ALLEGAN COUNTY ROAD COMMISSION

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ACRC PROJECT NO. LH 4852

NOTES

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 2012 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 ON UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

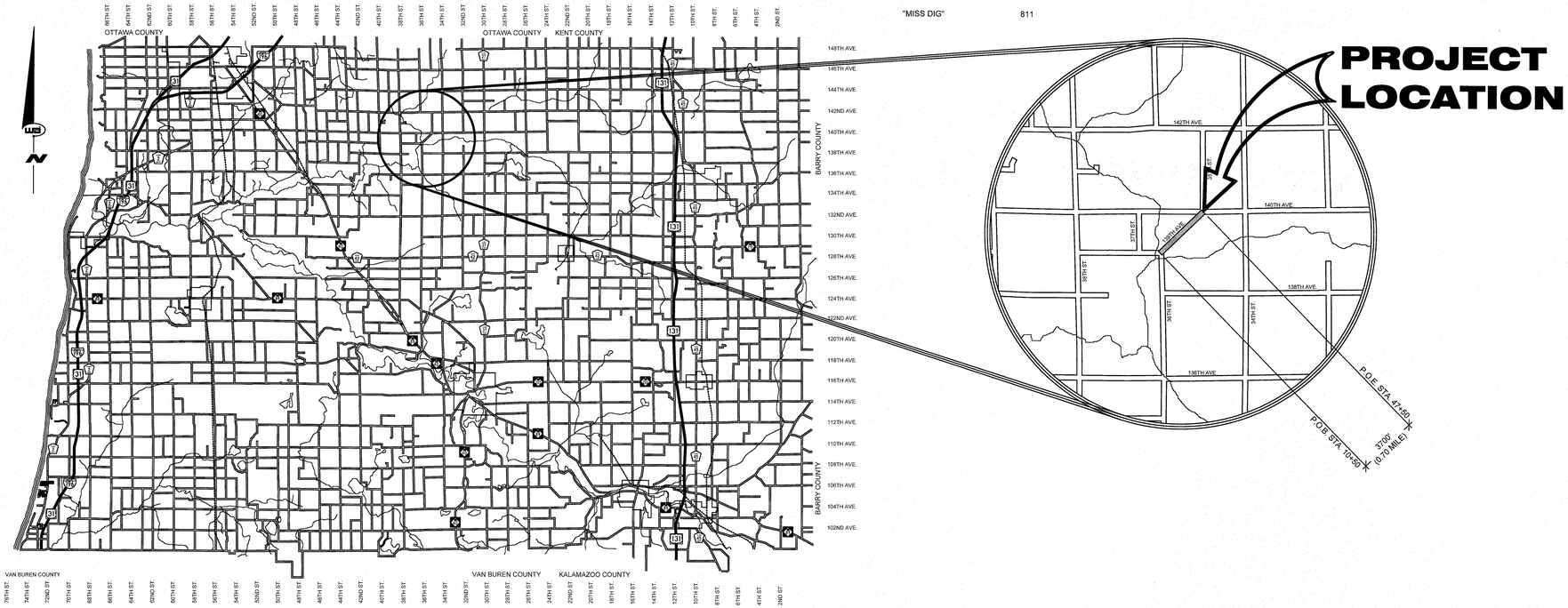
IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, ALL CONTRACTORS SHALL CALL MISS DIG @ 811 OR 800-482-7171 FOR PROTECTION OF UNDERGROUND UTILITIES A MINIMUM OF THREE FULL WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO BEGINNING EACH EXCAVATION IN ANY AREA. MEMBERS WILL THUS BE ROUTINELY 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.

UTILITIES

OVERHEAD ELECTRIC (36TH STREET AND 139TH AVENUE)	CONSUMERS ENERGY 4000 CLAY AVENUE SW GRAND RAPIDS, MI 49548 (616) 530-4115 MR. JIM MIXTER
OVERHEAD ELECTRIC:	GREAT LAKES ENERGY 1049 - 133RD AVENUE WAYLAND, MI 49348 (269) 792-0532 MR. JEFF HICKS
NATURAL GAS	MICHIGAN GAS UTILITIES 742 EAST ALLEGAN STREET OTSEGO, MI 49078 (269) 692-6352 MR. JIM SHAUM
TELEPHONE	AT&T 955 36TH STREET SE GRAND RAPIDS, MI 49508 (616) 246-7302 MS. CHERYL BENNET
TELEPHONE	ACENTEK 6568 LAKE MICHIGAN DRIVE ALLENDALE, MI 49401 (616) 892-0144 MR. RON BORST
TELEPHONE	FRONTIER COMMUNICATIONS 601 N. US-31 THREE RIVERS, MI 49093 (269) 273-0371 MR. JEFF MCCORD
"MISS DIG"	811

INDEX OF PLANS

172258-01	COVER SHEET
172258-02	TYPICAL SECTIONS AND NOTES
172258-03	PLAN & PROFILE - STA. 10+50 TO 20+00
172258-04	PLAN & PROFILE - STA. 20+00 TO 30+00
172258-05	PLAN & PROFILE - STA. 30+00 TO 40+00
172258-06	PLAN & PROFILE - STA. 40+00 TO 47+50
172258-07	SOIL EROSION CONTROL SHEETS - STA 10+00 TO STA 42+50
172258-08	SOIL EROSION CONTROL SHEETS - STA 42+50 TO STA 47+50
172258-09	CROSS SECTION - STA 11+00 TO STA 20+00
172258-10	CROSS SECTION - STA 21+00 TO STA 30+00
172258-11	CROSS SECTION - STA 31+00 TO STA 42+00
172258-12	CROSS SECTION - STA 43+00 TO STA 47+00
M.D.O.T. STANDARD PLANS	
R-80-E	GRANULAR BLANKET, UNDERDRAINS, OUTLET ENDINGS FOR UNDERDRAINS, AND SEWER BULKHEADS
R-82-D	BEDDING AND FILLING AROUND PIPE CULVERTS
R-83-C	UTILITY TRENCHES
R-86-E	PRECAST CONCRETE END SECTION FOR PIPE CULVERT
R-96-E	SOIL EROSION & SEDIMENTATION CONTROL MEASURES
R-100-H	SEEDING AND TREE PLANTING



ALLEGAN COUNTY, MICHIGAN
NOT TO SCALE

WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

STATE OF MICHIGAN
AARON J. NEITLING
ENGINEER
No. 50508
LICENSED PROFESSIONAL ENGINEER

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01	07/10/2018	AEH
	FINAL PLANS FOR BIDDING	
00	4/30/2018	AMZ
	PRELIMINARY - NOT FOR CONSTRUCTION	

REVISIONS

P:\Allegan\172258 ACRC - 139th Avenue\05 Drawings\dwg\AutoCAD\172258-01.dwg 172258-01 01/10/2018 4:09:56 PM

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
©2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JULY 2018

SCALE:

COVER SHEET

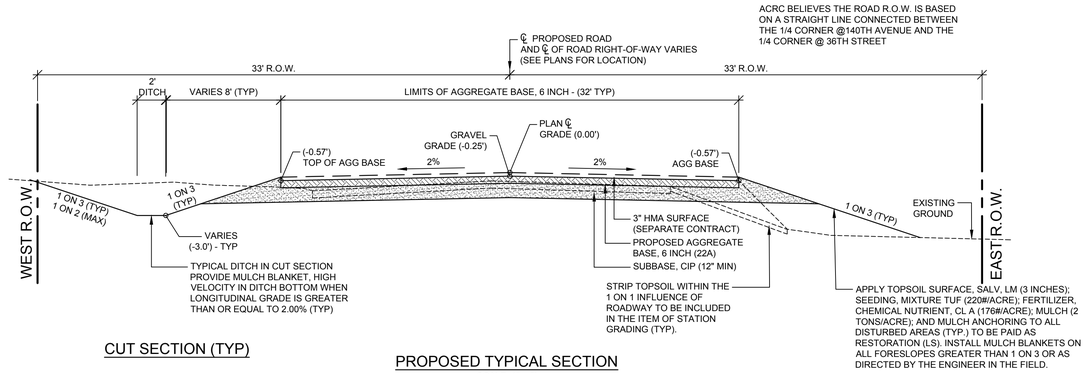
JOB No. 172258

172258-01

LH 4852

PROJECT NOTES

1. THE "2012 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.
2. IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, ALL CONTRACTORS SHALL CALL MISS DIG @ 811 OR 800-482-7171 FOR PROTECTION OF UNDERGROUND UTILITIES A MINIMUM OF THREE FULL WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO BEGINNING EACH EXCAVATION IN ANY AREA. 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.
3. THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
4. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE ALLEGAN COUNTY ROAD COMMISSION TO NOTIFY THEM THAT WORK IS COMMENCING.
5. THE CONTRACTOR SHOULD NOTE THAT STATION GRADING WILL INCLUDE THE REMOVAL OF FENCES, CULVERTS, BRUSH, TREES SMALLER THAN 6", CONCRETE FOUDNATIONS, 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.
6. 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 SHALL BE REMOVED FROM SITE BY THE CONTRACTOR. NOTE: NO BORROW OR SOIL REMOVAL ARRANGEMENTS HAVE BEEN PREARRANGED FOR THIS PROJECT, AND SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR.
7. THE SOIL BORINGS WERE TAKEN BY GREAT LAKES DRILLING COMPANY, P.O. BOX 51, ALLEGAN, MI 49010 ON APRIL 4, 2018. 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.
8. SEE PLAN AND PROFILE SHEETS FOR SOIL BORING DATA.
9. DRIVE REPLACEMENT SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
10. THE ITEM OF SUBBASE, CIP WILL BE PAID FOR AT PLAN QUANTITY EXCEPT IN THE CASE OF A DESIGN CHANGE OR DEMONSTRATED ERROR.
11. AS PART OF THE PROJECT THE CONTRACTOR WILL COORDINATE WITH THE ALLEGAN COUNTY ROAD COMMISSION TO PRESERVE AND RESET ALL GOVERNMENT CORNERS WITHIN THE PROJECT LIMITS.
12. CONTRACTOR SHALL 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 SHALL BE INCLUDED IN THE ITEM OF PROJECT CLEANUP. AT THE COMPLETION OF THE PROJECT SAID MAILBOXES SHALL BE RESET AT THEIR APPROPRIATE LOCATIONS.
13. ALL DISTURBED AREAS NOT TO BE PAVED WILL BE RESTORED WITH TOPSOIL SURFACE, SALV, LM (3 INCHES), MDOT SEED MIXTURE TUF (220#/ACRE), FERTILIZER, CHEMICAL NUTRIENT, CL A (176#/ACRE); AND MULCH AND MULCH ANCHORING (2 TON/ACRE). TO BE PAID AS RESTORATION (LUMP SUM)
14. 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.
15. 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.
16. 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. DRAINS THAT ARE ENCOUNTERED AND IDENTIFIED AS SOMETHING OTHER THAN A FIELD DRAIN SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING DRAINAGE PATTERNS, AND WILL RESOLVE ANY DRAINAGE PROBLEMS ON ADJACENT PROPERTIES WHICH MAY RESULT FROM THE CONTRACTORS ACTIVITIES.
18. DATUM REFERS TO NAVD88 DATUM.
19. ALL SCALES FOR DRAWINGS AND DETAILS ARE BASED ON 24"x36" PRINTED PLANS. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
20. THE ALLEGAN COUNTY ROAD COMMISSION WILL INSTALL ALL NECESSARY PERMANENT SIGNS BEFORE OPENING THE ROAD TO TRAFFIC. THE CONTRACTOR SHALL NOTIFY THE ROAD COMMISSION WHEN PERMANENT SIGNS CAN BE PLACED.
21. PROPERTY OWNER'S NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.



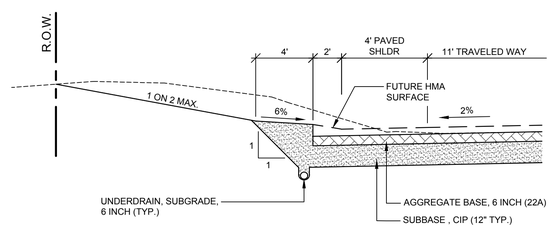
CUT SECTION (TYP)

PROPOSED TYPICAL SECTION

SCALE: 1" = 5'

THIS SECTION APPLIES TO:
STA. 10+50 (P.O.B.) TO STA. 47+50 (P.O.E.)

FILL SECTION (TYP)



HMA CURB HALF SECTION

SCALE: 1" = 5'

THIS SECTION APPLIES TO:
STA. 31+25 TO STA. 34+00 LT
STA. 32+50 TO STA. 34+00 RT
STA. 39+25 TO STA. 41+00 RT

LEGEND

EXISTING	PROPOSED	
C	C	CABLE
E	E	ELECTRIC LINE
OHE	OHE	ELECTRIC LINE (OVERHEAD)
FO	FO	FIBER OPTIC LINE
G	G	GAS LINE
T	T	TELEPHONE LINE
X X X X	X X X X	FENCE
		FORCEMAIN
		GUARDRAIL
		SANITARY SEWER
		STORM SEWER
		WATER MAIN
		CENTER LINE
		EXISTING TREE LINE
		EXISTING DITCH LINE
		EASEMENT LINE/GRADING PERMIT
		GRADING LIMITS/LIMITS OF DISTURBANCE
		PROPERTY LINE
		RIGHT-OF-WAY LINE
		SECTION LINE
		TO BE ABANDONED

= ANTENNA
= CATCH BASIN
= CABLE RISER BOX
= CLEAN OUT
= CURB INLET
= ELECTRIC MANHOLE
= FIRE HYDRANT
= FOUND IRON PIPE
= GAS VALVE
= GUY ANCHOR
= LIGHT POLE
= MAILBOX
= MONITORING WELL
= POST
= SATELLITE DISH
= SANITARY MANHOLE
= SECTION CORNER
= SIGN
= PAVEMENT/SOIL BORING
= PROPOSED HYDRANT
= PROPOSED GATE VALVE & BOX
= PROPOSED GATE VALVE & VAULT
= PROPOSED REDUCER
= PROPOSED SANITARY MANHOLE
= PROPOSED STORM MANHOLE
= STORM MANHOLE
= TELEPHONE MANHOLE
= TELEPHONE RISER BOX
= TURNING POINT/TRAVERSE
= UTILITY POLE
= VAULT
= WATER ELEVATION
= WATER MANHOLE
= WATER METER
= WATER VALVE
= WATER SPIGOT
= WELL

TREE DESIGNATORS

BUSH
STUMP
CONIFEROUS TREE
DECIDUOUS TREE
CONIFEROUS TREE TO BE REMOVED
DECIDUOUS TREE TO BE REMOVED

MISCELLANEOUS QUANTITIES

ITEM	QTY.
Clearing	1 LS
Station Grading	1 LS
Subbase, CIP	4,600 Cyd
Topsoil Surface, Salv, LM	1,150 Cyd
Subgrade Undercutting, Type II	500 Cyd
Geotextile, Stabilization	1,000 Syd
Aggregate, 6A	50 Ton
Culv, Cl E, Conc, 24 inch	40 Ft
Culv, Cl F, 12 inch	40 Ft
Underdrain, Subgrade, 6 inch	200 Ft
Underdrain Outlet, 6 inch	10 Ft
Underdrain, Outlet Ending, 6 inch	1 Ea
Approach, Cl II	10 Ton
Approach, HMA Millings	10 Ton
Restoration	1 LS
Extended Restoration	1 LS
Sign, Type B, Temp, Modified	210 Sft
Plastic Drum, High Intensity, Ltd, Modified	50 Ea
Barricade, Type III, High Intensity, Dbl Sided, Ltd, Modified	4 Ea
Erosion Control, Silt Fence	3,500 Ft
Erosion Control, Check Dam	20 Ft
Project Cleanup	1 LS

WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.wightman-assoc.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01 07/10/2018 AEH
FINAL PLANS FOR BIDDING

00 4/30/2018 AMZ
PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

J:\Allegan\172258 ACRC - 139th Avenue\D Drawings\PN
AutoCAD\172258-02.dwg 172258-02 8/30/2018 3:45:55 PM

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JULY 2018
SCALE: NONE

TYPICAL SECTIONS AND NOTES

JOB No. 172258

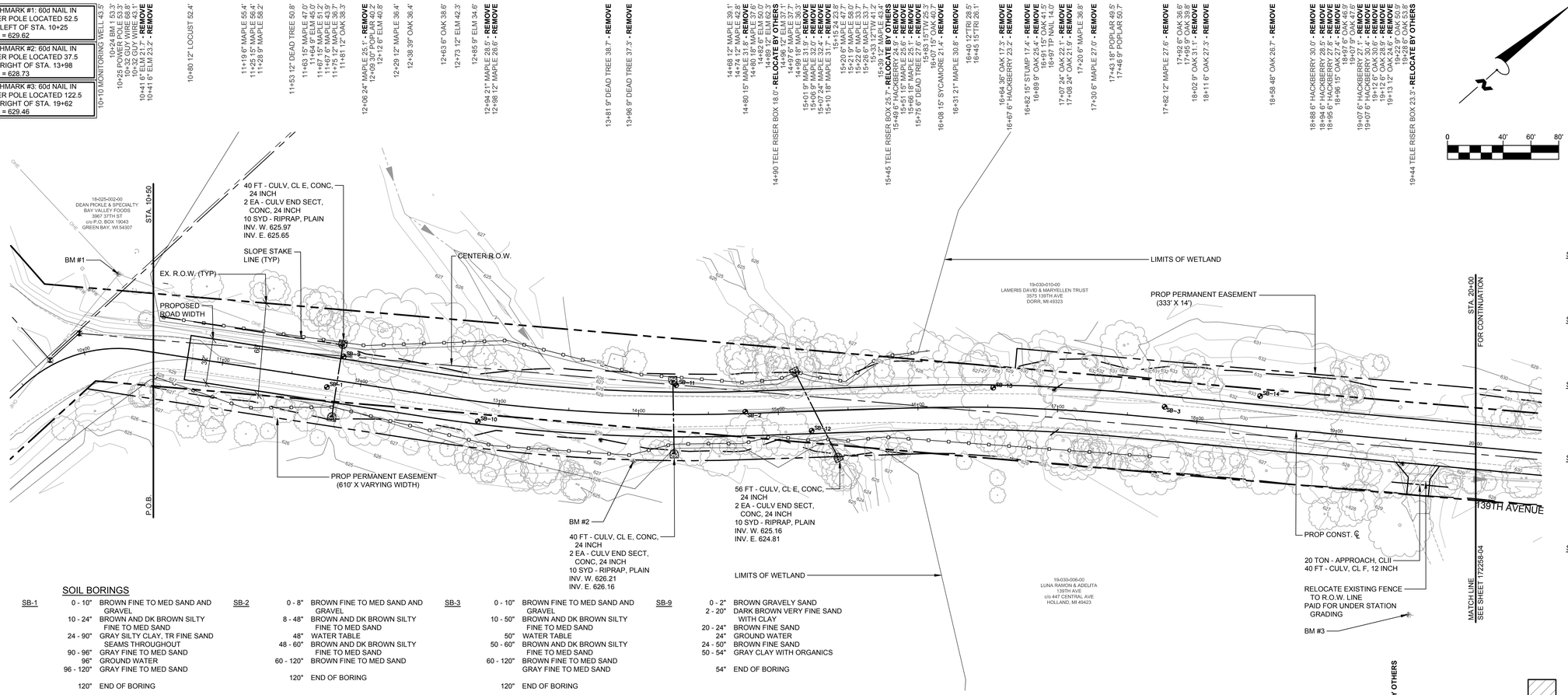
172258-02

OF 12

BENCHMARK #1: 60d NAIL IN POWER POLE LOCATED 52.5 FEET LEFT OF STA. 10+25 ELEV. = 629.62

BENCHMARK #2: 60d NAIL IN POWER POLE LOCATED 37.5 FEET RIGHT OF STA. 13+98 ELEV. = 628.73

BENCHMARK #3: 60d NAIL IN POWER POLE LOCATED 122.5 FEET RIGHT OF STA. 19+62 ELEV. = 629.46



SOIL BORINGS

SB-1
- 0 - 10" BROWN FINE TO MED SAND AND GRAVEL
- 10 - 24" BROWN AND DK BROWN SILTY FINE TO MED SAND
- 24 - 90" GRAY SILTY CLAY, TR FINE SAND SEAMS THROUGHOUT
- 90 - 96" GRAY FINE TO MED SAND
- 96" GROUND WATER
- 96 - 120" GRAY FINE TO MED SAND
- 120" END OF BORING

SB-2
- 0 - 8" BROWN FINE TO MED SAND AND GRAVEL
- 8 - 48" BROWN AND DK BROWN SILTY FINE TO MED SAND
- 48" WATER TABLE
- 48 - 60" BROWN AND DK BROWN SILTY FINE TO MED SAND
- 60 - 120" BROWN FINE TO MED SAND
- 120" END OF BORING

SB-3
- 0 - 10" BROWN FINE TO MED SAND AND GRAVEL
- 10 - 50" BROWN AND DK BROWN SILTY FINE TO MED SAND
- 50" WATER TABLE
- 50 - 60" BROWN AND DK BROWN SILTY FINE TO MED SAND
- 60 - 120" BROWN FINE TO MED SAND GRAY FINE TO MED SAND
- 120" END OF BORING

SB-9
- 0 - 2" BROWN GRAVELY SAND
- 2 - 20" DARK BROWN VERY FINE SAND WITH CLAY
- 20 - 24" BROWN FINE SAND
- 24" GROUND WATER
- 24 - 50" BROWN FINE SAND
- 50 - 54" GRAY CLAY WITH ORGANICS
- 54" END OF BORING

SOIL BORINGS CONT.

SB-10
- 0 - 2" BROWN CLAYEY SAND
- 2" GROUND WATER
- 2 - 6" BROWN CLAYEY SAND
- 6 - 18" GRAY CLAY WITH ORGANICS
- 18 - 24" GRAY/ BROWN CLAYEY SAND
- 24" END OF BORING

SB-11
- 0 - 6" BROWN CLAYEY SAND
- 6" GROUND WATER
- 6 - 54" BROWN FINE TO COARSE SAND WITH A TRACE OF ORGANICS
- 54 - 56" GRAY CLAY WITH ORGANICS
- 56" END OF BORING

SB-12
- 0 - 8" BROWN FINE TO MED SAND WITH ORGANICS
- 8" GROUND WATER
- 8 - 16" BROWN FINE TO MED SAND WITH ORGANICS
- 16 - 30" ORGANICS
- 30" END OF BORING (ROOTS)

SB-13
- 0 - 6" BROWN FINE TO MED SAND WITH ORGANICS
- 6" GROUND WATER
- 6 - 18" GRAY CLAYEY FINE SAND
- 18 - 36" LIGHT BROWN FINE TO COARSE SAND WITH TR CLAY
- 36 - 48" LIGHT BROWN MOTTLED FINE SANDY CLAY
- 48" END OF BORING

SB-14
- 0 - 2" DK BROWN FINE TO MED SAND,
- 2" TR ORGANICS
- 2 - 6" BROWN SANDY GRAVEL
- 6 - 18" GROUND WATER
- 18 - 24" BROWN SANDY GRAVEL
- 24" BROWN FINE TO MED SAND
- END OF BORING

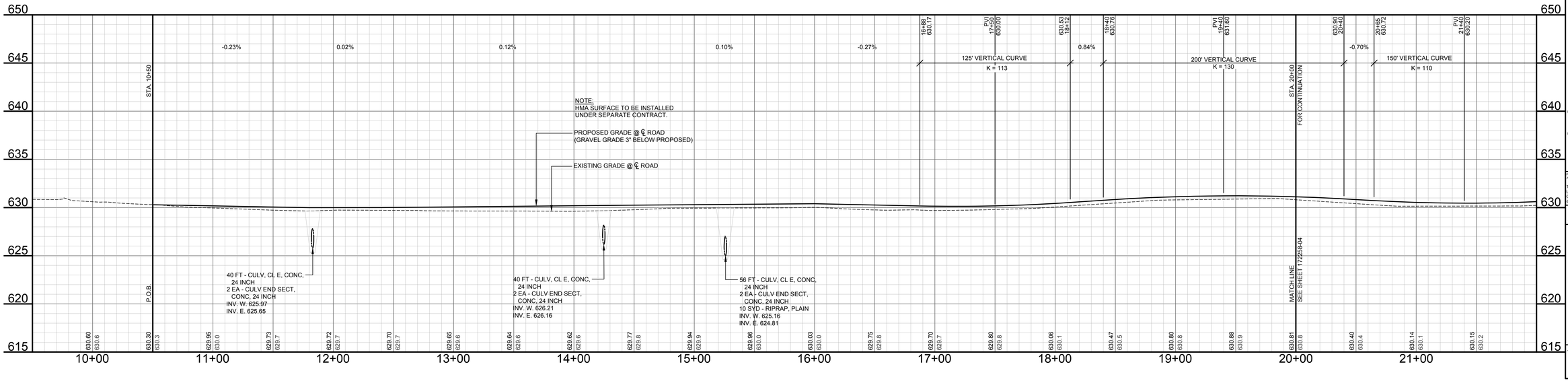
QUANTITIES THIS SHEET

ITEM	QTY.
Culv, Cl E, Conc, 24 inch	136 Ft
Culv, Cl F, 12 inch	40 Ft
Culv End Sect, Conc, 24 inch	6 Ea
Aggregate Base, 6 inch	3,290 Syd
Approach, Cl II	20 Ton
Riprap, Plain	30 Syd

NOTE:
HMA SURFACE TO BE INSTALLED UNDER SEPARATE CONTRACT.

LEGEND

- REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II 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, INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)



WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.wightman-assoc.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT

36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01	07/10/2018	AEH
	FINAL PLANS FOR BIDDING	
00	4/30/2018	AMZ
	PRELIMINARY - NOT FOR CONSTRUCTION	

REVISIONS

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JULY 2018

SCALE:

PLAN & PROFILE - STA. 10+50 TO 20+00

JOB No. 172258

172258-03

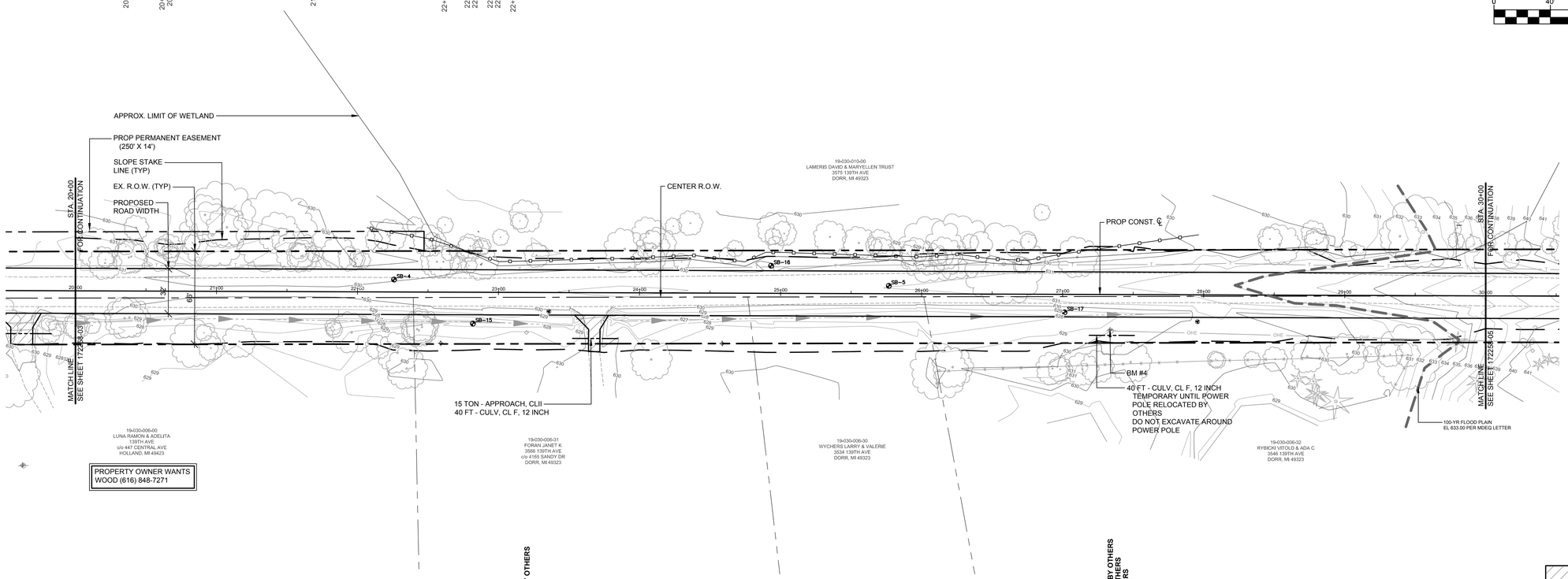
OF 12

BENCHMARK #3: 60d NAIL IN POWER POLE LOCATED 122.5 FEET RIGHT OF STA. 19+62 ELEV.= 629.46

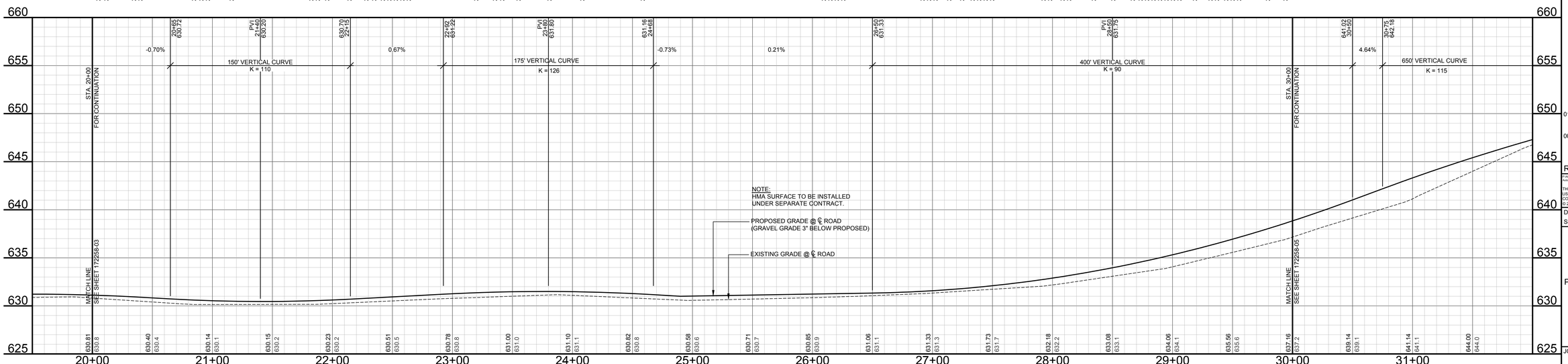
BENCHMARK #4: 60d NAIL IN POWER POLE LOCATED 26.5 FEET RIGHT OF STA. 27+33 ELEV. = 630.84

BENCHMARK #5: 60d NAIL IN POWER POLE LOCATED 42.9 FEET RIGHT OF STA. 33+23.5 ELEV. = 653.52

20+01 9" OAK 26.3" - **REMOVE**
20+12 6" TW 24.6'
20+16 15" TW 30.3'
20+17 10" TW 19.0'
20+21 6" MAPLE 22.2' - **REMOVE**
20+36 6" SASSAFRAS 31.5' - **REMOVE**
20+38 12" MAPLE 23.8' - **REMOVE**
20+40 12" CHERRY 24.5' - **REMOVE**
20+43 8" MAPLE 40.0'
20+61 12" DEAD TREE 25.0' - **REMOVE**
20+61 6" DEAD TREE 20.0' - **REMOVE**
20+63 6" MAPLE 31.8' - **REMOVE**
20+66 9" OAK 31.9' - **REMOVE**
20+66 6" MAPLE 26.9' - **REMOVE**
20+66 6" MAPLE 26.3' - **REMOVE**
20+83 6" MAPLE 34.3'
20+92 6" MAPLE 34.2'
20+97 24" MAPLE 40.1'
21+04 24" MAPLE 54.7'
21+07 15" MAPLE 45.5'
21+41 30" MAPLE 43.0'
21+44 12" MAPLE 41.4'
21+48 9" TW 36.4'
21+56 15" MAPLE 28.8' - **REMOVE**
21+58 12" MAPLE 29.7' - **REMOVE**
21+60 9" DEAD TREE 22.5' - **REMOVE**
21+61 12" MAPLE 25.4' - **REMOVE**
21+70 6" OAK 26.9' - **REMOVE**
21+86 12" MAPLE 27.6' - **REMOVE**
21+95 9" OAK 23.3' - **REMOVE**
21+99 6" DEAD TREE 22.0' - **REMOVE**
22+03 6" ELM 22.4' - **REMOVE**
22+14 9" DEAD TREE 36.7'
22+23 12" MAPLE 40.0'
22+41 6" POPLAR 47.7'
22+51 12" MAPLE 36.6'
22+54 12" OAK 36.9'
22+56 12" SASSAFRAS 21.6' - **REMOVE**
22+61 12" MAPLE 21.6' - **REMOVE**
22+63 12" MAPLE 24.0' - **REMOVE**
22+65 6" SASSAFRAS 22.2' - **REMOVE**
22+71 6" SASSAFRAS 20.1' - **REMOVE**
22+75 9" OAK 30.3' - **REMOVE**
22+79 6" SASSAFRAS 19.3' - **REMOVE**
22+80 9" SASSAFRAS 32.7' - **REMOVE**
22+87 6" MAPLE 31.7' - **REMOVE**
22+88 6" SASSAFRAS 32.5' - **REMOVE**
22+89 6" MAPLE 32.8' - **REMOVE**
23+01 6" SASSAFRAS 39.1'
23+05 6" MAPLE 37.6'
23+19 12" TW 54.0'
23+27 9" MAPLE 26.4' - **REMOVE**
23+89 15" MAPLE 31.1' - **REMOVE**
24+06 12" MAPLE 42.2'
24+07 12" MAPLE 40.7' - **REMOVE**
24+10 12" MAPLE 32.8' - **REMOVE**
24+14 12" MAPLE 35.0'
24+24 12" MAPLE 47.4'
24+50 6" TRI 22.3'
24+36 9" MAPLE 49.6'
24+62 6" OAK 26.6' - **REMOVE**
24+68 6" MAPLE 31.7' - **REMOVE**
24+95 6" TW 40.4'
24+95 12" MAPLE 45.8'
25+00 12" TW 42.6'
25+02 9" MAPLE 42.5'
25+35 12" TRI 40.2'
25+55 12" OAK 36.0'
25+66 6" OAK 34.1'
25+70 9" MAPLE 38.8'
25+72 9" OAK 31.3' - **REMOVE**
25+90 6" OAK 29.0' - **REMOVE**
25+97 12" OAK 28.2' - **REMOVE**
25+98 6" OAK 28.5' - **REMOVE**
26+05 6" OAK 28.0' - **REMOVE**
26+07 24" POPLAR 31.4' - **REMOVE**
26+12 6" OAK 27.1' - **REMOVE**
26+15 6" OAK 27.8' - **REMOVE**
26+17 6" OAK 26.1' - **REMOVE**
26+26 24" POPLAR 33.5' - **REMOVE**
26+33 6" OAK 35.7'
26+58 30" OAK 21.3' - **REMOVE**
26+66 6" OAK 32.6' - **REMOVE**
26+70 6" OAK 32.0' - **REMOVE**
26+72 6" TRI 20.6' - **REMOVE**
26+76 6" OAK 37.3'
26+85 6" POPLAR 58.2'
27+10 15" OAK 26.5' - **REMOVE**
28+47 9" OAK 39.8'
28+54 15" TW 36.0'
28+78 9" ELM 44.3'
28+80 9" ELM 36.8'
28+80 9" ELM 38.1'
29+03 6" TRI 33.0'
29+09 6" TRI 30.4'
29+39 15" DEAD TREE 42.1'
29+56 27" DEAD TREE 45.2'
29+79 6" CHERRY 39.0'
29+89 12" CHERRY 43.4'
29+91 6" OAK 36.6'



20+35 15" TRI 19.3'
20+38 15" TRI 18.8'
20+85 10" POPLAR 36.7'
20+94 6" MAPLE 25.5' - **REMOVE**
20+96 9" POPLAR 40.2'
21+16 12" POPLAR 35.5'
21+83 6" MAPLE 25.0' - **REMOVE**
21+84 6" DEAD TREE 26.7' - **REMOVE**
21+96 15" MAPLE 28.8' - **REMOVE**
22+19 9" MAPLE 39.0'
22+28 15" POPLAR 43.2'
22+35 15" MAPLE 54.4'
22+42 12" POPLAR 26.3' - **REMOVE**
22+44 12" POPLAR 27.2' - **REMOVE**
22+46 12" POPLAR 23.2' - **REMOVE**
22+46 12" POPLAR 24.9' - **REMOVE**
22+59 FND CIB 16012 36.3'
23+20 TELE RISER BOX 28.4' - **RELOCATE BY OTHERS**
23+38 TP NAIL 13.4'
23+42 ORN PIN 52.9'
23+55 CMP 18.8'
23+81 18 16.6'
24+08 15" TW 47.3'
24+59 FND CIB 45500 35.7'
26+13 WIRE FENCE 55.1'
26+13 1" FENCE 52.4'
26+13 1" POPLAR 54.5'
26+22 15" POPLAR 52.0'
26+92 WIRE FENCE 51.5'
26+93 12" POPLAR 52.7'
26+98 9" POPLAR 53.2'
27+14 12" TRI 53.1'
27+25 12" POPLAR 51.2'
27+34 BM 4 POWER POLE 26.2' - **RELOCATE BY OTHERS**
27+35 POWER POLE 25.6' - **RELOCATE BY OTHERS**
27+37 GUY WIRE 15.6' - **RELOCATE BY OTHERS**
27+48 15" POPLAR 48.0'
27+93 WIRE FENCE 47.3'
27+95 TP NAIL 19.1'
28+09 6" ELM 45.7'
28+10 6" ELM 46.4'
28+35 6" ELM 45.8'
28+51 9" MAPLE 45.5'
28+67 12" PINE 59.0'
28+71 12" MAPLE 43.4'
28+78 12" PINE 61.0'
28+79 15" PINE 69.8'
28+80 15" PINE 69.8'
28+94 24" PINE 75.3'
28+94 WIRE FENCE 44.3'
29+02 15" MAPLE 41.7'
29+19 6" MAPLE 41.7'
29+32 WIRE FENCE 71.3'
29+32 8" TW 41.9'
29+45 24" POPLAR 42.0'
29+45 24" POPLAR 44.0'
29+48 WIRE FENCE 42.3'
29+80 15" PINE 32.1' - **REMOVE**
29+94 15" PINE 60.2'



QUANTITIES THIS SHEET

ITEM	QTY.
Culv, Cl F, 12 inch	40 Ft
Aggregate Base, 6 inch	3,560 Syd
Approach, Cl II	15 Ton

0 40' 60' 80'

NOTE:
HMA SURFACE TO BE INSTALLED UNDER SEPARATE CONTRACT.

SOIL BORINGS

SB-15
- 0 - 10" DK BROWN CLAYEY FINE SAND
- 10 - 12" LIGHT BROWN FINE TO MED SAND
- 12" GROUND WATER
- 12 - 36" LIGHT BROWN FINE TO MED SAND
- 36" END OF BORING

SB-16
- 0 - 6" DK BROWN FINE TO MED SAND WITH ORGANICS
- 6" GROUND WATER
- 6 - 10" DK BROWN FINE TO MED SAND WITH ORGANICS
- 10 - 36" BROWN FINE TO MED SAND
- 36" END OF BORING

SB-5
- 0 - 3" BROWN FINE TO MED SAND AND GRAVEL
- 3 - 24" BROWN SILTY FINE TO MED SAND BROWN AND DK BROWN SILTY
- 24 - 60" FINE TO MED SAND
- 60 - 86" GRAYISH BROWN FINE TO MED SAND
- 86" WATER TABLE
- 86 - 120" GRAYISH BROWN FINE TO MED SAND
- 120" END OF BORING

SB-17
- 0 - 12" WATER
- 12 - 24" DK BROWN FINE SAND WITH ORGANICS
- 24" END OF BORING

LEGEND

REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II 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, INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.wightman-assoc.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT

36TH STREET TO 35TH STREET

ALLEGAN COUNTY ROAD COMMISS0N

1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01 07/10/2018 AEH
FINAL PLANS FOR BIDDING

00 4/30/2018 AMZ
PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

P:\Allegan\172258 ACRC - 139th Avenue\B) Drawings\B90 Auto\CAD\172258-04.dwg 172258-04 7/30/2018 10:55:13 AM

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JUNE 2018

SCALE:

PLAN & PROFILE - STA. 20+00 TO 30+00

JOB No. 172258

172258-04

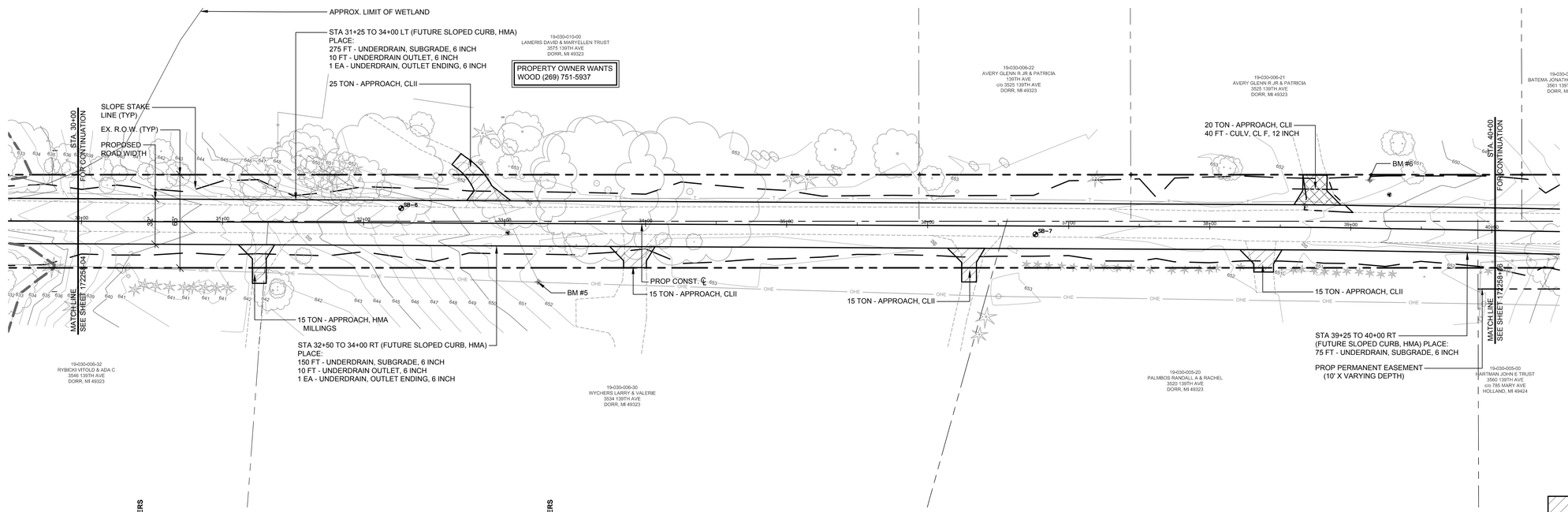
OF 12

BENCHMARK #4: 60d NAIL IN POWER POLE LOCATED 26.5 FEET RIGHT OF STA. 27+33 ELEV.= 630.84

BENCHMARK #5: 60d NAIL IN POWER POLE LOCATED 42.9 FEET RIGHT OF STA. 33+23.5 ELEV.= 653.52

BENCHMARK #6: 60d NAIL IN POWER POLE LOCATED 34 FEET LEFT OF STA. 39+12 ELEV. = 652.83

30+18 6"TW 25.7'
30+27 6" OAK 34.1'
30+45 6" ELM 35.7'
30+56 9" ELM 49.9'
30+57 12"TRI 34.5'
30+69 9"TRI 33.7'
30+89.3' FENCE 52.1'
30+92 WIRE FENCE 43.7'
31+19 15" MAPLE 30.3' - **REMOVE**
31+26 15" MAPLE 28.9' - **REMOVE**
31+29 TW MAPLE 24.5' - **REMOVE**
31+39 27" MAPLE 41.0' - **REMOVE**
31+39 BUILDING FENCE 78.0'
31+39 WIRE FENCE 45.8'
31+45 24" MAPLE 39.2'
31+55 18" HACKBERRY 47.2'
31+59 9" HACKBERRY 43.8'
31+64 18" HACKBERRY 52.3'
31+67 9" PINE 50.5'
31+67 TW MAPLE 25.2'
31+68 12" MAPLE 34.3'
31+70 TW MAPLE 23.8'
31+74 TW MAPLE 23.8'
31+78 8" MAPLE 41.2'
31+81 12" MAPLE 45.6'
31+82 9" MAPLE 35.4'
31+88 6" MAPLE 44.3'
31+89 12" MAPLE 45.6'
31+89 9" PINE 39.6'
31+97 18" HACKBERRY 30.1' - **REMOVE**
32+14 6" HACKBERRY 22.2' - **REMOVE**
32+18 6" PINE 35.5'
32+28 VINYL FENCE 33.1'
32+35 BUILDING HOUSE 87.9'
32+37 24" OAK 31.9'
32+52 2" FENCE 31.3'
32+63 BUSH 32.3'
32+64 BUSH 35.0'
32+77 BUILDING 81.9'
32+83 TELE RISER BOX 42.5'
32+86 POWER POLE 41.3'
32+94 15" PINE 63.9'
32+93 BUSH 56.7'
32+98 BUSH 45.1'
33+03 9" HACKBERRY 40.5'
33+03 6" HACKBERRY 54.2'
33+12 39" MAPLE 33.3' - **REMOVE**
33+15 6" HACKBERRY 32.7'
33+17 MAILBOX 3575 14.8' - **RELOCATE**
33+31 6"TW 30.4'
33+65 48" MAPLE 28.7' - **REMOVE**
33+73 54" MAPLE 24.1' - **REMOVE**
34+31 54" MAPLE 23.2' - **REMOVE**
34+78 BUSH 49.2'
34+85 BUSH 49.1'
34+91 BUSH 48.3'
35+03 12" PINE 33.0' - **REMOVE**
35+14 15" PINE 32.4' - **REMOVE**
35+32 BUSH 31.3'
35+32 POWER POLE 41.0'
35+34 15" POPLAR 53.5'
35+36 BUSH 38.2'
35+78 18"TW 50.9'
35+94 FND CIB KYO 36.1'
36+03 9" MAPLE 33.5'
36+21 TELE RISER BOX 24.2' - **RELOCATE BY OTHERS**
36+33 BUSH 42.4'
36+54 BUSH 44.8'
37+19 12" PINE 34.3'
37+44 FND CIB KYO 36.8'
38+10 9"TW 42.4'
38+14 9"TW 41.6'
38+67 MAILBOX 3525 15.5' - **RELOCATE**
39+13 BM 6 34.0'
39+13 POWER POLE 34.4'
39+27 TP PK 24.1'
39+29 9"TRI 61.0'
39+36 9"TRI 60.4'
39+44 9"TRI 40.4'



QUANTITIES THIS SHEET

ITEM	QTY.
Culv, Cl F, 12 inch	40 Ft
Underdrain, Subgrade, 6 inch	500 Ft
Underdrain Outlet, 6 inch	20 Ft
Underdrain, Outlet Ending, 6 inch	2 Ea
Aggregate Base, 6 inch	3,560 Syd
Approach, Cl II	105 Ton
Approach, HMA Millings	15 Ton

NOTE:
HMA SURFACE TO BE INSTALLED UNDER SEPARATE CONTRACT.

SOIL BORINGS

SB-6	0 - 3"	BROWN FINE TO MED SAND AND GRAVEL
	3 - 120"	BROWN FINE TO MED SAND, TR SILT
	120"	END OF BORING
SB-7	0 - 4"	BROWN FINE TO MED SAND AND GRAVEL
	4 - 10"	DK BROWN AND BROWN SILTY FINE TO MED SAND
	10 - 60"	BROWN SILTY FINE TO MED SAND
	60"	END OF BORING

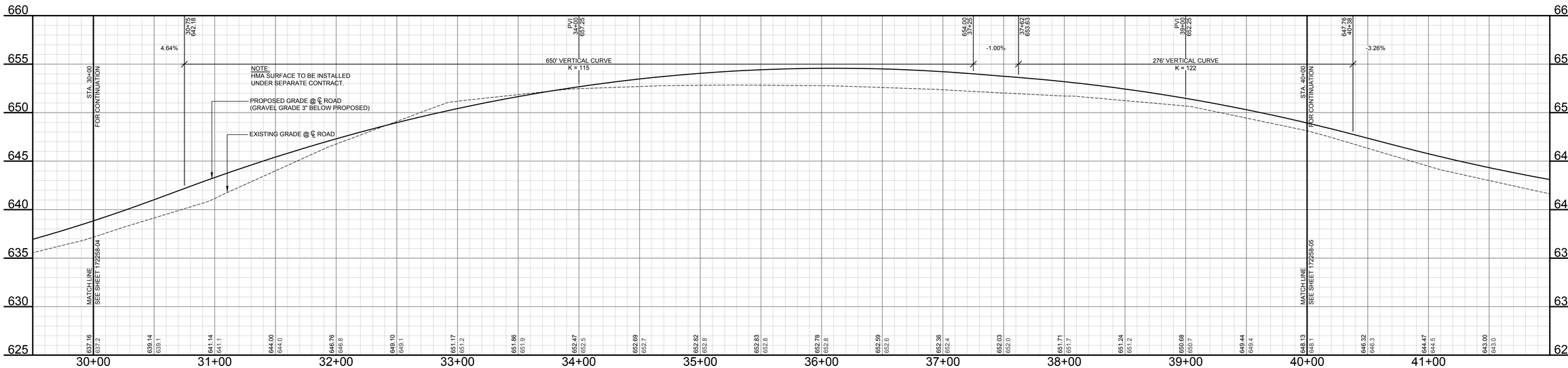
LEGEND

REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II 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, INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

30+28 BUSH 33.3'
30+33 POWER POLE 32.8'
30+33 TELE RISER BOX 28.8'
30+35 POWER POLE 32.2' - **RELOCATE BY OTHERS**
30+38 9" PINE 48.2'
30+45 9" PINE 44.5'
30+53 9" PINE 45.2'
30+62 9" PINE 45.9'
30+73 9" PINE 46.5'
30+79 9" PINE 46.4'
30+88 9" PINE 46.4'
30+96 9" PINE 46.7'
31+04 9" PINE 46.4'
31+36 15" ELM 48.2'
31+39 6" ELM 48.1'
31+39 6" ELM 45.8'
31+58 6" ELM 23.8' - **REMOVE**
31+61 MAILBOX 3546 11.1' - **RELOCATE**
33+02 TP PK 6.7'
33+24 BM 5 41.2'
33+24 POWER POLE 41.7'
33+32 GUY WIRE 19.5' - **RELOCATE BY OTHERS**
33+51 9"TW 15.0'
34+13 6"TW 11.7'
34+34 6"TRI 12.4'
36+04 MAILBOX 3534 12.1' - **RELOCATE**
36+37 12" PINE 77.0'
36+42 15" PINE 64.5'
36+51 POWER POLE 50.0'
36+70 6" PINE 27.0'
36+78 6" PINE 27.3'
36+86 6" PINE 27.9'
36+95 6" PINE 28.1'
37+04 6" PINE 28.9'
37+16 6" PINE 28.8'
37+25 6" PINE 28.3'
37+35 6" PINE 29.2'
37+44 6" PINE 29.0'
37+58 6" PINE 30.1'
37+73 6" PINE 30.6'
37+82 6" PINE 30.2'
37+92 6" PINE 30.0'
38+00 6" PINE 30.1'
38+05 6" PINE 28.9'
38+22 6" PINE 27.9' - **REMOVE**
38+51 6" PINE 32.1' - **REMOVE**
38+60 6" PINE 30.1'
38+65 6" PINE 30.3'
38+67 MAILBOX 3520 12.6'
38+74 6" PINE 30.2'
38+82 6" PINE 31.1'
38+90 6" PINE 32.0'
38+98 6" PINE 30.4'
39+06 6" PINE 30.7'
39+14 6" PINE 31.5'
39+22 6" PINE 32.2'
39+30 6" PINE 32.0'
39+53 ORN" PINE 33.6'
39+62 4" FENCE 64.2'
39+93 CHAIN FENCE 22.7'
39+93 GUY WIRE 61.5'
39+95 POWER POLE 52.1'
39+99 6" PINE 29.6'



WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.wightman-assoc.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT

36TH STREET TO 35TH STREET

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01 07/10/2018 AEH
FINAL PLANS FOR BIDDING

00 4/30/2018 AMZ
PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

Y:\Allegan\172258 ACRC - 139th Avenue\05 Drawings\05 AutoCAD\172258-06.dwg 172258-05 10/20/18 10:37:41 AM

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JUNE 2018
SCALE:

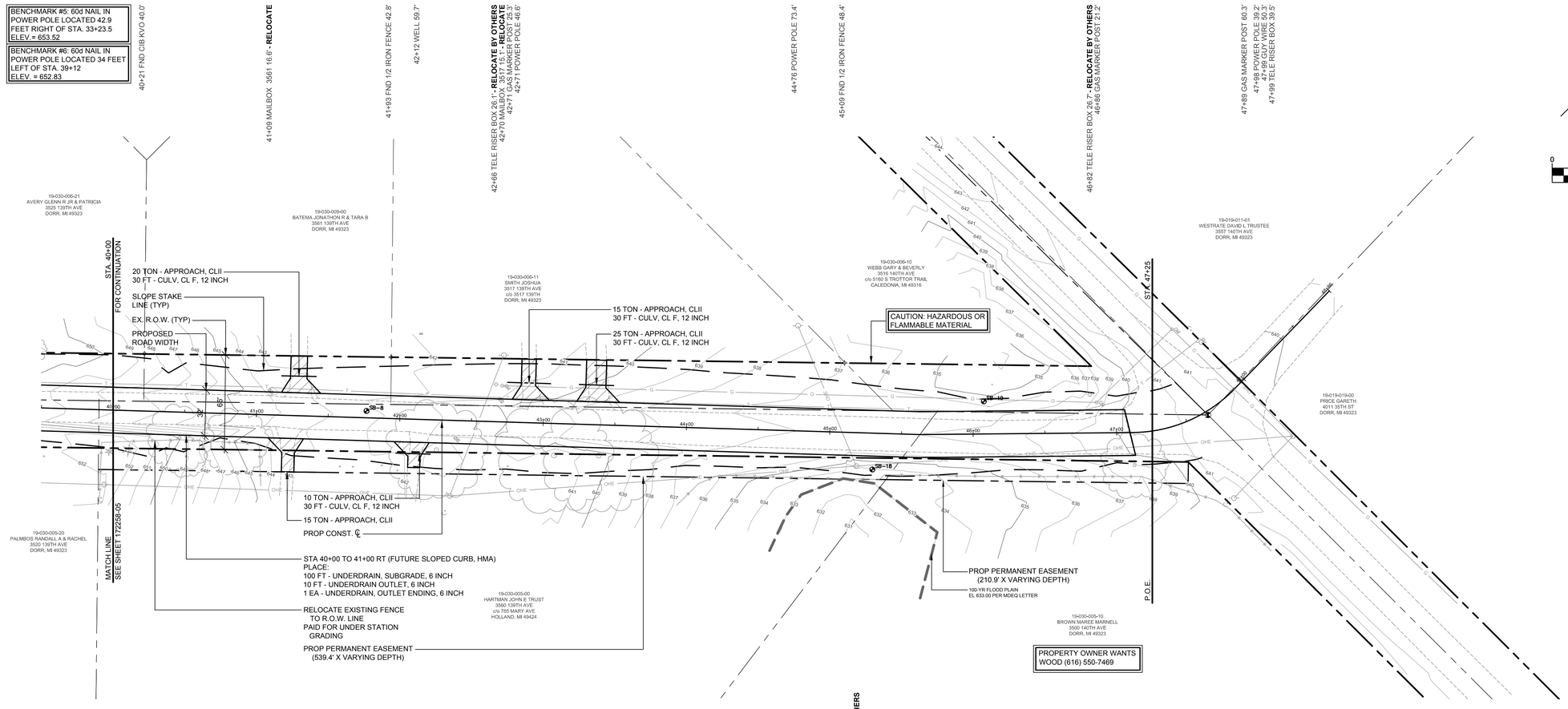
PLAN & PROFILE - STA. 30+00 TO 40+00

JOB No. 172258

172258-05
OF 12

BENCHMARK #5: 60d NAIL IN POWER POLE LOCATED 42.9 FEET RIGHT OF STA. 33+23.5 ELEV.= 653.52

BENCHMARK #6: 60d NAIL IN POWER POLE LOCATED 34 FEET LEFT OF STA. 39+12 ELEV. = 652.83



QUANTITIES THIS SHEET

ITEM	QTY.
Culv, Cl F, 12 inch	120 Ft
Underdrain, Subgrade, 6 inch	100 Ft
Underdrain Outlet, 6 inch	10 Ft
Underdrain, Outlet Ending, 6 inch	1 Ea
Aggregate Base, 6 inch	2,580 Syd
Approach, Cl II	85 Ton

NOTE:
HMA SURFACE TO BE INSTALLED UNDER SEPARATE CONTRACT.

SOIL BORINGS

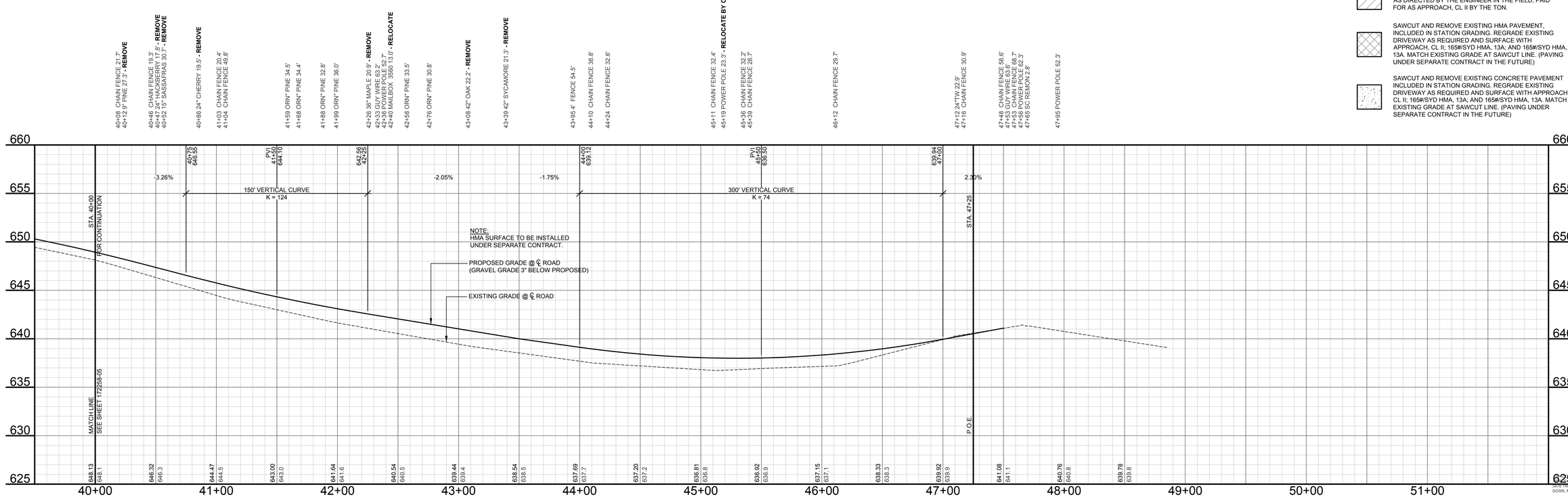
SB-8	0 - 6"	BROWN FINE TO MED SAND AND GRAVEL
	6 - 60"	BROWN FINE TO MED SAND
	60"	END OF BORING

LEGEND

REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CLASS II 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, INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT INCLUDED IN STATION GRADING. REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 13A. MATCH EXISTING GRADE AT SAWCUT LINE. (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)



WIGHTMAN & ASSOCIATES, INC.
ENGINEERING ◆ SURVEYING ◆ ARCHITECTURE
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: (269) 927-0100
9835 Portage Road
Portage, MI 49002
Phone: (269) 327-3532
1670 Lincoln Road
Allegan, MI 49010
Phone: (269) 673-8465
www.wightman-assoc.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01 07/10/2018 AEH
FINAL PLANS FOR BIDDING

00 4/30/2018 AMZ
PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

T:\Allegan\172258 ACRC - 139th Avenue\05 Drawings\05C Sheet\172258-06.dwg 172258-06 7/10/2018 12:26:05 PM

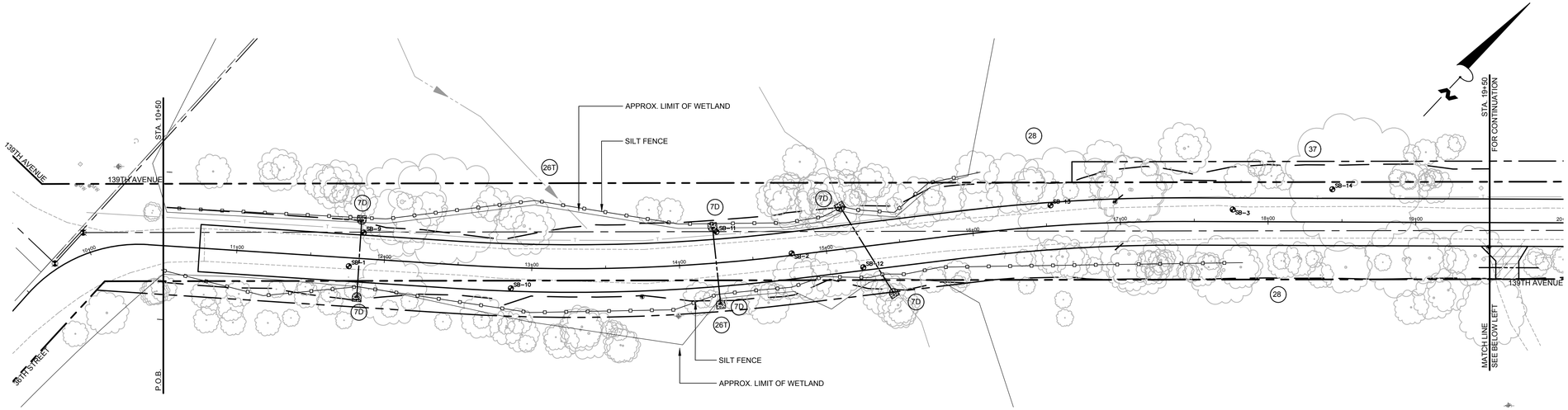
THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2016 WIGHTMAN & ASSOCIATES, INC.

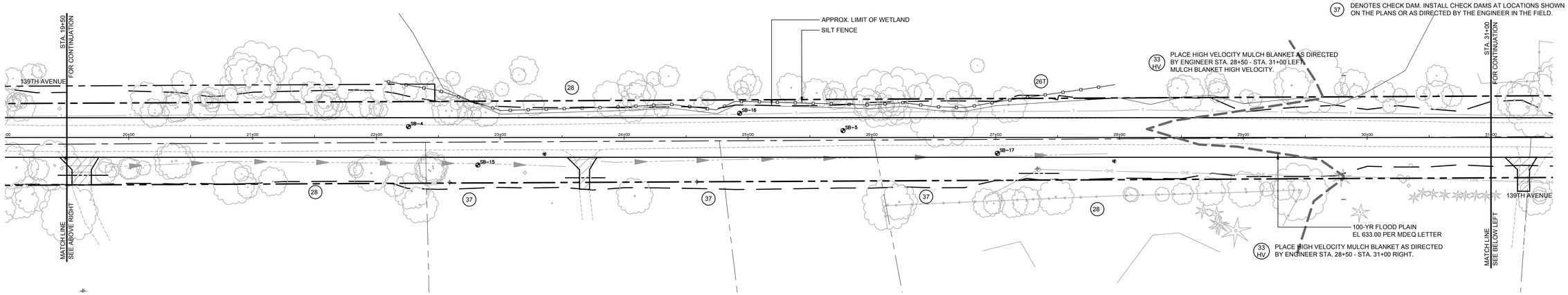
DATE: JULY 2018
SCALE:

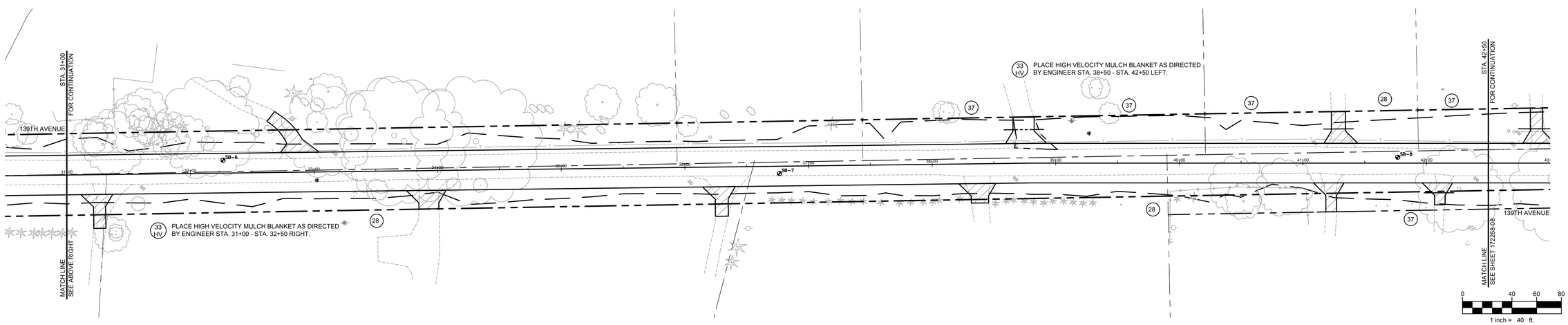
PLAN & PROFILE - STA. 40+00 TO 47+50

JOB No. 172258

3475 TAHOE DR.
DORR, MI 49323







QUANTITIES THIS SHEET

ITEM	QTY.
Seeding, Mixture CR	150 Lb
Mulch Blanket, High Velocity	1,625 Syd
Erosion Control, Check Dam	90 Ft

SOIL EROSION & SEDIMENTATION CONTROL NOTES

1. ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL 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 SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
4. GEOTEXTILE SILT FENCE SHALL 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 SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
5. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.

(##) 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.

(7D) DENOTES RIPRAP, PLAIN. INSTALL RIPRAP AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

(26T) DENOTES TEMPORARY SILT FENCE. SILT FENCE SHALL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE SHALL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.

(28) DENOTES MULCHING AND MULCH ANCHORING. INSTALL AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

(33 HV) DENOTES HIGH VELOCITY MULCH BLANKETS FOR USE 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.

(37) DENOTES CHECK DAM. INSTALL CHECK DAMS AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01	07/10/2018	AEH
	FINAL PLANS FOR BIDDING	
00	4/30/2018	AMZ
	PRELIMINARY - NOT FOR CONSTRUCTION	

REVISIONS

P:\Allegan\172258 ACRC - 139th Avenue\B) Drawings\B90 AutoCAD\172258-07.dwg 172258-07 8/10/2018 3:47:14 PM

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JUNE 2018

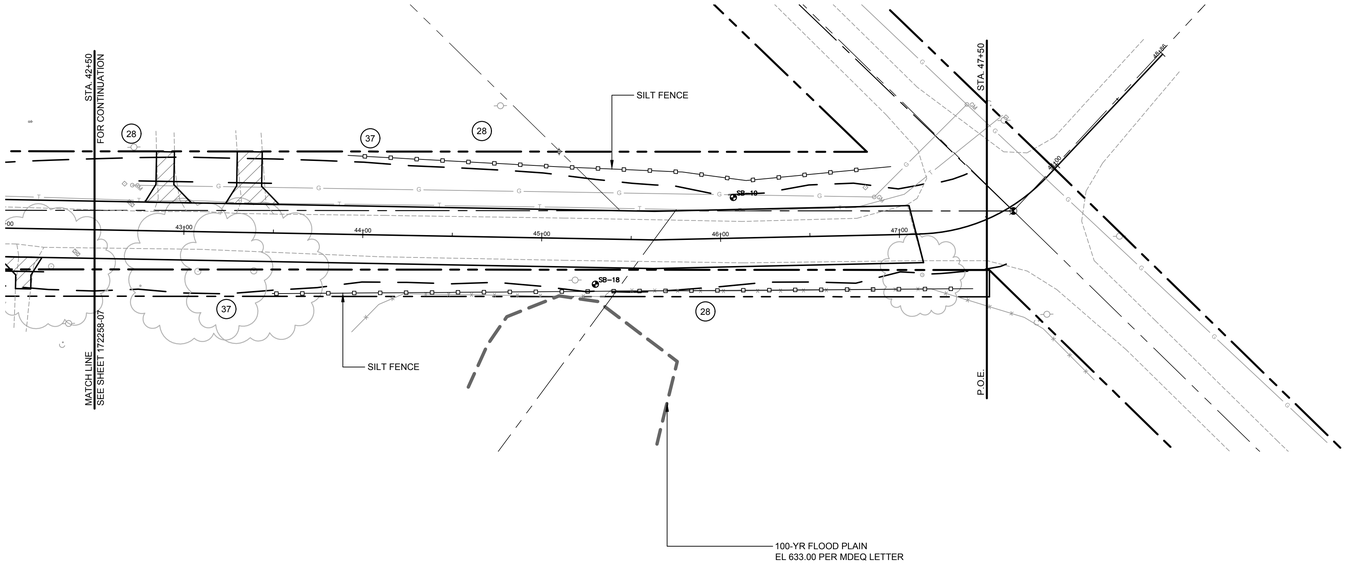
SCALE:

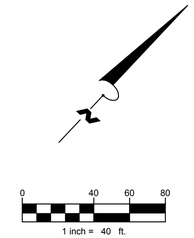
SOIL EROSION CONTROL SHEETS - STA 10+00 TO STA 42+50

JOB No. 172258

172258-07

OF 12





QUANTITIES THIS SHEET	
ITEM	QTY.
Seeding, Mixture CR	30 Lb
Erosion Control, Check Dam	20 Ft

SOIL EROSION & SEDIMENTATION CONTROL NOTES

1. ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL 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 SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
4. GEOTEXTILE SILT FENCE SHALL 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 SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
5. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
6. DENOTES PERMANENT SEEDING. ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED. PLACE TOPSOIL SURFACE, SALV, 3 INCH, MDOT SEEDING, MIXTURE TUF APPLIED AT A RATE OF 220 LB/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL A APPLIED AT A RATE OF 228 LB/ACRE; MULCH AT A RATE OF 2 TON/ACRE AND MULCH ANCHORING. (APPLIES TO ENTIRE PROJECT)

(##) 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.

(26T) DENOTES TEMPORARY SILT FENCE. SILT FENCE SHALL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE SHALL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.

(28) DENOTES MULCHING AND MULCH ANCHORING. INSTALL AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

(33 HV) DENOTES HIGH VELOCITY MULCH BLANKETS FOR USE 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.

(37) DENOTES CHECK DAM. INSTALL CHECK DAMS AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01 07/10/2018 AEH
FINAL PLANS FOR BIDDING

00 4/30/2018 AMZ
PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

P:\Allegan\172258 ACRC - 139th Avenue\B) Drawings\B90 AutoCAD\172258-08.dwg 172258-08 8/30/2018 3:48:17 PM

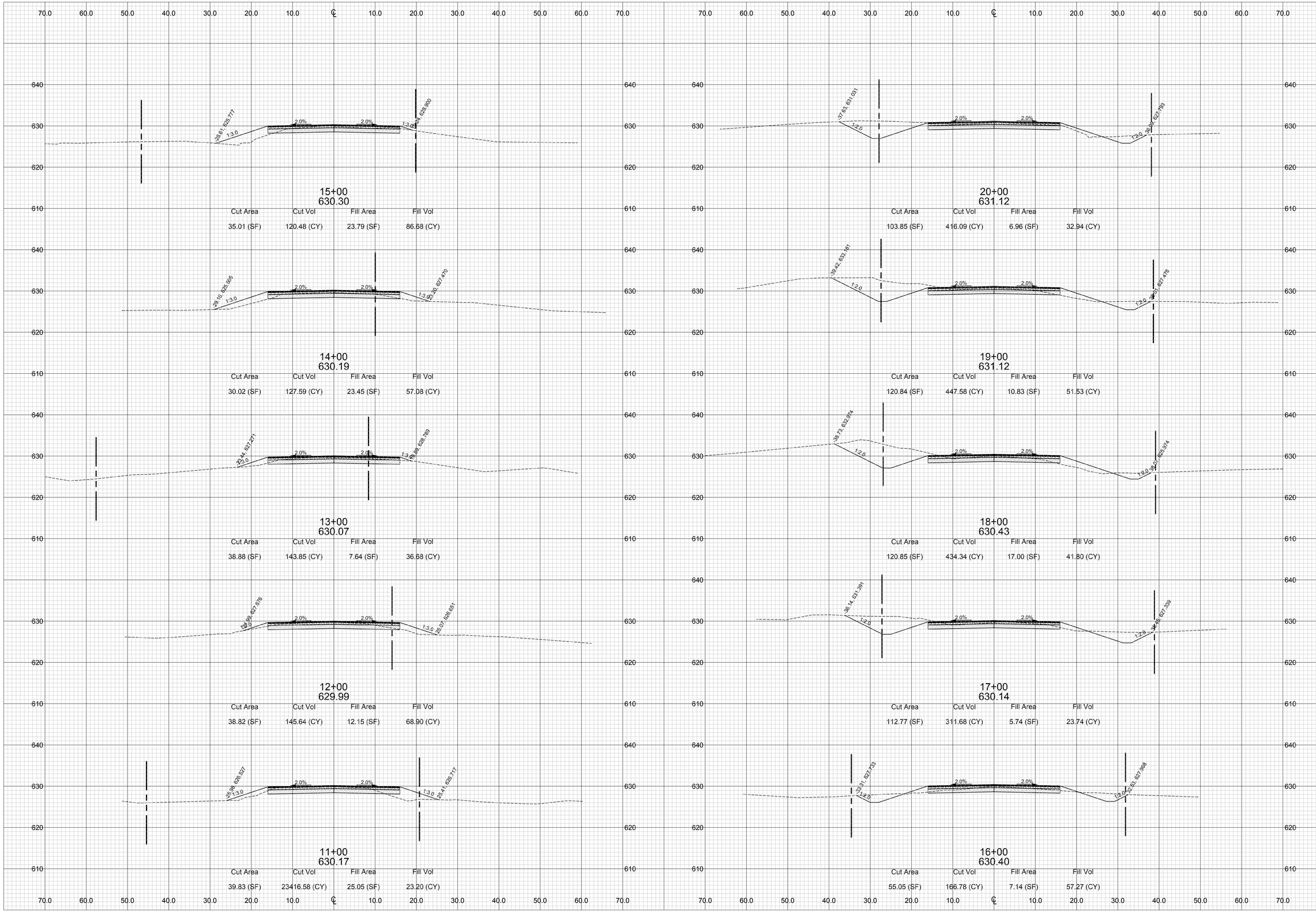
THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2018 WIGHTMAN & ASSOCIATES, INC.

DATE: JUNE 2018
SCALE:

SOIL EROSION CONTROL SHEETS - STA 42+50 TO STA 47+50

JOB No. 172258

172258-08
OF 12



WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01	07/10/2018	AEH
	FINAL PLANS FOR BIDDING	
00	4/30/2018	AMZ
	PRELIMINARY - NOT FOR CONSTRUCTION	

REVISIONS

J:\Allegan\172258 ACRC\139th Avenue\05 Drawings\RP Rev\ACD\172258R.dwg 172258-09 7/10/2018 8:53:02 AM

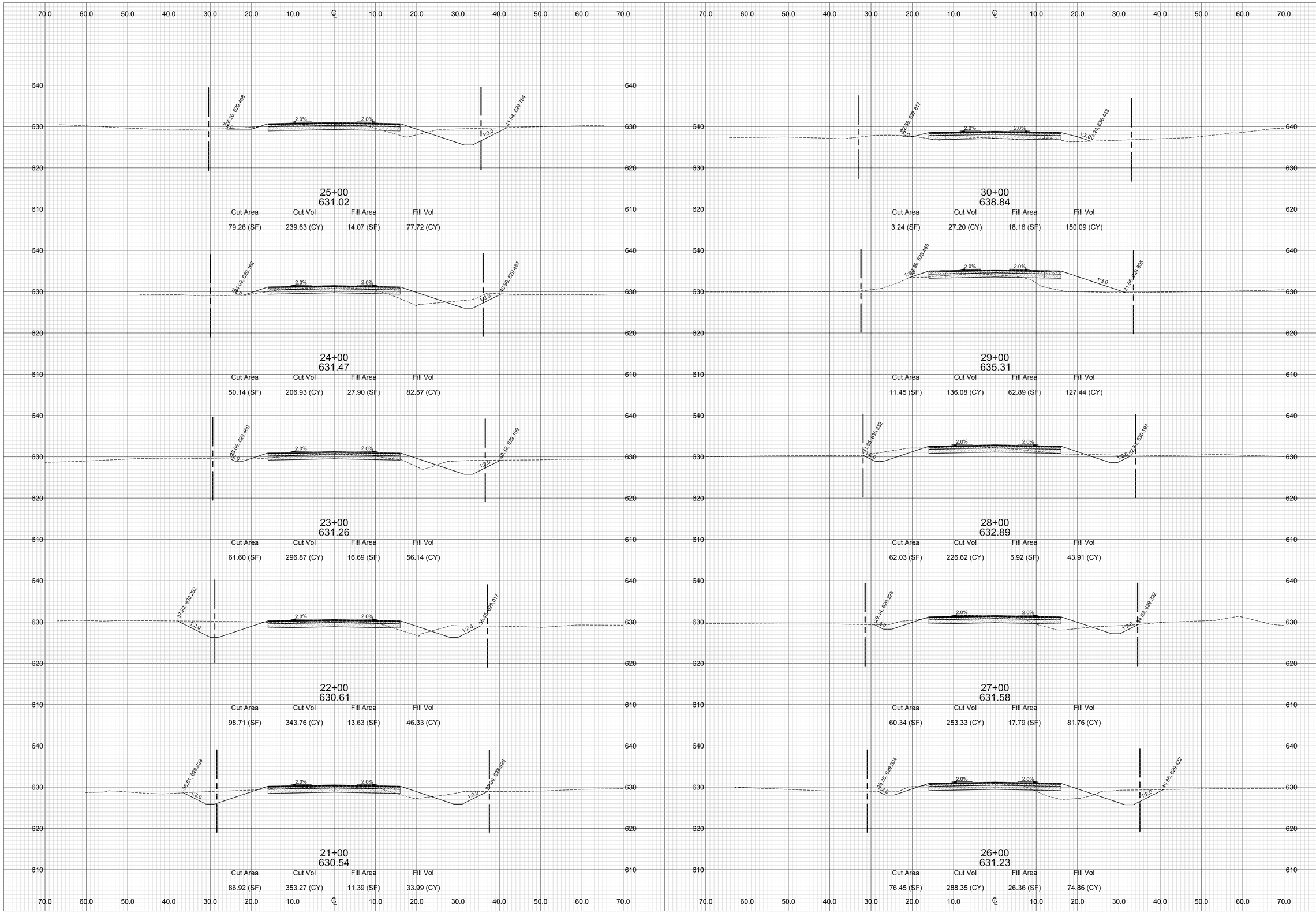
THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2016 WIGHTMAN & ASSOCIATES, INC.

DATE: JULY 2018
SCALE: 1" = 10'

CROSS SECTION - STA 11+00 TO STA 20+00

JOB No. 172258

172258-09
OF 12



WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01	07/10/2018 FINAL PLANS FOR BIDDING	AEH
00	4/30/2018 PRELIMINARY - NOT FOR CONSTRUCTION	AMZ

REVISIONS

J:\Allegan\172258 ACRC - 139th Ave\v26 Drawings\800 AutoCAD\172258X.dwg 172258-10 7/11/2018 9:56:30 AM

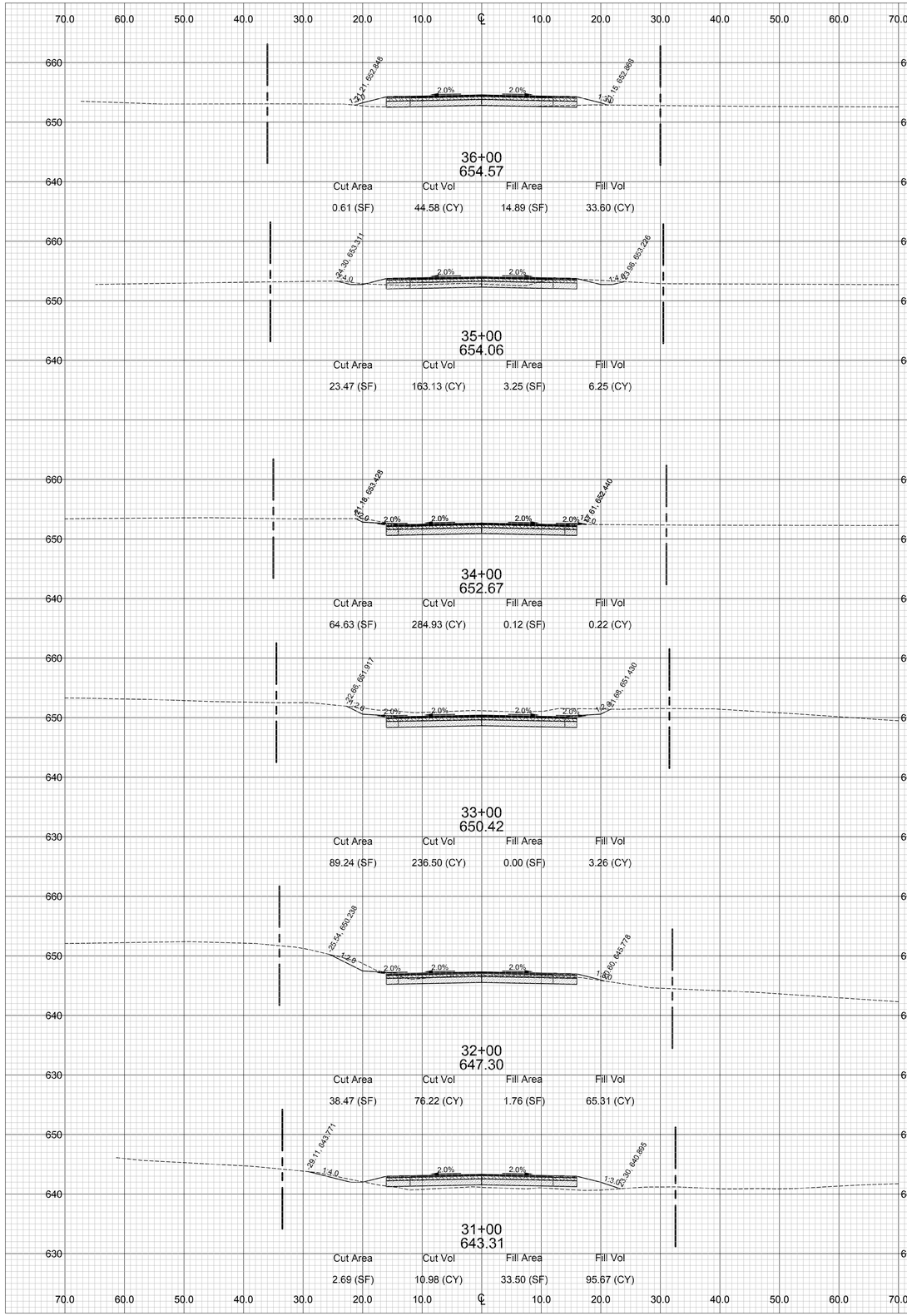
THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2016 WIGHTMAN & ASSOCIATES, INC.

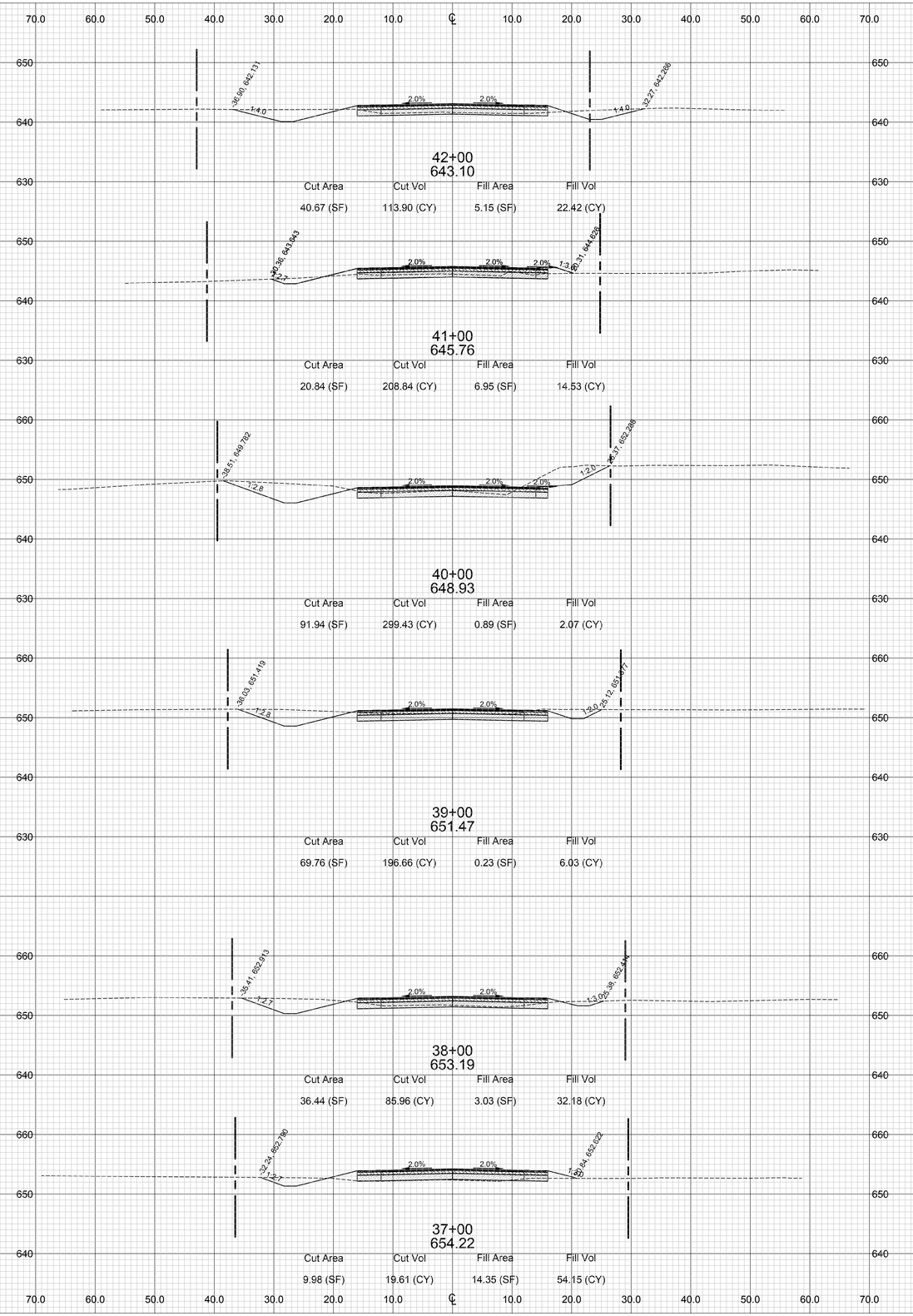
DATE: JULY 2018
SCALE: 1" = 10'

CROSS SECTION - STA 21+00 TO STA 30+00

JOB No. 172258

172258-10
OF 12





WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01 07/10/2018 AEH
FINAL PLANS FOR BIDDING

00 4/30/2018 AMZ
PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

J:\Allegan\172258 ACRC\139th Avenue\05 Drawings\RW Auto\CAD\172258.dwg 172258-11 7/10/2018 8:54:58 AM

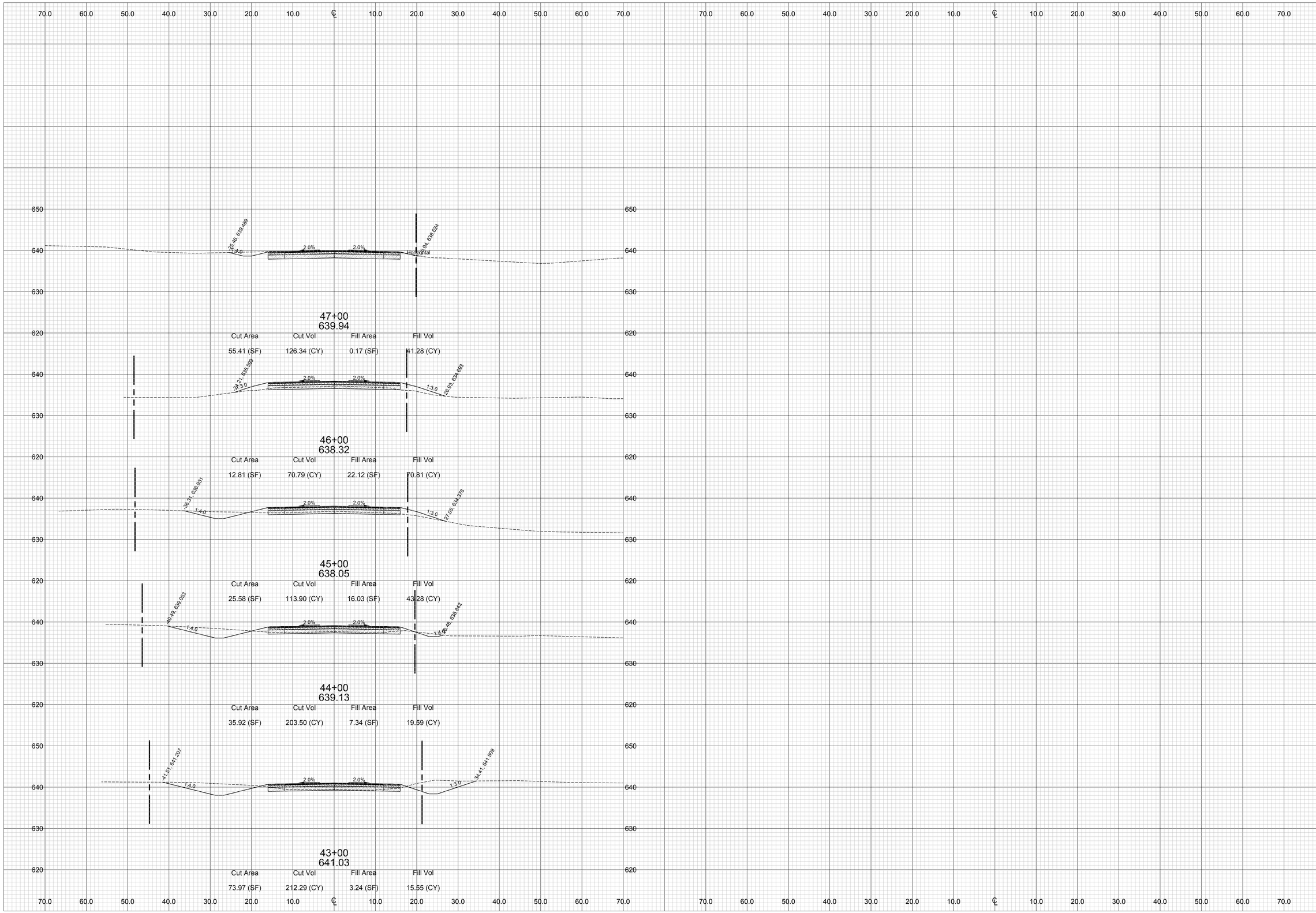
THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2016 WIGHTMAN & ASSOCIATES, INC.

DATE: JULY 2018
SCALE: 1" = 10'

CROSS SECTION - STA 31+00 TO STA 42+00

JOB No. 172258

172258-11
OF 12



WIGHTMAN

BENTON HARBOR
2303 Pipestone Road
Benton Harbor, MI 49022
Phone: 269.927.0100

PORTAGE
9835 Portage Road
Portage, MI 49002
Phone: 269.327.3532

ALLEGAN
1670 Lincoln Road
Allegan, MI 49010
Phone: 269.673.8465

www.gowightman.com

AARON J. NEITLING
ENGINEER NO. 50508

PROJECT NAME:

139TH AVENUE RECONSTRUCTION PROJECT
36TH STREET TO 35TH STREET - SALEM TOWNSHIP

ALLEGAN COUNTY ROAD COMMISS0N
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

01	07/10/2018	AEH
	FINAL PLANS FOR BIDDING	
00	4/30/2018	AMZ
	PRELIMINARY - NOT FOR CONSTRUCTION	

REVISIONS

Z:\Allegan\172258 ACRC - 139th Avenue\03 Drawings\Rdwy
AutoCAD\172258R.dwg 172258-12 T11\22018 8:56:16 AM

THE REPRODUCTION, COPYING OR OTHER USE OF THIS DRAWING WITHOUT WRITTEN CONSENT IS PROHIBITED.
© 2016 WIGHTMAN & ASSOCIATES, INC.

DATE: JULY 2018
SCALE: 1" = 10'

CROSS SECTION - STA 43+00 TO STA 47+00

JOB No. 172258

172258-12
OF 12