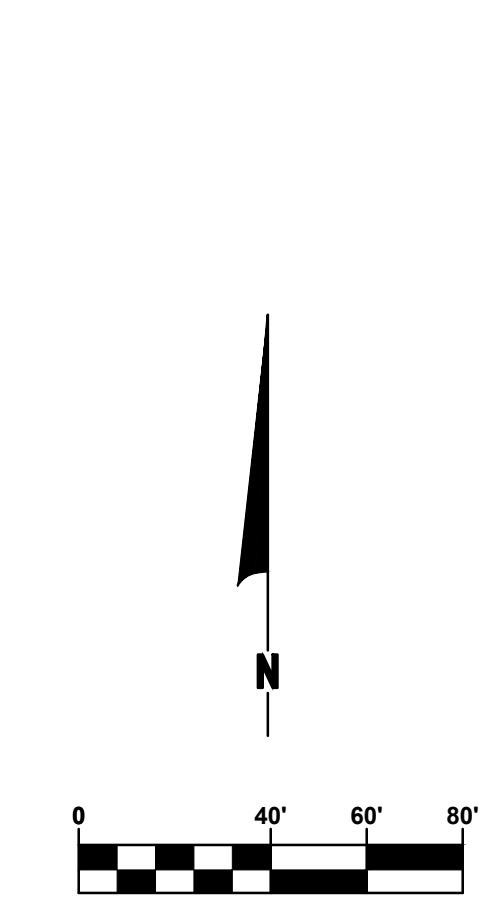
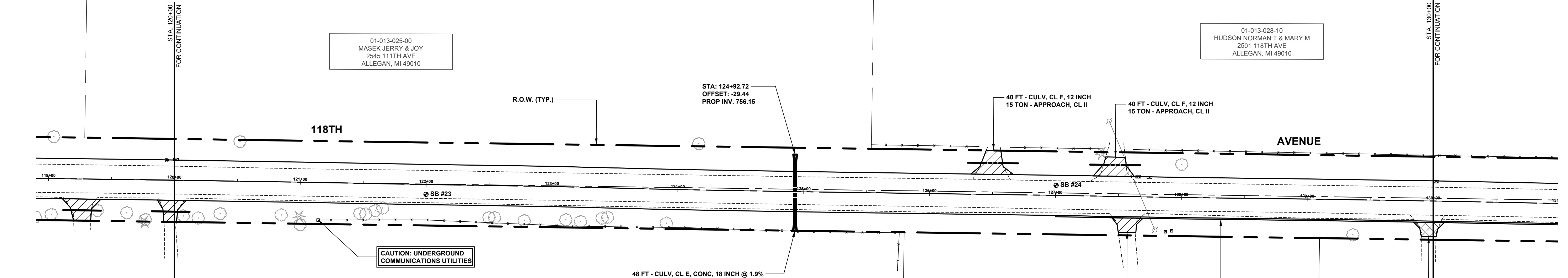
RELOCATE - 127+61 FENCE 38.1' 37.6'  
RELOCATE - 127+65 MAILBOX 2511 16.8'  
RELOCATE - 127+74 MAILBOX 2518 16.5'

REMOVE - 127+99 18" MAPLE 26.4'

01-013-025-00  
MASEK JERRY & JOY  
2545 111TH AVE  
ALLEGAN, MI 49010

01-024-007-10  
BECKNER DEAN  
2544 118TH AVE  
ALLEGAN, MI 49010

01-024-007-20  
KIMBLE RALPH & BARBARA  
2518 118TH AVE  
ALLEGAN, MI 49010



- 120+07 21" TREE 28.3' - REMOVE
- 120+19 21" TREE 29.8' - REMOVE
- 120+37 21" TREE 26.0' - REMOVE
- 120+85 24" DEAD TREE 26.3' - REMOVE
- 120+99 6" PINE 27.3' - REMOVE
- 121+00 21" TREE 33.7' - REMOVE
- 121+15 TELE RISER BOX 29.8' - RELOCATE (BY OTHERS)
- 121+15 FENCE 4' 29.8' - RELOCATE
- 121+48 21" TREE 23.9' - REMOVE
- 121+52 21" TREE 24.5' - REMOVE
- 121+60 21" TREE 21.4' - REMOVE
- 121+66 6" TREE 19.4' - REMOVE
- 121+99 FENCE WIRE 26.2' - RELOCATE
- 122+85 6" TREE 25.4' - REMOVE
- 122+55 21" TREE 25.6' - REMOVE
- 122+78 21" TREE 27.6' - REMOVE
- 123+12 6" TREE 26.2' - REMOVE
- 123+15 FENCE WIRE 31.1'
- 123+23 15" TREE 27.4' - REMOVE
- 123+40 21" CHERRY 24.2' - REMOVE
- 123+45 6" TREE 23.3' - REMOVE
- 123+91 21" CHERRY 26.9' - REMOVE
- 124+09 FENCE WIRE 30.1'
- 124+93 18" CMP 28.9' - REMOVE
- 125+01 FENCE WIRE 31.6'
- 125+75 FENCE WIRE 61.7'
- 125+76 FENCE WIRE 31.5'
- 127+43 12" CMP 17.3' - REMOVE
- 127+75 12" CMP 17.2' - REMOVE
- 127+79 POWER POLE 26.2'
- 127+88 TELE RISER BOX 27.4' - RELOCATE (BY OTHERS)
- 127+93 TELE RISER BOX 26.6' - RELOCATE (BY OTHERS)
- 129+37 12" TREE 27.9' - REMOVE

CAUTION: UNDERGROUND COMMUNICATIONS UTILITIES

48 FT - CULV, CL E, CONC, 18 INCH @ 1.9%  
2 EA - CULV END SECT, CONC, 18 INCH  
STA: 124+93.52 OFFSET: 31.05  
PROP INV. 755.00

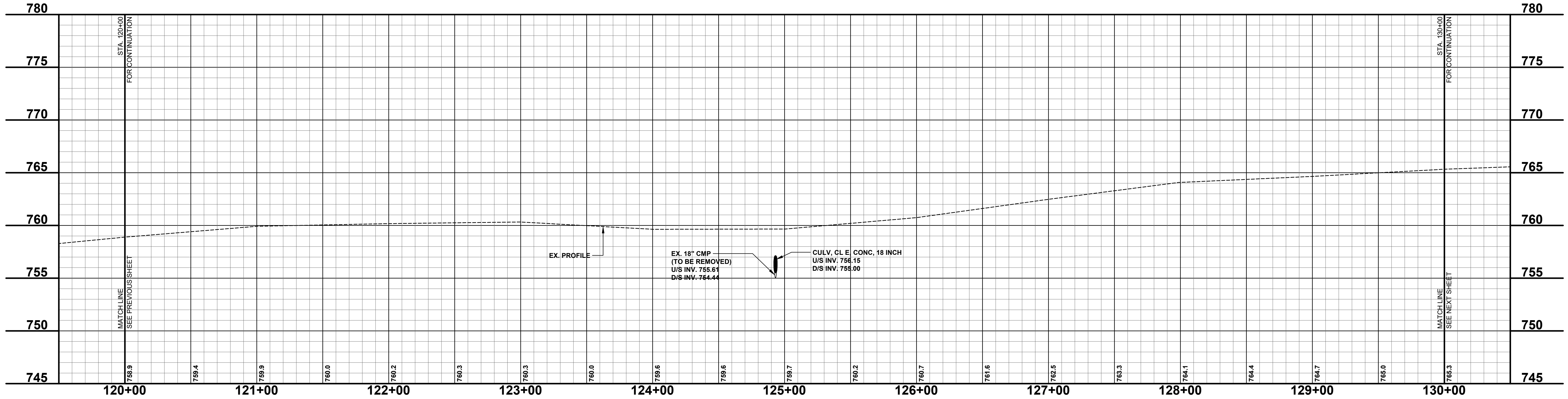
10 TON - APPROACH, CL II

10 TON - APPROACH, CL II  
2 TON - 4EML HMA (LEVELING)  
2 TON - 4EML HMA (TOP)

STA. 127+00 - 131+00 RT (FUTURE SLOPED CURB HMA)  
400 FT - UNDERDRAIN, SUBGRADE, 6 INCH  
10 FT - UNDERDRAIN OUTLET, 6 INCH  
1 EA - UNDERDRAIN, OUTLET ENDING, 6 INCH  
2.5 SYD - RIPRAP, PLAIN

**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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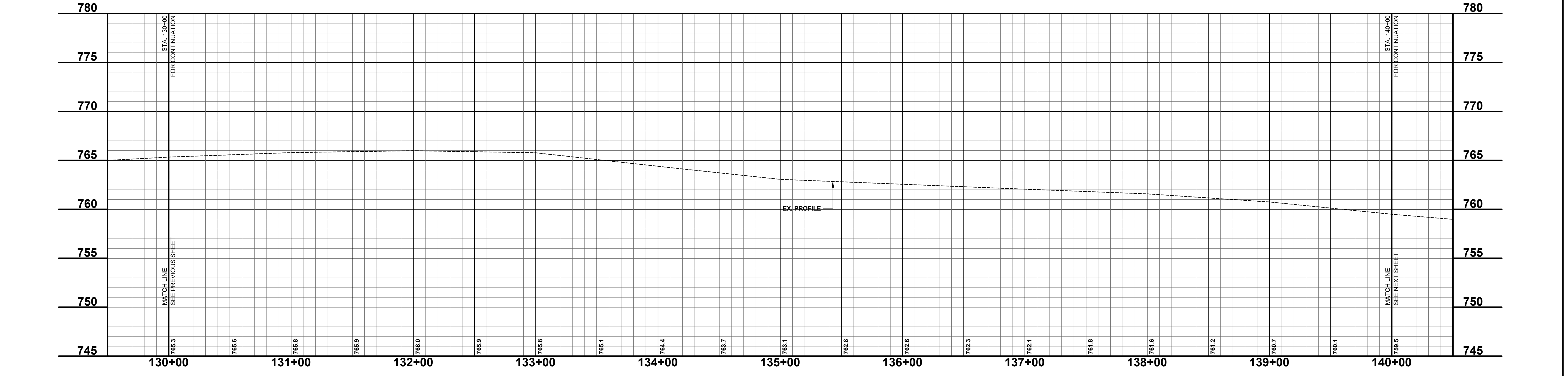
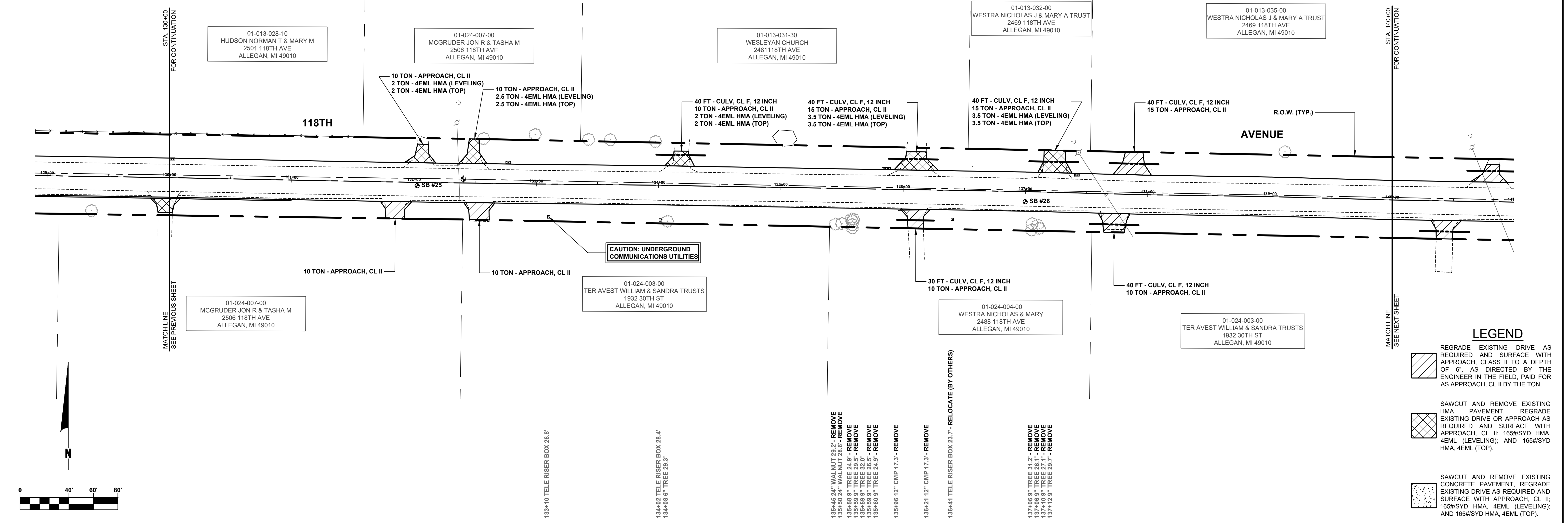
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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
118TH AVENUE PLAN - STA. 120+00 TO STA. 130+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V

**SOIL BORINGS**

<b>SB #25</b>	0 - 6" ASPHALT
	6" - 14" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	14" - 60" BROWN CLAY
	60" END OF BORING
<b>SB #26</b>	0 - 7" ASPHALT
	7" - 11" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	11" - 22" DARK BROWN FINE TO MEDIUM SAND, SOME CLAY & FINE TO COARSE GRAVEL
	22" - 60" BROWN SANDY CLAY; TRACE SILT
	60" END OF BORING



**LEGEND**

	REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
	SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).

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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
118TH AVENUE PLAN - STA. 130+00 TO STA. 140+00

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V

**SOIL BORINGS**

**SB #27**  
 0 - 9" ASPHALT  
 9" - 22" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 22" - 46" DARK BROWN CLAYEY FINE SAND, TRACE TOPSOIL  
 46" - 60" BROWN SANDY CLAY  
 60" END OF BORING

**SB #28**  
 0 - 7" ASPHALT  
 7" - 21" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL  
 21" - 60" BROWN SANDY CLAY  
 60" END OF BORING

140+61 GUY WIRE 53.5'  
 140+64 POWER POLE 44.1'

141+23 LANDSCAPE STONE 33.2'  
 RELOCATE - 141+36 MAILBOX 2467 15.1'

142+03 36" TREE 40.7'

143+08 FENCE WIRE 40.8'  
 RELOCATE - 143+16 MAILBOX 2460 17.5'

144+01 FENCE 36.7'

144+87 FENCE 57.2'  
 144+87 FENCE 33.2'

145+10 SIGN, STOP 38.8'

RELOCATE - 145+96 MAILBOX 2444 17.6'

REMOVE - 147+45 12" TREE 27.1'

RELOCATE - 147+77 FNP WOOD FENCE 26.4'

RELOCATE - 148+15 FNP WOOD FENCE 26.4'  
 148+23 APPLE TREE ROW 42.5'

RELOCATE - 148+53 FNP WOOD FENCE 26.2'

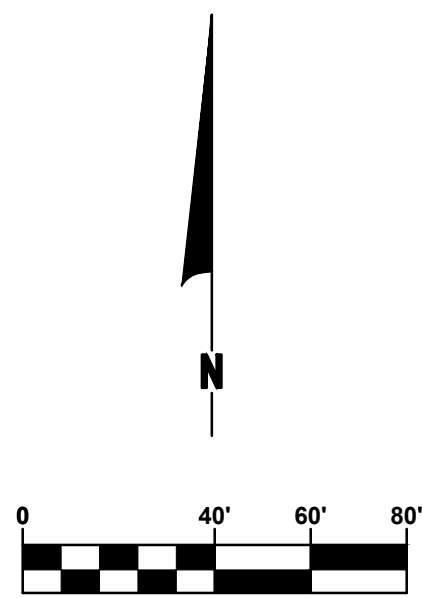
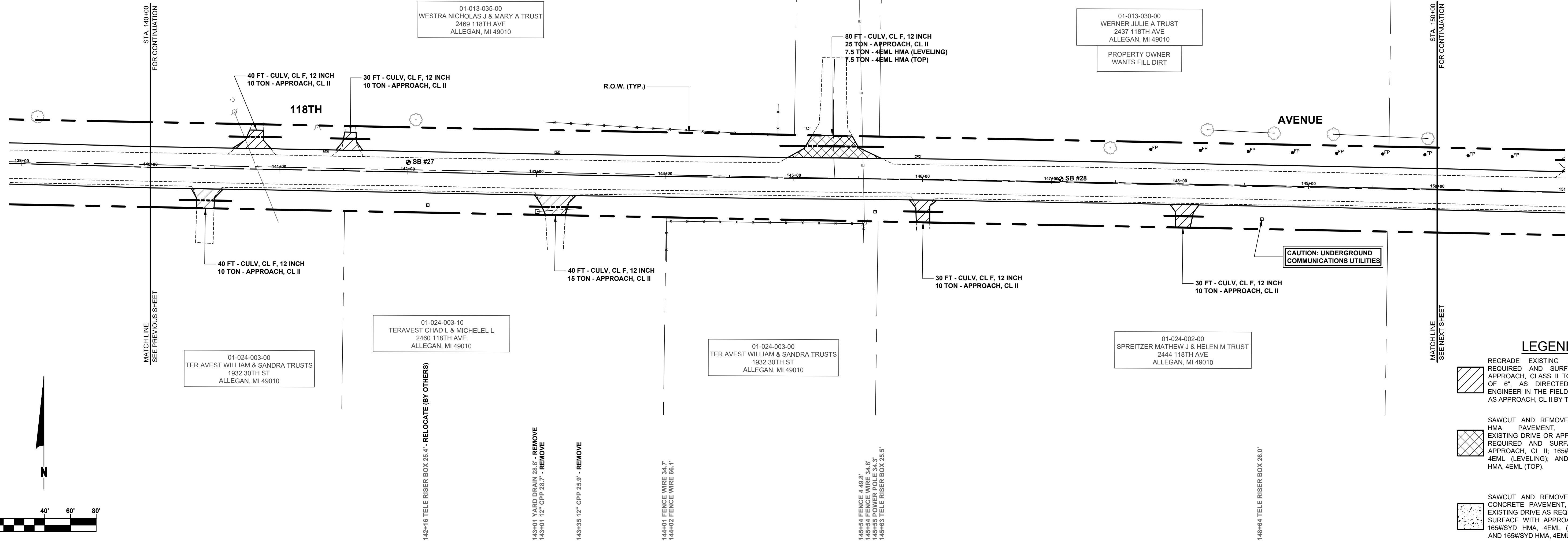
148+72 APPLE TREE ROW 40.9'

RELOCATE - 148+87 FNP WOOD FENCE 26.1'

148+18 APPLE TREE ROW 41.0'  
 RELOCATE - 148+21 FNP WOOD FENCE 26.2'

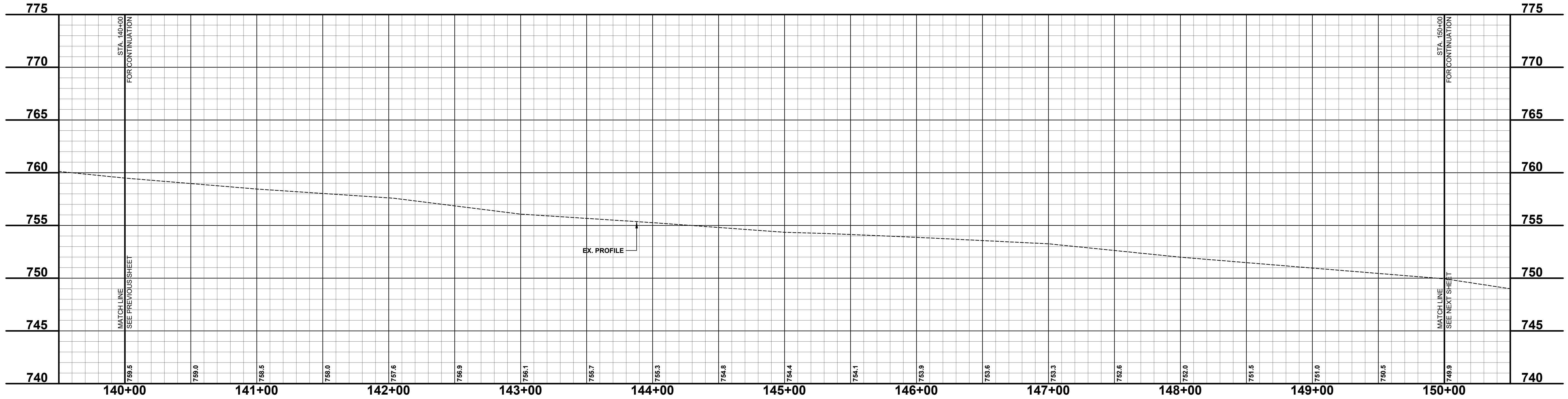
RELOCATE - 148+57 FNP WOOD FENCE 26.6'

RELOCATE - 148+85 FNP WOOD FENCE 26.5'  
 148+92 APPLE TREE ROW 39.5'



**LEGEND**

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II TO A DEPTH OF 6" AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID FOR AS APPROACH, CL II BY THE TON.
- SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVE OR APPROACH AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA, 4EML (TOP).



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**118TH AVENUE REHABILITATION PROJECT**  
 ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

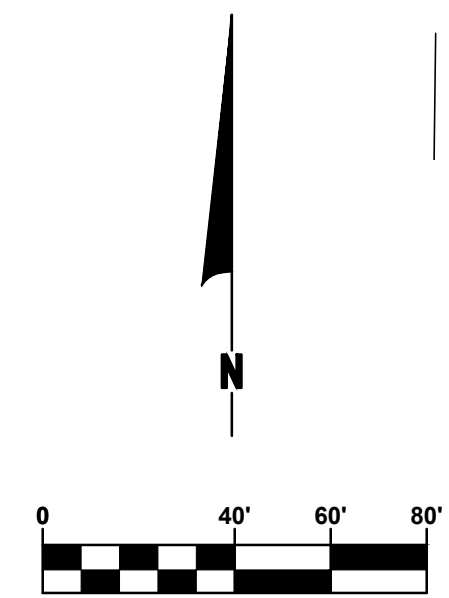
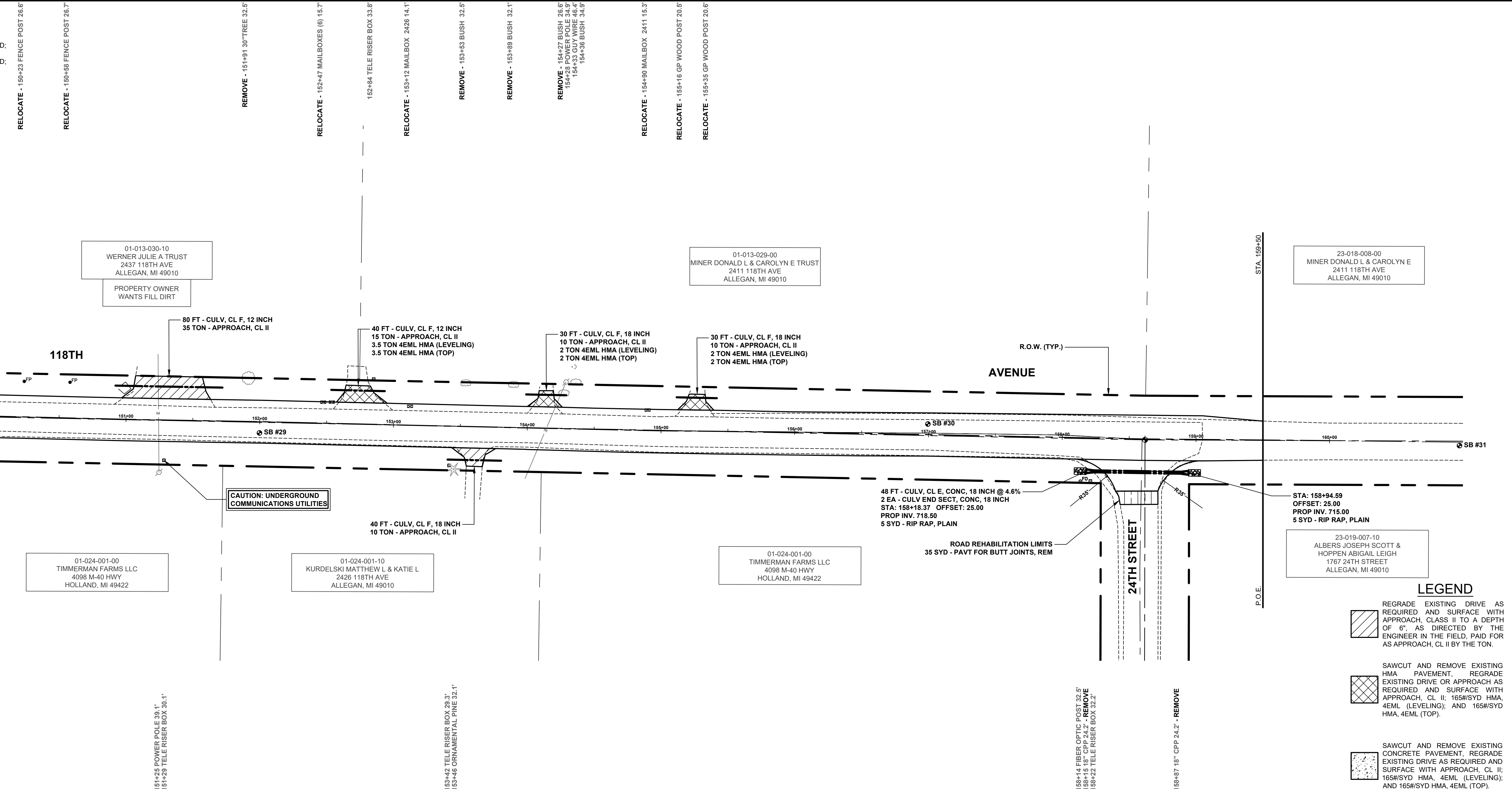
118TH AVENUE PLAN - STA. 140+00 TO STA. 150+00

DRAWN BY: ACW  
 REVIEWED BY: RPB  
 DATE: JANUARY 2023  
 SCALE: 1"= 40'H, 5V



**SOIL BORINGS**

<b>SB #29</b>	0 - 8" ASPHALT
	8" - 13" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	13" - 22" DARK BROWN CLAYEY MEDIUM SAND; SOME FINE TO COARSE GRAVEL
	22" - 36" DARK BROWN FINE TO MEDIUM SAND; TRACE FINE GRAVEL
	36" - 60" BROWN SANDY CLAY
	60" END OF BORING
<b>SB #30</b>	0 - 5" ASPHALT
	5" - 10" BROWN MEDIUM SAND; SOME FINE GRAVEL
	10" - 26" DARK BROWN MEDIUM SAND; SOME FINE TO COARSE GRAVEL
	26" - 60" BROWN CLAY
	60" END OF BORING
<b>SB #31</b>	0 - 11" BROWN MEDIUM SAND & FINE TO COARSE GRAVEL
	11" - 60" DARK BROWN CLAYEY FINE SAND; TRACE TOPSOIL
	60" END OF BORING



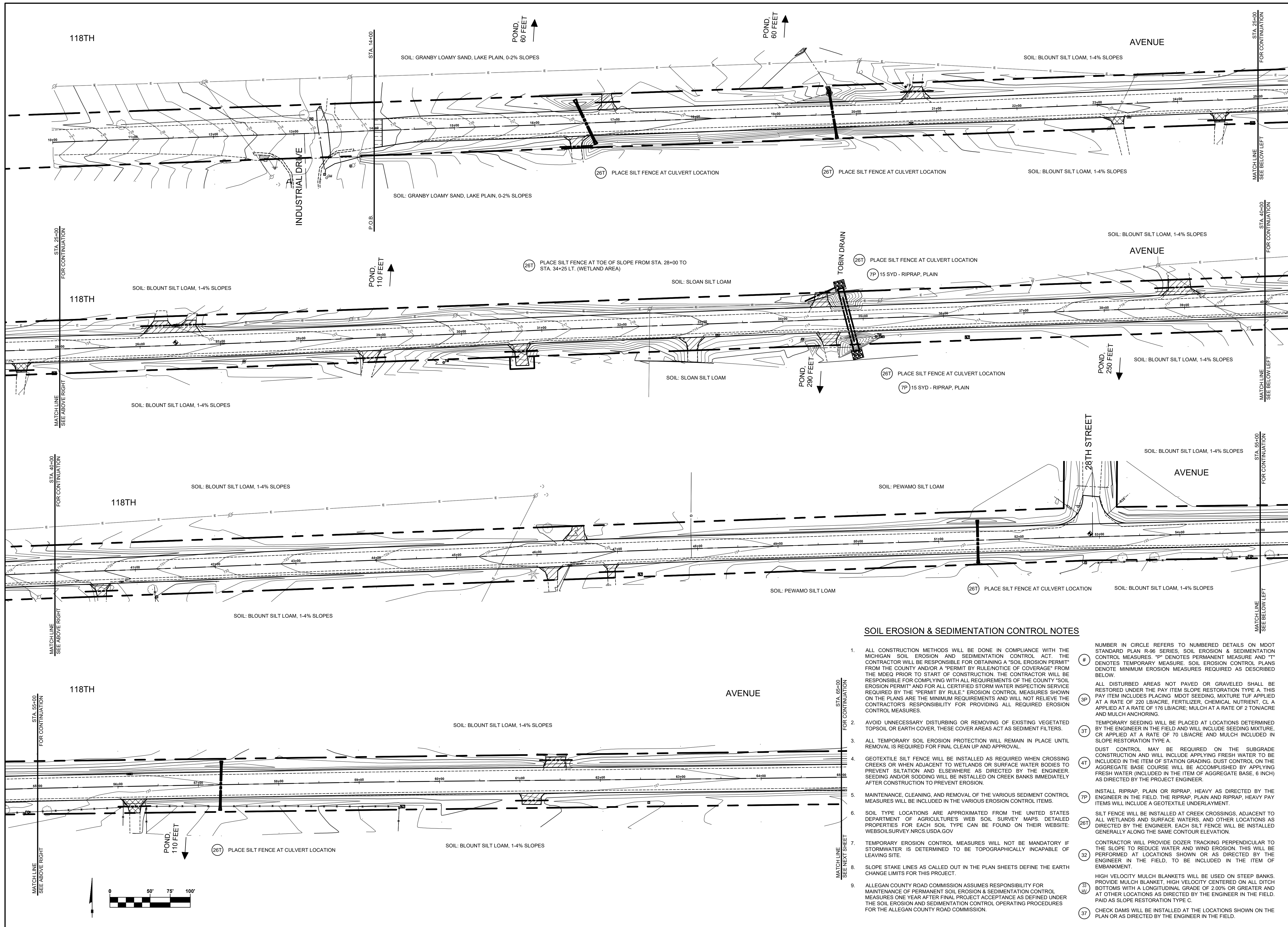
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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
118TH AVENUE PLAN - STA. 150+00 TO P.O.E.

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: JANUARY 2023  
SCALE: 1"= 40'H, 5V



**SOIL EROSION & SEDIMENTATION CONTROL NOTES**

- ALL CONSTRUCTION METHODS WILL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE COUNTY AND/OR A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE MDEQ PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE COUNTY "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND WILL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
  - AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER. THESE COVER AREAS ACT AS SEDIMENT FILTERS.
  - ALL TEMPORARY SOIL EROSION PROTECTION WILL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
  - GEOTEXTILE SILT FENCE WILL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING WILL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
  - MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES WILL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
  - SOIL TYPE LOCATIONS ARE APPROXIMATED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE'S WEB SOIL SURVEY MAPS. DETAILED PROPERTIES FOR EACH SOIL TYPE CAN BE FOUND ON THEIR WEBSITE: [WEBSOILSURVEY.NRCS.USDA.GOV](http://WEBSOILSURVEY.NRCS.USDA.GOV)
  - TEMPORARY EROSION CONTROL MEASURES WILL NOT BE MANDATORY IF STORMWATER IS DETERMINED TO BE TOPOGRAPHICALLY INCAPABLE OF LEAVING SITE.
  - SLOPE STAKE LINES AS CALLED OUT IN THE PLAN SHEETS DEFINE THE EARTH CHANGE LIMITS FOR THIS PROJECT.
  - ALLEGAN COUNTY ROAD COMMISSION ASSUMES RESPONSIBILITY FOR MAINTENANCE OF PERMANENT SOIL EROSION & SEDIMENTATION CONTROL MEASURES ONE YEAR AFTER FINAL PROJECT ACCEPTANCE AS DEFINED UNDER THE SOIL EROSION AND SEDIMENTATION CONTROL OPERATING PROCEDURES FOR THE ALLEGAN COUNTY ROAD COMMISSION.
- NUMBER IN CIRCLE REFERS TO NUMBERED DETAILS ON MDOT STANDARD PLAN R-96 SERIES, SOIL EROSION & SEDIMENTATION CONTROL MEASURES. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.
- ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED UNDER THE PAY ITEM SLOPE RESTORATION TYPE A. THIS PAY ITEM INCLUDES PLACING MDOT SEEDING, MIXTURE TUF APPLIED AT A RATE OF 220 LB/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL A APPLIED AT A RATE OF 176 LB/ACRE, MULCH AT A RATE OF 2 TON/ACRE AND MULCH ANCHORING.
- TEMPORARY SEEDING WILL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER IN THE FIELD AND WILL INCLUDE SEEDING MIXTURE, CR APPLIED AT A RATE OF 70 LB/ACRE AND MULCH INCLUDED IN SLOPE RESTORATION TYPE A.
- DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF STATION GRADING. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AS DIRECTED BY THE PROJECT ENGINEER.
- INSTALL RIPRAP, PLAIN OR RIPRAP, HEAVY AS DIRECTED BY THE ENGINEER IN THE FIELD. THE RIPRAP, PLAIN AND RIPRAP, HEAVY PAY ITEMS WILL INCLUDE A GEOTEXTILE UNDERLAYMENT.
- SILT FENCE WILL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE WILL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.
- CONTRACTOR WILL PROVIDE DOZER TRACKING PERPENDICULAR TO THE SLOPE TO REDUCE WATER AND WIND EROSION. THIS WILL BE PERFORMED AT LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE ITEM OF EMBANKMENT.
- HIGH VELOCITY MULCH BLANKETS WILL BE USED ON STEEP BANKS. PROVIDE MULCH BLANKET, HIGH VELOCITY CENTERED ON ALL DITCH BOTTOMS WITH A LONGITUDINAL GRADE OF 2.00% OR GREATER AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER IN THE FIELD. PAID AS SLOPE RESTORATION TYPE C.
- CHECK DAMS WILL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

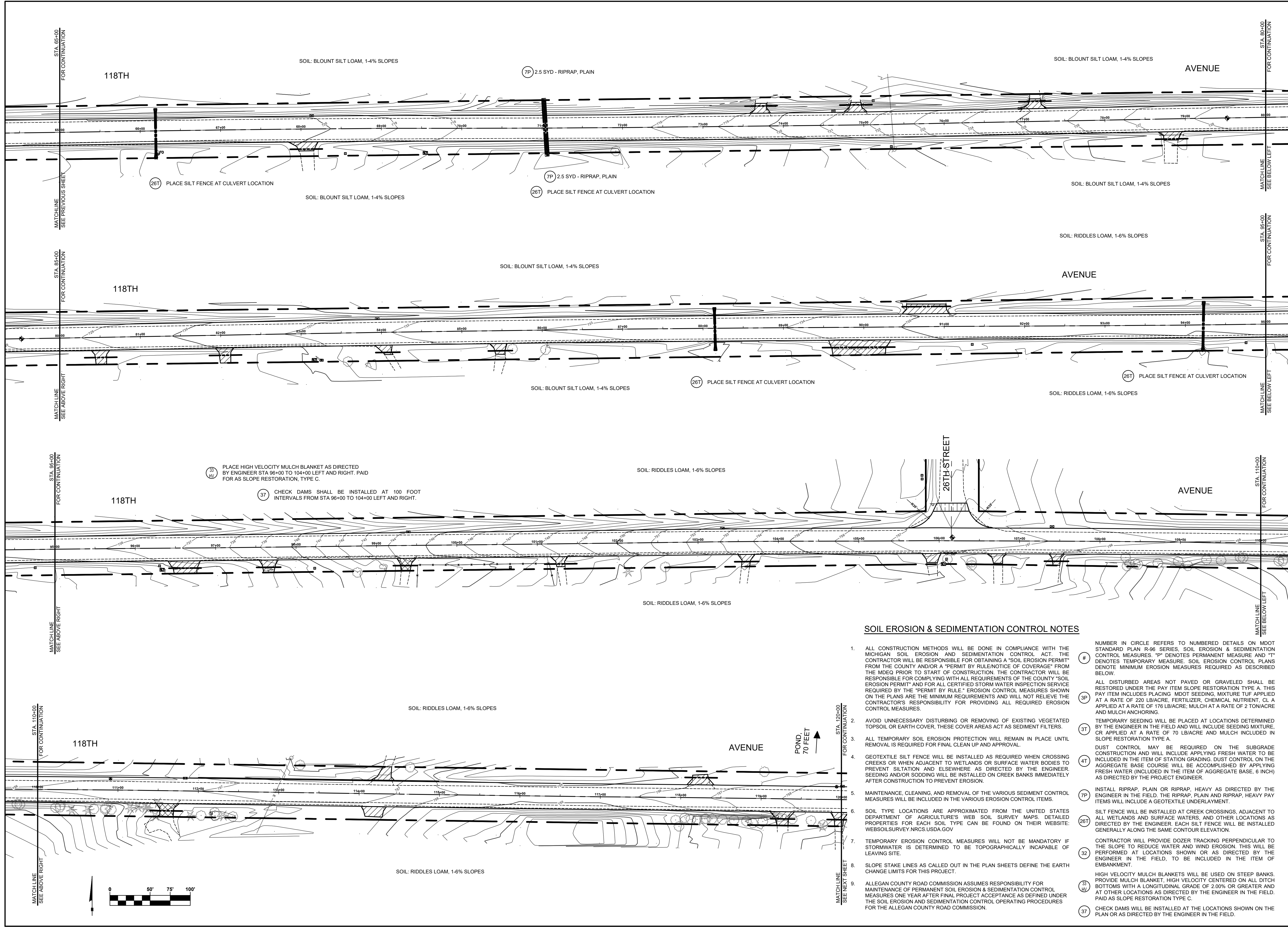
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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET

SOIL EROSION & SEDIMENTATION CONTROL PLAN P.O.B. TO STA. 65+00

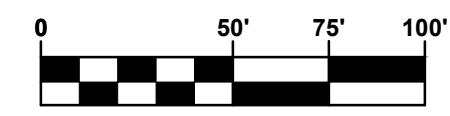
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REVIEWED BY: RPB  
DATE: FEBRUARY 2023  
SCALE: 1" = 50'



**SOIL EROSION & SEDIMENTATION CONTROL NOTES**

1. ALL CONSTRUCTION METHODS WILL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE COUNTY AND/OR A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE MDEQ PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE COUNTY "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND WILL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
2. AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER. THESE COVER AREAS ACT AS SEDIMENT FILTERS.
3. ALL TEMPORARY SOIL EROSION PROTECTION WILL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
4. GEOTEXTILE SILT FENCE WILL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING WILL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
5. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES WILL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
6. SOIL TYPE LOCATIONS ARE APPROXIMATED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE'S WEB SOIL SURVEY MAPS. DETAILED PROPERTIES FOR EACH SOIL TYPE CAN BE FOUND ON THEIR WEBSITE: [WEBSOILSURVEY.NRCS.USDA.GOV](http://WEBSOILSURVEY.NRCS.USDA.GOV)
7. TEMPORARY EROSION CONTROL MEASURES WILL NOT BE MANDATORY IF STORMWATER IS DETERMINED TO BE TOPOGRAPHICALLY INCAPABLE OF LEAVING SITE.
8. SLOPE STAKE LINES AS CALLED OUT IN THE PLAN SHEETS DEFINE THE EARTH CHANGE LIMITS FOR THIS PROJECT.
9. ALLEGAN COUNTY ROAD COMMISSION ASSUMES RESPONSIBILITY FOR MAINTENANCE OF PERMANENT SOIL EROSION & SEDIMENTATION CONTROL MEASURES ONE YEAR AFTER FINAL PROJECT ACCEPTANCE AS DEFINED UNDER THE SOIL EROSION AND SEDIMENTATION CONTROL OPERATING PROCEDURES FOR THE ALLEGAN COUNTY ROAD COMMISSION.

- # NUMBER IN CIRCLE REFERS TO NUMBERED DETAILS ON MDOT STANDARD PLAN R-96 SERIES, SOIL EROSION & SEDIMENTATION CONTROL MEASURES. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.
- 3P ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED UNDER THE PAY ITEM SLOPE RESTORATION TYPE A. THIS PAY ITEM INCLUDES PLACING MDOT SEEDING MIXTURE TUF APPLIED AT A RATE OF 220 LBS/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL A APPLIED AT A RATE OF 176 LBS/ACRE, MULCH AT A RATE OF 2 TON/ACRE AND MULCH ANCHORING.
- 3P1 TEMPORARY SEEDING WILL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER IN THE FIELD AND WILL INCLUDE SEEDING MIXTURE, CR APPLIED AT A RATE OF 70 LBS/ACRE AND MULCH INCLUDED IN SLOPE RESTORATION TYPE A.
- 4P1 DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF STATION GRADING. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AS DIRECTED BY THE PROJECT ENGINEER.
- 7P1 INSTALL RIPRAP, PLAIN OR RIPRAP, HEAVY AS DIRECTED BY THE ENGINEER IN THE FIELD. THE RIPRAP, PLAIN AND RIPRAP, HEAVY PAY ITEMS WILL INCLUDE A GEOTEXTILE UNDERLAYMENT.
- 26T1 SILT FENCE WILL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE WILL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.
- 32 CONTRACTOR WILL PROVIDE DOZER TRACKING PERPENDICULAR TO THE SLOPE TO REDUCE WATER AND WIND EROSION. THIS WILL BE PERFORMED AT LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE ITEM OF EMBANKMENT.
- 3P1 HIGH VELOCITY MULCH BLANKETS WILL BE USED ON STEEP BANKS. PROVIDE MULCH BLANKET, HIGH VELOCITY CENTERED ON ALL DITCH BOTTOMS WITH A LONGITUDINAL GRADE OF 2.00% OR GREATER AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER IN THE FIELD, PAID AS SLOPE RESTORATION TYPE C.
- 37 CHECK DAMS WILL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD.



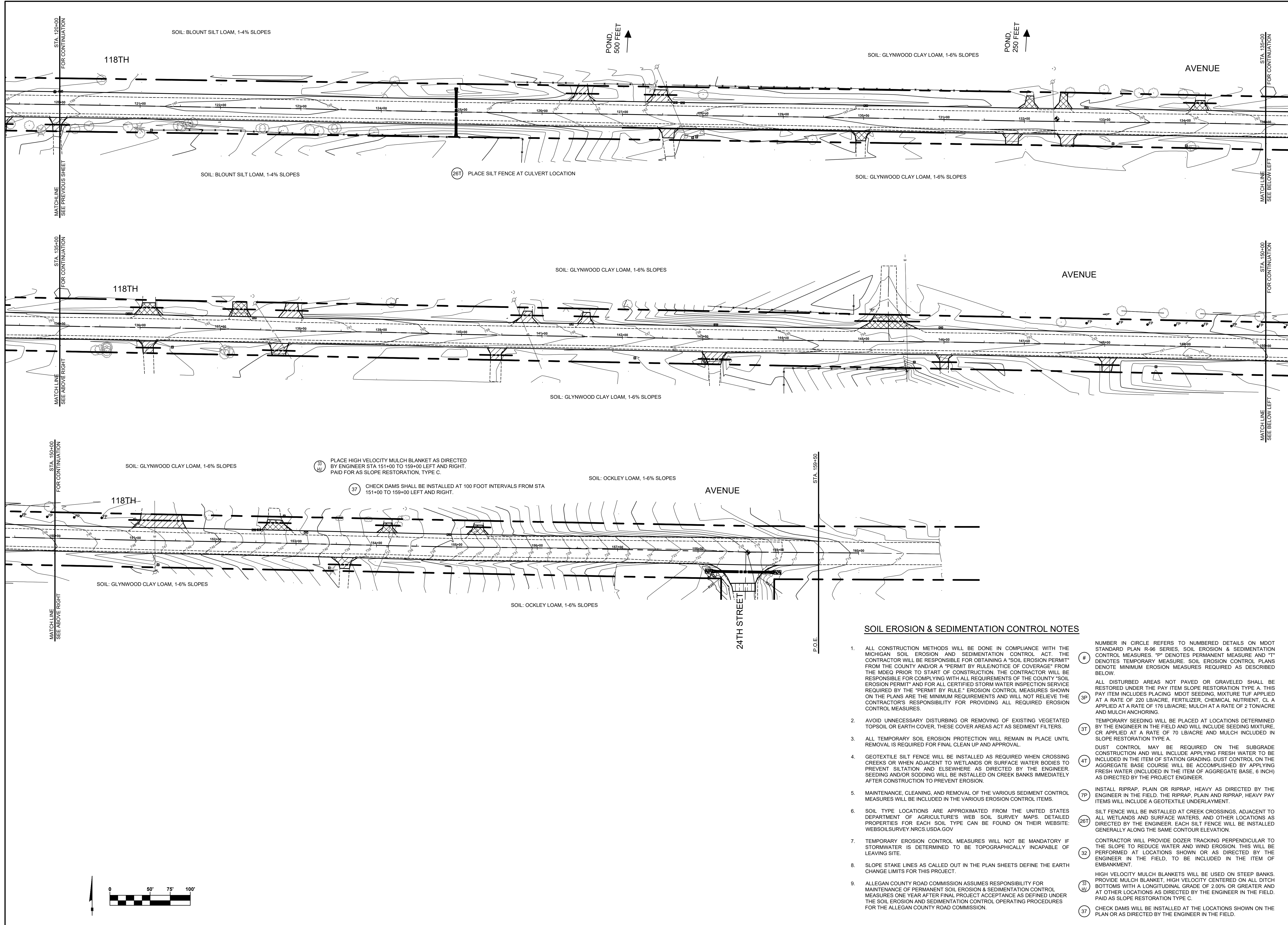
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**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
SOIL EROSION & SEDIMENTATION CONTROL PLAN STA. 65+00 TO STA. 120+00

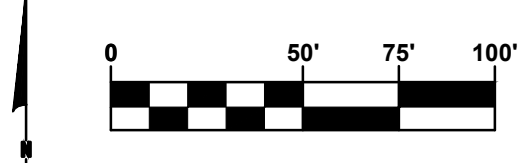
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REVIEWED BY: RPB  
DATE: FEBRUARY 2023  
SCALE: 1" = 50'

PH 300038 19



**SOIL EROSION & SEDIMENTATION CONTROL NOTES**

- ALL CONSTRUCTION METHODS WILL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE COUNTY AND/OR A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE MDEQ PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE COUNTY "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND WILL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
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  - ALL TEMPORARY SOIL EROSION PROTECTION WILL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
  - GEOTEXTILE SILT FENCE WILL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING WILL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
  - MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES WILL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
  - SOIL TYPE LOCATIONS ARE APPROXIMATED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE'S WEB SOIL SURVEY MAPS. DETAILED PROPERTIES FOR EACH SOIL TYPE CAN BE FOUND ON THEIR WEBSITE: WEBSOILSURVEY.NRCS.USDA.GOV
  - TEMPORARY EROSION CONTROL MEASURES WILL NOT BE MANDATORY IF STORMWATER IS DETERMINED TO BE TOPOGRAPHICALLY INCAPABLE OF LEAVING SITE.
  - SLOPE STAKE LINES AS CALLED OUT IN THE PLAN SHEETS DEFINE THE EARTH CHANGE LIMITS FOR THIS PROJECT.
  - ALLEGAN COUNTY ROAD COMMISSION ASSUMES RESPONSIBILITY FOR MAINTENANCE OF PERMANENT SOIL EROSION & SEDIMENTATION CONTROL MEASURES ONE YEAR AFTER FINAL PROJECT ACCEPTANCE AS DEFINED UNDER THE SOIL EROSION AND SEDIMENTATION CONTROL OPERATING PROCEDURES FOR THE ALLEGAN COUNTY ROAD COMMISSION.
- # NUMBER IN CIRCLE REFERS TO NUMBERED DETAILS ON MDOT STANDARD PLAN R-96 SERIES, SOIL EROSION & SEDIMENTATION CONTROL MEASURES. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.  
 #37 CHECK DAMS SHALL BE INSTALLED AT 100 FOOT INTERVALS FROM STA 151+00 TO 159+00 LEFT AND RIGHT. PAID FOR AS SLOPE RESTORATION, TYPE C.  
 #31 TEMPORARY SEEDING WILL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER IN THE FIELD AND WILL INCLUDE SEEDING MIXTURE, OR APPLIED AT A RATE OF 70 LB/ACRE AND MULCH INCLUDED IN SLOPE RESTORATION TYPE A.  
 #41 DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF STATION GRADING. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AS DIRECTED BY THE PROJECT ENGINEER.  
 #77 INSTALL RIPRAP, PLAIN OR RIPRAP, HEAVY AS DIRECTED BY THE ENGINEER IN THE FIELD. THE RIPRAP, PLAIN AND RIPRAP, HEAVY PAY ITEMS WILL INCLUDE A GEOTEXTILE UNDERLAYMENT.  
 #261 SILT FENCE WILL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE WILL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.  
 #32 CONTRACTOR WILL PROVIDE DOZER TRACKING PERPENDICULAR TO THE SLOPE TO REDUCE WATER AND WIND EROSION. THIS WILL BE PERFORMED AT LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE ITEM OF EMBANKMENT.  
 #33 HIGH VELOCITY MULCH BLANKETS WILL BE USED ON STEEP BANKS. PROVIDE MULCH BLANKET, HIGH VELOCITY CENTERED ON ALL DITCH BOTTOMS WITH A LONGITUDINAL GRADE OF 2.00% OR GREATER AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER IN THE FIELD. PAID AS SLOPE RESTORATION TYPE C.  
 #37 CHECK DAMS WILL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD.



**Board of County Road Commissioners  
Of Allegan County**  
1308 LINCOLN ROAD  
ALLEGAN, MICHIGAN 49010-9762  
TELEPHONE (269) 673-2184 www.alleganroads.org FAX (269) 673-5922

REVISIONS	NO.	DESCRIPTION
	1	
	2	
	3	
	4	
	5	
	6	
	7	

**118TH AVENUE REHABILITATION PROJECT**  
ALLEGAN TOWNSHIP - INDUSTRIAL DRIVE TO 24TH STREET  
SOIL EROSION & SEDIMENTATION CONTROL PLAN STA. 120+00 TO P.O.E.

DRAWN BY: ACW  
REVIEWED BY: RPB  
DATE: FEBRUARY 2023  
SCALE: 1" = 50'

PH 300038 20