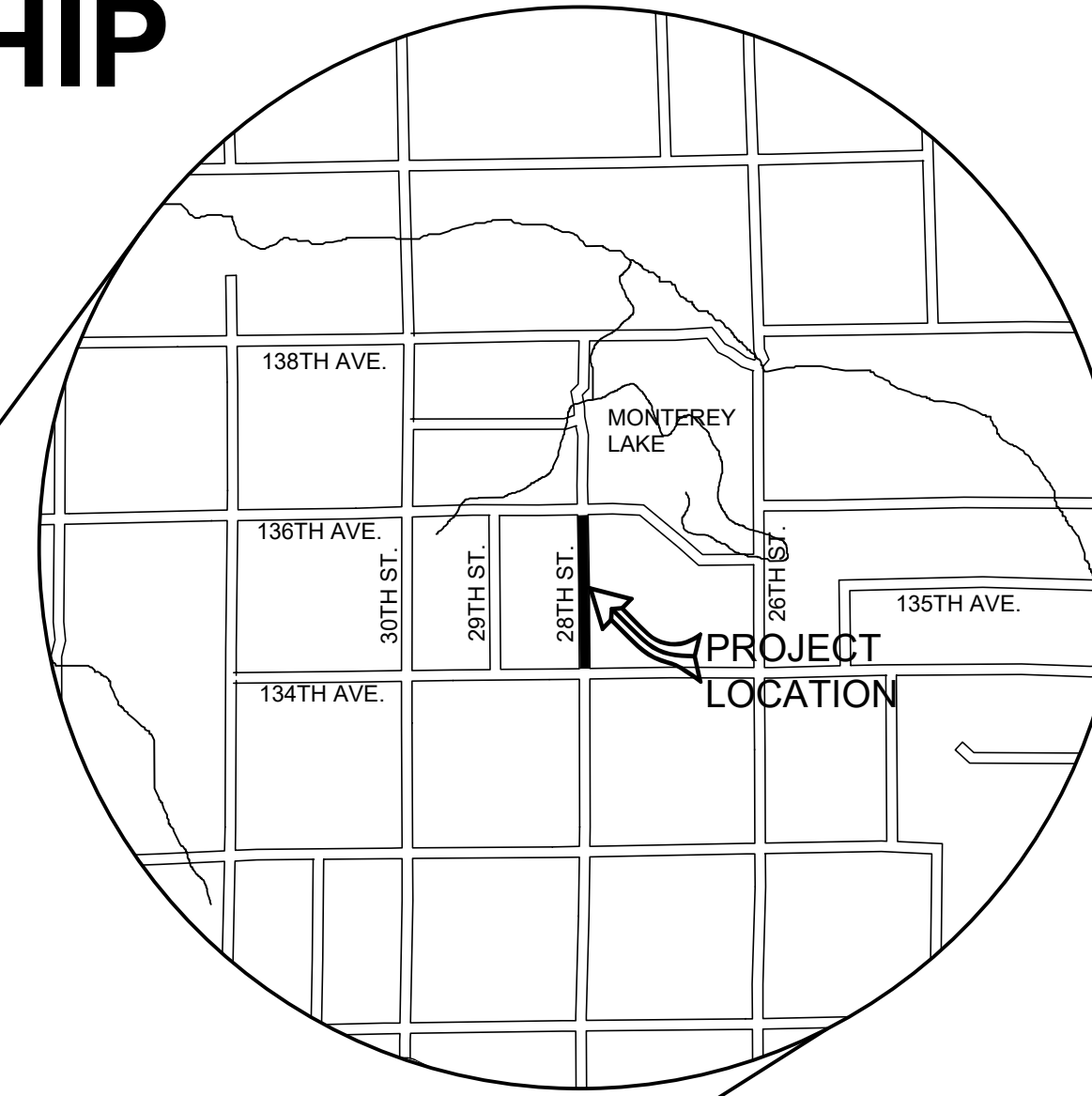


ALLEGAN COUNTY ROAD COMMISSION

28TH STREET RECONSTRUCTION PROJECT

134TH AVENUE TO 136TH AVENUE

MONTEREY TOWNSHIP



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.

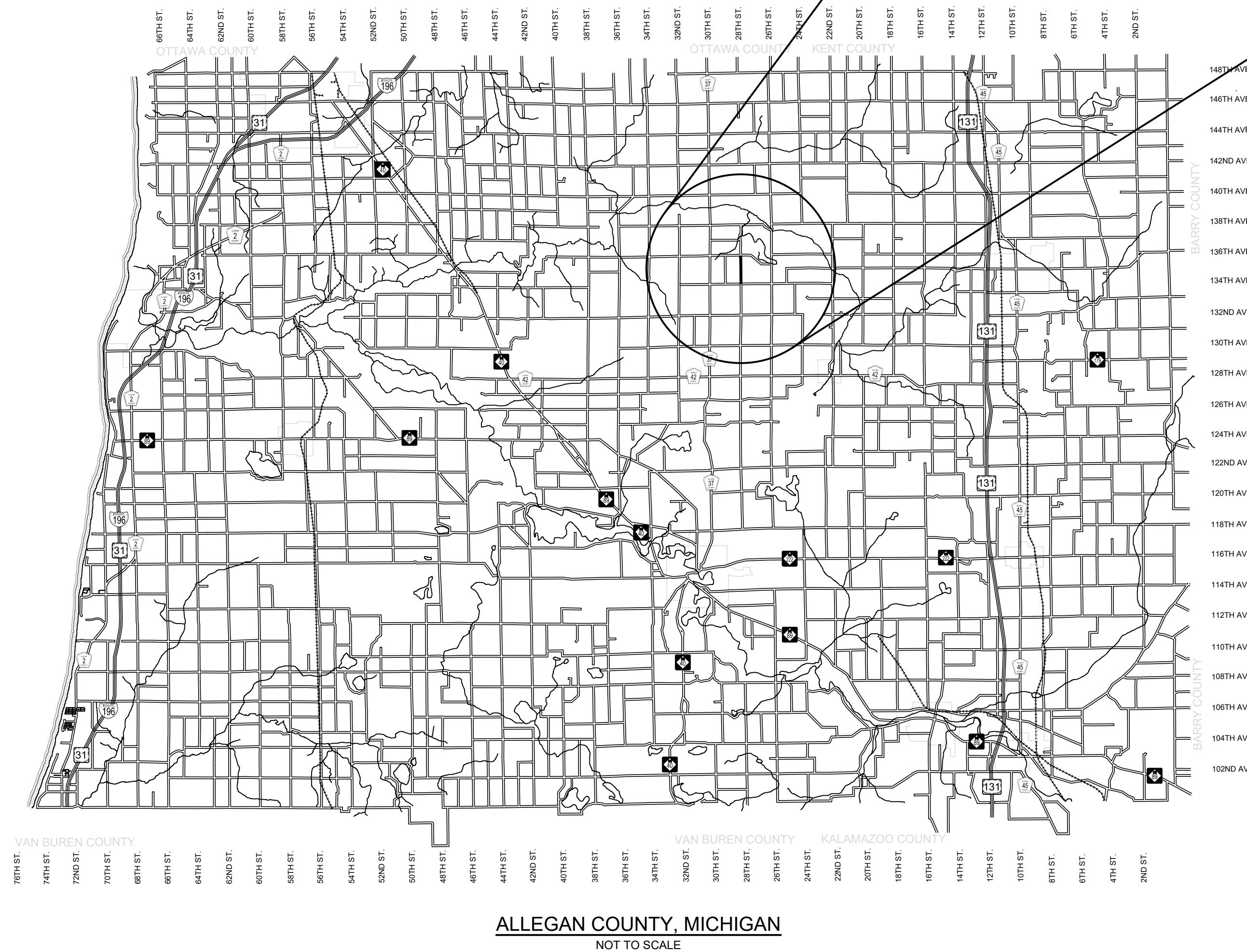
THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

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.

INDEX OF PLANS

- 1 - COVER SHEET
- 2 - TYPICAL SECTIONS, DETAILS, & NOTES
- 3 - TYPICAL BOX SECTIONS, DETAILS, & NOTES
- 4 - PLAN AND PROFILE - P.O.B. TO STA. 20+00
- 5 - PLAN AND PROFILE - STA. 20+00 TO STA. 30+00
- 6 - PLAN AND PROFILE - STA. 30+00 TO STA. 40+00
- 7 - PLAN AND PROFILE - STA. 40+00 TO STA. 50+00
- 8 - PLAN AND PROFILE - STA. 50+00 TO P.O.E.
- 9-13 - CROSS SECTIONS
- 14 - SOIL EROSION AND SEDIMENTATION CONTROL PLAN



UTILITY CONTACTS

ELECTRIC CONSUMERS ENERGY 4000 CLAY AVE. SW GRAND RAPIDS, MI 49548 317-445-8814 COLE ROCHOWIAK HAMSTCIVIMP@cmsenergy.com	GAS CONSUMERS ENERGY 2500 E CORK ST KALAMAZOO, MI 49001 269-337-2366 MR. KYLE OAK kyle.oak@cmsenergy.com
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TELEPHONE AT&T 269-384-4472 CARRIE DEMOTT cd3249@att.com	"MISS DIG" 811
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CABLE
CHARTER
4176 COMMERCIAL AVE
PORTAGE, MI 49002
269-217-9152
MR. LEO SCOFIELD
leo.scofield@charter.com

GAS
MICHIGAN GAS UTILITIES
616-844-7514
SETH PURUCKER
seth.purucker@michigangasutilities.com

**Board of County Road Commissioners
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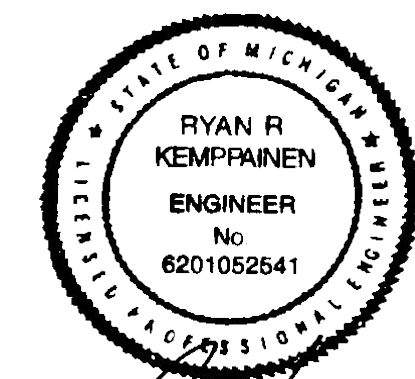
28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP

COVER SHEET

CONTRACT FOR ROAD IMPROVEMENTS

0.93 MILES OF ROADWAY RECONSTRUCTION INCLUDING CLEARING, GRADE ESTABLISHMENT, SAND SUBBASE, AGGREGATE BASE, CULVERT REPLACEMENTS, AND RESTORATION ON 28TH STREET FROM 134TH AVENUE TO 136TH AVENUE IN MONTEREY TOWNSHIP, ALLEGAN COUNTY.

PREPARED UNDER THE SUPERVISION OF:

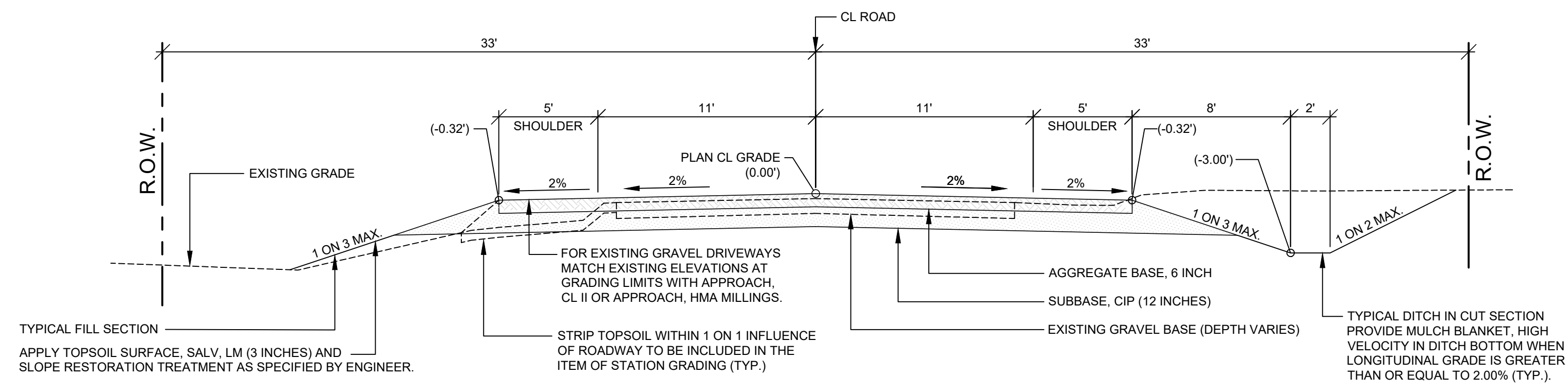


Ryan R. Kempainen

DRAWN BY:	LAH
REVIEWED BY:	RK
DATE:	APRIL 2024
SCALE:	NONE

RYAN RAYMOND KEMPPAINEN
REGISTERED PROFESSIONAL ENGINEER No. 6201052541

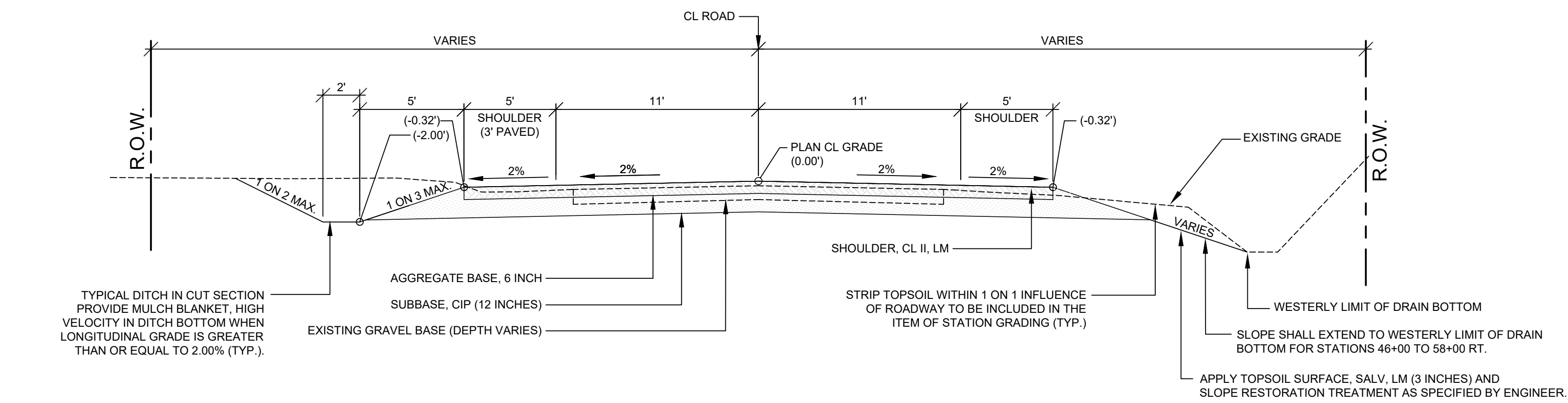
LH 400141 | 1



TYPICAL SECTION - 28TH STREET

SCALE: 1" = 5'

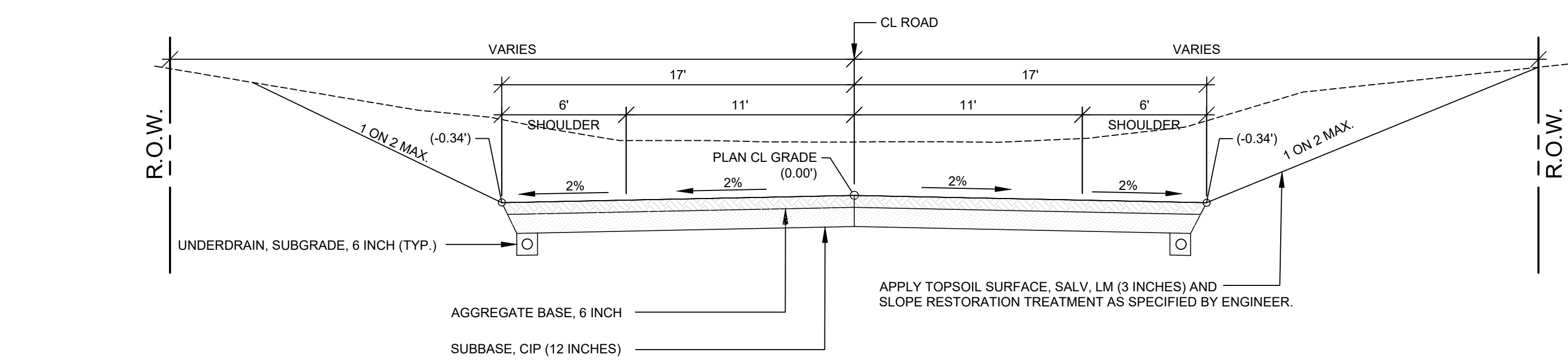
THIS SECTION APPLIES TO:
P.O.B. TO P.O.E.



TYPICAL SECTION - 28TH STREET (2' DEEP DITCH)

SCALE: 1" = 5'

THIS SECTION APPLIES TO:
STA. 42+00 TO 58+00 LT.
STA. 46+00 TO 58+00 RT.



TYPICAL SECTION - VALLEY GUTTER (34' WIDE)

SCALE: 1" = 5'

THIS SECTION APPLIES TO:
STA. 10+50 TO STA. 19+75 LT.
STA. 10+50 TO STA. 15+25 RT.

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 ALL CULVERT REMOVAL, FENCE REMOVAL, FENCE RELOCATION REGARDLESS OF FENCE TYPE, OBLITERATING/PULVERIZING ROADWAY, ROCK EXCAVATION, CONCRETE REMOVAL, HMA REMOVAL, EARTH EXCAVATION, EMBANKMENT, SAW CUTS REQUIRED, 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 DECEMBER 21, 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 AND PROFILE SHEETS FOR SOIL BORING DATA.

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

THE ITEM OF SUBBASE, CIP WILL BE PAID FOR AT PLAN QUANTITY EXCEPT IN THE CASE OF A DESIGN CHANGE OR DEMONSTRATED ERROR.

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. SEE SESC PLAN FOR AREAS TO USE HIGH VELOCITY MULCH BLANKET, TO BE PAID AS SLOPE RESTORATION TYPE C.

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 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.

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.

MISCELLANEOUS QUANTITIES

DESCRIPTION	QUANTITY	UNIT
SUBGRADE UNDERCUTTING, TYPE II	1000	CYD
AGGREGATE, 6A	50	TON
GEOTEXTILE, STABILIZATION	750	SYD
TRIPRAP, PLAIN	20	SYD
TRIPRAP, HEAVY	50	SYD
EROSION CONTROL, SILT FENCE	2500	FT
EROSION CONTROL, CHECK DAM	100	FT
APPROACH, CL II	50	TON
APPROACH, HMA MILLINGS	50	TON
CULV, CL F, 12 INCH	60	FT
CULV, CL F, 18 INCH	40	FT

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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE

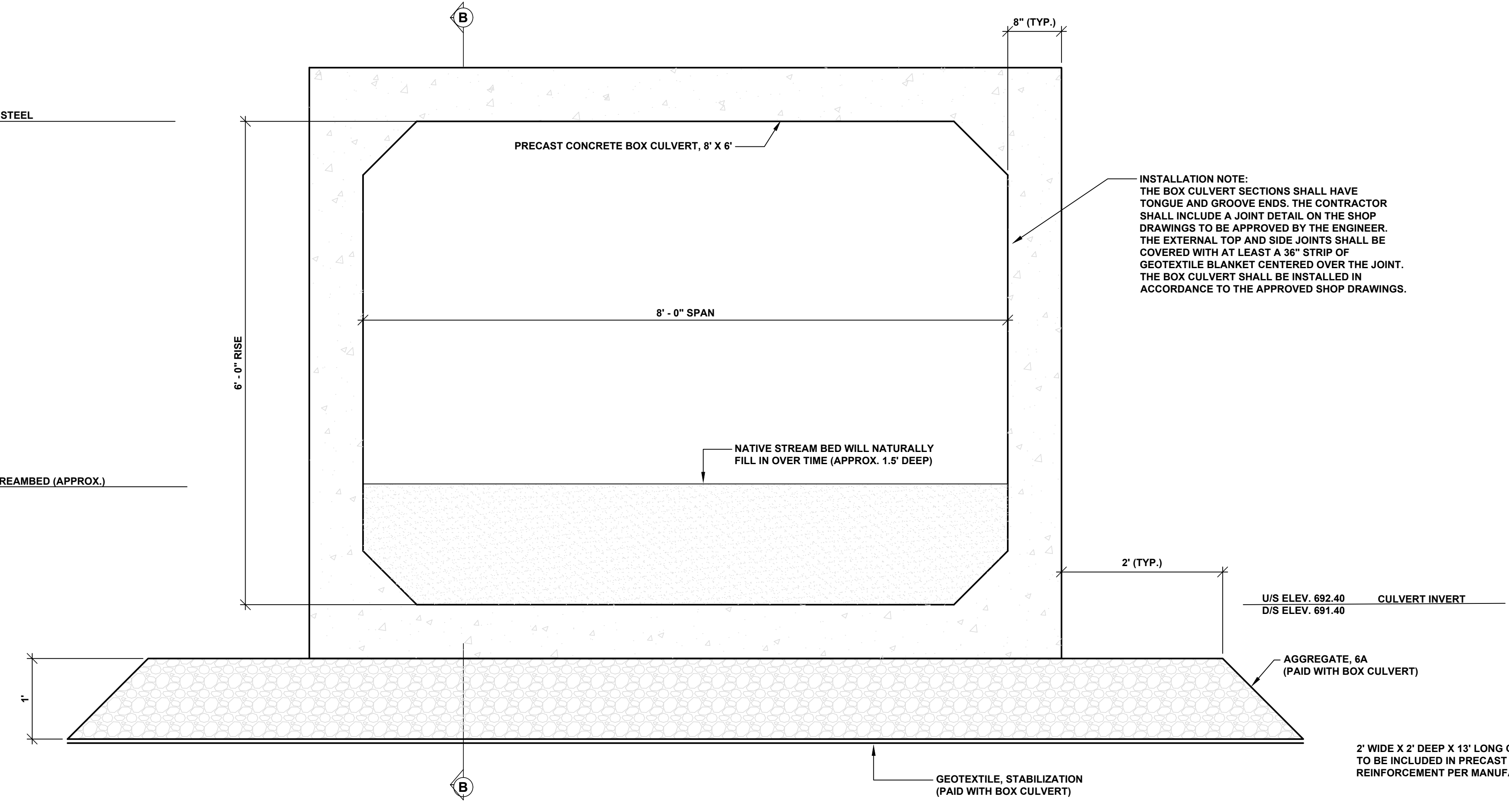
TYPICAL SECTIONS, DETAILS, & NOTES

DRAWN BY: LAH
REVIEWED BY:
DATE: APRIL 2024
SCALE: AS NOTED

LH 400141 2

U/S ELEV. 698.40 LOW STEEL
D/S ELEV. 697.40

U/S ELEV. 693.90 STREAMBED (APPROX.)
D/S ELEV. 692.90



TYPICAL BOX CULVERT SECTION - STATION 15+50

SCALE 1" = 1'

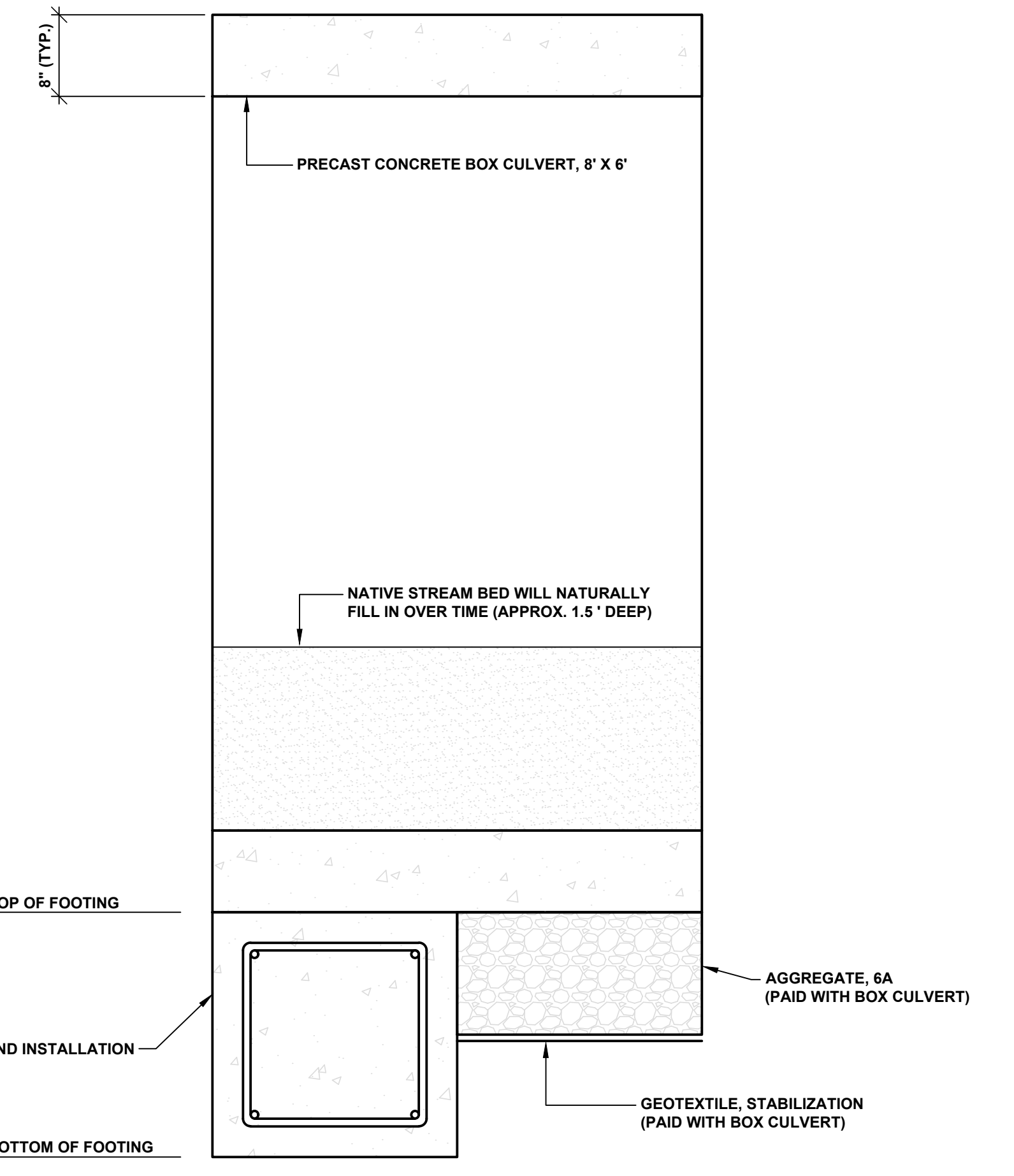
INSTALLATION NOTE:
THE BOX CULVERT SECTIONS SHALL HAVE TONGUE AND GROOVE ENDS. THE CONTRACTOR SHALL INCLUDE A JOINT DETAIL ON THE SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER. THE EXTERNAL TOP AND SIDE JOINTS SHALL BE COVERED WITH AT LEAST A 36" STRIP OF GEOTEXTILE BLANKET CENTERED OVER THE JOINT. THE BOX CULVERT SHALL BE INSTALLED IN ACCORDANCE TO THE APPROVED SHOP DRAWINGS.

U/S ELEV. 692.40 CULVERT INVERT
D/S ELEV. 691.40

* U/S ELEV. 691.74 TOP OF FOOTING
* D/S ELEV. 690.74

* U/S ELEV. 689.74 BOTTOM OF FOOTING
* D/S ELEV. 688.74

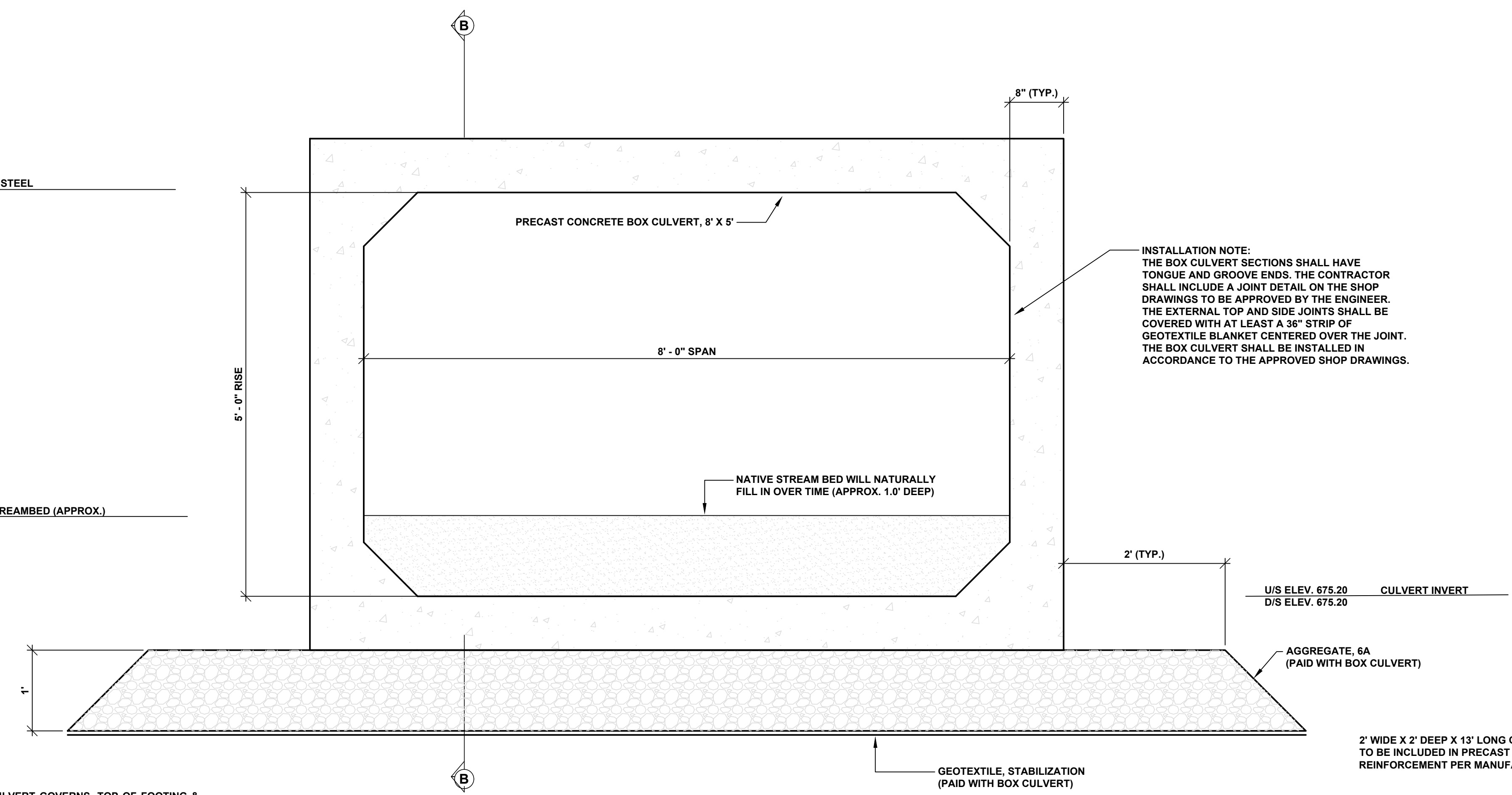
2' WIDE X 2' DEEP X 13' LONG CONCRETE FOOTING. MATERIAL AND INSTALLATION TO BE INCLUDED IN PRECAST CONCRETE BOX CULVERT, 8' X 6' REINFORCEMENT PER MANUFACTURE SPECIFICATIONS



SECTION B-B
SCALE 1" = 1'

U/S ELEV. 680.20 LOW STEEL
D/S ELEV. 680.20

U/S ELEV. 676.20 STREAMBED (APPROX.)
D/S ELEV. 676.20



TYPICAL BOX CULVERT SECTION - STATION 58+75

SCALE 1" = 1'

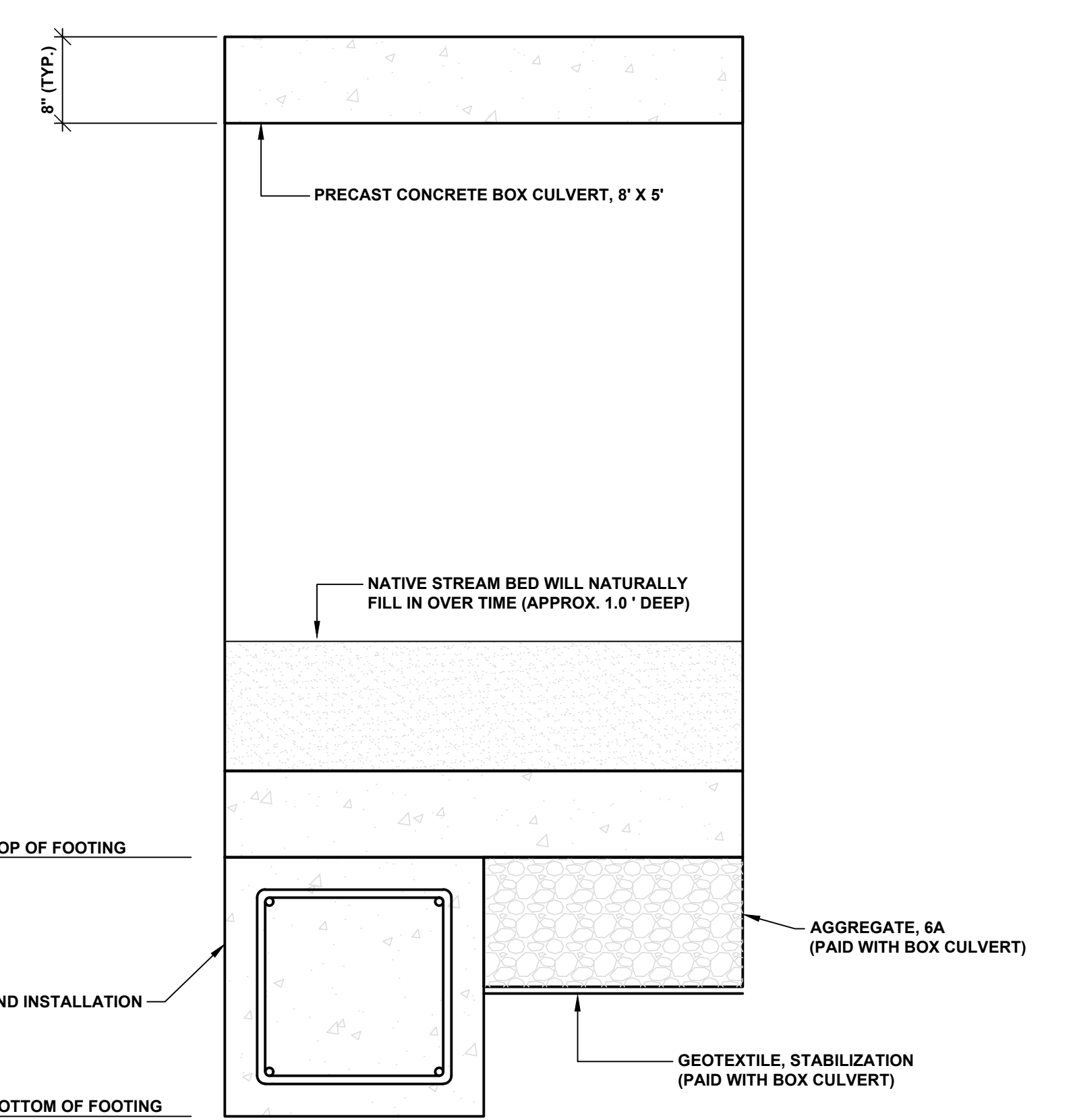
INSTALLATION NOTE:
THE BOX CULVERT SECTIONS SHALL HAVE TONGUE AND GROOVE ENDS. THE CONTRACTOR SHALL INCLUDE A JOINT DETAIL ON THE SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER. THE EXTERNAL TOP AND SIDE JOINTS SHALL BE COVERED WITH AT LEAST A 36" STRIP OF GEOTEXTILE BLANKET CENTERED OVER THE JOINT. THE BOX CULVERT SHALL BE INSTALLED IN ACCORDANCE TO THE APPROVED SHOP DRAWINGS.

U/S ELEV. 675.20 CULVERT INVERT
D/S ELEV. 675.20

* U/S ELEV. 674.54 TOP OF FOOTING
* D/S ELEV. 674.54

* U/S ELEV. 672.54 BOTTOM OF FOOTING
* D/S ELEV. 672.54

2' WIDE X 2' DEEP X 13' LONG CONCRETE FOOTING. MATERIAL AND INSTALLATION TO BE INCLUDED IN PRECAST CONCRETE BOX CULVERT, 8' X 5' REINFORCEMENT PER MANUFACTURE SPECIFICATIONS



SECTION B-B
SCALE 1" = 1'

NOTES:
INVERT ELEVATION OF BOX CULVERT GOVERNS. TOP OF FOOTING & BOTTOM OF FOOTING ELEVATIONS MAY VARY BASED UPON THE MANUFACTURER'S CULVERT DESIGN. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE FOOTING ACCORDINGLY.
STREAMBED DRY AT TIME OF SURVEY (AUGUST 2023)

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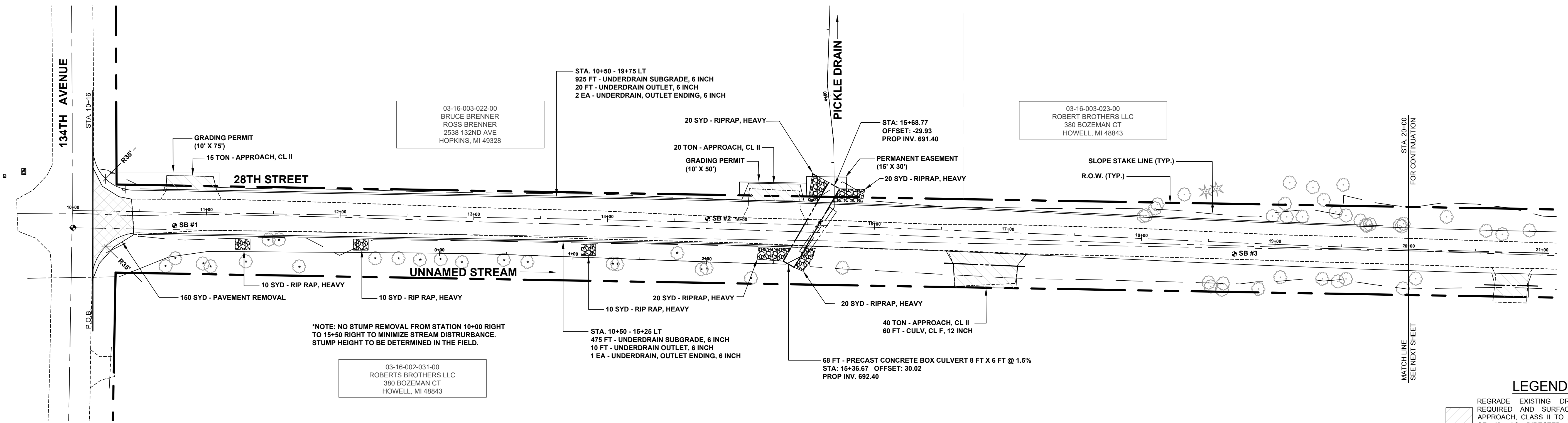
28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE
28TH STREET - TYPICAL BOX CULVERT SECTIONS, DETAILS, & NOTES

DRAWN BY: L.A.H.
REVIEWED BY: R.K.
DATE: APRIL 2024
SCALE: AS NOTED

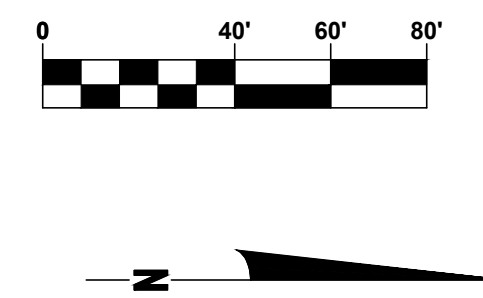
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SOIL BORINGS

SB #1	0 - 7" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL	SB #3	0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
	7" - 24" DARK BROWN FINE TO MEDIUM SAND - TRACE CLAY - TOPSOIL		3" - 10" DARK BROWN FINE SAND - TOPSOIL
	24" - 60" BROWN FINE SAND		10" - 60" LIGHT BROWN FINE SAND
	60" END OF BORING		60" END OF BORING
SB #2	0 - 6" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL		
	6" - 16" DARK BROWN FINE SAND - TRACE CLAY - TOPSOIL		
	16" - 60" LIGHT BROWN FINE SAND		
	60" END OF BORING		



*NOTE: NO STUMP REMOVAL FROM STATION 10+00 RIGHT TO 15+50 RIGHT TO MINIMIZE STREAM DISTURBANCE. STUMP HEIGHT TO BE DETERMINED IN THE FIELD.

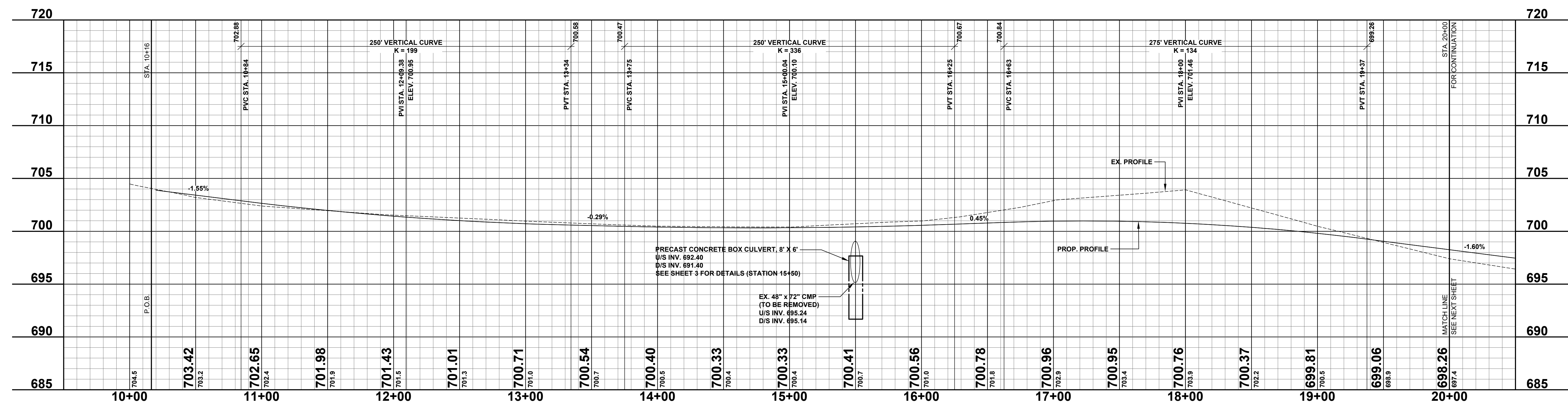


LEGEND

	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, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
	SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT. REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

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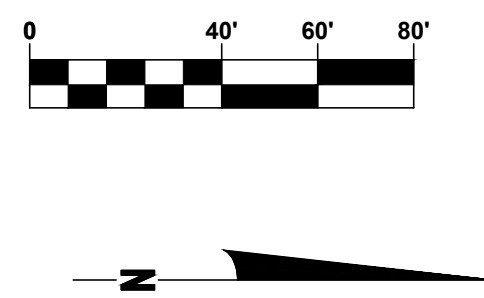
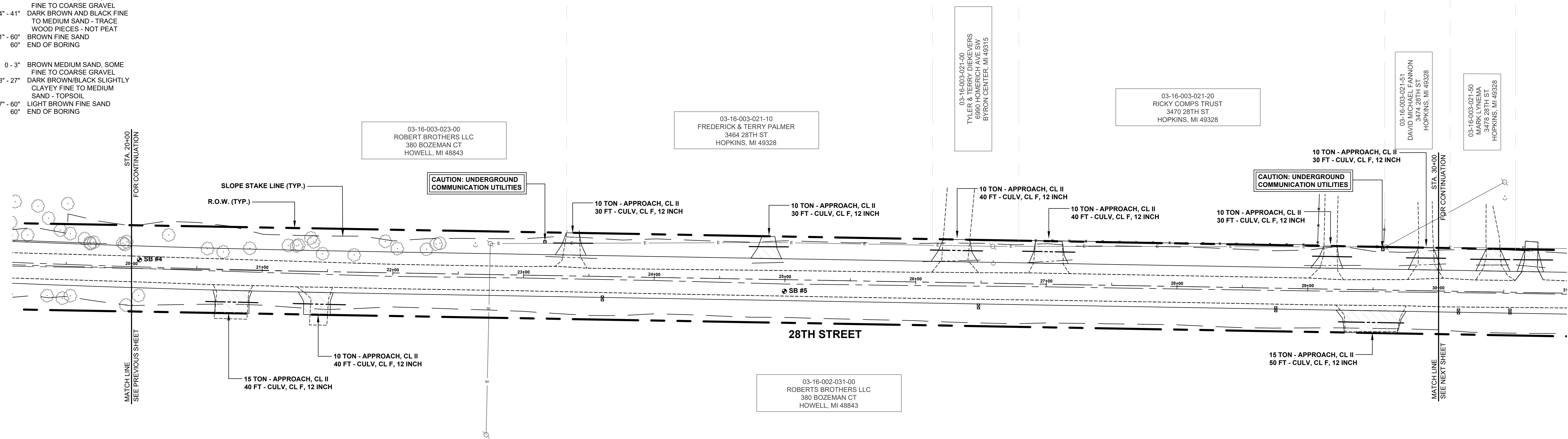
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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVE TO 136TH AVE
28TH PLAN AND PROFILE - STA. P.O.B. TO STA. 20+00

DRAWN BY: LAH
REVIEWED BY: RK
DATE: APRIL, 2024
SCALE: 1"= 40'H, 5V

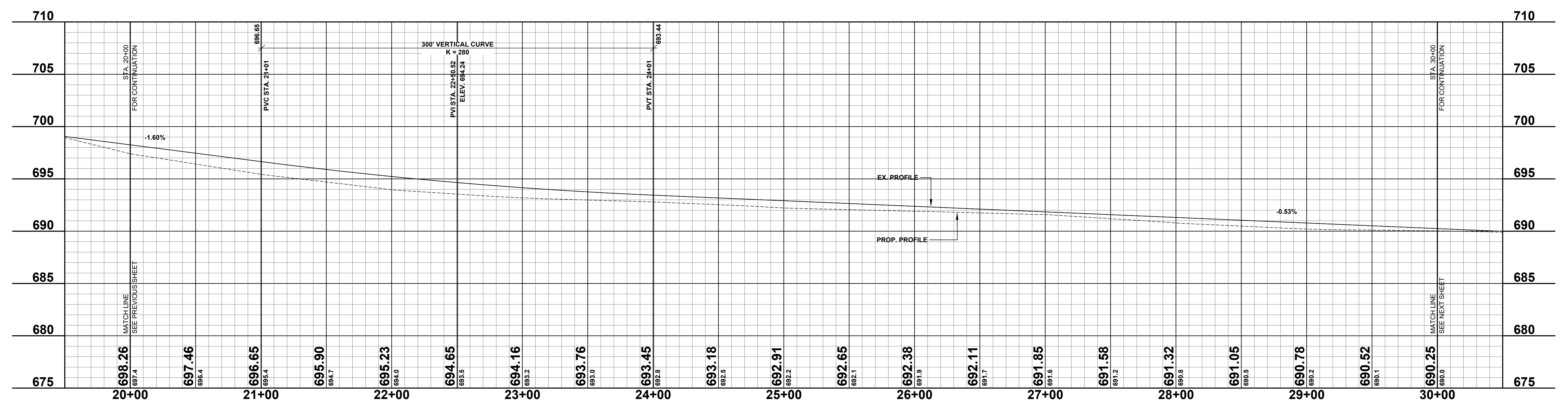
SOIL BORINGS

- SB #4**
 0 - 4" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
 4" - 41" DARK BROWN AND BLACK FINE TO MEDIUM SAND - TRACE WOOD PIECES - NOT PEAT
 41" - 60" BROWN FINE SAND
 60" END OF BORING
- SB #5**
 0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
 3" - 27" DARK BROWN/BLACK SLIGHTLY CLAYEY FINE TO MEDIUM SAND - TOPSOIL
 27" - 60" LIGHT BROWN FINE SAND
 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, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT. REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)



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28TH STREET RECONSTRUCTION PROJECT
 MONTEREY TOWNSHIP - 134TH AVE TO 136TH AVE
 28TH PLAN AND PROFILE - STA. 20+00 TO STA. 30+00

DRAWN BY: LAH
 REVIEWED BY: RK
 DATE: APRIL, 2024
 SCALE: 1"= 40'H, 5V

SOIL BORINGS

- SB #6**
 0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
 3" - 22" DARK BROWN/BLACK FINE TO MED SAND - TRACE CLAY - TOPSOIL
 22" - 60" LIGHT BROWN FINE SAND
 60" END OF BORING
- SB #7**
 0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
 3" - 27" DARK BROWN/BLACK SLIGHTLY CLAYEY FINE TO MEDIUM SAND - TOPSOIL
 27" - 48" LIGHT BROWN FINE SAND
 48" - 60" BROWN FINE SAND
 60" END OF BORING

03-16-003-021-51
 DAVID MICHAEL FANNON
 3478 28TH ST
 HOPKINS, MI 49328

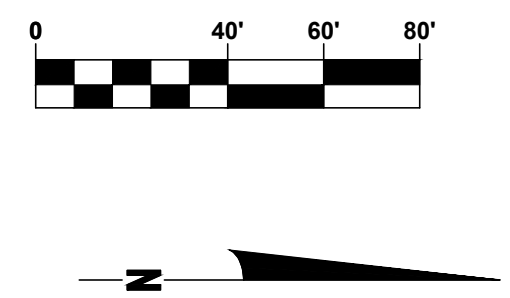
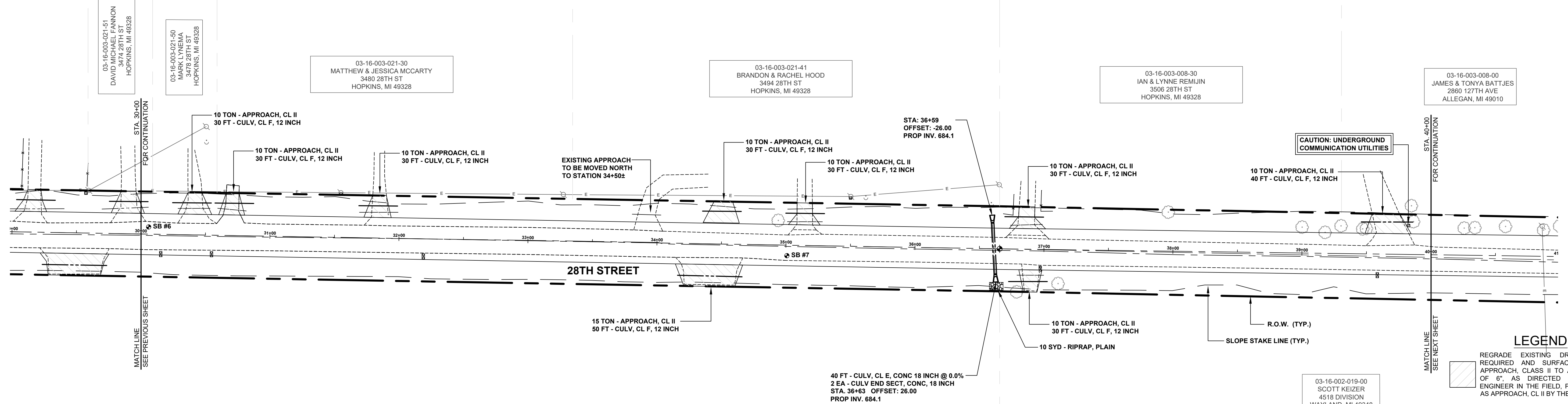
03-16-003-021-50
 DAVID MICHAEL FANNON
 3478 28TH ST
 HOPKINS, MI 49328

03-16-003-021-30
 MATTHEW & JESSICA MCCARTY
 3480 28TH ST
 HOPKINS, MI 49328

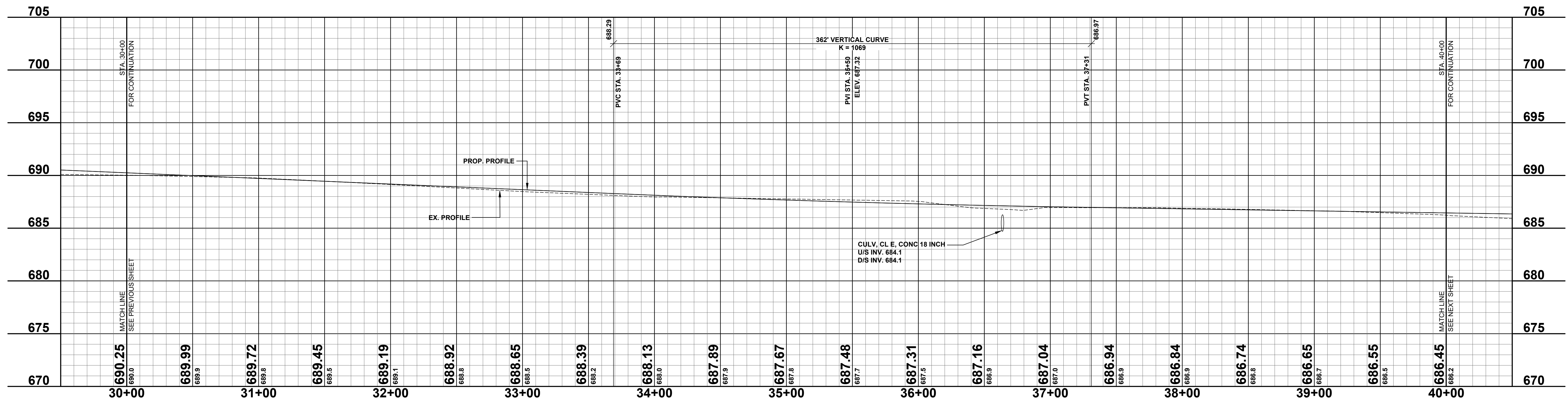
03-16-003-021-41
 BRANDON & RACHEL HOOD
 3494 28TH ST
 HOPKINS, MI 49328

03-16-003-008-30
 IAN & LYNNE REMIJN
 3506 28TH ST
 HOPKINS, MI 49328

03-16-003-008-00
 JAMES & TONYA BATTJES
 2860 127TH 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, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
 - SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)



**Board of County Road Commissioners
 Of Allegan County**
 1308 LINCOLN ROAD
 ALLEGAN, MICHIGAN 49010-9762
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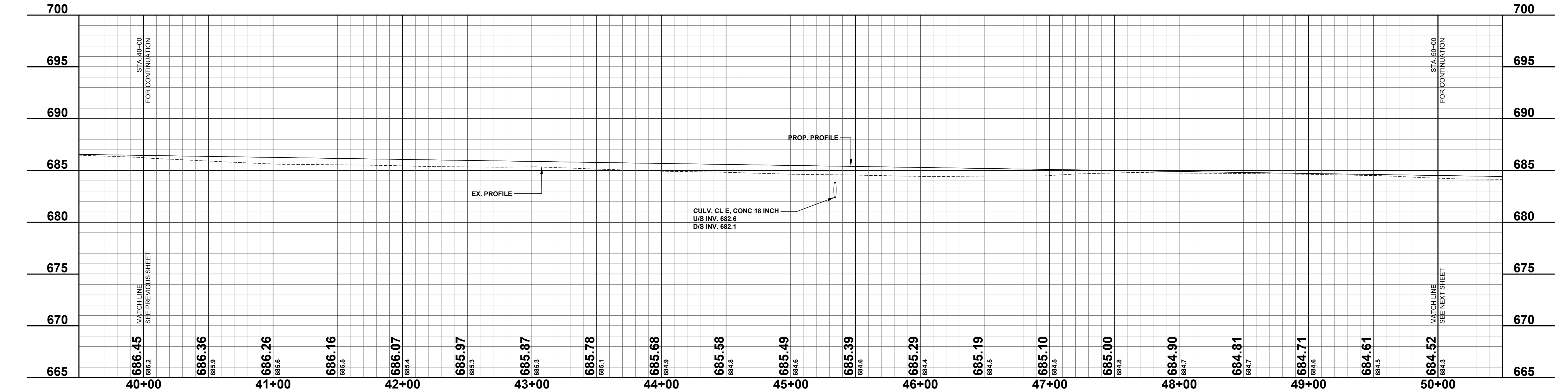
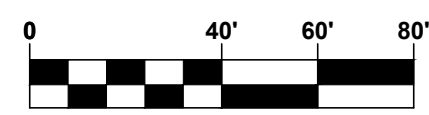
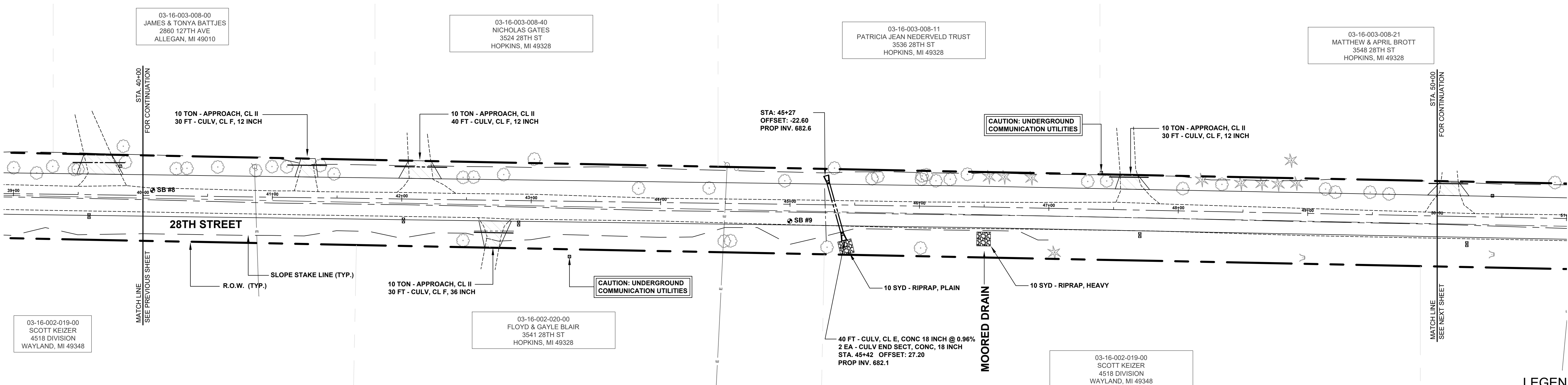
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28TH STREET RECONSTRUCTION PROJECT
 MONTEREY TOWNSHIP - 134TH AVE TO 136TH AVE
 28TH PLAN AND PROFILE - STA. 30+00 TO STA. 40+00

DRAWN BY: LAH
 REVIEWED BY: RK
 DATE: APRIL, 2024
 SCALE: 1"= 40'H, 5V

SOIL BORINGS

SB #	0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL	SB #	0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
	3" - 11" DARK BROWN FINE TO MED SAND - TRACE FINE GRAVEL - TOPSOIL		3" - 25" DARK BROWN FINE TO MEDIUM SAND - TRACE CLAY AND FINE GRAVEL - TOPSOIL
	11" - 41" BROWN FINE SAND		25" - 60" BROWN FINE SAND
	41" - 60" LIGHT BROWN FINE SAND		60" END OF BORING
	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, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP). (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVE TO 136TH AVE
28TH PLAN AND PROFILE - STA. 40+00 TO STA. 50+00

DRAWN BY: LAH
REVIEWED BY: RK
DATE: APRIL, 2024
SCALE: 1"= 40'H, 5V

LH 400141 7

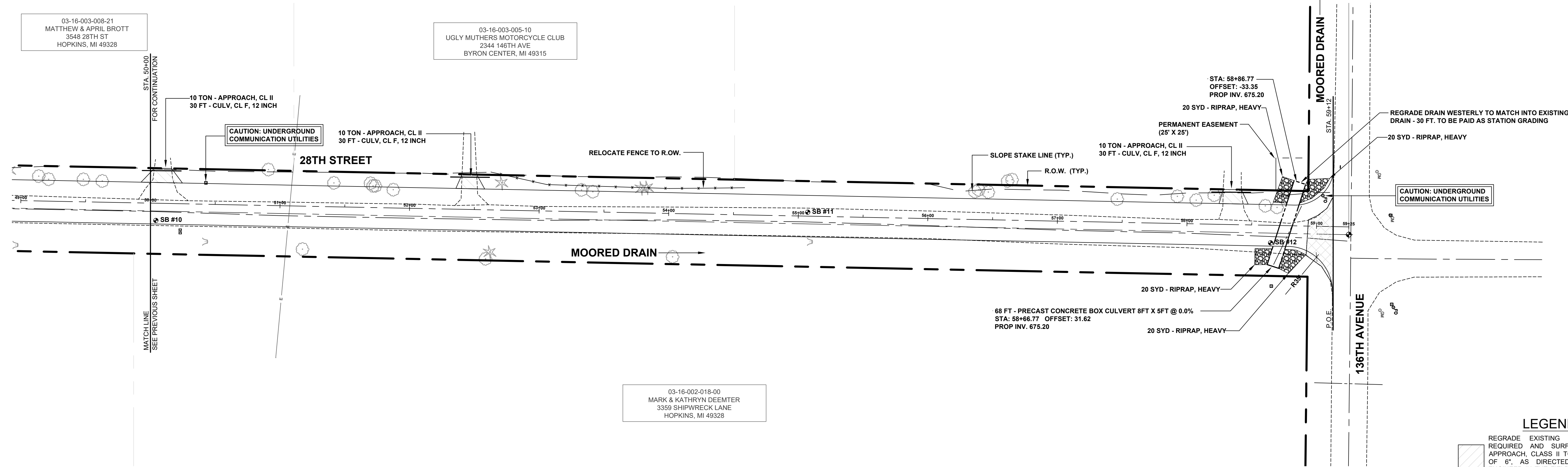
SOIL BORINGS

SB #10	0 - 3" BROWN MEDIUM SAND, SOME FINE GRAVEL	SB #11	0 - 2" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL	SB #12	0 - 3" BROWN MEDIUM SAND, SOME FINE TO COARSE GRAVEL
	3" - 23" DARK BROWN FINE SAND - TOPSOIL		2" - 28" DARK BROWN FINE SAND - TOPSOIL		3" - 22" DARK BROWN FINE TO MEDIUM SAND
	23" - 60" BROWN FINE SAND		28" - 60" BROWN FINE SAND		22" - 60" BROWN FINE SAND
	60" END OF BORING		60" END OF BORING		60" END OF BORING

03-16-003-008-21
MATTHEW & APRIL BROTT
3548 28TH ST
HOPKINS, MI 49328

03-16-003-005-10
UGLY MOTHERS MOTORCYCLE CLUB
2344 146TH AVE
BYRON CENTER, MI 49315

03-16-002-018-00
MARK & KATHRYN DEEMTER
3359 SHIPWRECK LANE
HOPKINS, MI 49328

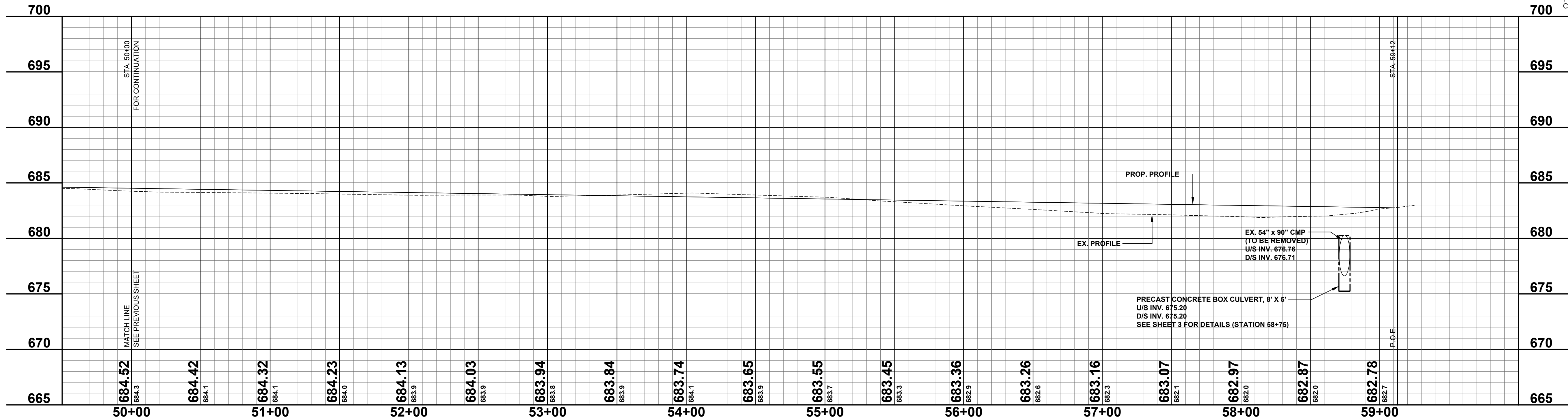


LEGEND

- 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, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP) (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH APPROACH, CL II; 165#/SYD HMA, 4EL (LEVELING); AND 165#/SYD HMA, 4EL (TOP) (PAVING UNDER SEPARATE CONTRACT IN THE FUTURE)

REVISIONS

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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVE TO 136TH AVE

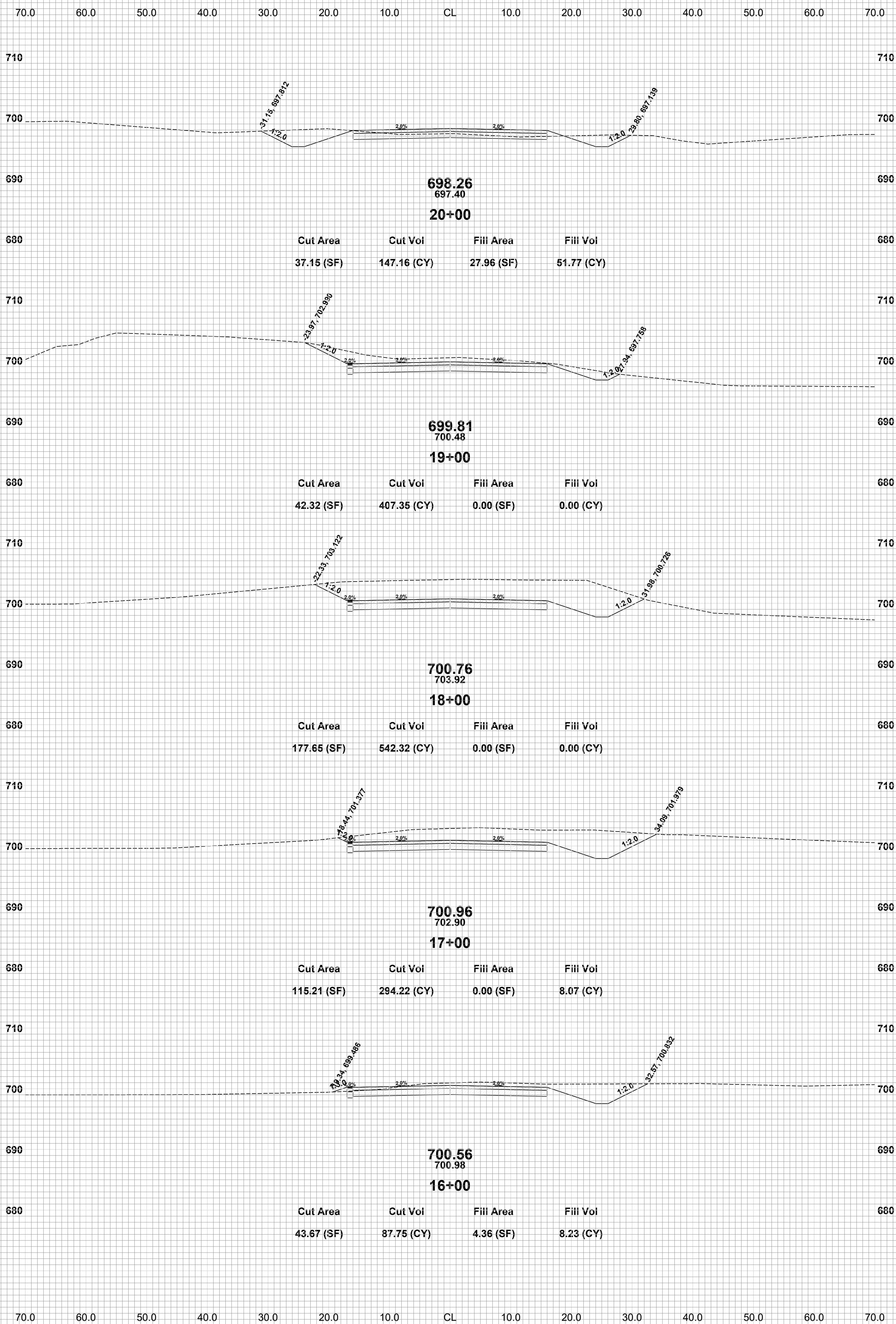
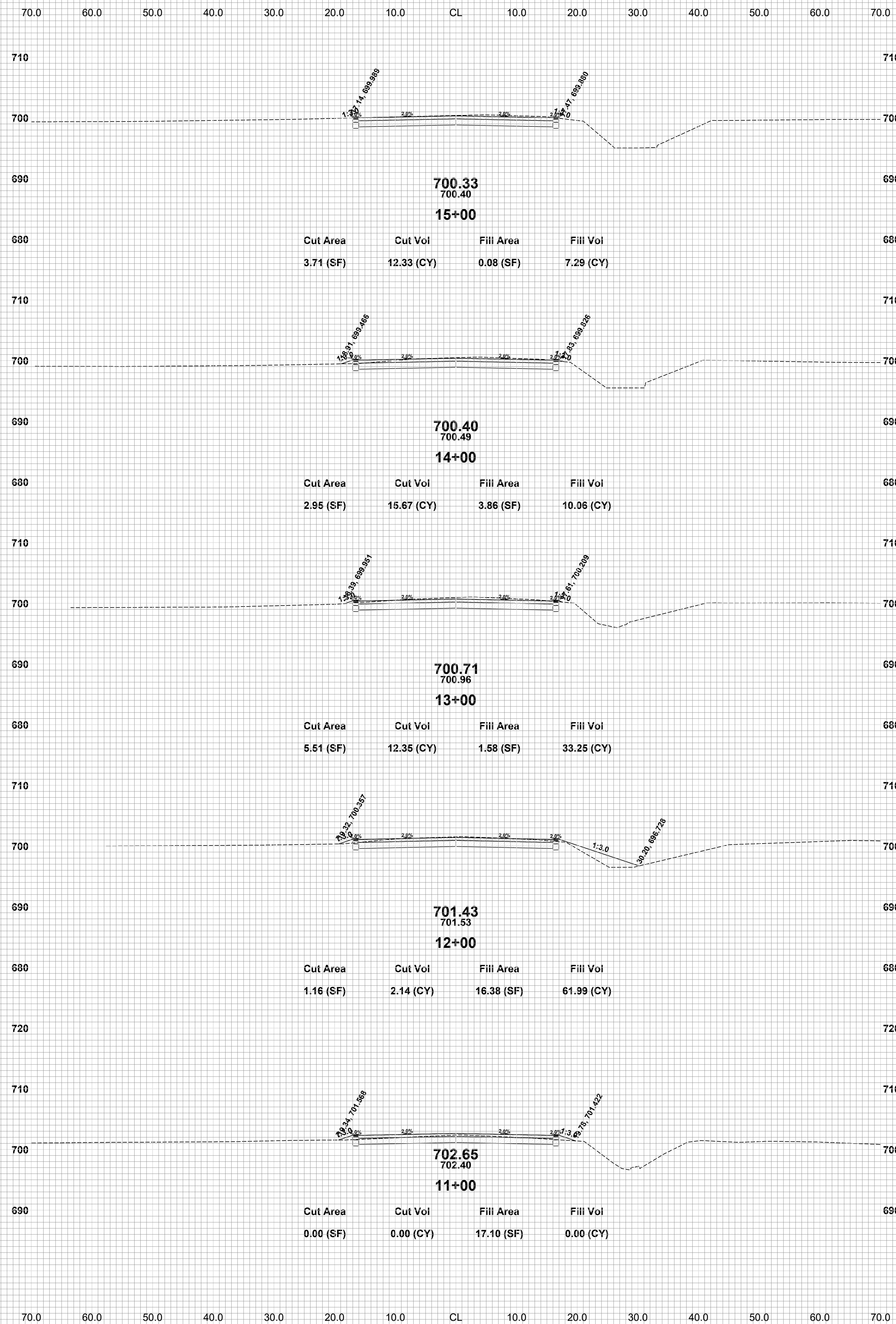
28TH PLAN AND PROFILE - STA. 50+00 TO STA. P.O.E.

DRAWN BY: LAH
REVIEWED BY: RK
DATE: APRIL, 2024
SCALE: 1"= 40'H, 5'V

LH 400141 8

**Board of County Road Commissioners
Of Allegan County**

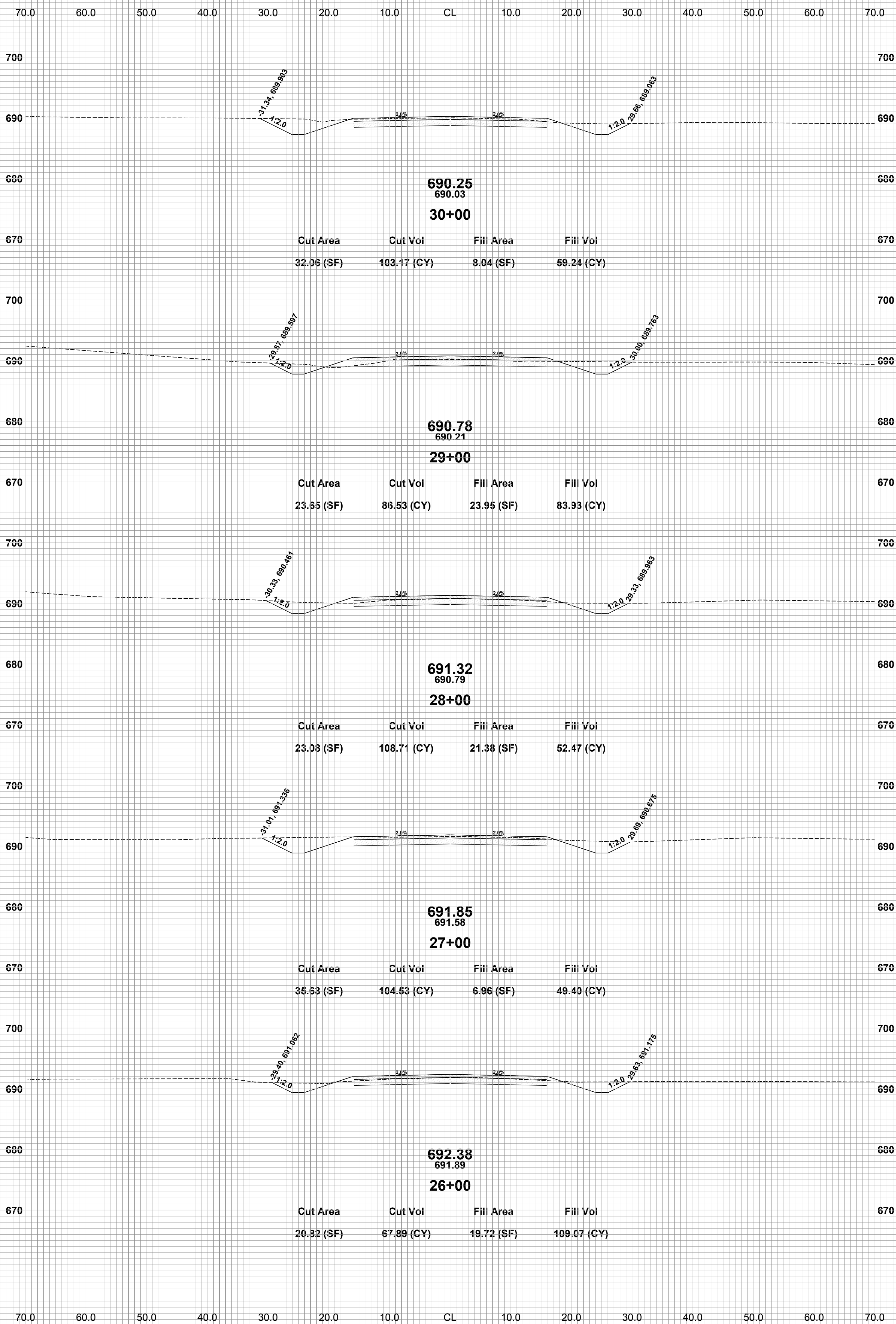
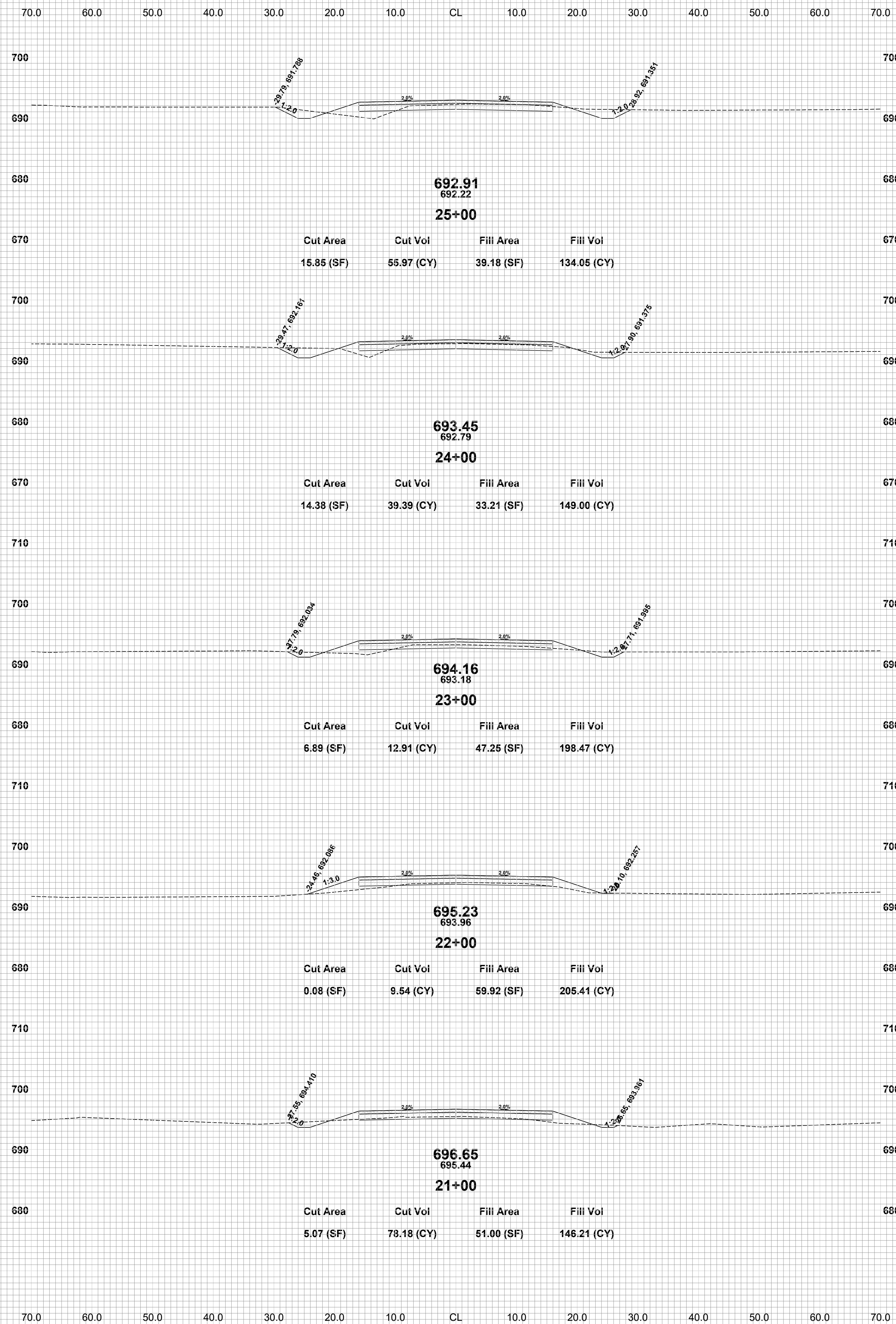
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28TH STREET RECONSTRUCTION PROJECT
 MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE
 CROSS SECTIONS - STA. 11+00 TO STA. 20+00

DRAWN BY: L.A.H.
 REVIEWED BY: R.K.
 DATE: APRIL, 2024
 SCALE: 1"= 10'

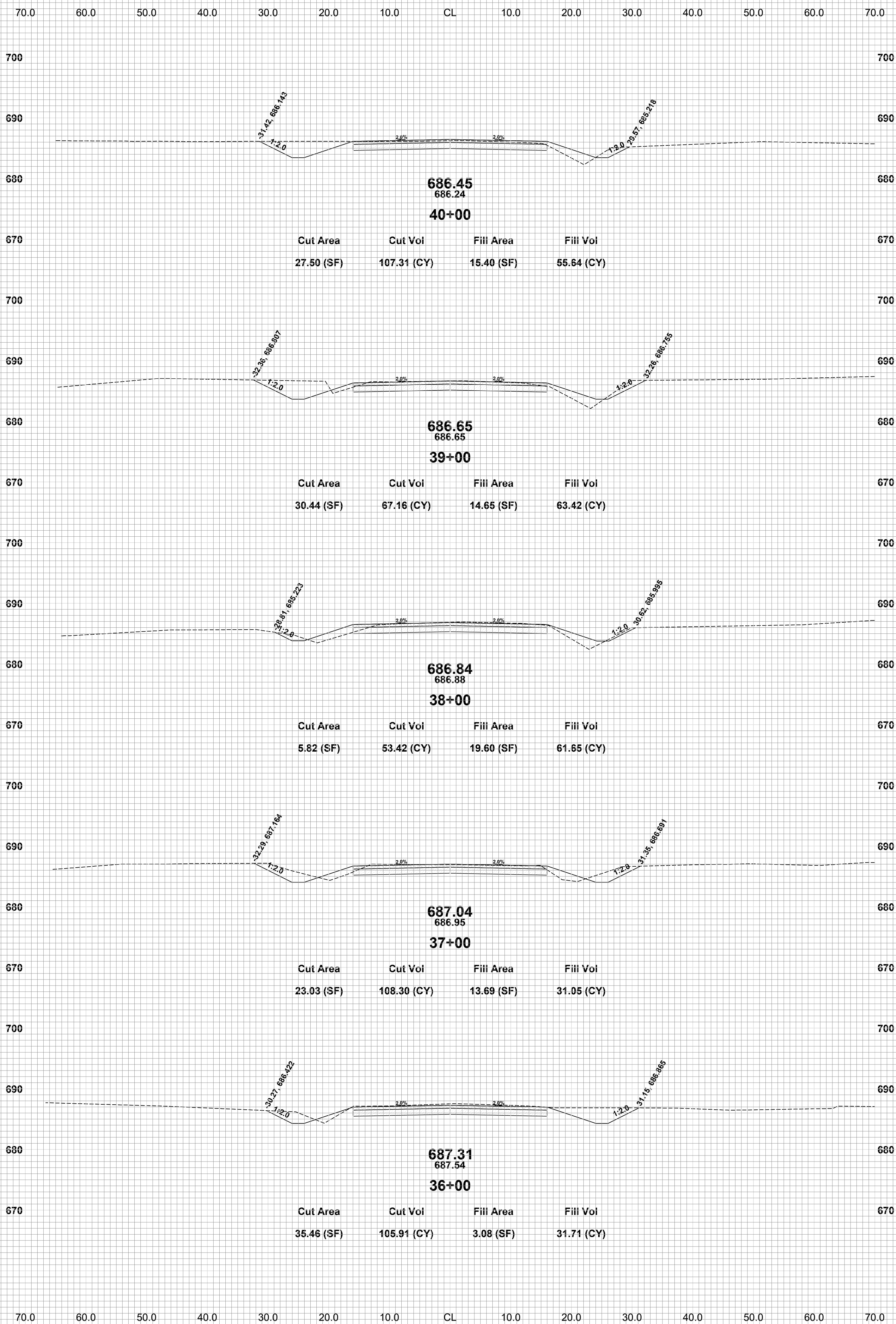
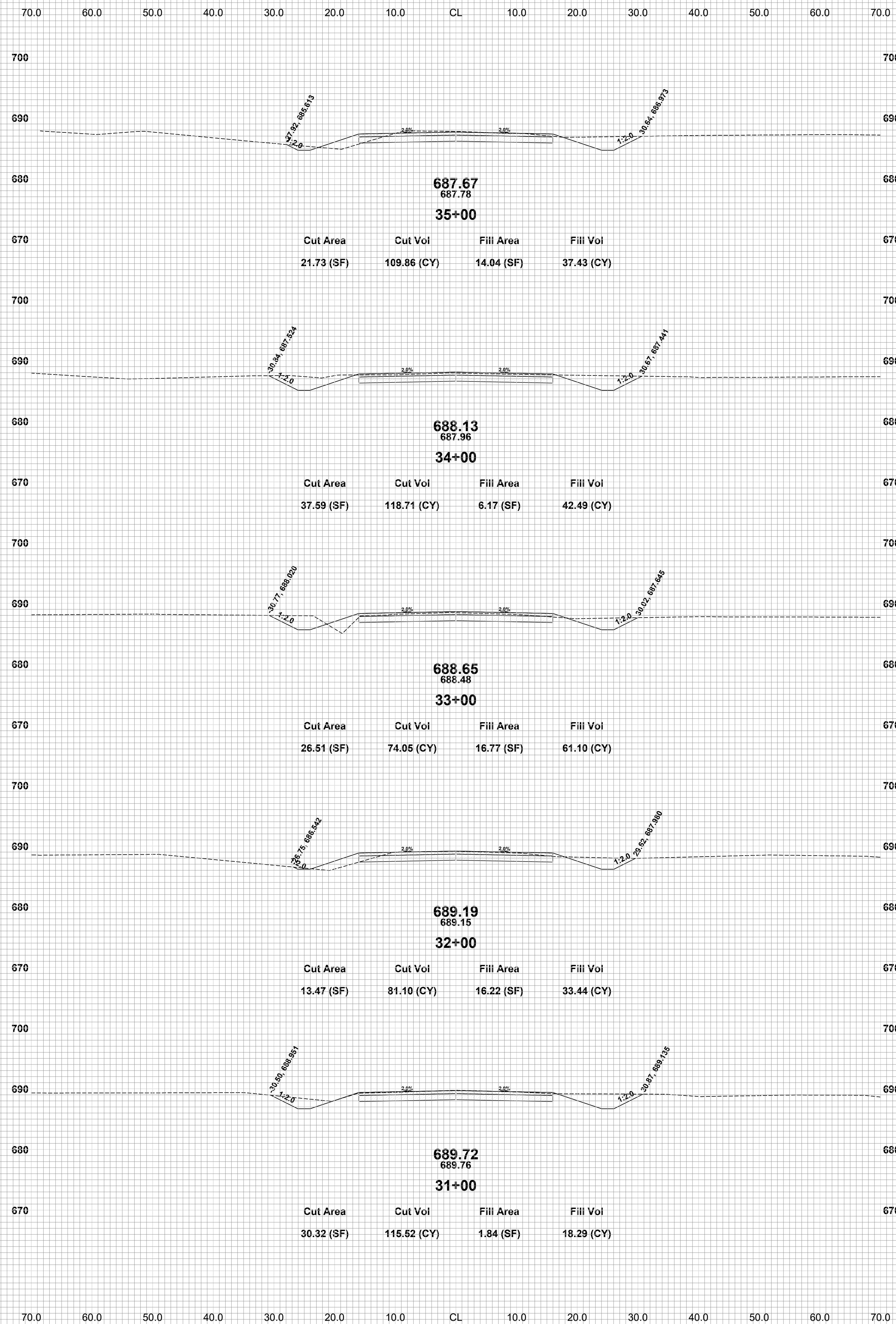


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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE
CROSS SECTIONS - STA. 21+00 TO STA. 30+00

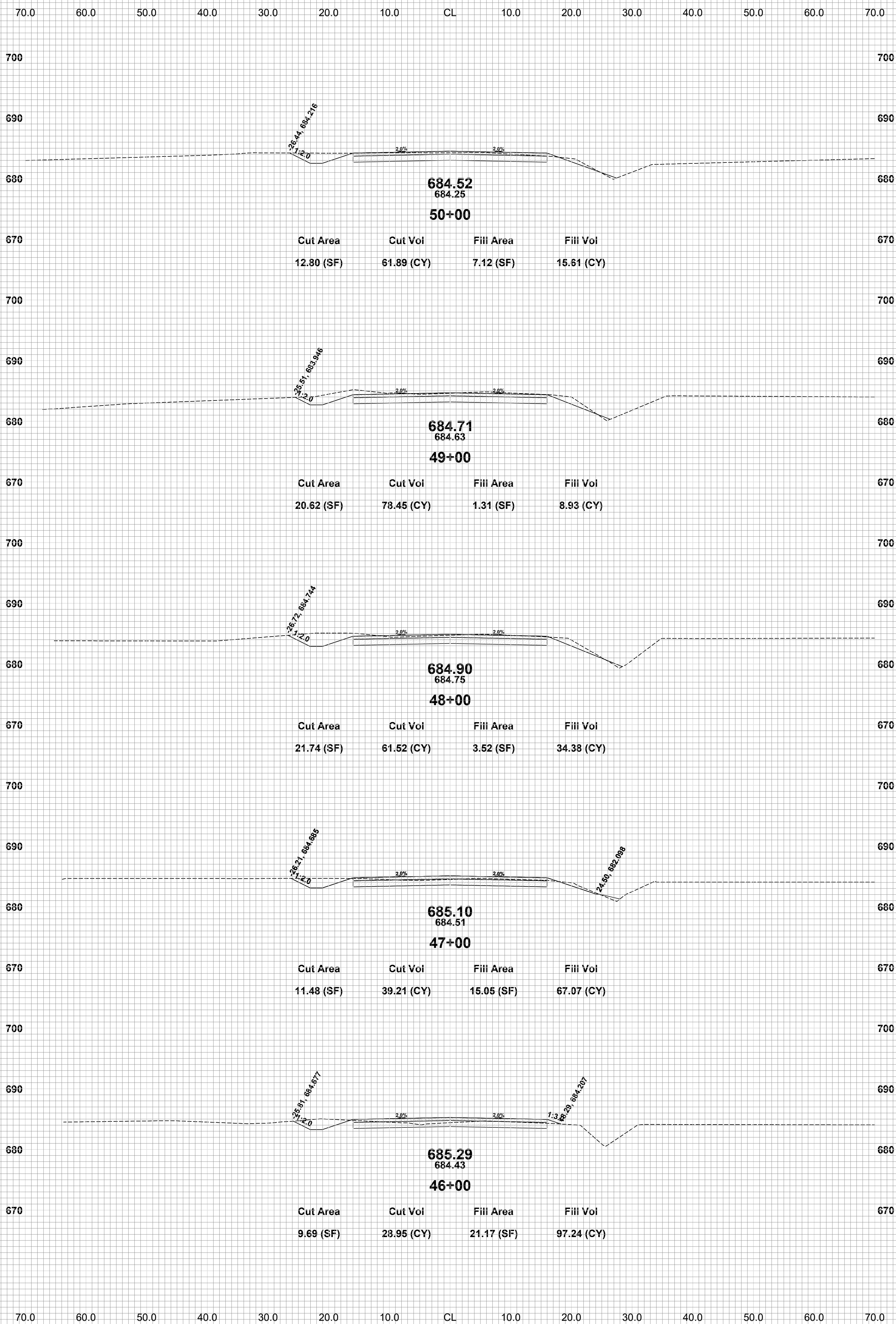
DRAWN BY: L.A.H.
REVIEWED BY: R.K.
DATE: APRIL, 2024
SCALE: 1"= 10'



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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE
CROSS SECTIONS - STA. 31+00 TO STA. 40+00

DRAWN BY: L.A.H.
REVIEWED BY: R.K.
DATE: APRIL, 2024
SCALE: 1"=10'

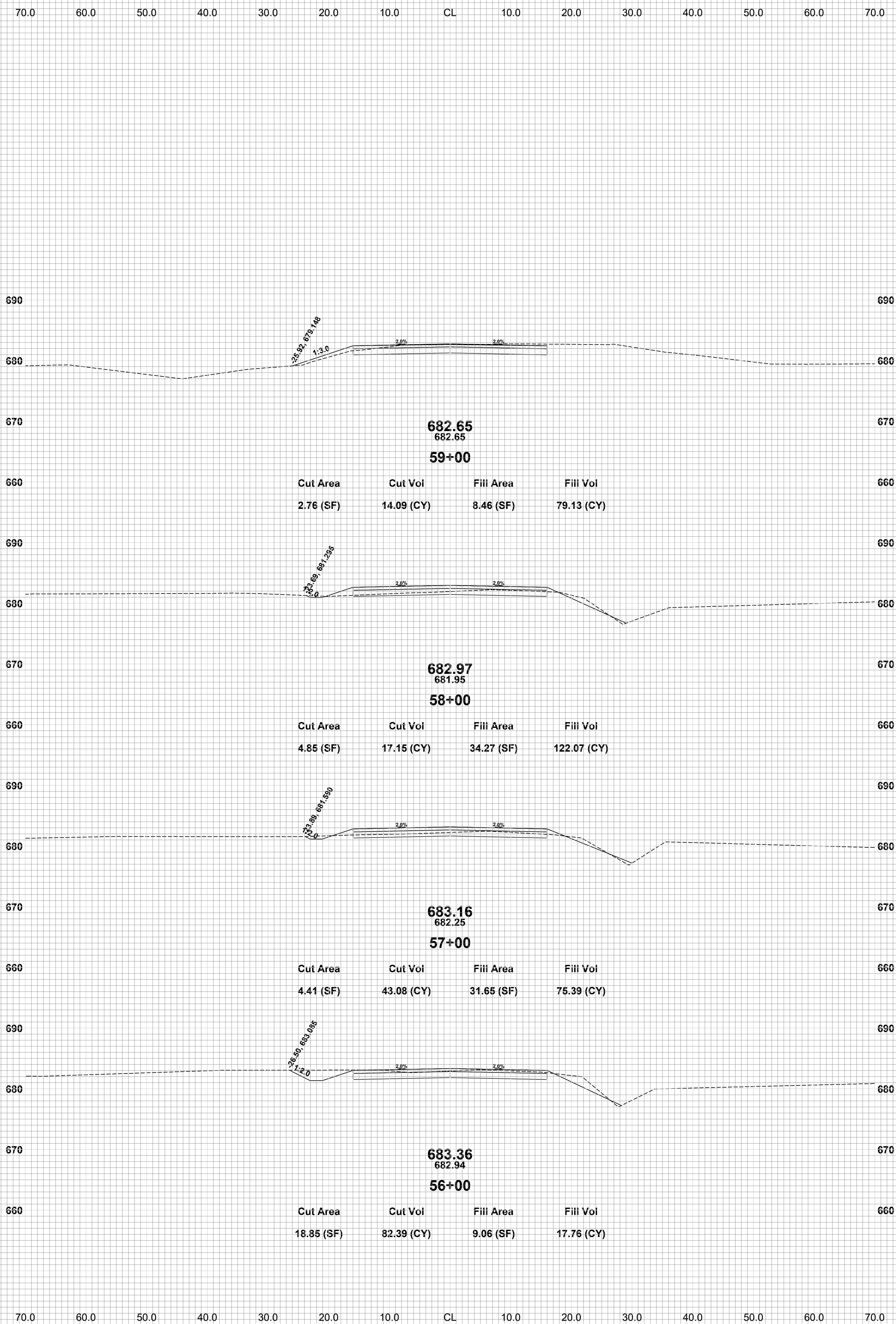
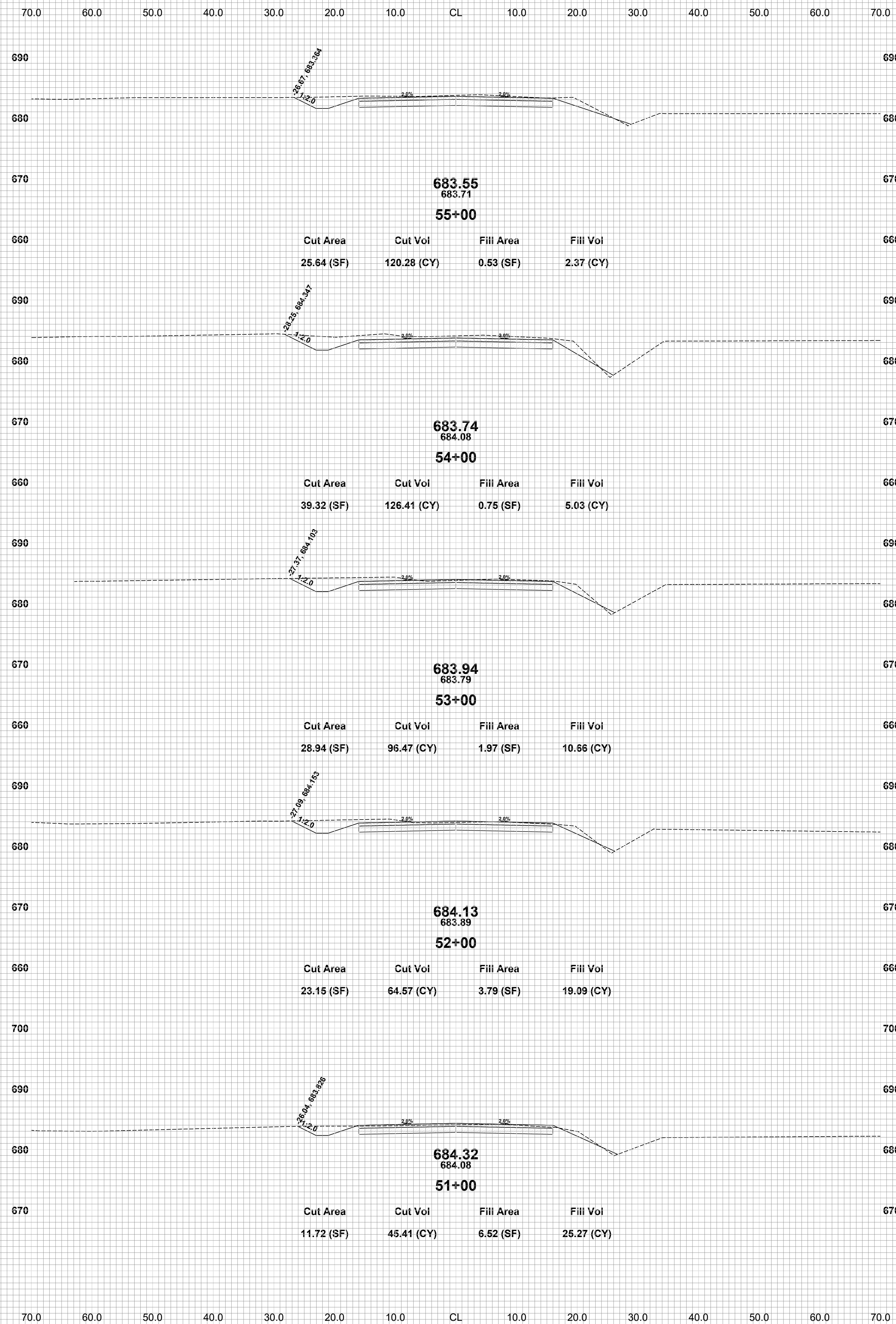


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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE
CROSS SECTIONS - STA. 41+00 TO STA. 50+00

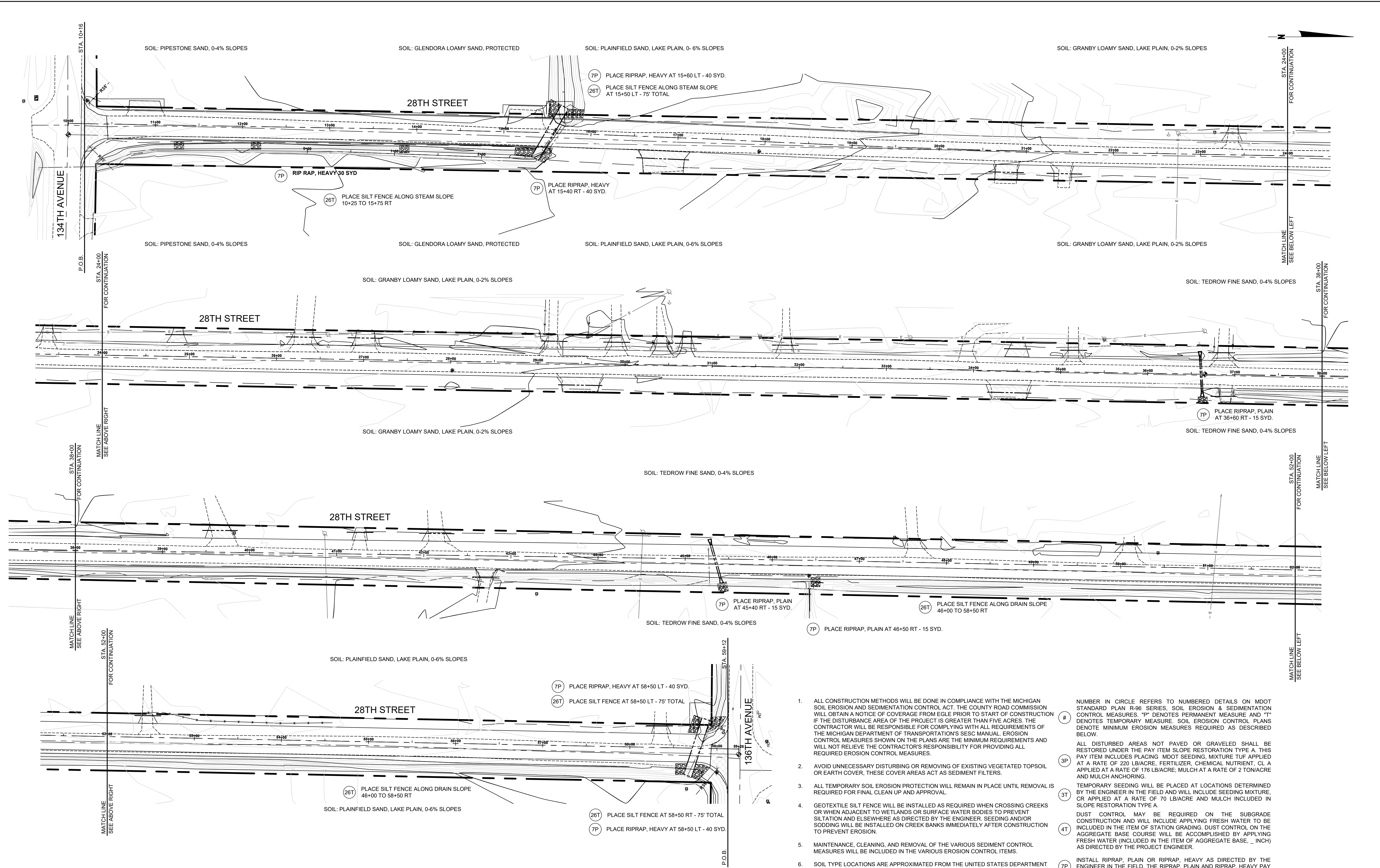
DRAWN BY: L.A.H.
REVIEWED BY: R.K.
DATE: APRIL, 2024
SCALE: 1"=10'



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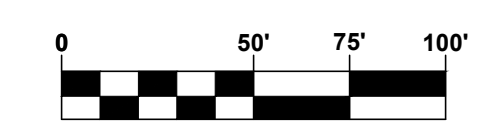
28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVENUE TO 136TH AVENUE
CROSS SECTIONS - STA. 51+00 TO STA. 59+00

DRAWN BY: L.A.H.
REVIEWED BY: R.K.
DATE: APRIL, 2024
SCALE: 1"= 10'



TIMING & SEQUENCE	MONTH 1			MONTH 2			MONTH 3						
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13
ANTICIPATED START DATE: JUNE 1, 2024													
INSTALL/MAINTAIN TEMPORARY CONTROL MEASURES													
SITE CLEARING													
CULVERT INSTALLATIONS													
ROADWAYSLOPE RECONSTRUCTION													
SLOPE RESTORATION/INSTALL PERMANENT CONTROL MEASURES													
REMOVE TEMPORARY MEASURES													

- ALL CONSTRUCTION METHODS WILL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. THE COUNTY ROAD COMMISSION WILL OBTAIN A NOTICE OF COVERAGE FROM EGLE PRIOR TO START OF CONSTRUCTION IF THE DISTURBANCE AREA OF THE PROJECT IS GREATER THAN FIVE ACRES. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S SESC MANUAL. 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: WEBSSOILSURVEY.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.
 - TIMING & SEQUENCE: ALL SOIL EROSION & SEDIMENTATION CONTROL MEASURES MUST BE INSTALLED IN PROXIMITY TO WORK AREAS PRIOR TO WORK COMMENCING. UPON FINAL GRADING, PERMANENT EROSION AND SEDIMENTATION CONTROL MUST BE COMPLETED WITHIN TWENTY-FOUR HOURS WITHIN 150 FEET OF BODIES OF WATER, AND WITHIN FIVE DAYS ELSEWHERE.
- 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 MDT SEEDING MIXTURE TUF APPLIED AT A RATE OF 220 LB/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL 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, _ 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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28TH STREET RECONSTRUCTION PROJECT
MONTEREY TOWNSHIP - 134TH AVE TO 136TH AVE

SESC PLAN - P.O.B. TO P.O.E.

DRAWN BY: LAH
REVIEWED BY: RK
DATE: APRIL, 2024
SCALE: 1"= 50'

LH 40012 14