

CITY OF OWOSSO

SHIAWASSEE COUNTY

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND LOCATION OF EXISTING UTILITIES.

CABLE TV
PHONE: 989-233-9404
mark.kelly@chartercom.com

ROAD
989-725-0550
randy.chesney@ci.owosso.mi.us

SANITARY SEWER & WATER MAIN
989-725-0550
glenn.chinavare@ci.owosso.mi.us

ELECTRIC
OFFICE: 989-729-3250
CELL: 517-204-9018
tm Mahar@cmsenergy.com

GAS
OFFICE: 517-374-2375
CELL: 517-614-8570
adam.bertram@cmsenergy.com

FIBER
PHONE: 989-720-6000
FAX: 989-720-6060
brent.klein@daystarrfiber.net

FIBER
PHONE: 989-723-0373
mark.stevens@ftr.com

SOIL EROSION AND SEDIMENTATION CONTROL
PHONE: 989-743-2289
FAX: 989-743-2413
salworden@shiawasseechd.net

PROJECT LOCATION - SEVENTH STREET
B.O.P. STA 50+86 TO E.O.P. STA 58+00
TOTAL LENGTH = 714 FT (0.14 MILES)

PROJECT LOCATION - RYAN STREET
B.O.P. STA 102+66 TO E.O.P. STA 115+45
TOTAL LENGTH = 1279 FT (0.24 MILES)

WHERE THE FOLLOWING ITEMS ARE CALLED FOR ON PLANS, THEY ARE TO BE CONSTRUCTED ACCORDING TO THE MDOT STANDARD PLAN GIVEN BELOW OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

R-1-G*
R-7-F
R-11-E
R-15-F
R-18-F
R-28-J*
R-29-I
R-30-G
R-74-D
R-80-E
R-82-D
R-83-C
R-96-E
R-100-H

SEVENTH STREET
STA 50+86 TO E.O.P. STA 58+00
LENGTH = 714 FT (0.14 MILES)

N STREET
STA 115+45
0.24 MILES

LOCATION MAP
CITY OF OWOSSO

CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

[illegible]

2019 STREET PROGRAM CONTRACT 3

COVER SHEET

CS



Know what's **below**.
Call before you dig.

GENERAL NOTES

UNDERGROUND UTILITIES/MISS DIG
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 FOR 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. MEMBER 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 EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER AS TO WHERE POSSIBLE CONFLICT EXIST.

EXISTING WATER MAINS AND SEWERS
THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO PROPERLY IDENTIFIED EXISTING WATER MAINS AND / OR EXISTING SEWERS DURING THE CONSTRUCTION OF THE PROJECT.

ADJUSTING OF MONUMENT BOXES
ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED, WHETHER SHOWN OR NOT. IT MAY BE NECESSARY TO PLACE OR ADJUST MONUMENT BOXES AS REQUIRED.

PAVEMENT MARKINGS AND SIGNS
ALL PERMANENT PAVEMENT MARKINGS, SHAPES, AND DIMENSIONS SHALL CONFORM WITH MDOT PAVEMENT MARKING TYPICALS PAVE - 900 SERIES.

SOIL EROSION MEASURES
APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH DISTURBING ACTIVITIES. PLACE LAWN RESTORATION ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODIBLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD OR SEED / MULCH BLANKET AS DIRECTED BY THE ENGINEER.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND MAINTAINED UNTIL THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MEASURES SHALL ONLY BE PAID FOR ONCE.

RUBBISH DISPOSAL
SEE MAINTAINING TRAFFIC SPECIAL PROVISIONS.

MAIL DELIVERY
SEE MAINTAINING TRAFFIC SPECIAL PROVISIONS.

STORM SEWER REMOVAL
REMOVAL OF SEWER WITH DIAMETER LESS THAN 12 INCHES, WITHIN THE EXCAVATION LIMITS OF NEW SEWER, IS INCLUDED IN THE UNIT PRICE FOR NEW SEWER AND WILL NOT BE PAID FOR SEPARATELY.

STORM SEWER STRUCTURES
ALL STORM ORIFICES TO RECEIVE SEWER PIPE SHALL BE FITTED WITH KOR-N-SEAL FLEXIBLE CONNECTOR (S) , OR APPROVED EQUAL CONNECTOR. THE FLEXIBLE CONNECTOR WILL NOT BE PAID FOR SEPARATELY, BUT IS CONSIDERED AS PART OF THE DRAINING STRUCTURE PAY ITEM.

STORM SEWER CONNECTIONS
PROPOSED STORM SEWERS SHALL BE CONNECTED TO EXISTING STORM SEWERS WITH A FERNCO COUPLER, OR APPROVED EQUAL, AS DIRECTED BY THE ENGINEER. CONNECTION SHALL BE ACCOMPLISHED WITH COUPLER OF SIMILAR SIZE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PAYMENT FOR ALL MATERIALS AND LABOR NECESSARY TO ACCOMPLISH THIS WORK WILL NOT BE PAIR FOR SEPARATELY, BUT WILL BE CONSIDERED AS PART OF OTHER WORK ITEMS.

STREET APPROACHES
STREET APPROACHES SHALL BE PAID FOR AS PART OF THE MAINLINE PAVING PAY ITMES.

STRUCTURE ADJUSTMENTS
ADJUSTMENTS TO STORM AND SANITARY STRUCTURES LOCATED WITHIN THE PAVEMENT OR CURB AND GUTTER SHALL BE PAID FOR AS: Dr Structure Cover, Adj, Case 1.

SIDEWALK RAMPS AND SIDEWALKS
SIDEWALK RAMPS SHALL BE COMPLETED IN ACCORDANCE WITH THE MDOT 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MDOT STANDARD PLAN R-28 SERIES, EXCEPT AS MODIFIED HEREIN. THE PORTION OF RAMP NEAREST THE CURBS AND GUTTER SHALL BE 7-INCHES THICK AS IDENTIFIED ON THE SIDEWALK RAMP THICKNESS DETAIL. THE REMAINDER OF THE RAMP SHALL BE 4-INCHES THICK. THE PAY ITEMS FOR Sidewalk Ramp, Conc, 4 inch AND Sidewalk, Conc, inch SHALL INCLUDE ALL EXCAVATION AND EMBANKMENT NECESSARY TO CONSTRUCT EACH ITEM AND ALL WORK NECESSARY TO SAW AND TRIM EDGES OF EXISTING CONCRETE. EXCAVATION AND EMBANKMENT WILL NOT BE PAID FOR SEPARATELY.

DETECTIBLE WARNING SURFACES SHALL BE RED IN COLOR, INSTALLED ONTO FRESH CONCRETE, AND IN ACCORDANCE WITH MDOT STANDARD R-28 SERIES.

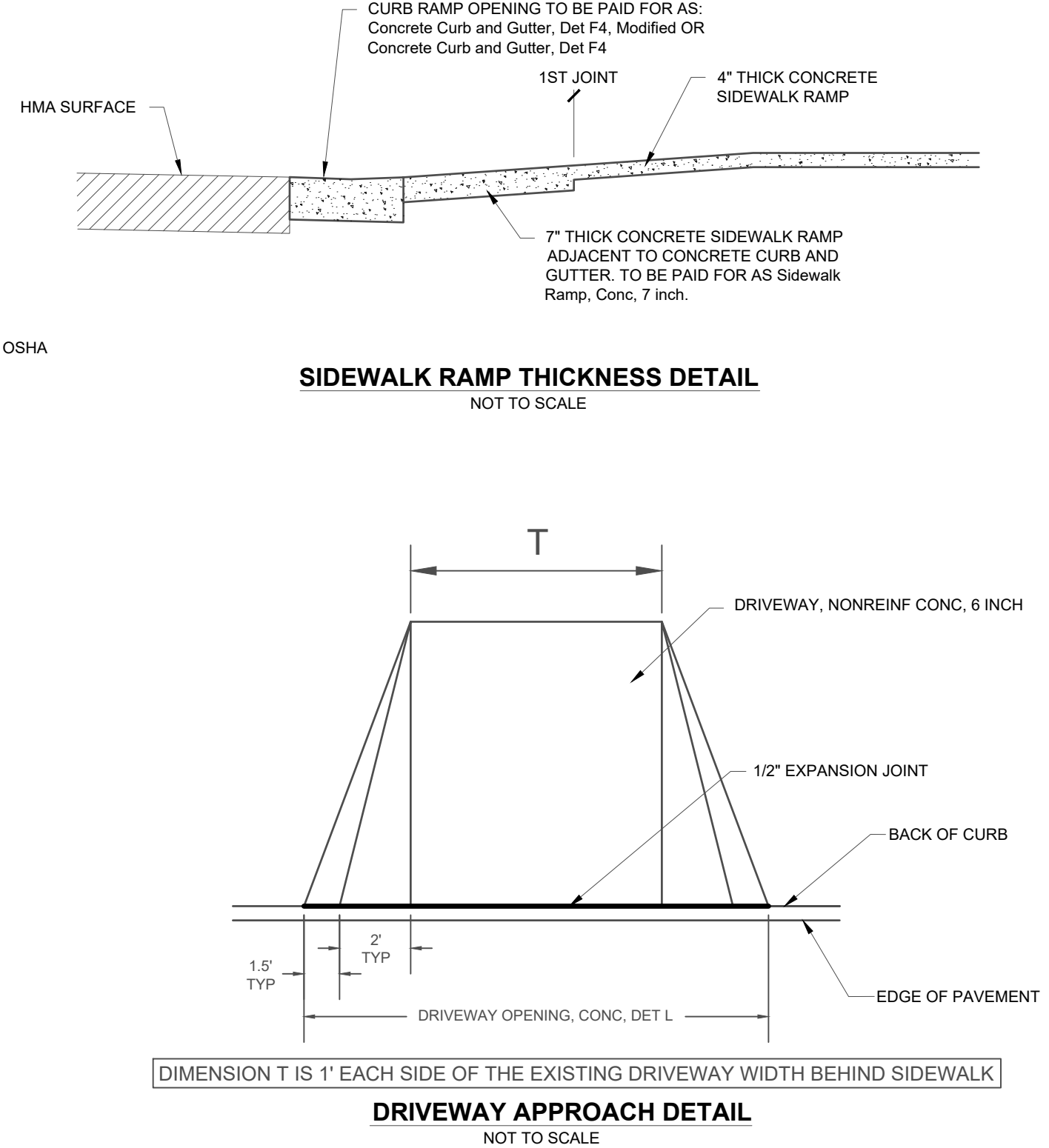
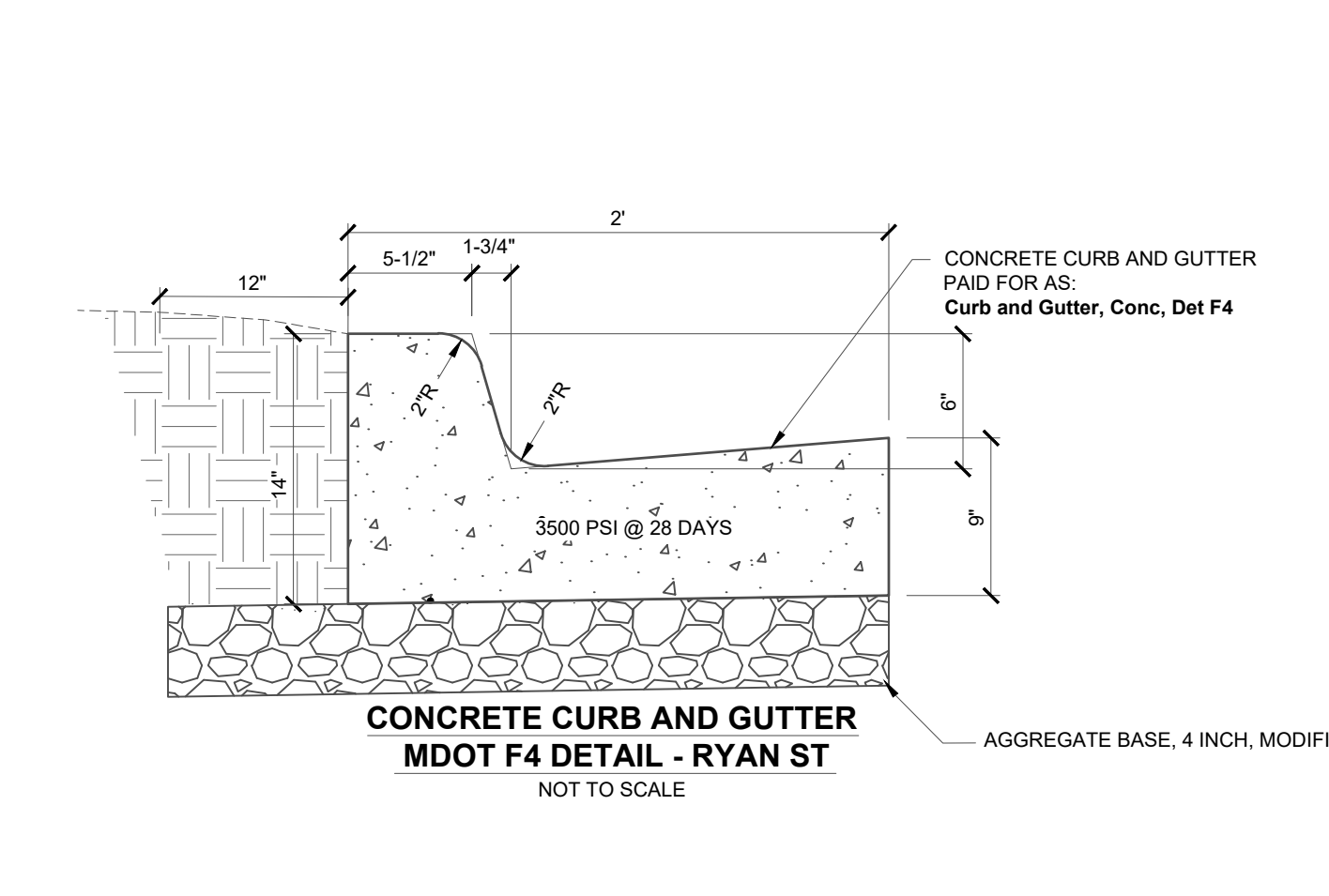
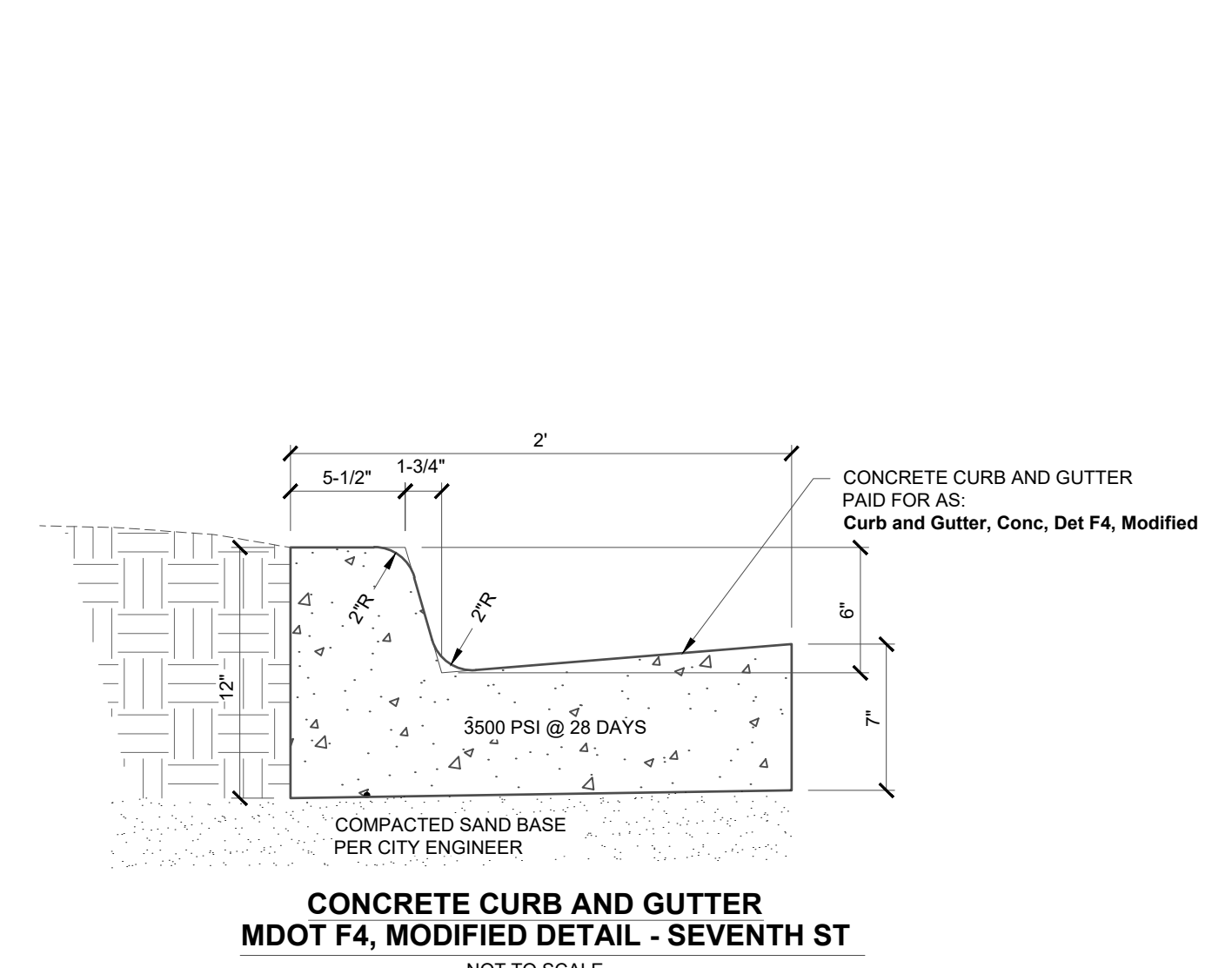
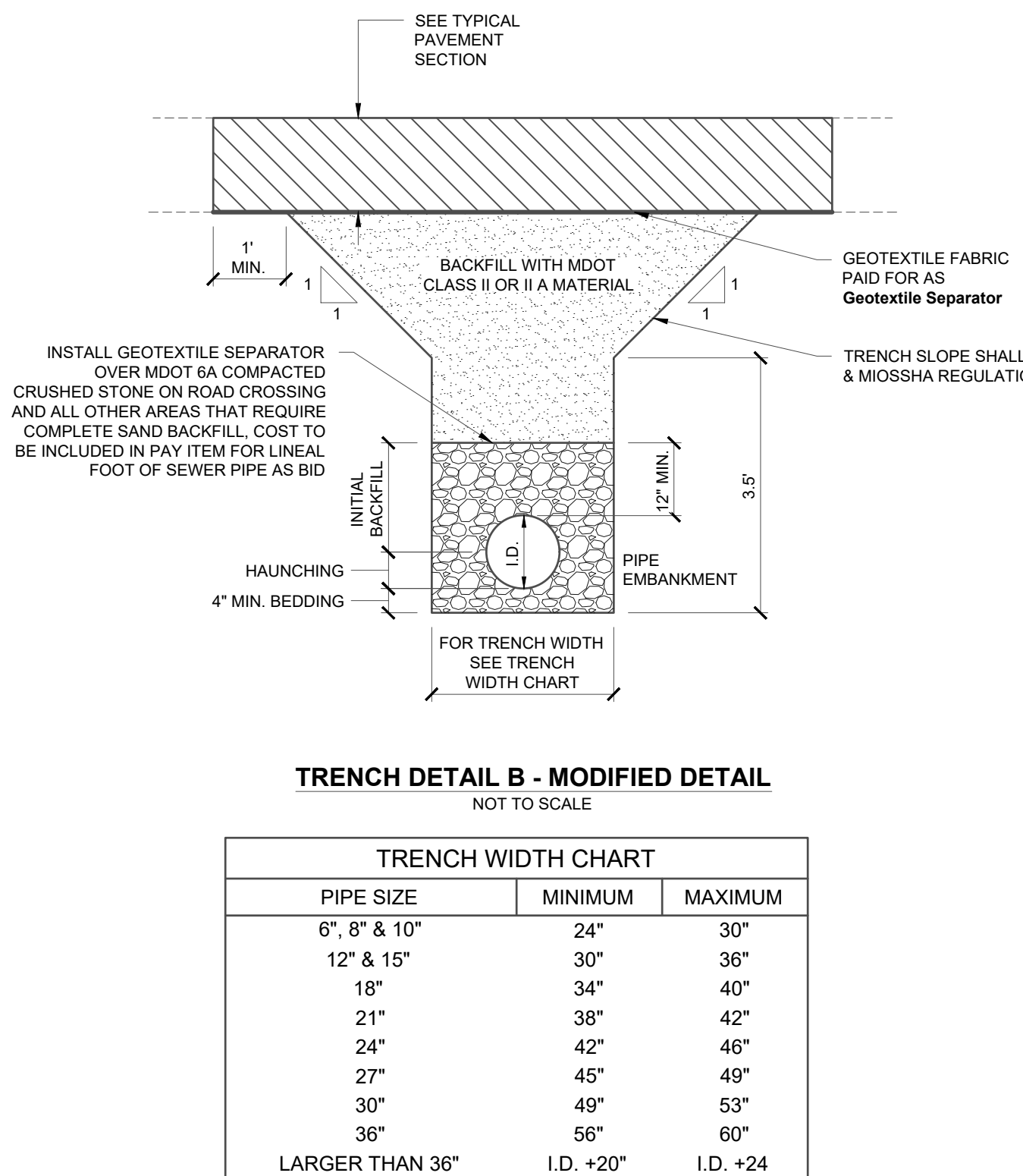
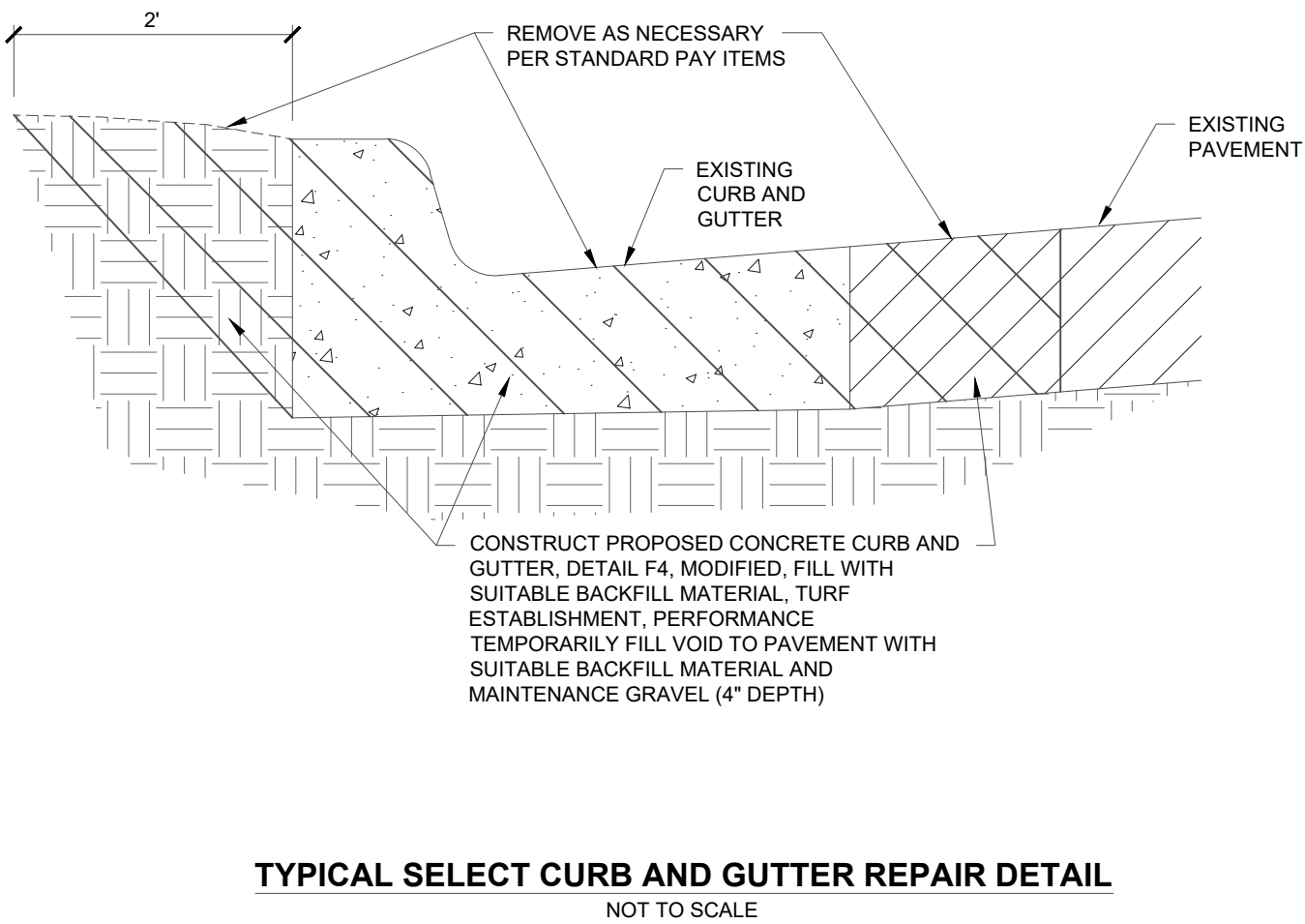
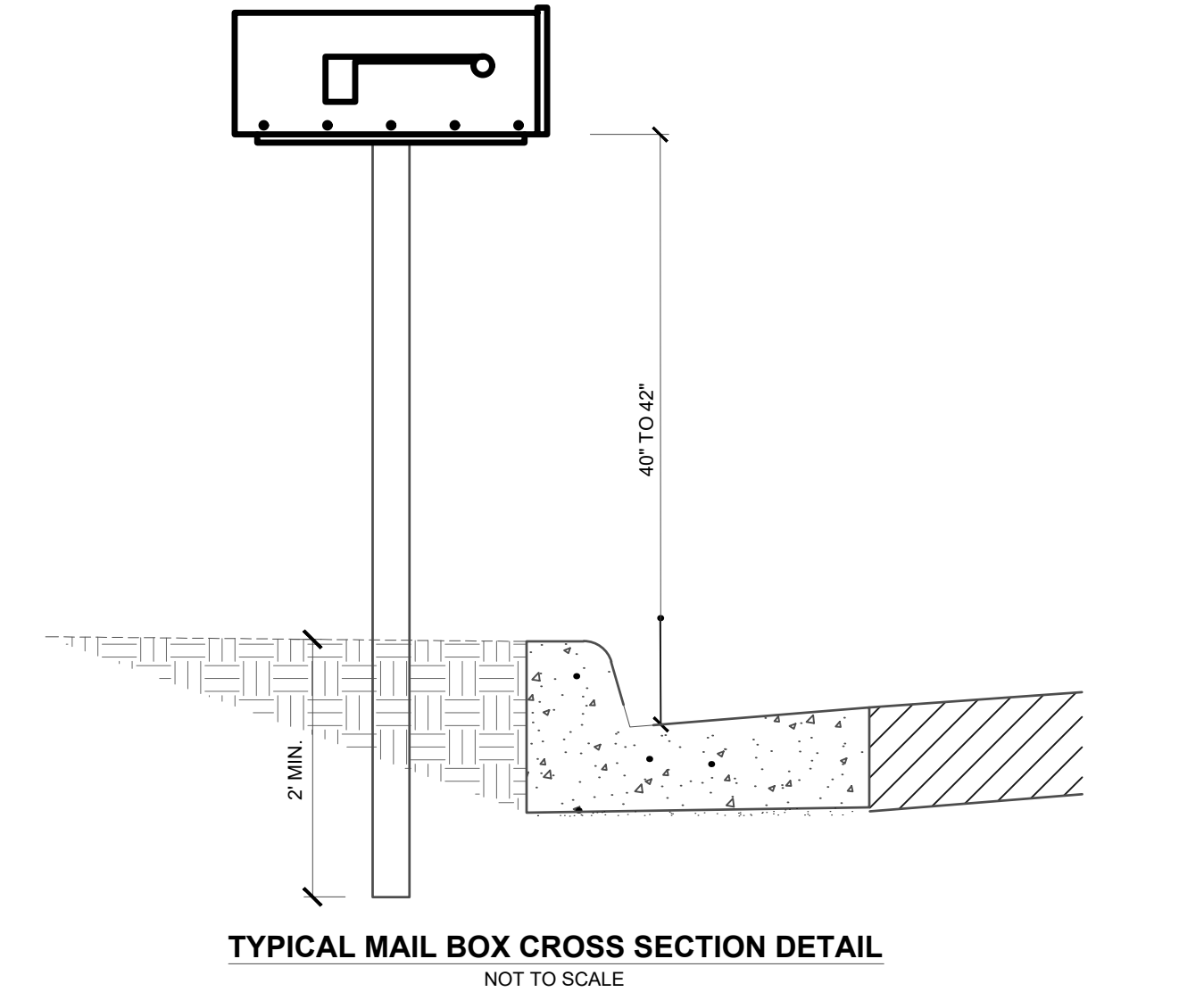
SIDEWALKS LOCATED WITHIN RESIDENTIAL DRIVEWAYS SHALL BE 6-INCHES THICK AND WILL BE PAID FOR AS Sidewalk, Conc, 6 inch.

SIDEWALKS LOCATED WITHIN COMMERCIAL DRIVEWAYS SHALL BE 7-INCHES THICK AND WILL BE PAID FOR AS Sidewalk, Conc, 7 inch.

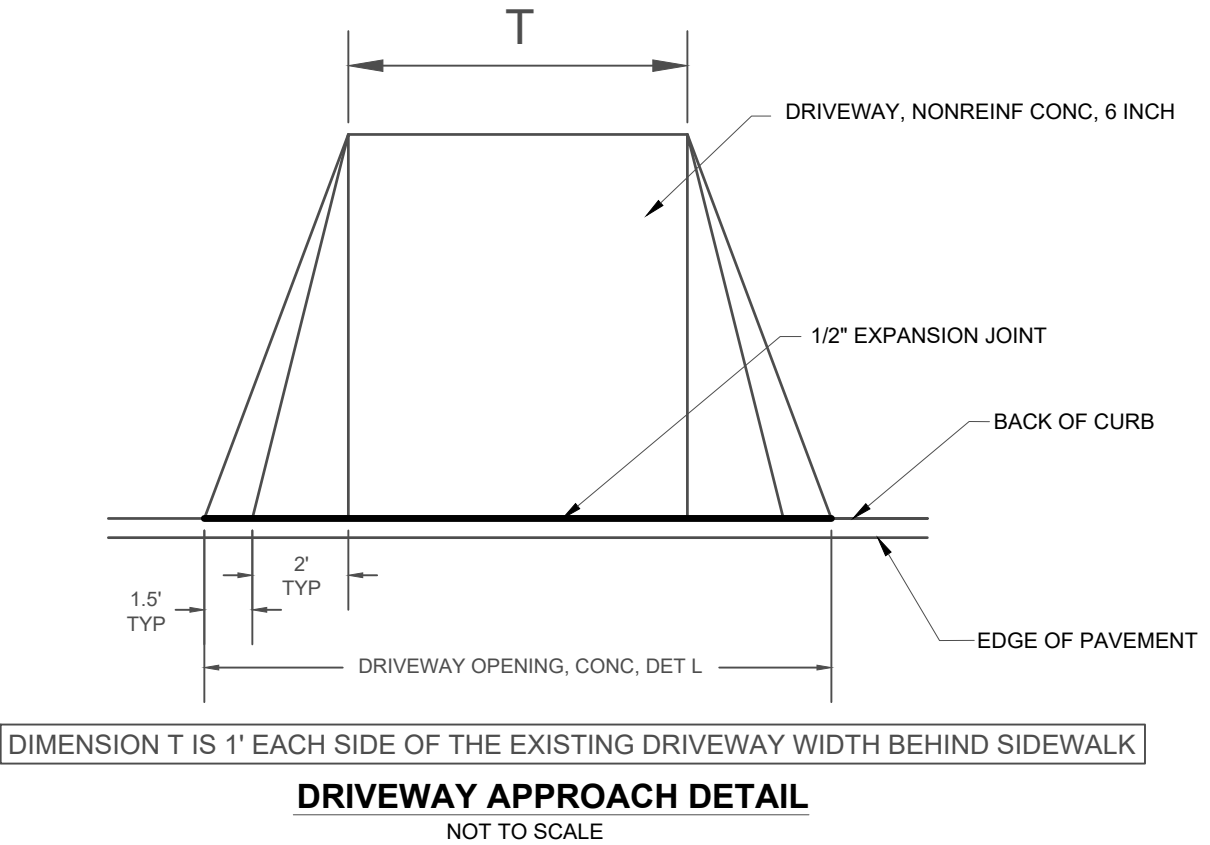
LAWN SPRINKLERS / LANDSCAPING
OWNERS OF EXISTING LAWN SPRINKLER SYSTEMS AND / OR LANDSCAPING SHALL BE NOTIFIED (IN WRITING WITH A COPY SENT TO THE ENGINEER) BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF ANY WORK THAT WILL BE DONE THAT WILL AFFECT THOSE SYSTEMS AND / OR LANDSCAPING. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LAWN SPRINKLER SYSTEM PRIOR TO THE CONTRACTOR BEGINNING WORK, AND IF THE CONTRACTOR CUTS THE SYSTEM DURING CONSTRUCTION, THE CONTRACTOR SHALL CAP THE SYSTEM PIPE AND WITNESS THE LOCATION OF THE CAP WITH A WOODEN STAKE FOR THE PROPERTY OWNERS USE. THE CONTRACTOR SHALL PLACE THE SALVAGED SPRINKLER HEADS ON THE BACK OF THE RIGHT OF WAY. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LANDSCAPING PRIOR TO THE CONTRACTOR BEGINNING WORK, THE CONTRACTOR SHALL CAREFULLY SALVAGE THE LANDSCAPING ITEMS AND STOCKPILE THEM ON THE BACK OF THE RIGHT OF WAY OR AT A LOCATION DESIGNATED BY THE ENGINEER FOR THE PROPERTY OWNER. ANY OTHER MODIFICATION TO THE SPRINKLER SYSTEM AND / OR LANDSCAPING IS THE RESPONSIBILITY OF THE OWNER AND IS NOT PART OF THIS CONTRACT. THIS WORK WILL NOT BE PAID FOR SEPARATELY.

PROPERTY OWNERS
PROPERTY OWNERS' NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THIER ACCURACY IS NOT GUARANTEED.

MAINTAINING TRAFFIC
REFER TO THE CONTRACT SPECIAL PROVISION FOR WORK RESTRICTIONS RELATIVE TO MAINTAINING TRAFFIC.



SIDEWALK RAMP THICKNESS DETAIL
NOT TO SCALE



DRIVEWAY APPROACH DETAIL
NOT TO SCALE

MISCELLANEOUS ESTIMATES

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS

1	LSUM	Mobilization, Max 5%
5	Ea	Sanitary Serv Conflict
10	Ea	Abandoned Gas Main Conflict
100	Syd	Pavt, Rem
50	Syd	Sidewalk, Rem
450	Sft	Sidewalk, Conc, 4 inch
2	Ton	Cement
300	Ft	Curb and Gutter, Rem
300	Ft	Curb and Gutter, Conc, Det F4, Modified
15	Ton	HMA Approach
30	Syd	Driveway, Nonreinf, Conc, 6 inch
10	Cyd	Approach, CL II, LM
10	Ea	Sign, Type B, Temp, Prismatic, Furn & Oper
10	Ea	Sign, Type III, Erect, Salv
160	Ft	Post, Steel, 3 Pound
500	Syd	Turf Establishment, Performance

MAINTAINING TRAFFIC QUANTITIES

6	Ea	Barricade, Type III, High Intensity, Double Sided, Furn & Oper
20	Ea	Pedestrian, Type II Barricade, Temp
75	Ea	Plastic Drum, High Intensity, Furn & Oper
365	Sft	Sign, Type B, Temp, Prismatic, Furn & Oper
1	LSUM	Minor Traf Devices, Max \$10,000

EXISTING FEATURES LEGEND

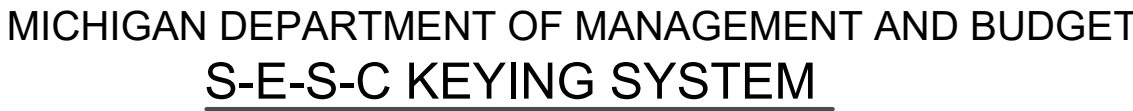
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	TREE (DECIDUOUS)		CABLE BOX		SURVEY CONTROL POINT
	BUSH		TELEPHONE RISER		BENCHMARK
	TREE (CONIFEROUS)		TELEPHONE MANHOLE		SECTION CORNER
	DEAD TREE		TELEPHONE HANDHOLE		BOUNDARY LINE
	STUMP		ELECTRICAL RISER		PROPERTY LINE
	MANHOLE		ELECTRICAL MANHOLE		WATERMAIN
	SANITARY CLEANOUT		ELECTRICAL HANDHOLE		SANITARY SEWER
	RD. CATCH BASIN		POWER POLE		STORM SEWER
	SQ. CATCH BASIN		LIGHT POLE		CULVERT (21" AND UNDER)
	FIRE HYDRANT		GUY POLE		CABLE T.V.
	WATER VALVE		GUY ANCHOR		TELEPHONE
	CURB STOP & BOX		PED CROSSING SIGNAL		ELECTRIC
	WELL		YARD LIGHT		GAS
	WATER MANHOLE		SIGN		OVERHEAD LINES
	WATER METER		MAILBOX		GUARDRAIL
	SOIL BORING		GUARD POST		FENCE
	MONITORING WELL		FOUND CONC. MONUMENT		WOODLINE
			FOUND IRON ROD		
			SET IRON ROD		

NOTE: ALL ITEMS LISTED ON THE LEGEND MAY NOT BE PRESENT ON DRAWING.

CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

2019 STREET PROGRAM CONTRACT 3
NOTES AND MISCELLANEOUS ESTIMATES
ROAD AND STORM SEWER DETAILS

D1



B = BIOENGINEERING



B = BIOENGINEERING



B = BIOENGINEERING

1. INSTALLATION OF TEMPORARY EROSION CONTROL MEASURES.
2. TRENCH EXCAVATION, WATER MAIN INSTALLATION, AND BACKFILL.
3. PERMANENT MEASURES, FINAL GRADING, SEEDING AND MULCHING.

CITY OF OWOSSO, MICHIGAN
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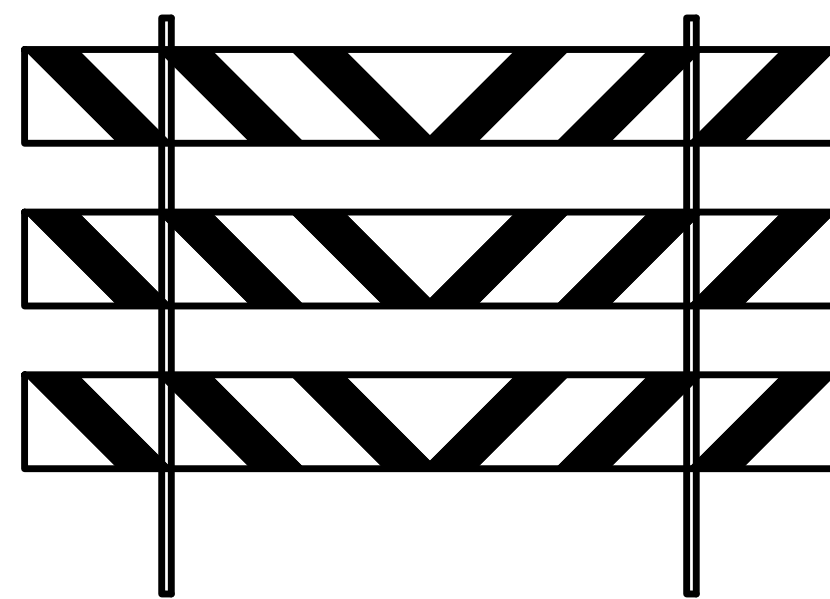
2019 STREET PROGRAM CONTRACT 3

SESC STANDARD NOTES AND DETAILS

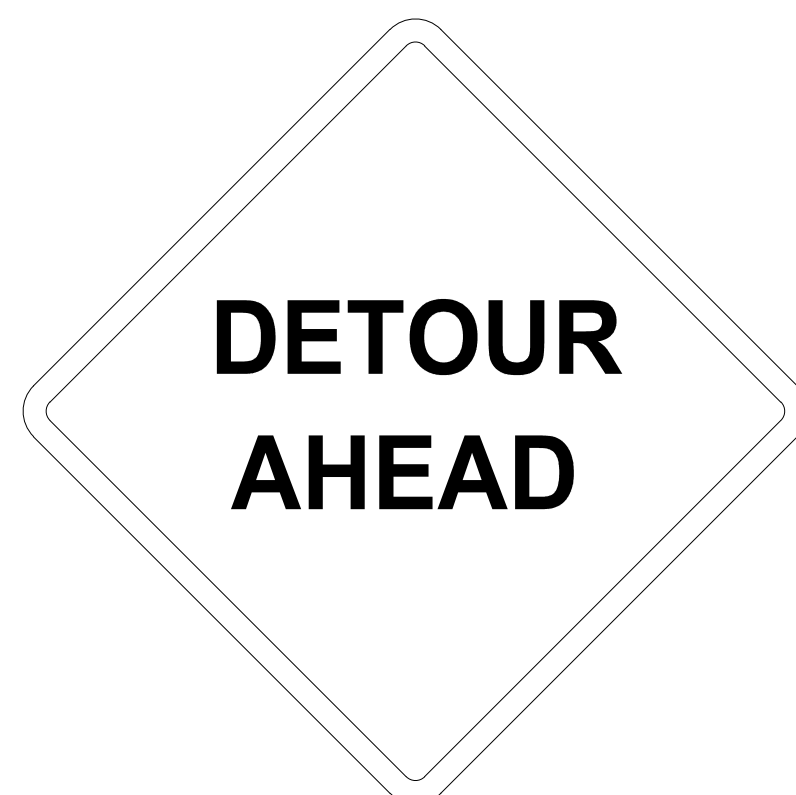
SHEET NO.	DESCRIPTION
SV1	SEVENTH ST - TRAFFIC CONTROL PLAN
SV2	SEVENTH ST - TYPICAL CROSS SECTIONS
SV3	SEVENTH ST - REMOVAL PLAN & SOIL BORING
SV4	SEVENTH ST - ROAD PLAN
SV5	SEVENTH ST - ROAD PROFILES

CITY OF OWOSSO, MICHIGAN
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R11-3a
60" x 30"

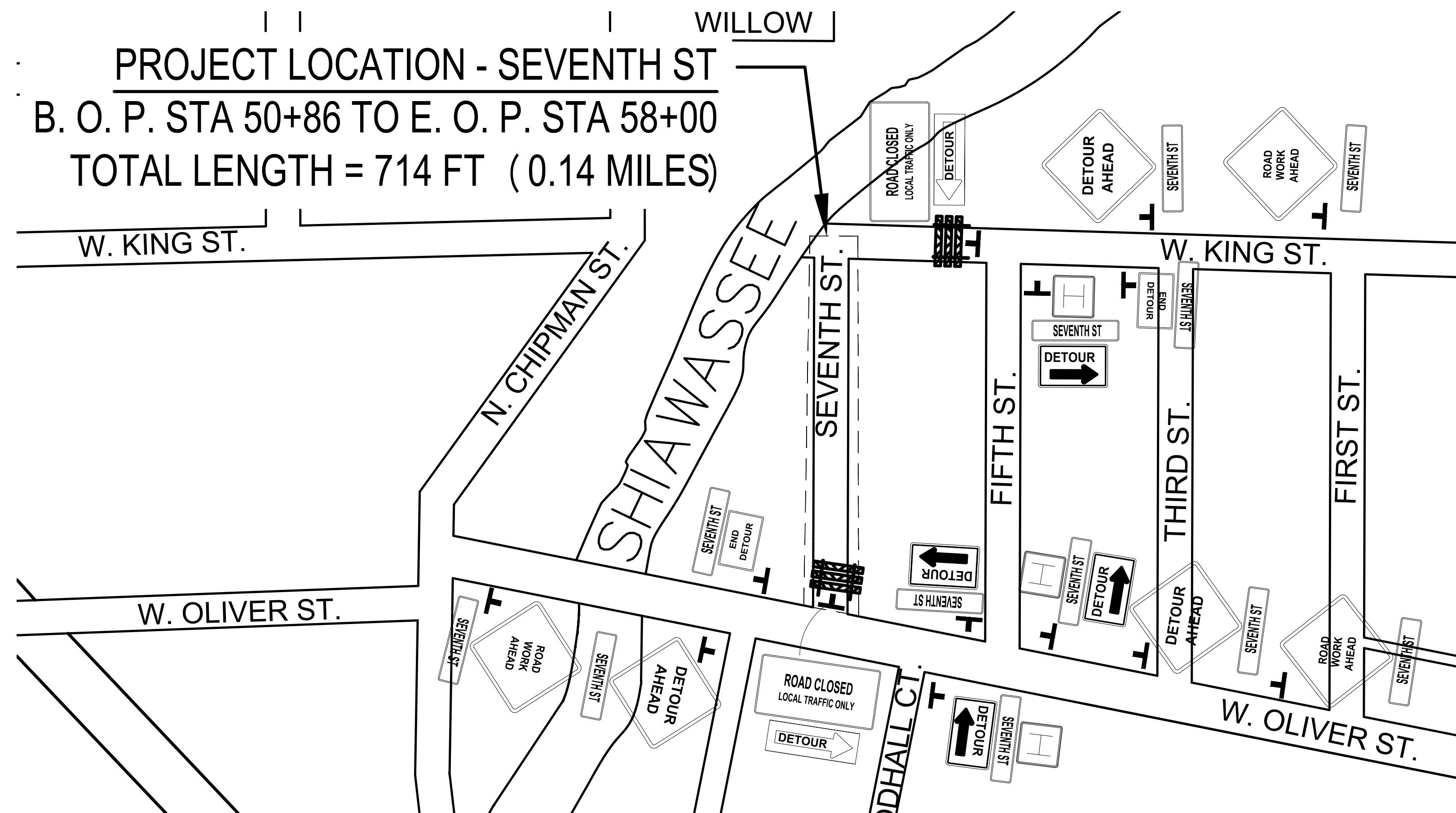


TYPE III BARRICADE



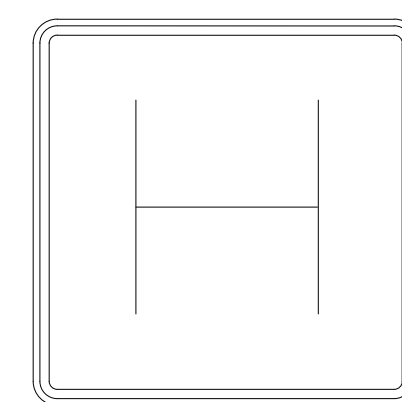
W20-2a
48" x 48"

PROJECT LOCATION - SEVENTH ST
B. O. P. STA 50+86 TO E. O. P. STA 58+00
TOTAL LENGTH = 714 FT (0.14 MILES)



VICINITY MAP AND TRAFFIC CONTROL PLAN

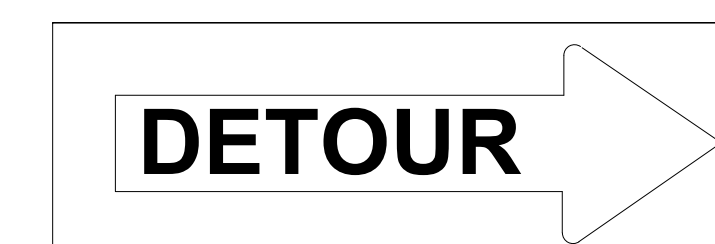
SEVENTH ST



D9-2
24" x 24"



M4-10L
48" x 18"



M4-10R
48" x 18"



W20-1
48" x 48"

SEVENTH ST

M4-8 (MOD)
30" x 8"

**END
DETOUR**

M4-8a
24" x 18"



M4-9R
30" x 24"



M4-9L
30" x 24"

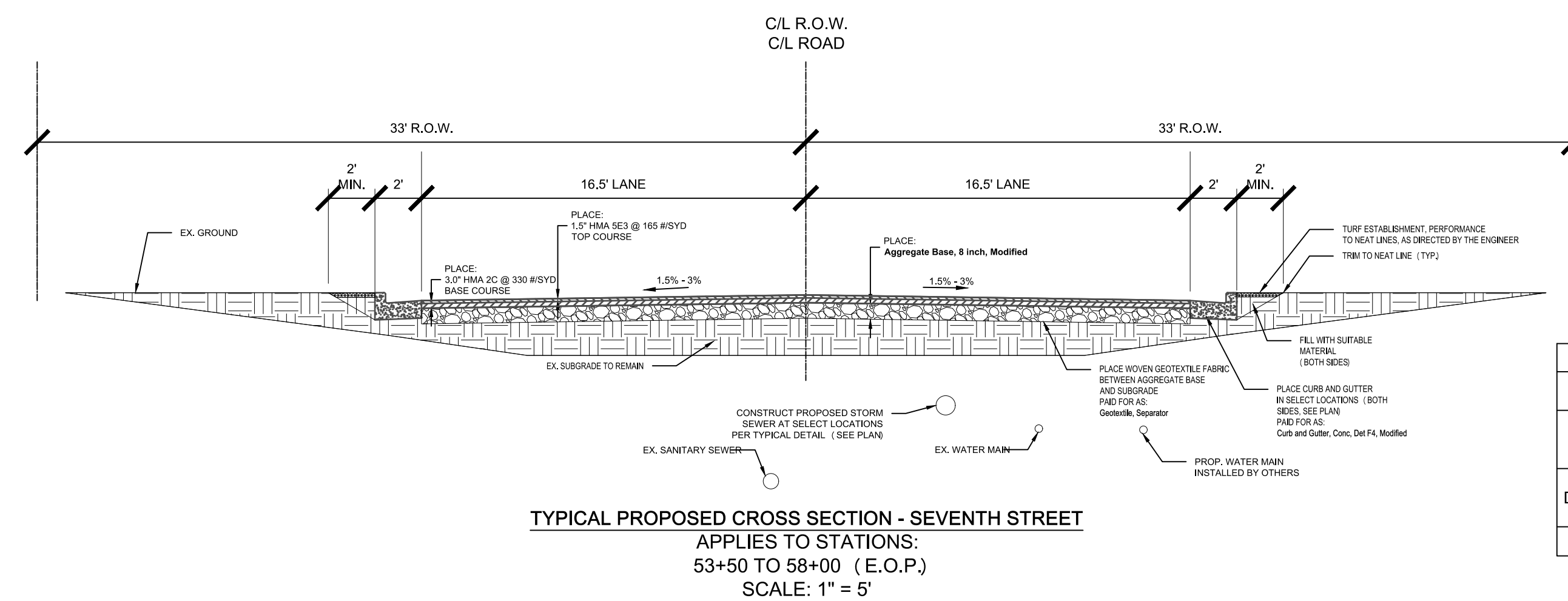
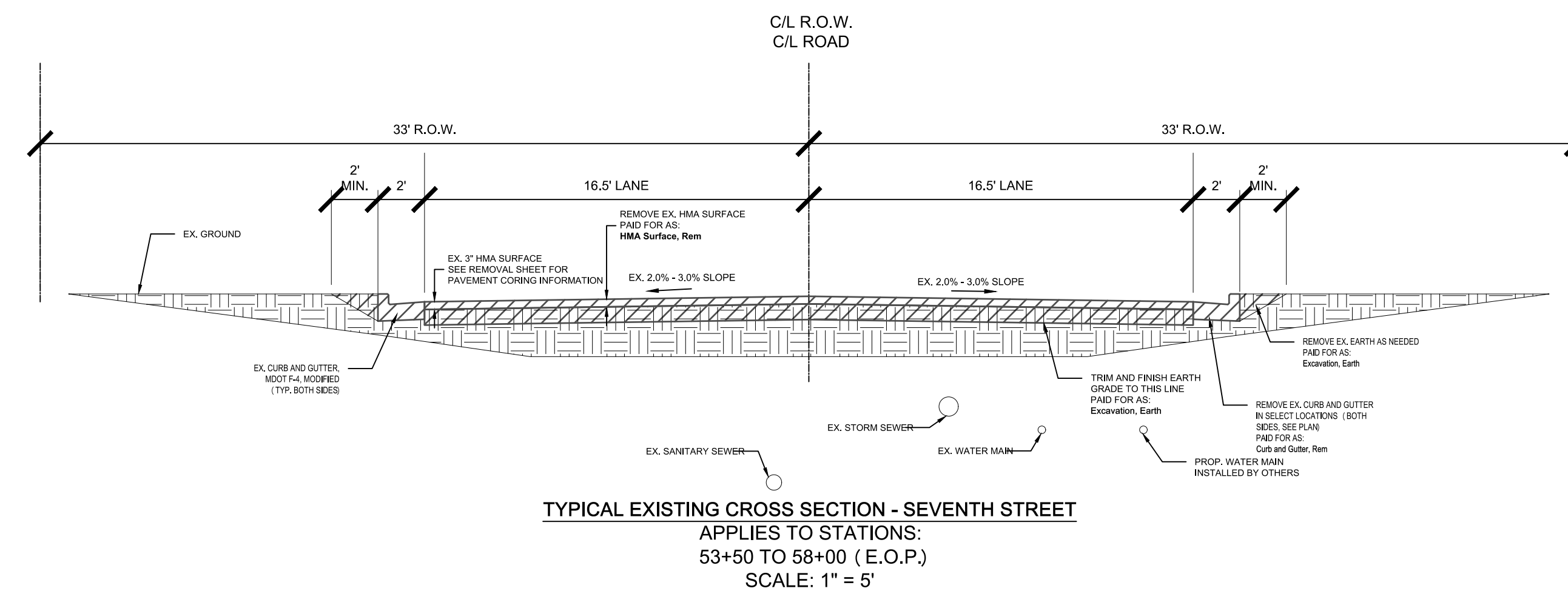
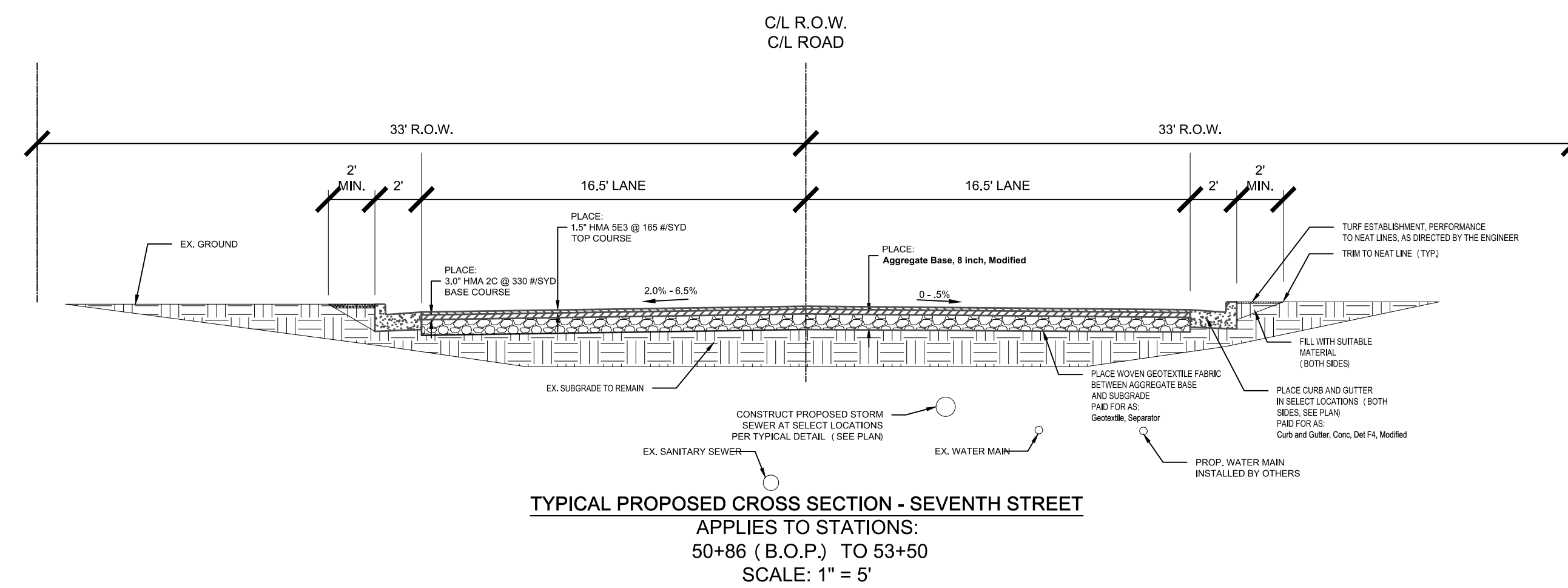
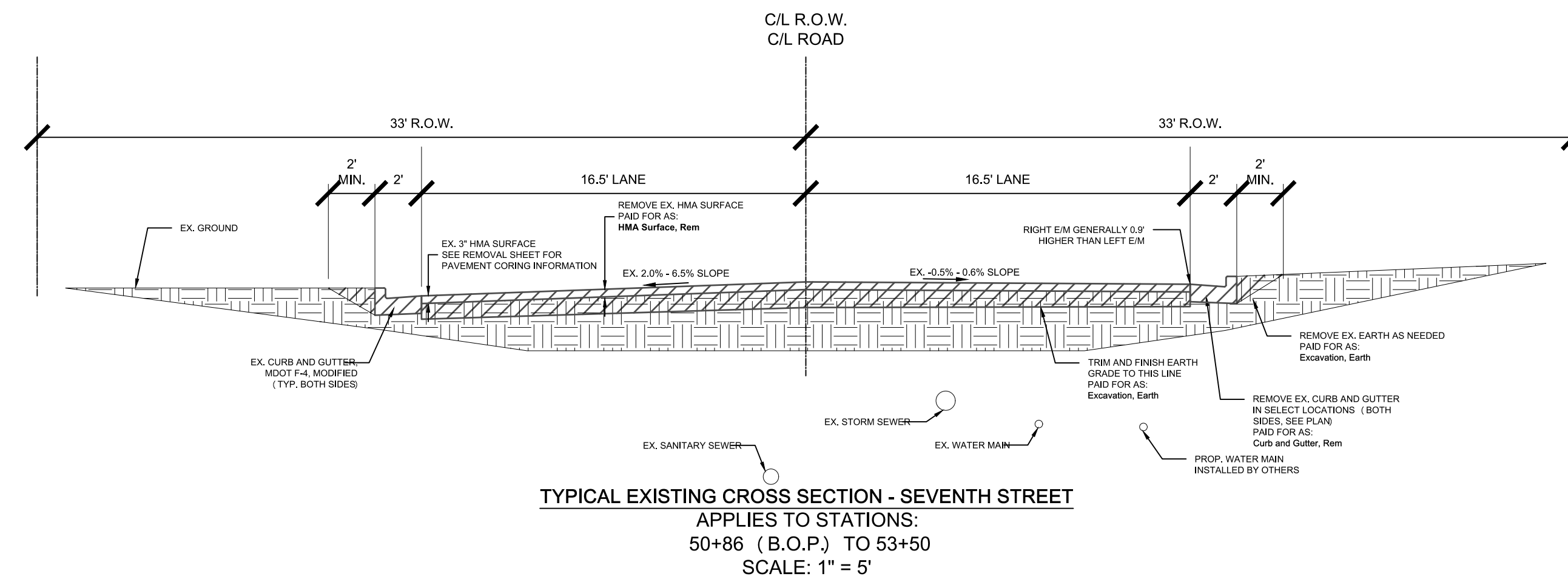
BENCHMARK DATA		NO.	REVISIONS	DATE	BY
ELEV.	DESCRIPTION				
		ORIGINAL PLAN			
		CHECKED BY	APPROVED BY		

2019 STREET PROGRAM CONTRACT 3

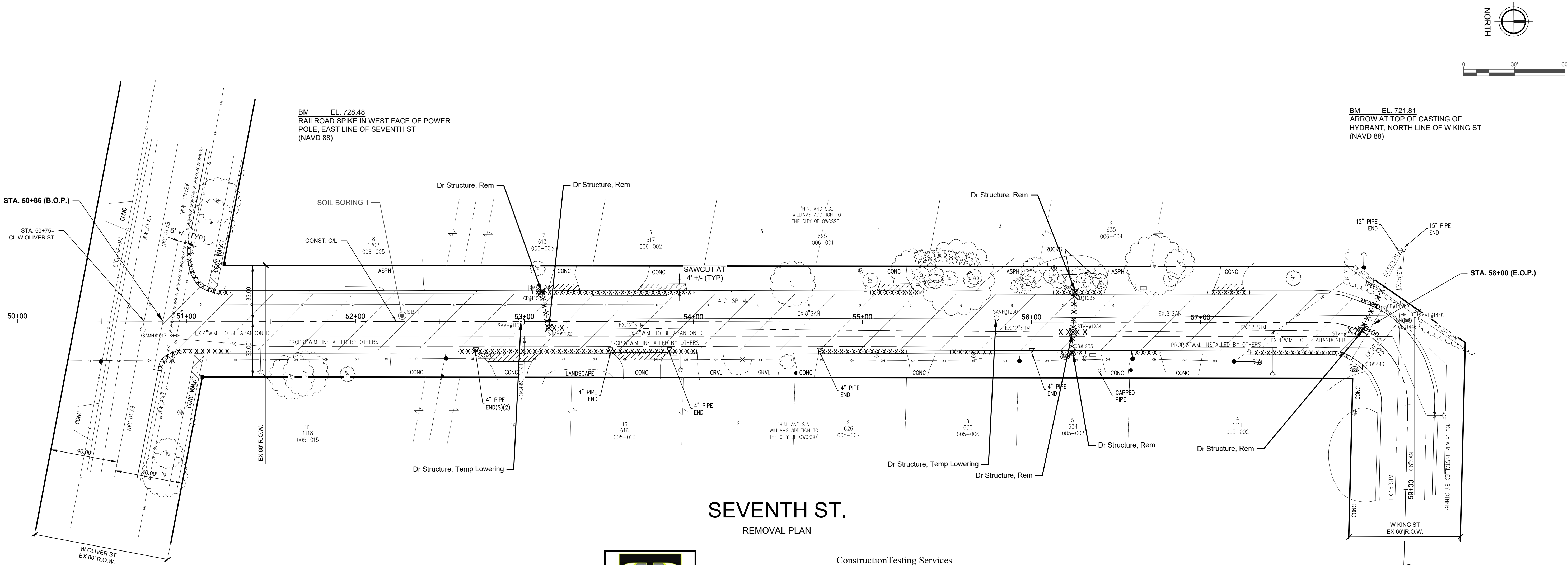
SEVENTH STREET
TRAFFIC CONTROL PLAN

DATE PROJECT NO.	FIELD BOOK PG.
---------------------	-------------------

SV1



SEVENTH STREET - HMA APPLICATION RATE					
ITEM	PAY ITEM	RATE PER SYD	PERFORMANCE GRADE	ESTIMATED THICKNESS	REMARKS
HMA	HMA, 5E3	165 LBS.	64-28	1.5"	TOP COURSE - AWI = 220 (MIN)
	HMA, 2C	330 LBS.	64-28	3"	BASE COURSE
DRIVE APPROACH	HMA APPROACH	220 LBS.	58-28	2"	TOP COURSE - AWI = 220 (MIN); HMA, 13A
	HMA APPROACH	330 LBS.	58-28	3"	BASE COURSE; HMA, 13A
BOND COAT		0.1 GAL.			SS-1H (FOR INFORMATION ONLY)



- LEGEND**
- XXXXX Curb and Gutter, Rem
 - XXX Sewer, Rem
 - XXX Dr Structure, Rem
 - HMA Surface, Rem and Excavation, Earth
 - Pavt, Rem
 - Sidewalk, Rem
 - STANDARD SOIL EROSION KEY

SEVENTH ST. REMOVAL PLAN



Construction Testing Services
3300 E. Bristol Road, Burton, MI 48529
PHONE: (810) 603-0766
FAX: (810) 603-0786

JOB NO. S-18-245 LOG OF SOIL BORING NO. 1
PROJECT: City of Owosso 2019 Street Program
LOCATION: Owosso, Michigan
DATE: 9/20/18 SURFACE ELEVATION: Existing

Sample & Type	Depth	Legend	Soil Description	SPT Blows per ft.	Moisture %	Natural Wt. P.C.F.	Unc. Comp. Strength	Str. %
1A	1	3" Asphalt	8" Sandy Gravel - Medium Compact, Moist, Brown	2				
SS	2			2				
	3			4				
1B	4		Clay - Firm to Stiff, Moist, Sandy, Variegated	4				
SS	5			5				
1C	6			7				
SS	7		7'0" End of Boring	8				
	8			9				
	9			10				
	10			11				
	11			12				
	12			13				
	13			14				
	14			15				
	15			16				
	16			17				
	17			18				
	18			19				
	19			20				
	20			21				
	21							

TYPE OF SAMPLE
D - DISTURBED
UL - UNDIST. LINER
S.T. - SHELBY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
OTHER -

BORING PLUGGED WITH NATURAL SOIL

* The soil descriptions shown on the logs are from visual observations. No classification tests were performed.

Standard Penetration Test - Driving 2" OD Sampler 1' With 140# Hammer Falling 30"; Count Made At 6" Intervals.








GROUND WATER OBSERVATIONS


G.W. ENCOUNTERED AT FT. INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. ON COMPLETION FT. INS.
G.W. AFTER HOURS FT. INS.
G.W. VOLUMES None

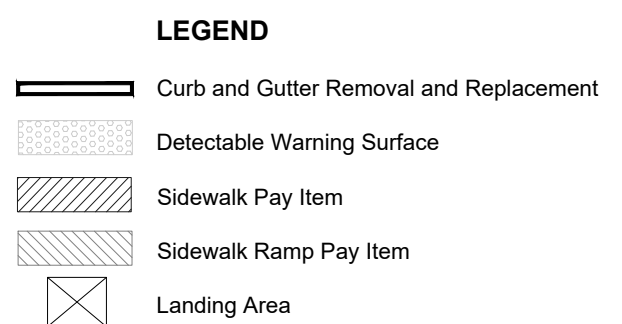
REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	WORK ITEM
6	Ea	Dr Structure, Rem
70	Ft	Sewer, Rem, Less than 24 inch
596	Ft	Curb and Gutter, Rem
68	Syd	Pavt, Rem
23	Syd	Sidewalk, Rem
731	Cyd	Excavation, Earth
50	Cyd	Subgrade Undercutting, Type II
5	Ea	Erosion Control, Inlet Protection, Fabric Drop
2	Ea	Dr Structure, Temp Lowering
2681	Syd	HMA Surface, Rem



LEGEND

-  Curb and Gutter, Conc., Det F4, Modified
-  Sewer, SDR-26, __ inch, Tr Det B, Modified
-  HMA / HMA Approach
-  Driveway, Nonreinf., Conc., __ inch
-  Aggregate Approach, __ inch
-  Sidewalk, Conc., __ inch
-  Sidewalk, Ramp, Conc., __ inch

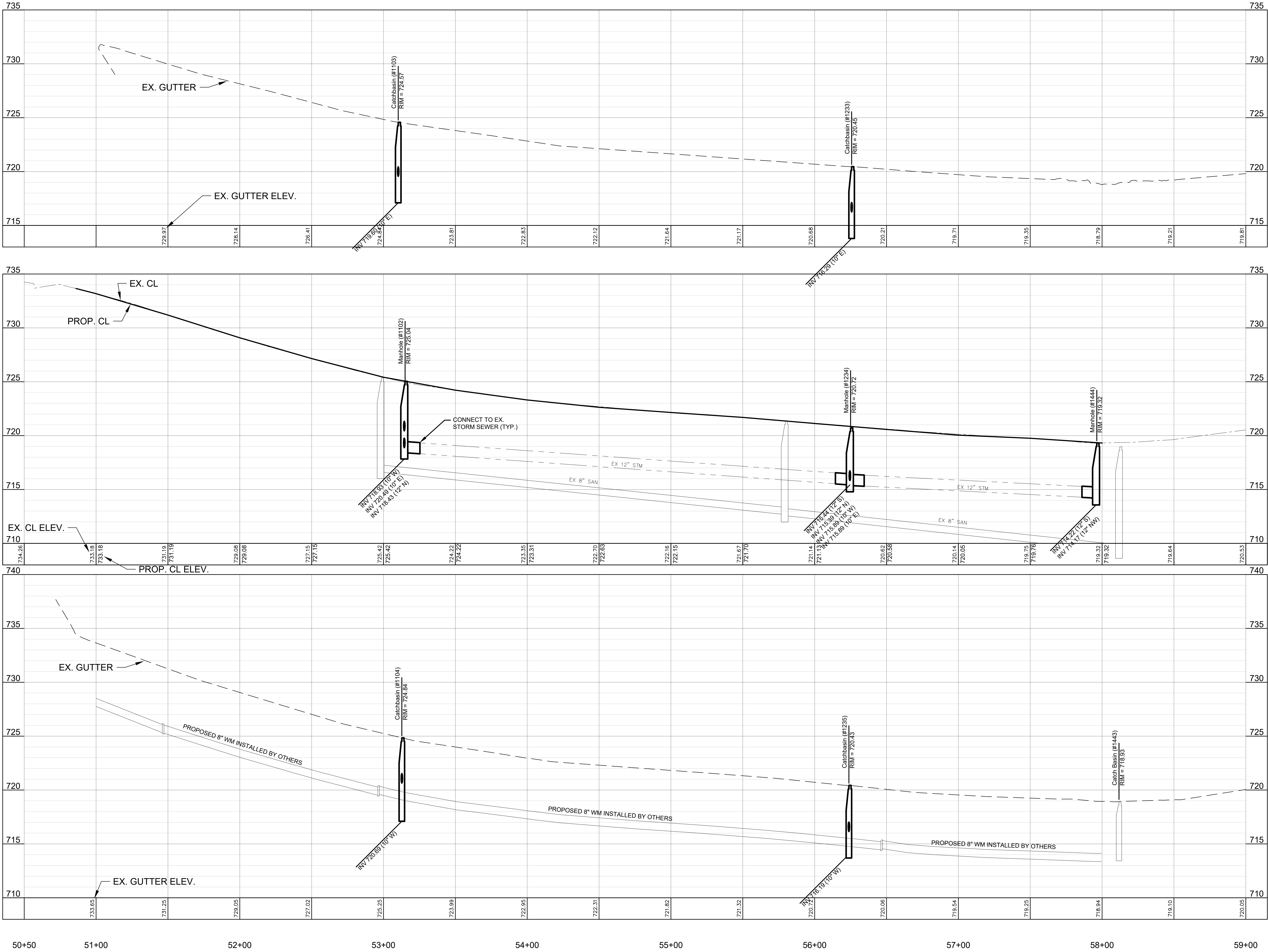
 STANDARD SOIL EROSION KEY



EAST PROFILE

CENTERLINE PROFILE

WEST PROFILE



2019 STREET PROGRAM CONTRACT 3

SEVENTH STREET
ROAD PROFILE

SV5

FIELD BOOK
PG.

DATE
PROJECT NO.

BENCHMARK DATA
ELEV.

DESCRIPTION

NO. REVISIONS DATE BY

CHECKED BY APPROVED BY

CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

CITY OF OWOSSO
2019 STREET PROGRAM
CONTRACT 3

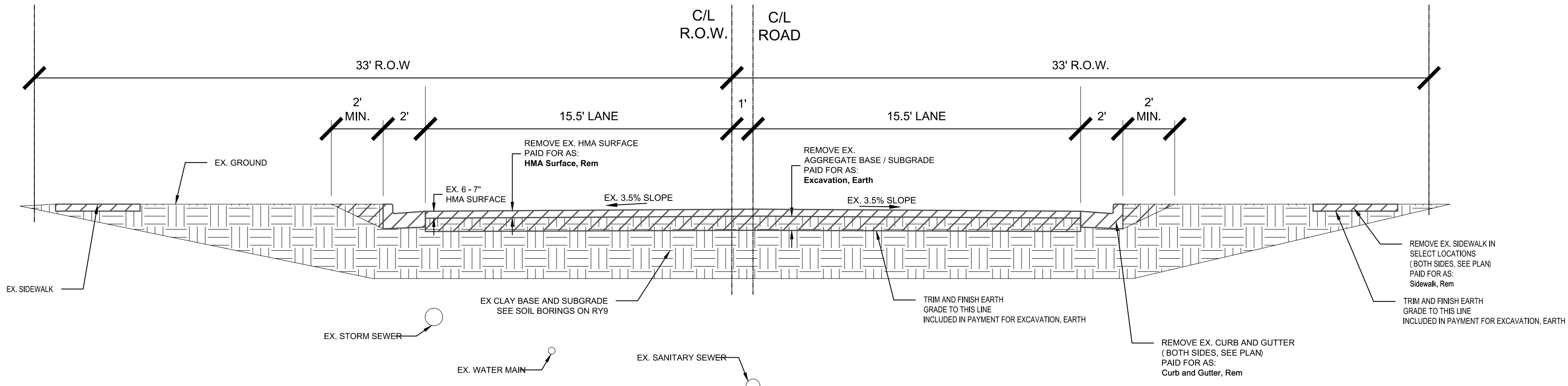
CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

2019 STREET PROGRAM CONTRACT 3

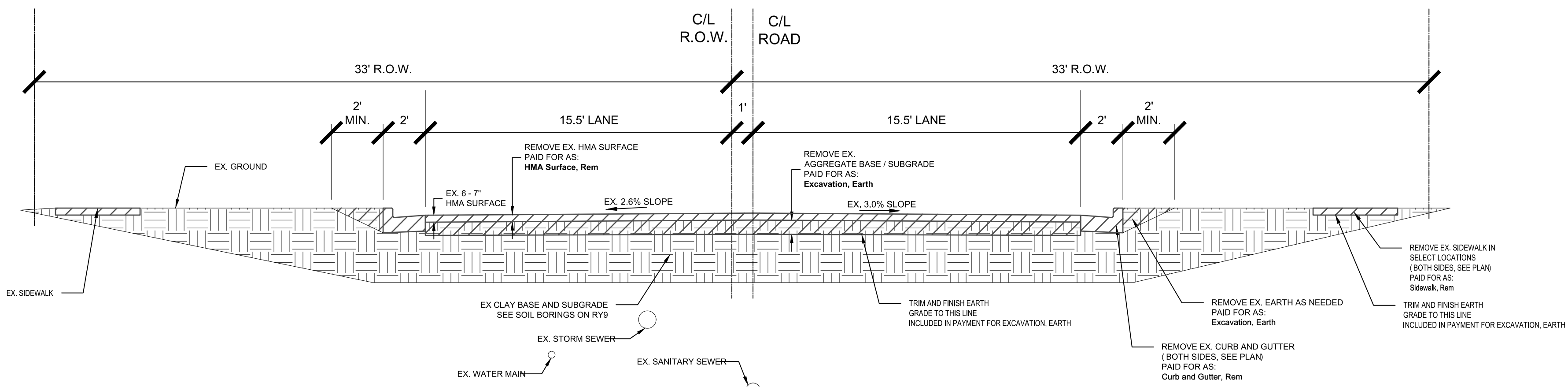
RYAN SIREI
TRAFFIC CONTROL PLAN

RY1

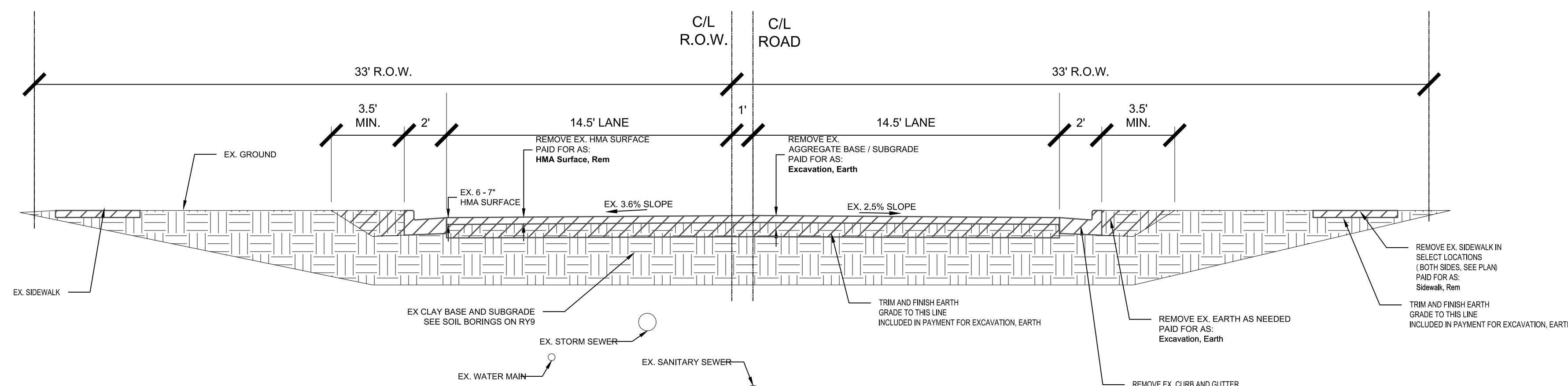
PG.



TYPICAL EXISTING CROSS SECTION - RYAN STREET
APPLIES TO STATIONS:
102+66 (B.O.P.) TO 111+63
SCALE: 1" = 4'



TYPICAL EXISTING CROSS SECTION - RYAN STREET
APPLIES TO STATIONS:
111+63 TO 113+39
SCALE: 1" = 4'



TYPICAL EXISTING CROSS SECTION - RYAN STREET
APPLIES TO STATIONS:
113+39 TO 115+45 (E.O.P.)
SCALE: 1" = 4'

CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

NO.	REVISIONS	DATE	BY	APPROVED BY	
				CHECKED BY	ORIGINAL PLAN

BENCHMARK DATA

ELEV.	DESCRIPTION

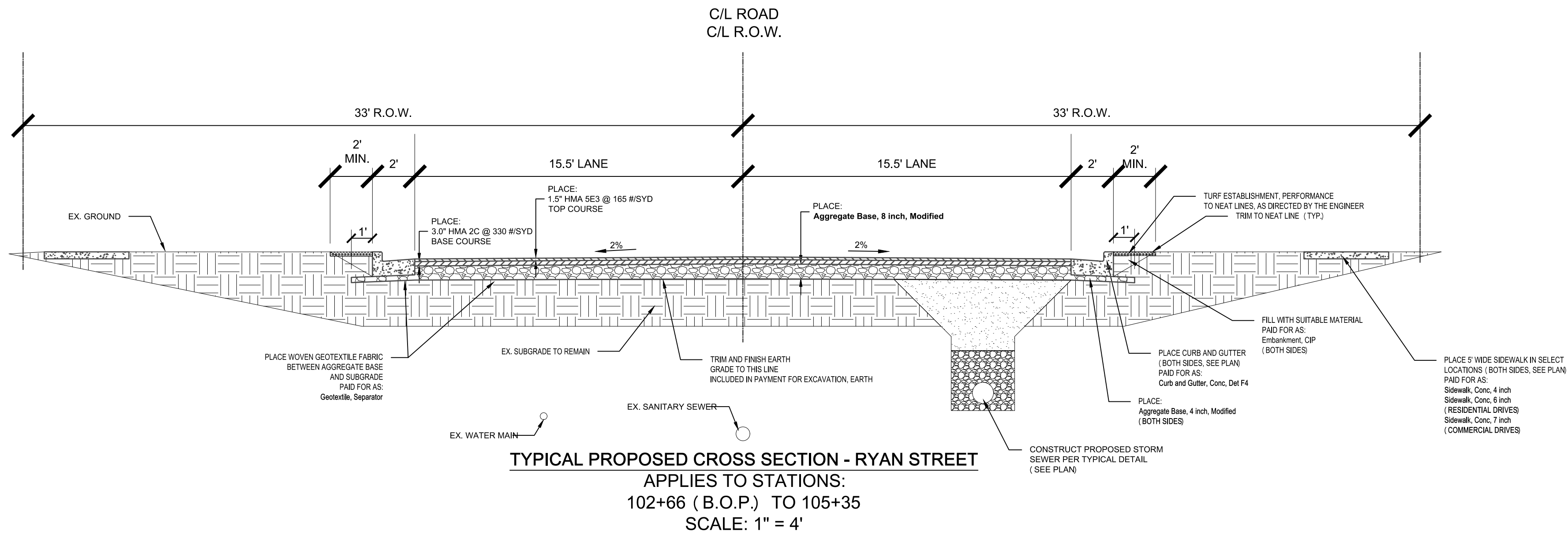
2019 STREET PROGRAM CONTRACT 3

RYAN STREET
TYPICAL CROSS SECTIONS

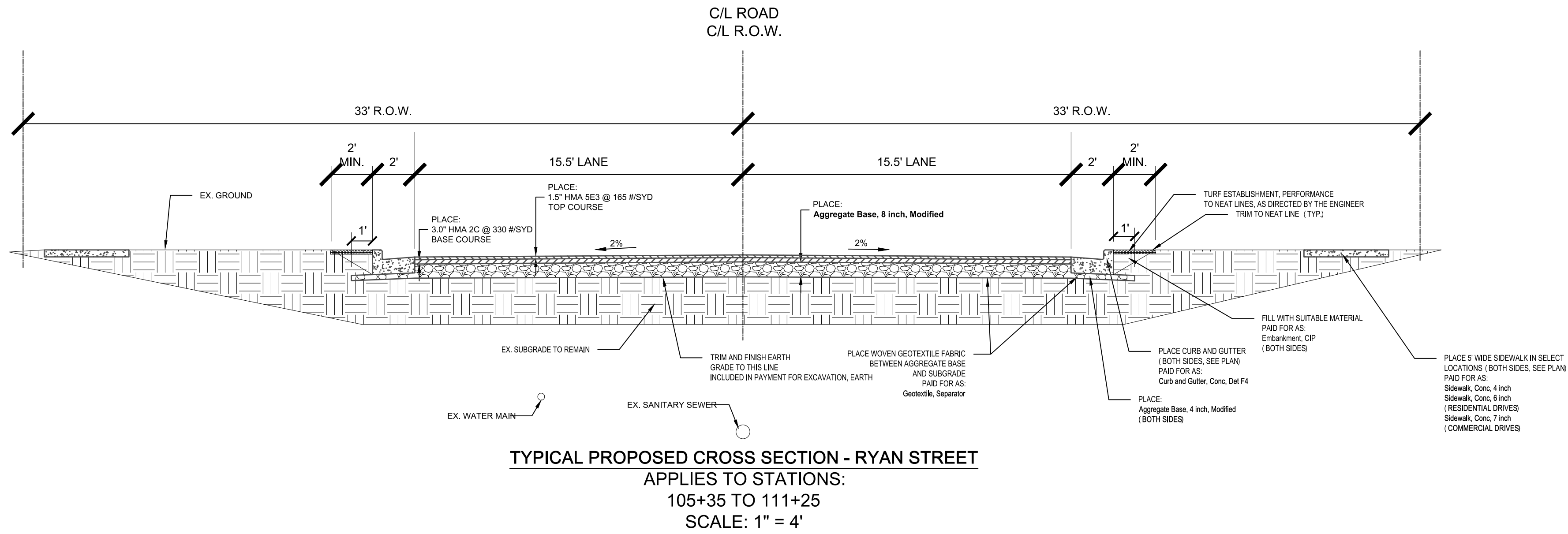
DATE PROJECT NO.

FIELD BOOK PG.

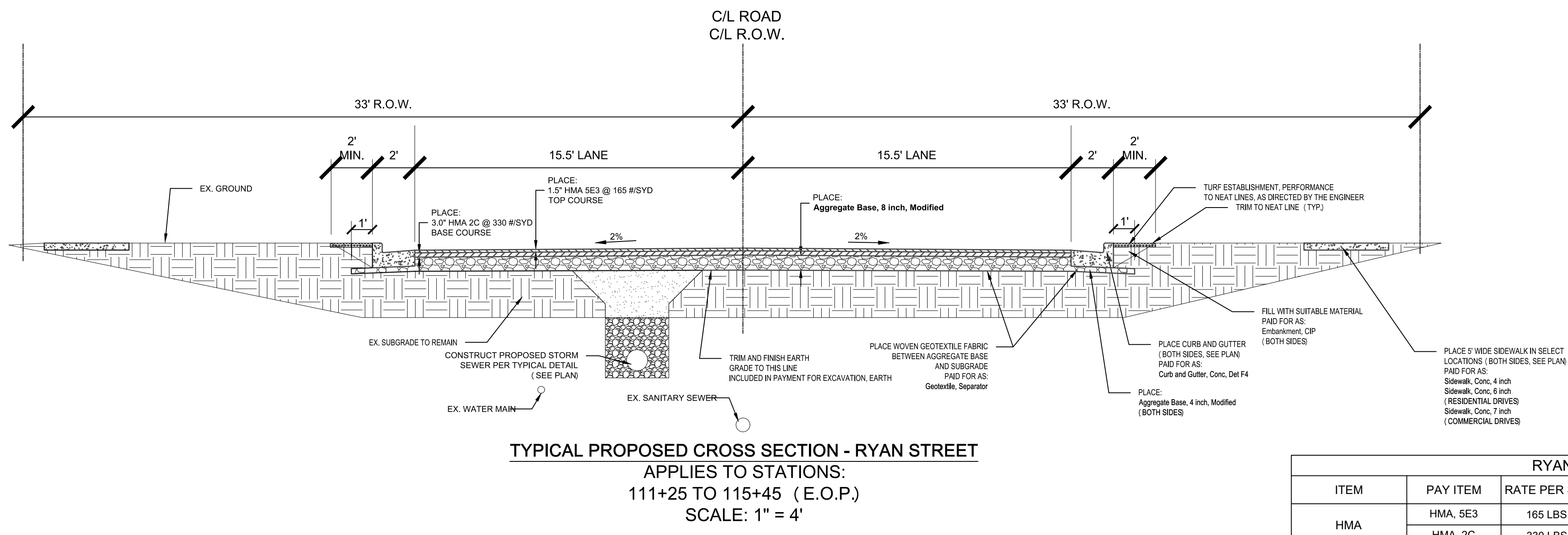
RY2



TYPICAL PROPOSED CROSS SECTION - RYAN STREET
APPLIES TO STATIONS:
102+66 (B.O.P.) TO 105+35
SCALE: 1" = 4'

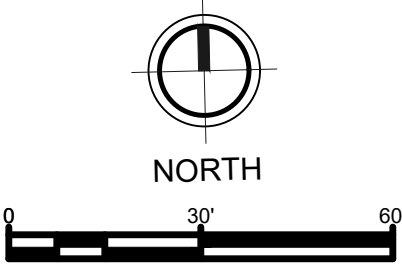
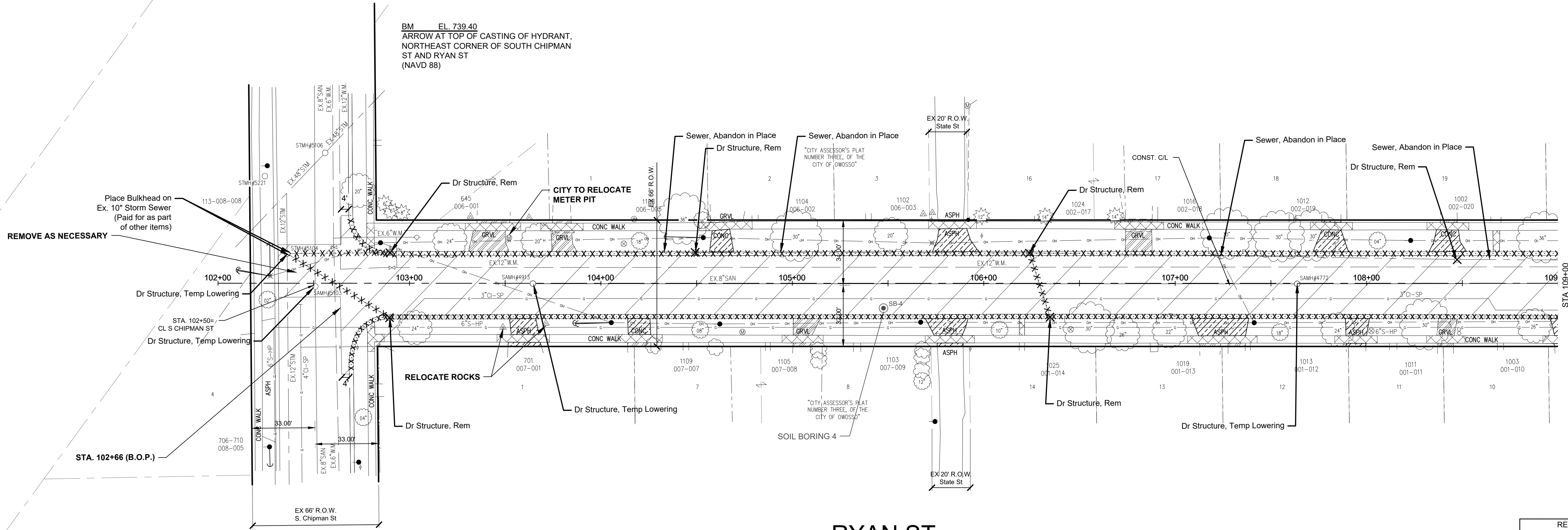


TYPICAL PROPOSED CROSS SECTION - RYAN STREET
APPLIES TO STATIONS:
105+35 TO 111+25
SCALE: 1" = 4'



TYPICAL PROPOSED CROSS SECTION - RYAN STREET
APPLIES TO STATIONS:
111+25 TO 115+45 (E.O.P.)
SCALE: 1" = 4'

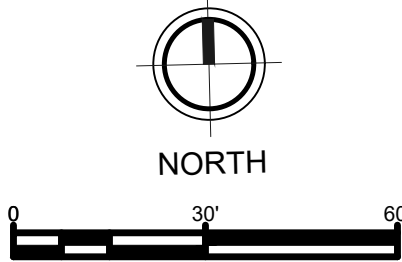
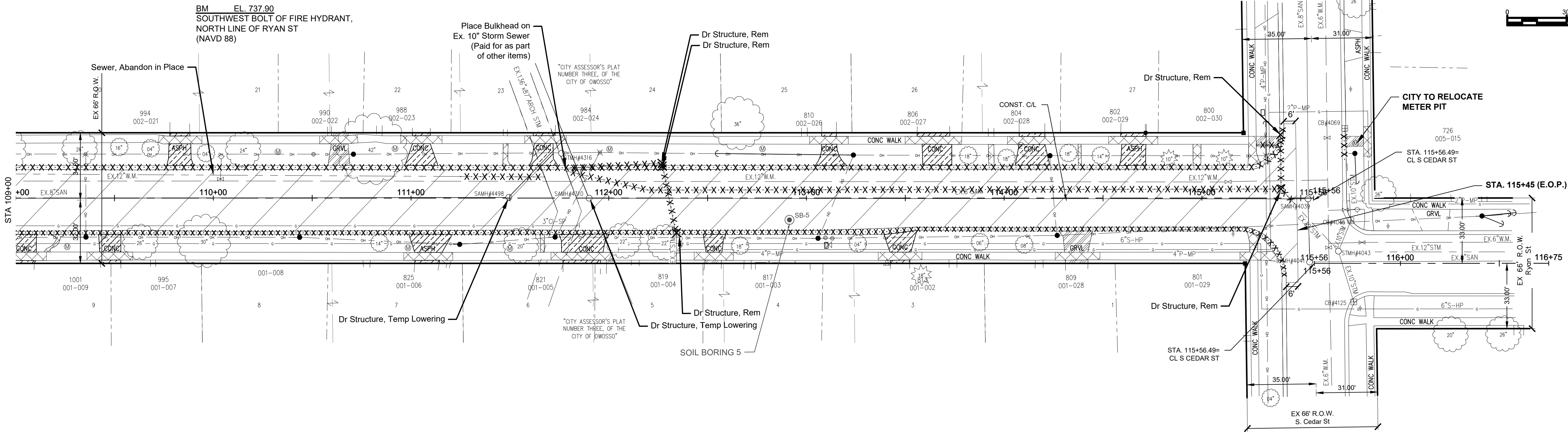
RYAN STREET - HMA APPLICATION RATE					
ITEM	PAY ITEM	RATE PER SYD	PERFORMANCE GRADE	ESTIMATED THICKNESS	REMARKS
HMA	HMA, SE3	165 LBS.	64-28	1.5"	TOP COURSE - AWI = 220 (MIN)
	HMA, 2C	330 LBS.	64-28	3"	BASE COURSE
DRIVEWAY BEHIND SIDEWALK	HAND PATCHING	330 LBS.	58-28	3"	TOP COURSE - AWI = 220 (MIN); HMA, 13A
	HAND PATCHING	330 LBS.	58-28	3"	BASE COURSE; HMA, 13A
BOND COAT		0.1 GAL.			SS-1H (FOR INFORMATION ONLY)



RYAN ST.
REMOVAL PLAN

- LEGEND**
- Curb and Gutter, Rem
 - X-X- Sewer, Rem
 - XXX Dr Structure, Rem
 - Pavt, Rem
 - Sidewalk, Rem
 - Excavation, Earth
 - ⊙ STANDARD SOIL EROSION KEY

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	WORK ITEM
11	Ea	Dr Structure, Rem
677	Ft	Sewer, Rem, Less than 24 inch
716	Ft	Sewer, Abandon in Place
2632	Ft	Curb and Gutter, Rem
389	Syd	Pavt, Rem
375	Syd	Sidewalk, Rem
1556	Cyd	Excavation, Earth
50	Cyd	Subgrade Undercutting, Type II
6	Ea	Dr Structure, Temp Lowering
4574	Syd	HMA Surface, Rem



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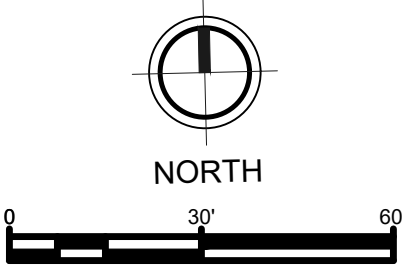
2019 STREET PROGRAM CONTRACT 3
RYAN STREET
REMOVAL PLAN

RY4

NO.	REVISIONS	DATE	BY	APPROVED BY	
				CHECKED BY	ORIGINAL PLAN

BENCHMARK DATA		FIELD BOOK PG.
ELEV.	DESCRIPTION	

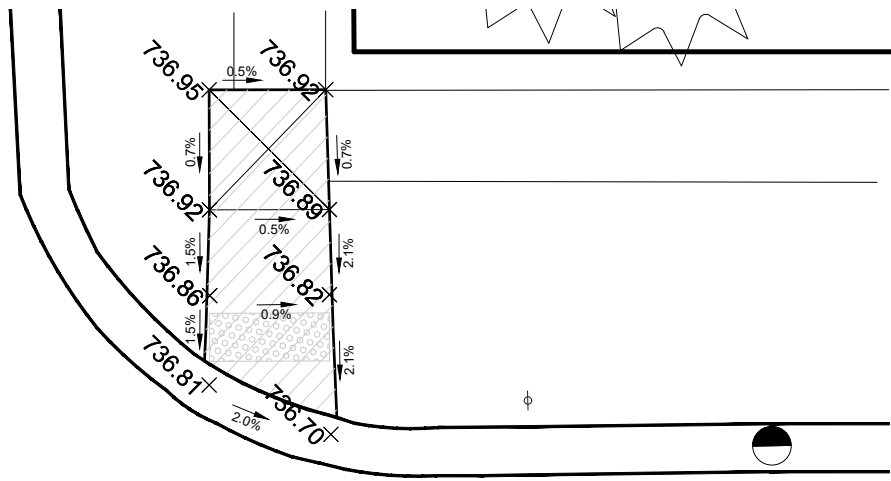
DATE PROJECT NO.



CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

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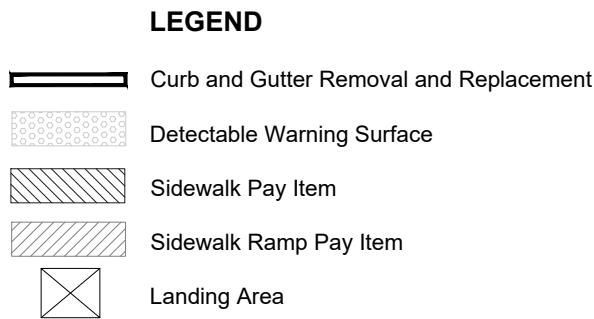
CONSTRUCTION QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	WORK ITEM
105	Cyd	Embankment, CIP
4	Ea	Erosion Control, Int. Protection, Fabric Drop
432	Syd	Aggregate Base, 4 inch, Modified
2328	Syd	Aggregate Base, 8 inch, Modified
3	Cyd	Approach, C II, LM
2328	Syd	Geotextile Separator
1	Ea	Sewer Tap, 12 inch
67	Ft	Sewer, SDR-26, 10 inch, Tr Det B, Modified
303	Ft	Sewer, SDR-26, 12 inch, Tr Det B, Modified
4	Ea	Dr Structure Cover, Adj. Case 1
4	Ea	Dr Structure, 36 inch dia, Modified
2	Ea	Dr Structure, 48 inch dia, Modified
2	Ea	Dr Structure Cover, Type EJ 1060
4	Ea	Dr Structure Cover, Type EJ 7000
3	Ea	Dr Structure Cover, Type EJ 1120 w/ Solid Gasket Sealed Cover
3	Tons	Hand Patching
414	Tons	HMA, 2C
192	Tons	HMA, SE3
255	Syd	Driveway, Nonreint Conc, 6 inch
41	Ft	Driveway Opening, Conc, Det M
1297	Ft	Curb and Gutter, Conc, Det F4
10	Ft	Detachable Warning Surface, Modified
168	Sh	Sidewalk Ramp, Conc, 7 inch
1777	Sft	Sidewalk, Conc, 6 inch
940	Syd	Turf Establishment, Performance
10	Ton	Maintenance Gravel
3	Ea	Valve Box, Adj



S CHIPMAN ST

RYAN ST

SIDEWALK RAMPS AT S CHIPMAN ST

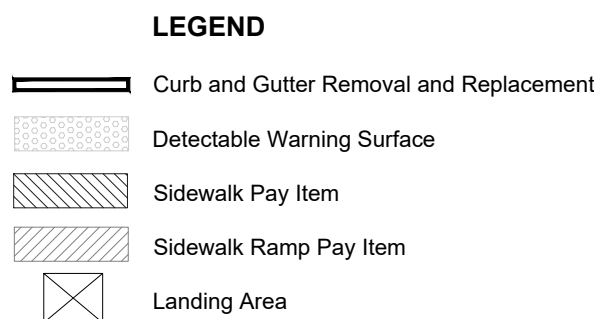
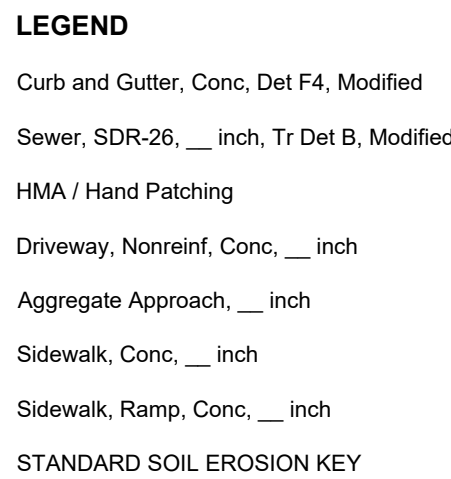
2019 STREET PROGRAM CONTRACT 3

RYAN STREET
CONSTRUCTION PLAN

FIELD BOOK
PG.

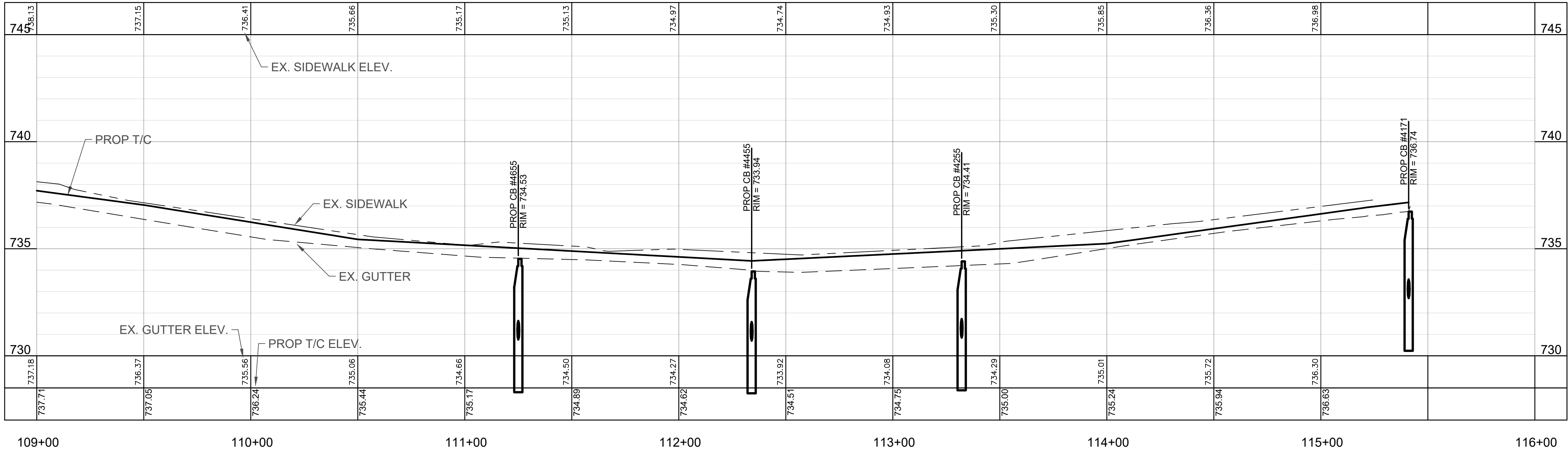
RYAN ST
CONSTR

Ry5

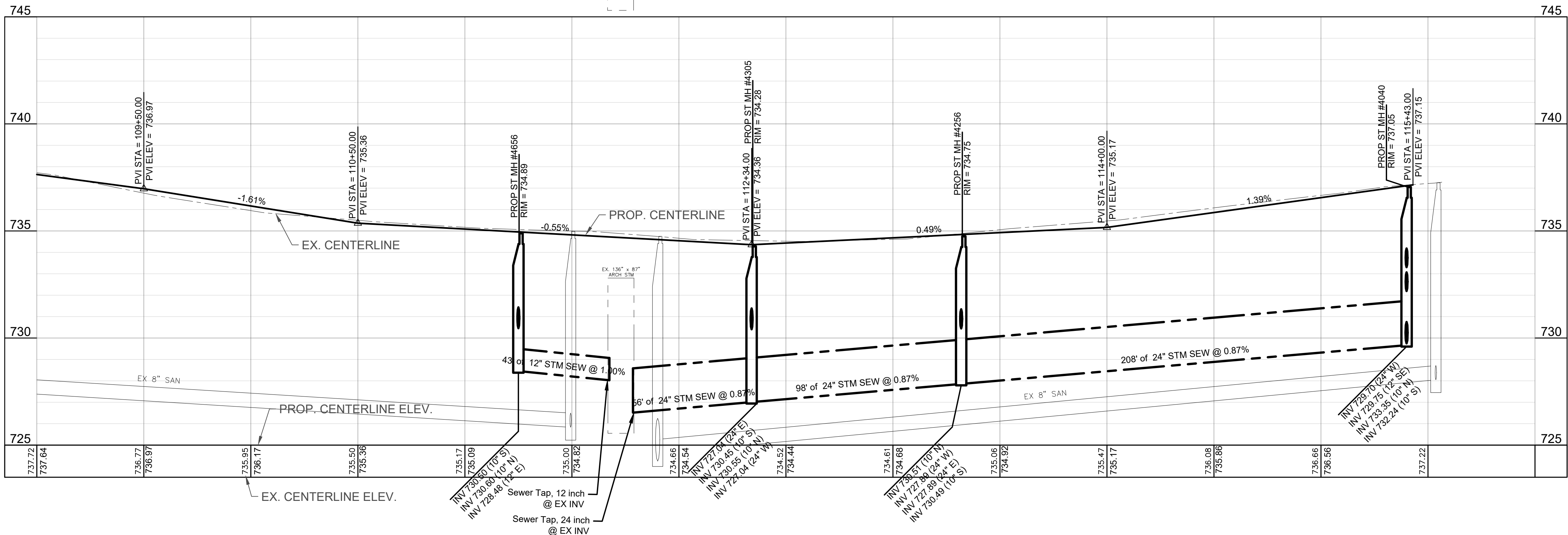


CONSTRUCTION QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	WORK ITEM
106	Cyd	Embankment, CIP
10	Ea	Erosion Control, Inlet Protection, Fabric Drop
443	Syd	Aggregate Base, 4 inch, Modified
2283	Syd	Aggregate Base, 8 inch, Modified
1	Cyd	Approach, C/I II, LM
2283	Syd	Geotextile Separator
1	Ea	Sewer Tap, 12 inch
1	Ea	Sewer Tap, 24 inch
170	Ft	Sewer, SDR-26, 10 inch, Tr Det B, Modified
53	Ft	Sewer, SDR-26, 12 inch, Tr Det B, Modified
362	Ft	Sewer, SDR-26, 24 inch, Tr Det B, Modified
2	Ea	Dr Structure Cover, Adj, Case 1
8	Ea	Dr Structure, 36 inch dia, Modified
4	Ea	Dr Structure, 48 inch dia, Modified
4	Ea	Dr Structure Cover, Type EJ 1060
8	Ea	Dr Structure Cover, Type EJ 7000
2	Ea	Dr Structure Cover, Type EJ 1120 w/ Solid Gasket Sealed Cover
4	Tons	Hand Patching
377	Tons	HMA, 2C
188	Tons	HMA, SE3
249	Syd	Driveway, Nonreinf Conc, 6 inch
1328	Ft	Curb and Gutter, Conc, Det F4
20	Ft	Detectable Warning Surface, Modified
334	Sft	Sidewalk Ramp, Conc, 7 inch
1683	Sft	Sidewalk, Conc, 6 inch
955	Syd	Turf Establishment, Performance
10	Ton	Maintenance Gravel
2	Ea	Valve Box, Adj

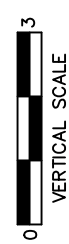
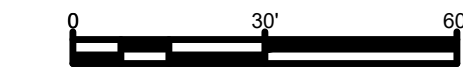
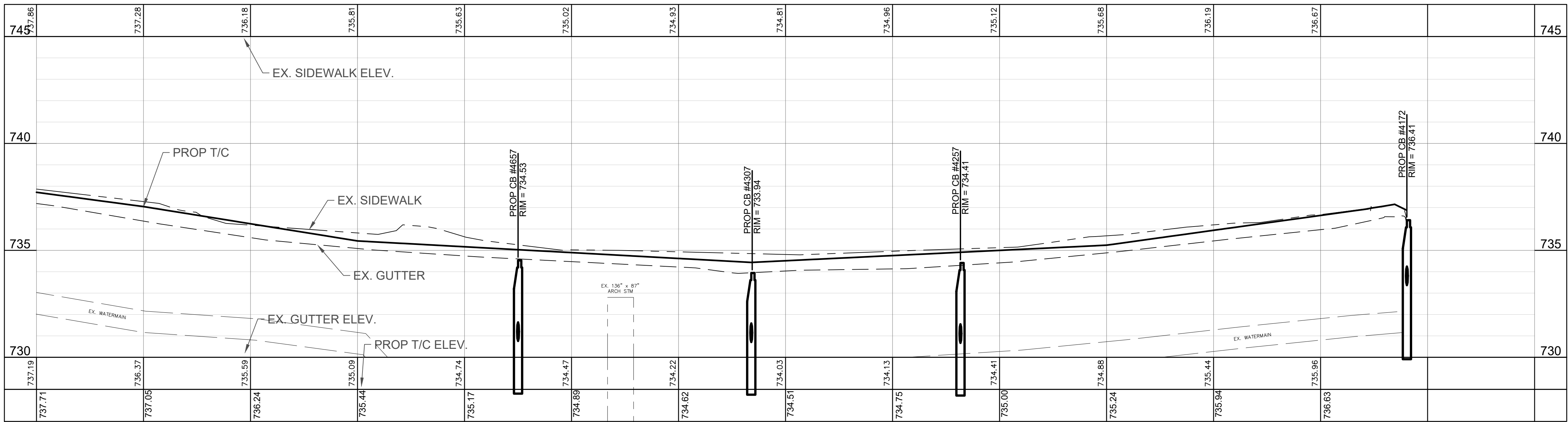
SOUTH PROFILE



CENTERLINE PROFILE



NORTH PROFILE



NO.	REVISIONS	DATE	BY
ORIGINAL PLAN		CHECKED BY	APPROVED BY

BENCHMARK DATA	DESCRIPTION
ELEV.	

