ADDENDUM No. 1

RFP No. 22-49

Ellsworth Road Sidewalk Gap Elimination

Due: July 19, 2022 at 10 A.M. (local time)

The information contained herein shall take precedence over the original documents and is appended thereto. This Addendum includes forty (40) pages.

The Proposer is to acknowledge receipt of this Addendum No. 1, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum may be considered non-conforming.

The following forms provided within the RFP Document should be included in submitted proposal:

- Attachment D Prevailing Wage Declaration of Compliance
- Attachment E Living Wage Declaration of Compliance
- Attachment G Vendor Conflict of Interest Disclosure Form
- Attachment H Non-Discrimination Declaration of Compliance

<u>Proposals that fail to provide these completed forms listed above upon proposal opening</u> may be rejected as non-responsive and may not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the RFP documents which are outlined below are referenced to a page or Section in which they appear conspicuously. Offerors are to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s)	Change
III.E. Schedule of Pricing / Pages 13-14	Revised quantities for Pay Items 170, 171, 322, 530, 540, 541, 544, 560, 701, 705, 800; Revised Pay Item names 310, 320, 800 Added Pay Items 703, 704, 805, 806
	n this change is to simply replace the outdated Pages 13 and 14 ment with the updated Pages 13-Addendum1 and 14-Addendum1
Detailed Specifications / DS-82	Added Detailed Specifications for Pay Item 703, 704

Comment: The intent with this change is to simply replace the outdated Detailed Specification page DS-82 provided in the RFP Document with the updated Pages DS82-Addendum1 provided herein. Also, add Detailed Specification For Item #704, pages DS704-Addendum1-1 to DS704-Addendum1-5.

Section/Page(s)	Change
Detailed Specifications	Added Detailed Specifications for Pay Items 805, 806
	this change is to simply add Detailed Specifications For Items #805 ddendum1-1 to DS805-Addendum1-4 provided herein.
Appendix / FEMA Flood Insurance Rate Map	Added Overall Floodplain and Floodway Mapping
Comment: The intent with	this change is to simply add the Map provided herein.
Drawing Plan / 3 of 24	Added Details.
Drawing Plan / 4 and 5 of 24	Removal Key Clarification to Remove HMA and Concrete (*Sawcut Full Depth at Removal Limits) Wetland Impact Quantities Separated on Sheets 4 and 5
Drawing Plan / 13 of 24	Corrected Pay Item in Note Regarding Coordination with Ann Arbor Railroad
Drawing Plan / 21 of 24	15" Storm Sewer and End Section specified as Concrete
Drawing Plan / 22 and 23 of 24	Added Turbidity Curtain
Drawing Plan / 23 of 24	Added Sheet 23 to Plan Set (Previously provided in Appendix)
Drawing Plans / Multiple	Added Additional Easement Information Added Floodplain/Floodway Information Added Restoration Quantities and Native Seed Quantities Updated Sidewalk Type Quantities
Comment: The intent with provided herein.	this change is to simply replace the plan set with Drawing Plans

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the RFP. Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: Will there be a traffic control plan issued?

Answer 1: No. The traffic controls will be required as indicated in the typical MDOT details

that have been included in the specifications.

Question 2: Will there be traffic control pay items added?

Answer 2: No. Payment for traffic control items is included in the lump sum payment for Minor

Traffic Devices, Maximum \$50,000.

Question 3: Who is responsible for survey and staking?

Answer 3: The City will provide survey and staking. The contractor is responsible for

requesting staking three business days in advance.

Question 4: Who is responsible for testing?

Answer 4: The City will provide construction materials and compaction testing. The contractor

is responsible for requesting testing personnel 1 business day in advance.

Offerors are responsible for any conclusions that they may draw from the information contained in the Addendum.

E. Schedule of Pricing/Cost - 20 Points

Company	

Unit Price Bid

Pay Item	<u>nu</u>		Estimated		
Code	Pay Item Description	<u>Units</u>	Quantity	Unit Price	Total Price
101	General Conditions, Max \$85,000	LS	1	\$	\$
102	Digital Audio Visual Coverage	LS	1	\$	\$
103	Project Supervision, Max. \$20,000	LS	1	\$	\$
104	Certified Payroll	LS	1	\$	\$
105	Minor Traffic Devices, Max \$50,000	LS	1	\$	\$
130	Tree Protection Fence	Ft	350	\$	\$
150	Structure, Rem Portion (Wingwall)	Ea	1	\$	\$
151	Culv, Other than Pipe, Rem	Ea	1	\$	\$
155	Culv, End, Rem, 12 to 18 inch	Ea	1	\$	\$
156	Culv, End, Rem, 36 inch	Ea	1	\$	\$
170	Remove HMA Pavement	Sft	600	\$	\$
171	Remove Concrete Curb and Gutter - Any Type	Ft	60	\$	\$
172	Remove Concrete Sidewalk or Drive - Any Thickness	Sft	1020	\$	\$
280	Backfill, Structure, CIP	Cyd	25	\$	\$
281	Substructure Conc	Cyd	25	\$	\$
282	Reinforcement, Steel	Lb	5000	\$	\$
310	Culv End Sect, Conc, 15 inch	Ea	1	\$	\$
311	Culv End Sect, Conc, 36 inch	Ea	1	\$	\$
312	Culv End Sect, Elliptical 24 inch by 38 inch	Ea	2	\$	\$
320	Culv, Cl.A, Conc, 15 inch	Ft	5	\$	\$
321	Culv, Cl A, Conc, 36 inch	Ft	8	\$	\$
322	Culv, Reinf Conc, Ellip, HE Cl A, 24 inch by 38 inch	Ft	19	\$	\$
323	Culv, Reinf Conc, Ellip, HE Cl A, 43 inch by 68 inch	Ft	16	\$	\$
510	Sidewalk Station Grading	Sta	38.02	\$	\$
511	Sidewalk Station Grading, Railroad ROW	Sta	1.01	\$	\$
520	Subgrade Undercutting, Type II	Sft	1000	\$	\$
521	Sand Subbase Course, Class II - CIP	Cyd	450	\$	\$

TOTAL THIS PAGE (Page 13-Addendum1)

(Also must be entered on Page 14-Addendum1)

\$

Pay Item Code	Pay Item Description	Units	Estimated Quantity	Unit Price	Total Price
<u> </u>	Tay item Description	<u> </u>	Quantity	Office	TotalTrice
522	21AA Limestone - CIP	Cyd	10	\$	\$
525	Maintanana Crayal	Ton	2	¢.	\$
525	Maintenance Gravel	Ton		\$	Φ
530	Handpatching	Ton	5	\$	\$
540	4 inch Sidewalk or Ramp	Sft	18500	\$	\$
340	4 IIICH Sidewaik of Kamp	Sit	16300	Φ	Ψ
541	6 inch Drive Approach, Ramp, or Sidewalk	Sft	500	\$	\$
544	8 inch Drive Approach, Ramp, or Sidewalk-High Early	Sft	850	\$	\$
344	o men brive Approach, Namp, or oldewaik-riigh Lany	Oit	000	Ψ	Ψ
560	Curb and Gutter, Conc, AA Det SD-R-1, Modified	Ft	55	\$	\$
561	Curb Ramp Opening, Conc	Ft	30	\$	\$
301	outs reams opening, conc	1	- 00	Ψ	Ψ
570	Detectable Warning, Cast In Place	Sft	30	\$	\$
580	Adjust Structure	Ea	2	\$	\$
	7 Agust Gildetalo	Lu		Ψ	*
581	Adjust Curb Box	Ea	1	\$	\$
701	Erosion Control, Silt Fence	Ft	4150	\$	\$
	Election control, out a street		1100	Ψ	¥
702	Erosion Control, Inlet Protection	Ea	2	\$	\$
703	Floating Turbidity Curtain	Ft	30	\$	\$
	3 ,				
704	Riprap, Plain	Syd	110	\$	\$
705	Mallett's Creek Airport Branch Construction - Water Diversion and SESC	LS	1	\$	\$
800	Turf Restoration	Syd	1200	\$	\$
805	Restoration of Native Seeding	Syd	800	\$	\$
806	Temporary Erosion Control Seed	Syd	250	\$	\$
810	Irrigation Systems, Protect and Maintain	LS	1	\$	\$
825	Fence, Split Rail	Ft	100	\$	\$
850	Clean-Up & Restoration, Special, Max \$14,000	LS	1	\$	\$

TOTAL THIS PAGE (Page 14-Addendum1)	\$
TOTAL FROM PAGE 13-Addendum1	\$
TOTAL BID	\$

ITEM #701 - EROSION CONTROL, SILT FENCE ITEM #702 – EROSION CONTROL, INLET PROTECTION ITEM #703 - EROSION CONTROL, FLOATING TURBIDITY CURTAIN

DESCRIPTION

The Contractor shall furnish, place, maintain, and remove soil erosion and sedimentation control measures, including but not limited to, silt fence and fabric filter protection at all drainage structures, all in accordance with all applicable City (and other governmental agencies) codes and standards, as directed by the Engineer, as detailed in the Standard Specifications, and as shown on the Plans.

This work consists of installing and maintaining inlet filters and silt fence in accordance with Section 208 of the 2020 Michigan Department of Transportation Standard Specifications for Construction and as shown on the plans. Filters in existing and proposed inlets, as well as silt fence downstream of construction area, shall be installed in order to minimize the erosion of soil and the sedimentation of water courses. The related work includes the installation, maintenance, and removal of the filters and fence, cleaning as required during the performance of the project work, removing and disposing of accumulated sediment, and replacement of filters if required by the Engineer so as to provide a properly working inlet filter and a well-drained site.

MATERIALS

The inlet protection filters shall be in accordance with the REGULAR FLOW SILTSACK® manufactured by ACF Environmental (800) 448-3636; FLEXSTORM® Style FX manufactured by Advanced Drainage Systems, Inc. (800) 821-6710; CATCH-ALL® manufactured by Price & Company (866) 960-4300, SLOT GUARD® manufactured by Ertec Environmental Systems (866) 521-0724, or Engineer approved equal.

The Contractor shall submit product data sheets and a sample of the filter material for inlet filters and silt fence for Engineer approval prior to ordering materials.

METHODS OF CONSTRUCTION

The Contractor shall install, maintain, clean, and re-install and/or replace inlet filters and silt fence in accordance with the manufacturer's specifications and as directed by the Engineer. The Contractor shall dispose of debris off-site.

MEASUREMENT AND PAYMENT

DAVITEM

Soil erosion and sedimentation control items shall be field measured and paid for at the Contract Unit Prices for their respective Contract (Pay) Items as follows:

PAY ITEM	PAY UNIT
Erosion Control, Silt Fence	Foot
Erosion Control, Inlet Protection	Each
Erosion Control, Floating Turbidity Curtain	Foot

The unit prices for these items of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

ITEM #704 MALLETT'S CREEK AIRPORT BRANCH CONSTRUCTION – WATER DIVERSION AND SESC MEASURES

DESCRIPTION

This Detailed Specification covers the requirements for working within and near Mallett's Creek Airport Branch for the purposes of constructing the proposed improvements detailed in the plans. These requirements consist of performing water diversion and installing temporary soil erosion and sedimentation control (SESC) measures related to the water diversion in accordance with all local, state, and federal requirements; in accordance with all project permits; and as approved by the Engineer.

Also included is the complete design of the Mallett's Creek Airport Branch water diversion and SESC systems; construction, operation, and maintenance of these water diversion and SESC systems; abandonment or removal of water diversion and SESC systems when no longer needed, protection of personnel, structures, and existing site features to be preserved or protected; environmental protection, and restoration. The Contractor shall be responsible for the complete design of all structures and methods proposed for water diversion and SESC of Mallett's Creek Airport Branch and the surrounding area as needed for the work as detailed on the plan sheets, including the furnishing, installation, and operation of all materials, tools, and equipment proposed for use in the work. Temporary wiring associated with this work shall comply with the applicable portions of the National Electric Code.

Water diversion and SESC systems shall be designed by a Professional Engineer registered in the State of Michigan with a minimum of seven years of documented experience in the design, installation, and operation of water diversion and SESC systems and as specified elsewhere herein.

The requirements of this Detailed Specification shall supersede all other requirements of the 2012 Michigan Department of Transportation Standard Specifications for Construction with regard to water diversion and SESC for Mallett's Creek Airport Branch and payment thereof.

METHODS OF CONSTRUCTION

All work within Mallett's Creek Airport Branch must comply with the Michigan Department of Environment, Great Lakes, and Energy Permit. In addition to all of the approved permit conditions, the Contractor shall also adhere to the following additional project requirements:

• Temporary soil erosion and sedimentation control measures shall be installed before or upon commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading or the final earth change has been

ITEM #704 MALLETT'S CREEK AIRPORT BRANCH CONSTRUCTION – WATER DIVERSION AND SESC MEASURES

completed. The Contractor shall not delay the performance of final grading and restoration for the purposes of "efficiency" in grouping together or performing the final restoration activities of other work simultaneously.

- All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by project plans and special provisions) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity, and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.
- All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets by October 10th.
- Prior to the initiation of any permitted construction activities, a sedimentation barrier shall be constructed immediately down gradient of the construction site. Sedimentation barriers shall be specifically designed to handle the sediment type, load, water depth, and flow conditions of each construction site throughout the anticipated time of construction and unstable site conditions. The sedimentation barrier shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland (non-wetland, non-floodplain) site and stabilized with seed and mulch. The sedimentation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.
- Any cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, concrete, or other acceptable barriers shall be installed to isolate all construction activity from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site.
- All cofferdam and temporary steel sheet pile shall then be removed in its entirety.
- All riprap, including gabion baskets, shall be properly sized and graded based on wave action and velocity, and shall meet the contract requirements contained elsewhere in the contract documents. The use of broken concrete is not allowed.
- All other road fill slopes, ditches, and other raw areas draining directly to the stream may be protected with riprap placed on top of geotextile fabric, sod and/or seed and mulch as may be necessary to provide effective erosion protection.
- All slurry resulting from any dewatering operation shall be discharged through a filter bag or pumped to a sump located away from wetlands and surface waters and allowed to filter through natural upland vegetation, gravel filters, or other engineered devices for a sufficient distance and/or period of time necessary to remove sediment or suspended particles. The discharge of slurry water resulting

ITEM #704 MALLETT'S CREEK AIRPORT BRANCH CONSTRUCTION – WATER DIVERSION AND SESC MEASURES

from any hydrodemolition of concrete is not allowed to enter a lake, stream, or wetland.

- All fill material and/or backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill material shall be contained in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be stabilized with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
- All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, nonfloodplain or non-bottomland), prepared for stabilization, and stabilized with sod and/or seed and mulch in such a manner to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
- If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap, temporary seed and mulch, or other acceptable temporary protection as allowed by the Engineer. The Engineer's acceptance of any temporary measure shall not be construed as an approval of the work or its effectiveness. All temporary measures shall be effective.
- No work shall be performed in the stream during periods of above-normal flows except as necessary to prevent erosion.
- All contaminated spoils excavated from the uplands or dredged from lakes or streams, including organic and inorganic soils, vegetation, and debris shall be properly disposed as detailed in the permit or as determined acceptable by the Engineer.
- No work or dredging in the water is allowed from April 1 to June 30, due to critical spawning, migration, and/or recreational use periods.

Methods used in diverting Mallett's Creek Airport Branch flow around the construction area shall be the responsibility of the Contractor and shall be approved by the Engineer. Damming and bypass pumping of Mallett's Creek Airport Branch will not be accepted as a method for water diversion. When flow is shallow (less than two feet), temporary concrete barriers or sandbags may be used to divert flow.

Equipment for water diversion shall be the responsibility of the Contractor and shall be acceptable to the Engineer. The Contractor shall furnish and construct adequate diversion systems to maintain Mallett's Creek Airport Branch flow so as to prevent damage to existing structures, proposed work, or property. Diversion equipment shall be of proper type and size for the work, be in good working condition, and be properly maintained throughout the life of the project until it is no longer needed. The Contractor shall provide all anchors and supports for diversion equipment.

ITEM #704 MALLETT'S CREEK AIRPORT BRANCH CONSTRUCTION – WATER DIVERSION AND SESC MEASURES

Any and all method(s) of water diversion and SESC proposed by the Contractor shall be effective. The Contractor is responsible for diverting flow and protecting the site in an effective, timely-manner, that will not unduly delay the work of the project. Delays due to these efforts will not be a basis of payment for additional compensation, extra work, or an extension of contract time. The Engineer's acceptance of a particular method of diversion or SESC shall not relieve the Contractor of their responsibility of performing the work in a manner that meets the requirements of this Special Provision, the Contract Documents, and all other local, state, and federal requirements.

All water that is removed from excavations, or directed away from work areas, shall be directed to existing storm sewers or other water courses as approved by the Engineer. In handling and directing this water, the Contractor is required to comply with all applicable local, state, and federal requirements regarding soil erosion and sedimentation control and shall provide filters, filter bags, check dams, or any other measure that is necessary in order to comply with the applicable laws and ordinances.

Shop Plans and Working Drawings

The Contractor shall submit to the Engineer a detailed plan, calculations and description of the proposed method of water diversion and soil erosion and sedimentation control. The work of preparing the detailed plans, calculations, and descriptions of the proposed work shall be in accordance with Section 104.02 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. Plans, calculations and descriptions shall be sealed by a Professional Engineer registered in the State of Michigan.

For each submittal or resubmittal, the Contractor shall allow at least 14 calendar days from the date of the submittal to receive the Engineer's acceptance or request for revisions. The Engineer's comments shall be incorporated into the submitted plans, calculations and descriptions. The Engineer's acceptance of the proposed plans are required before beginning the work. Resubmittals may take less than 14 calendar days depending upon the magnitude of revisions requested. Required revisions will not be a basis of payment for additional compensation, extra work, or an extension of contract time. The Contractor shall include time for this entire review process in his/her CPM network schedule.

ITEM #704 MALLETT'S CREEK AIRPORT BRANCH CONSTRUCTION – WATER DIVERSION AND SESC MEASURES

Measurement and Payment

The completed work shall be paid for at the contract unit price for the following contract item (pay item):

Contract Item (Pay Item)

Pay Unit

Mallett's Creek Airport Branch Construction

– Water Diversion and SESC MeasuresLump Sum

Mallett's Creek Airport Branch Construction shall include all labor, material, and equipment required for designing, furnishing, installing, maintaining, and operating, complete water diversion and soil erosion and sedimentation control systems as necessary to complete the work, and shall include, but not be limited to; the preparation of shop plans, design drawings, and calculations; placement and removal of diversion equipment needed; protection of existing or proposed improvements; miscellaneous restoration needed to resume construction when the creek construction operations are completed; furnishing, maintaining, and removing when no longer needed, all soil erosion and sedimentation control devices associated with the work in Mallett's Creek Airport Branch; complying with all applicable local, state, and federal environmental and soil erosion and sedimentation control measures; and, all other items necessary to complete the work, whether specifically mentioned or implied.

Payment for permanent soil erosion and sedimentation controls along Mallett's Creek Airport Branch are not included in this item and shall be paid for as detailed elsewhere in the project plans and detailed specifications.

ITEM #805 – RESTORATION OF NATIVE SEEDING ITEM #806 – TEMPORARY EROSION CONTROL SEED

DESCRIPTION

This work shall consist of furnishing and applying Engineer- approved weed control and herbicide materials; fine grading, grooming, and preparing areas for temporary and permanent seeding; furnishing and placing seed where Temporary Erosion Control and Native Seed is called for on the plans or required to be placed to stabilize prepared areas; and, furnishing and placing mulch or mulch blankets. All work shall be performed in accordance with Sections 205 and 816 of the 2012 Michigan Department of Transportation Standard Specifications for Construction except as provided herein.

MATERIALS

Native seed shall be fresh, clean, new seed of native plant material of genotypes from the north central states only (IL, IN, MI, OH) and from a recognized nursery of this region. Seed mix shall be composed of seed with the purity, germination, and proportions by acre, as indicated on the drawings.

Seed weights listed for native seed mixes are shown as pure live seed (PLS) and indicate the total amount of fresh, new crop seed per acre for all species listed.

The native seed mixture shall be by weight and proportions as shown on the plans.

Seed sources for all the native seed are available through The Michigan Wildflower Farm, Portland, Michigan, (517) 647-6010; JFNew, Walkerton, IN (574) 586-2412; or LaFayette Home Nursery, LaFayette IL, (309) 995-3311, or approved substitution.

Mulch for native seed shall be clean chopped straw from oats to protect seeded areas from invasive species frequently found in common straw. No other type of mulch is acceptable. It shall be natural and suited for horticultural use and not contain lumps, roots or other foreign matter over one inch in diameter. It shall be free of seeds and noxious weeds. Mulch shall not contain more than 35% moisture by weight. Mulch is not necessary under straw mulch blanket.

Seed for Temporary Erosion Control shall be Annual Rye, Lolium multiflorum.

Mulch for Temporary Erosion Control Seed shall be Straw Mulch Blanket.

Topsoil shall be 4 inches furnished as specified in MDOT section 917.

SUBMITTALS

The Contractor shall notify the Engineer of the native seed source no later than thirty days after the contract award. The Contractor shall review native seed sources with Engineer prior to ordering and shall submit an invoice following purchase and delivery of the seed. The Contractor shall submit to the Engineer a plan and schedule for seeding at least four weeks prior to the scheduled commencement of work.

ITEM #805 – RESTORATION OF NATIVE SEEDING ITEM #806 – TEMPORARY EROSION CONTROL SEED

METHODS OF CONSTRUCTION

Seeding shall be performed in accordance with the requirements of Section 816 of the 2012 MDOT Standard Specifications for Construction except as modified herein.

1. Delivery, Storage and Handling

Seed shall be delivered in original sealed containers, labeled in accordance with State Regulations and the US Department of Agriculture Rules and Regulations under the Federal Seed Act. Seed shall be stored in such a manner that it will be protected from damage by heat, moisture, rodents, or other causes.

2. Seeding Time

Native Seed areas shall be seeded after October 1st, but before November 30th, or prior to the ground freezing (as determined by the Engineer) "Fall Seeding Time"; or, after frost has left the ground in the spring until June 1 "Spring Seeding Time."

If final grading and seed bed preparation is completed between Spring and Fall Seeding Time, Temporary Erosion Control Seeding shall be placed immediately following completion of final grades.

Temporary Erosion Control Seed shall be placed immediately after final grading and seed bed preparation is completed in areas shown on the plans.

3. Sowing Temporary Erosion Control Seed

Temporary Erosion Control Seed shall be placed immediately after final grading at a rate of 200 pounds per acre in areas shown on the plans, even in areas with a slope of 1:3 or greater.

Place Straw Mulch Blanket on top of Temporary Erosion Control Seed immediately after sowing.

4. Preparation of Earth Bed and Sowing Native Seed

Prepare Native Areas for seeding in accordance with Section 816.03.A.1 of the MDOT 2012 Standard Specifications for Construction.

Place topsoil in accordance with Section 816.03.A.2 except that the seed bed shall be graded and groomed to the contours as shown on the plans and all rocks and stones of 1" diameter or greater, roots, brush, litter, and any other deleterious matter shall be removed and properly disposed of off-site.

ITEM #805 – RESTORATION OF NATIVE SEEDING ITEM #806 – TEMPORARY EROSION CONTROL SEED

All slopes and graded areas shall be considered to be Class A Slopes and shall be prepared in accordance with the requirements of Section 205.03.N.

The Contractor shall not fertilize any native seed bed or planting area.

Do not sow seed in planting areas where standing water is present. Remove excess water.

Sow native seed at the rate in pounds per acre indicated on the drawings. Sow seed into soil in several directions to avoid uniform rows. Seed shall be sown with mason sand as a carrier. The mixture of seed to carrier shall consist of equal parts seed to sand. Lightly rake seeded areas to incorporate seed into soil and to cover the seed within twelve hours, if conditions permit, or as soon thereafter as practicable.

a. Methods of seeding

For small areas and on slopes 1:3 or steeper seeding shall be by hand or broadcast seeder on a calm day (winds between 0 and 5 mph). Sow seed evenly. Firm soil with a roller or other methods as approved by the Engineer in order to provide consistent soil and seed contact. For large areas, and on slopes flatter than 1:3, seed shall be drilled into the soil with a native seed drill moving in several directions, perpendicular and parallel to the contours, making two or three passes over each area to avoid uniform rows of grass and forbs. Rolling of the seedbed shall not be required with if a native seed drill is used.

The Engineer may approve the use of hydroseeding equipment on large areas. Should the Contractor elect to propose hydroseeding as an alternative method of seeding, they shall submit their request and description of all equipment and materials to be used to the Engineer for evaluation a minimum of 30 days prior to the scheduled start date.

If the use of hydroseeding equipment is approved by the Engineer, the equipment shall meet the following requirements:

- 1. The hydraulic seeding equipment shall include a pump rated and operated at no less than 100 gallons per minute and no less than 100 pounds per square inch pressure.
- 2. A minimum of 1,000 gallons of seed-mulch slurry mixture shall be used. The tank shall have a mechanical agitator powerful enough to keep all material in a uniform suspension in the water.
- 3. Calibration of the hydraulic seeding equipment shall be accurate and to the satisfaction of the Engineer. When hydroseeding, the nozzle must be

ITEM #805 – RESTORATION OF NATIVE SEEDING ITEM #806 – TEMPORARY EROSION CONTROL SEED

no closer than 15 ft. but no further than 30 ft. from the soil surface and shall be maintained at a 45-degree angle to the ground during seeding.

- 4. Paper as a mulch shall not be used.
- 5. Mulch made from clean chopped straw from oats shall be placed over all native seeded areas at a rate of 2 tons per acre. Straw Mulch blankets shall be placed over all temporary erosion control seeded areas.

If final grading was completed prior to Native Seed Seeding Time and erosion control seed has germinated and is growing, mow erosion control grasses to a height of 3 inches, remove mulch blanket, and prepare seed bed in accordance with Section 816.03.A.1 and the requirements of this Detailed Specification, and furnish and sow native seed as specified herein. The Contractor shall then re-mulch the areas in accordance with the requirements of this specification.

MEASUREMENT AND PAYMENT

The completed work as described will be measured and paid for at the contract unit prices using the following contract items (pay items).

Contract Item (Pay Item)

Pay Unit

Native Seeding Mixture, Complete will be measured at the contract unit price per square yard, which price shall be payment in full for all labor, materials, seed, mulch, and equipment needed to complete the work as detailed herein.

Temporary Erosion Control Seeding Mixture, AR, Complete will be measured at the contract unit price per square yard, which price shall be payment in full for all labor, materials, seed, mulch blankets, and equipment needed to complete the work as detailed herein.

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Michigan State Plane South zone 6401 (FIPSZONE 2113). The **horizontal datum** was NAD83. Differences in datum, spheroid, projection or state plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services NOAA, N/NGS12 National Geodetic Survey SSMC-3, #9202 1315 East-West Highway

scale of 1:100 from photography dated 2002.

Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information

Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at http://www.ngs.noaa.gov/.

Base Map information shown on this FIRM was derived from the Washtenaw County Geographic Information Systems Department at a

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

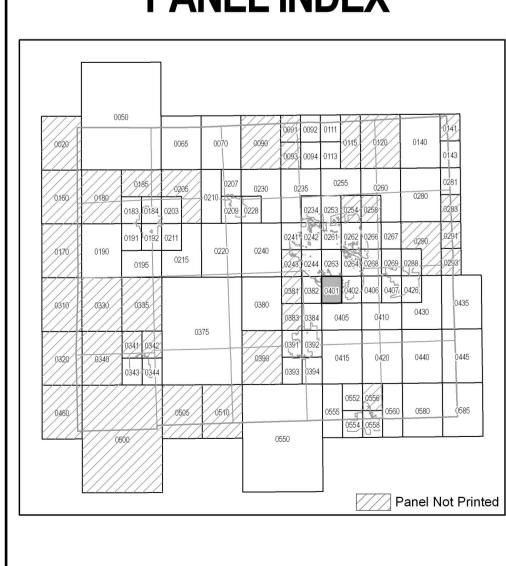
Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

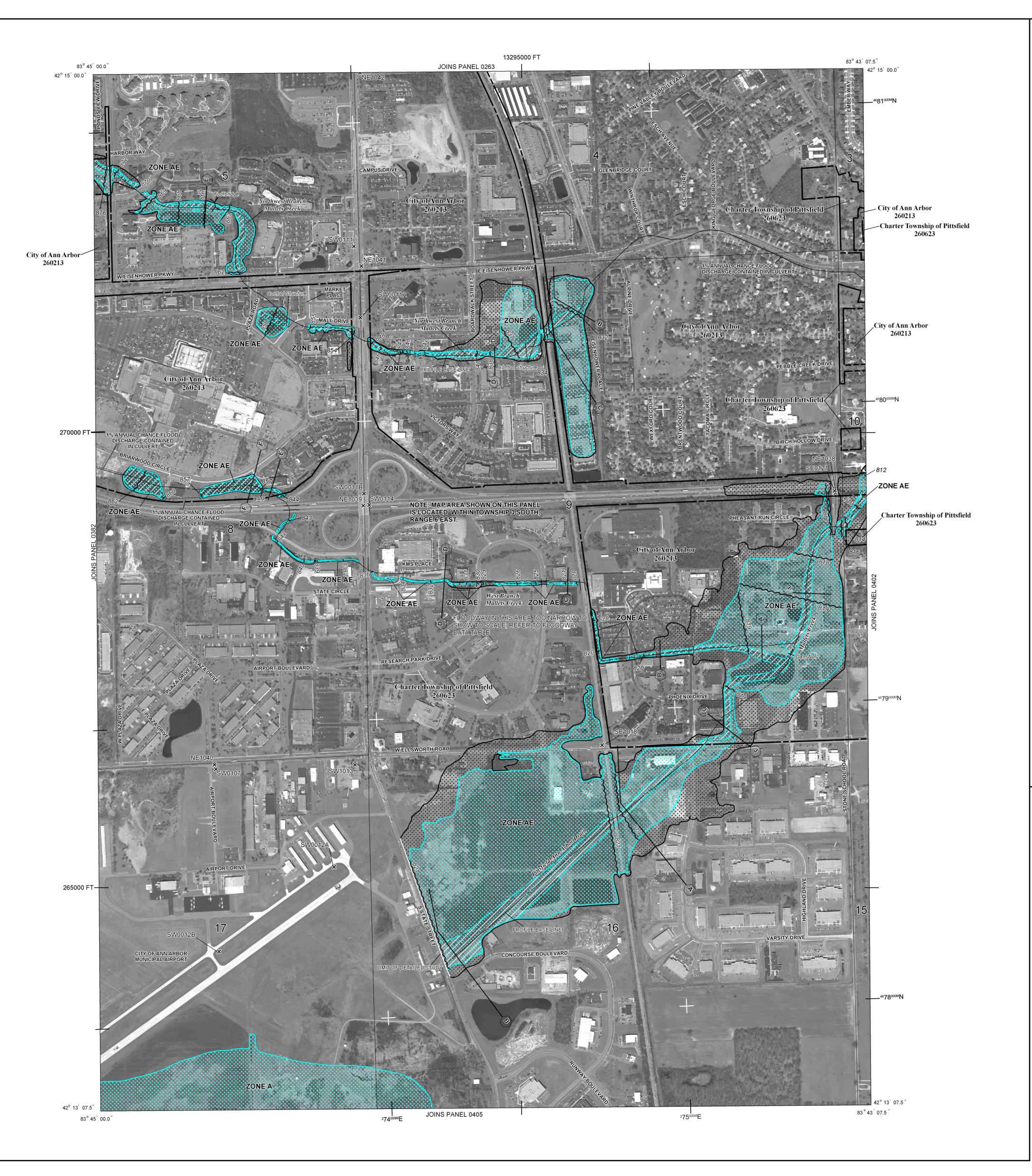
For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

The **profile base lines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile base line**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

PANEL INDEX





LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard may include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base

Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH

Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO

Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain);

Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or

Coastal flood zone with velocity hazard (wave action); no Base Flood

ZONE A99

Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE V

ZONE X

ZONE D

ZONE X

Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance

OTHER AREAS

Areas determined to be outside of the 0.2% annual chance floodplain.

Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary

Floodway Boundary
Zone D Boundary

CBRS and OPA boundary

Boundary Dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

Base Flood Elevation line and value; elevation in feet*

(EL 10)

Base Flood Elevation line and value; elevation in feet*

Base Flood Elevation value where uniform within zone; elevation in feet*

(23) - - - - - - (23) Transect line

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

4587000 M

1000-meter Universal Transverse Mercator grid values, zone 17

5000-foot grid ticks: Michigan State Plane South Coordinate

2250000 FT

System, 6401 zone (FIPSZONE 2113) Lambert Conformal Conic

KA0015

KA0015

Bench mark (see explanation in Notes to Users section of this FIRM panel)

M1.5

MAP REPOSITORY

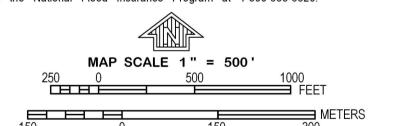
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP APRIL 3, 2012

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



PANEL 0401E

FIRM
FLOOD INSURANCE RATE MAP
WASHTENAW COUNTY,
MICHIGAN

(ALL JURISDICTIONS)

PANEL 401 OF 585

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

 COMMUNITY
 NUMBER
 PANEL
 SUFFIX

 ANN ARBOR, CITY OF
 260213
 0401
 E

 PITTSFIELD,

 CHARTER TOWNSHIP OF
 260623
 0401
 E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject



26161C0401E EFFECTIVE DATE APRIL 3, 2012

MAP NUMBER

||||||| Federal Emergency Management Agency



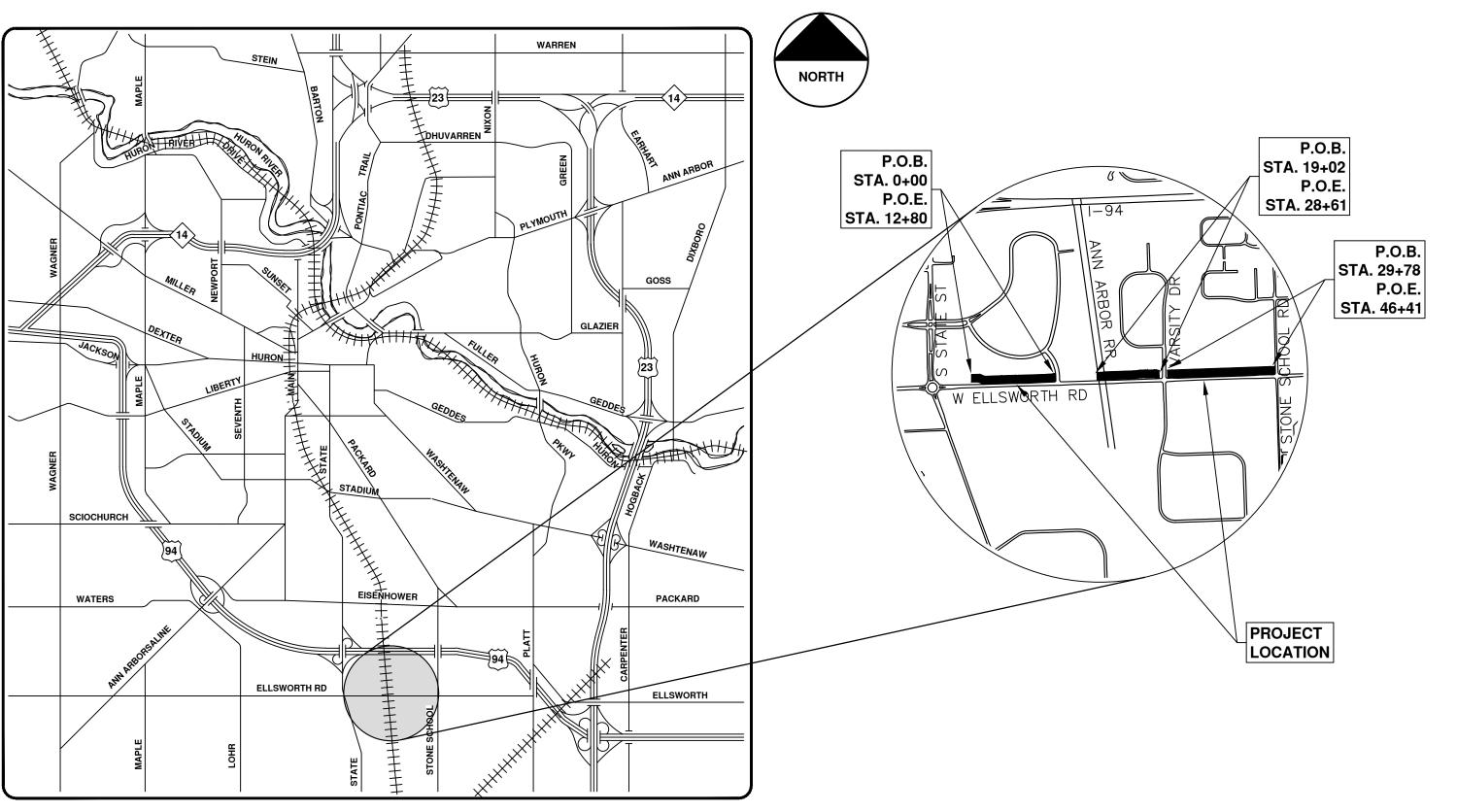
CITY OF ANN ARBOR ENGINEERING

REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR

ELLSWORTH RD SIDEWALK GAP ELIMINATION

RFP 22-49, FILE No. 2022007

	SHEET LIST TABLE
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	STANDARD NOTES
3	LEGEND AND DETAILS
4 - 5	REMOVALS - WEST OF RESEARCH PARK DR.
6	REMOVALS - EAST OF RAILROAD
7 - 9	REMOVALS - VARSITY DR. TO STONE SCHOOL RD.
10 - 12	PROPOSED SIDEWALK - WEST OF RESEARCH PARK DR.
13 - 16	PROPOSED SIDEWALK - EAST OF RAILROAD
17 - 20	PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL RD.
21 - 24	PROPOSED STORM SEWER



VICINITY MAP

THERESA BRIDGES, P.E. - MI LICENSE No. 6201052180 **PROJECT MANAGER**

6 / 22 /2022





CONSTRUCTION NOTES:

- DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY, AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WHEN APPROVED BY THE ENGINEER. VEHICULAR AND PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL NECESSARY DRIVEWAY CLOSURES WITH THE PROPERTY OWNER(S) AND RESIDENT(S) IN THE AREAS OF CONSTRUCTION.
- 2. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND SERVICE LEADS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 3. LOCATION OF UTILITIES AS DEPICTED ON THE PLANS IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND ADJUST DEPTH OF CONFLICT UTILITIES ACCORDINGLY. ANY DAMAGE TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID AND/OR REPAIR AS NECESSARY.
- 4. DURING NON-WORKING HOURS NO TRENCH SHALL REMAIN OPEN UNLESS APPROVED BY THE ENGINEER; ANY OPEN TRENCH SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
- 5. THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS SHALL BE APPROVED BY THE ENGINEER. ALL MATERIAL STOCKPILES SHALL BE MAINTAINED SUCH THAT DRAINAGE AND SIGHT DISTANCES ARE NOT ADVERSELY IMPACTED. SOIL EROSION REQUIREMENTS SHALL APPLY TO ALL MATERIAL STOCKPILES.
- 6. ALL EXCAVATION REQUIRED FOR PROJECT GRADING WITHIN THE PROJECT LIMITS, INCLUDING PROPOSED PAVEMENT, SIDEWALK, AND SIDEWALK RAMPS SHALL BE INCLUDED IN "STATION GRADING,____.
- 7. EXCAVATON AND BACKFILL BEHIND CURB AND GUTTER SHALL BE INCLUDED IN "STATION GRADING, ____." ALL BACKFILL UNDER PROPOSED CONCRETE PAVEMENTS SUCH AS DRIVE APPROACHES, RAMPS, SIDEWALK, ETC., SHALL BE MDOT CLASS II GRANULAR MATERIAL, COMPACTED TO 95% OF ITS MAX. DRY DENSITY AND WILL BE PAID FOR AS "SAND SUBBASE COURSE, CLASS II, C.I.P." BACKFILL FOR OTHER AREAS MUST BE APPROVED BY THE ENGINEER AND COMPACTED TO 95% OF ITS MAX. DRY DENSITY. NO PAYMENT WILL BE MADE FOR SUB-BASE OR AGGREGATE BASE THAT EXTENDS BEYOND 12" BEHIND THE BACK OF CURB OR PROPOSED SIDEWALK EDGE. REFERENCE THE TYPICAL CROSS SECTIONS.
- 8. ALL CURB, SIDEWALK, AND DRIVEWAY APPROACH REMOVALS SHALL BE APPROVED BY ENGINEER BEFORE THE WORK IS PERFORMED. ALL CONCRETE AND BITUMINOUS MATERIALS SHALL BE SAW-CUT FULL-DEPTH AT THEIR REMOVAL LIMITS PRIOR TO REMOVAL. SAW-CUTTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE "REMOVAL" ITEMS OF WORK.
- 9. PLACE 4" (MINIMUM) OR 6" (MINIMUM) THICKNESS CLASS II GRANULAR MATERIAL COMPACTED TO 95% OF ITS MAX. DRY DENSITY UNDER CONCRETE SIDEWALK AS SHOWN ON THE DETAILS. THIS WORK SHALL BE INCLUDED IN THE CONTRACT ITEMS "SAND SUBBASE COURSE, CLASS II, C.I.P."
- 10. A UNIFORM COAT(S) OF CURING COMPOUND SHALL BE APPLIED TO FRESHLY PLACED CONCRETE ACCORDING TO THE STANDARD SPECIFICATIONS AND DETAILED SPECIFICATIONS REGARDLESS OF THE DIFFICULTY INVOLVED. THE CONTRACTOR SHALL TAKE CARE TO PREVENT OVERSPRAY WHEN APPLYING CURING COMPOUND. SEVERAL DIFFERENT METHODS MAY NEED TO BE DEVELOPED TO PROTECT VARIOUS SITUATIONS, BUT ALL METHODS USED TO PREVENT OVERSPRAY OF THE CURING COMPOUND SHALL BE COMPLETELY EFFECTIVE. METHODS USED SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE. HOWEVER APPROVAL OF A METHOD DOES NOT GUARANTEE SUCCESS OR ACCEPTABILITY. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR COMPLYING WITH THESE REQUIREMENTS.
- 11. "NO PARKING" SIGNS SHALL BE INSTALLED BY THE CONTRACTOR AT LOCATIONS AS APPROVED OR DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.
- 12. POSTAL DELIVERY AND SOLID WASTE PICKUP SERVICE AS WELL AS EMERGENCY VEHICLE ASSESSIBILITY SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
- 13. WHERE STREET CURBS ARE UNDERMINED DUE TO CONSTRUCTION ACTIVITIES, THEY SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF SOIL EROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA UNTIL THE FULL COMPLETION OF THE PROJECT. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
- 15. ALL STRUCTURES SHALL RECEIVE NEW CASTINGS AS DIRECTED BY THE ENGINEER, AS SPECIFIED ON THE STANDARD CASTING SCHEDULE. THE EXISTING CASTINGS ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL DELIVER TO CITY OF ANN ARBOR PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL
- 16. EXISTING STREET NAME, GUIDE, AND REGULATORY SIGNS, AND MAILBOXES WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED PRIOR TO CONSTRUCTION, STORED IN A MANNER WHICH WILL PREVENT DAMAGE, AND RE-SET IN LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN "STATION GRADING"

- NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.
- 1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- 2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CHAPTER 55 ANN ARBOR UNIFIED DEVELOPMENT CODE. CITY OF ANN ARBOR STANDARDS DIVISION VII. THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- 5. ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION. SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
- 7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- 8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- 9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLATIVE AS REQUIRED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- 11. THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
- 12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

1. THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM

- 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. PERFORM STATION GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.4. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.5. COMPLETE ALL FINE GRADING.
- 1.6. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.7. REFER TO PLANS FOR PERMANENT SITE STABILIZATION.
- 1.8. CLEAN OUT STORM SEWER SYSTEMS.
- 1.9. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.10. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.
- THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$10,000
- ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN:

ELLSWORTH RD.

- MfA METAMORA SANDY LOAM, 0 TO 4 PERCENT SLOPES
- NaB NAPPANEE SILTY CLAY LOAM. 2 TO 6 PERCENT SLOPES
- Sb SEBEWA LOAM, DISINTEGRATION MORAINE, 0 TO 2 PERCENT SLOPES

ESTIMATE OF EXCAVATION AND FILL FROM EXISTING TO FINAL GRADE:

EXCAVATION = 62.49 CY, FILL = 457.32 CY

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR DDIOD TO THE DECIMINAC OF CONSTRUCTION

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR ENGINEERING
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE

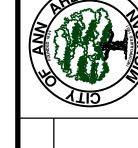
CONTACT INFORMAT	ION	
PUBLIC UTILITIES	OWNER	CONTACT
WATER		
SANITARY		
STORM	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD	(734) 794–6350
FORESTRY	ANN ARBOR, MI 48108	
SIGNS SIGNALS STREET LIGHTS		MARK MORENO (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSK (734) 544–7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4447
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SOUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	MARC GOODELL (313) 405-0574
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016
FIBER OPTIC	WINDSTREAM 1295 S LINDEN ROAD, SUITE B FLINT, MI 48532	GREG SERICH (810) 244-3500
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188

		PROJECT NAME BENCHMARKS
BM#	ELEV	DESCRIPTION
1	827.818	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS 25'± E. OF BELLE TIRE BLDG.
2	821.877	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS SECOND POLE W. OF DRIVE FOR CAR WASH
3	819.682	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS 110'± E. OF CL OF DRIVE FOR CAR WASH
4	821.412	TOP OF NW VALVE ON F. HYD ON S. SIDE OF ELLSWORTH. 170'± E. OF CL OF DRIVE FOR CAR WASH
5	822.122	TOP OF SE ANCHOR BOLT FOR MAST ARM POLE AT NW CORNER OF RESEARCH PARK DR. AND ELLSWORTH.
6	823.624	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE HAS EMERGENCY SIREN ON IT AND IS 300'± E. OF RR TRACKS
7	819.576	TOP OF SE ANCHOR BOLT FOR MAST ARM POLE AT NW CORNER OF ELLSWORTH AND VARSITY DR.
8	816.454	TOP, CENTER OF 36" RCP DRAIN PIPE ON N. SIDE OF ELLSWORTH
9	821.823	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS 25'± W. OF EAST DRIVE FOR EOTECH BLDG
10	826.066	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH IN FRONT OF AVL BLDG
11	837.087	STEAMER VALVE ON F. HYD AT NW CORNER OF ELLSWORTH AND STONE SCHOOL RD. (BM#2 FROM STONE SCHOOL RD TOPO, BK 1110 PG 4)
12	837.087	TOP OF NE VALVE ON F. HYD AT SE CORNER OF ELLSWORTH AND STONE SCHOOL RD. (BM#1 FROM STONE SCHOOL RD TOPO, BK 1110 PG 4)
1018	828.700	STATION 1018 IS LOCATED ON THE NORTH SIDE OF ELLSWORTH RD WEST OF THE ANN ARBOR RAILROAD TRACKS. THE STATION IS LOCATED 25.9' WEST OF THE WEST RAIL OF THE RAILROAD TRACKS AND 3.5' NORTH OF THE NORTH BACK OF CURB ALONG ELLSWORTH ROAD. SAID STATION IS A VERTICAL CONTROL STATION AND IS DESCRIBED AS THE 1993 EDITION OF THE CITY OF ANN ARBOR BRASS DISC.



Call berore	СНЕСКЕВ	DRAWN	DATE
Know what's b	TB	KB/DF	2/20/25
	TB	KB/DF	6/22/22
	TB	KB/DF	27/21/2





ES - ENGINEERING /ORTH RD SIDEWA ELIMINATION

ARBO

CITY

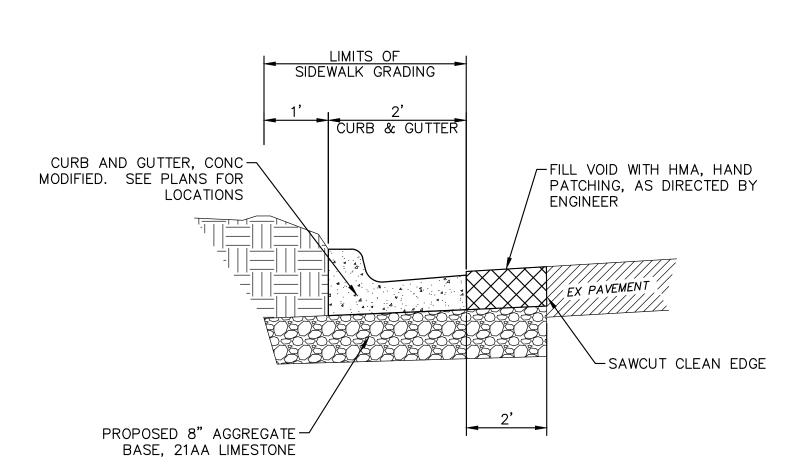
SHEET No.

NOTES

- 1. SIDEWALK SHALL BE A DESIGNED AND CONSTRUCTED TO MEET ALL ADA STANDARDS AND REQUIREMENTS.
- 2. CITY OF ANN ARBOR MINIMUM STANDARD WIDTH OF SIDEWALK IS FIVE (5) FEET.
- 3. CONCRETE SIDEWALK THICKNESS (T1) SHALL BE A MINIMUM OF FOUR (4) INCHES.
- 4. SIDEWALK THICKNESS (T1) SHALL BE INCREASED AT DRIVE APPROACHES TO SIX (6) INCHES FOR SINGLE-FAMILY OR DUPLEX RESIDENTIAL USES. ALL OTHER USES REQUIRE A MINIMUM EIGHT (8) INCH THICKNESS WITHIN THE DRIVE APPROACH.
- 5. BASE THICKNESS (T2) SHALL BE A MINIMUM OF FOUR (4) INCHES.
- 6. THICKNESS OF THE BASE (T2) SHALL BE INCREASED TO A MINIMUM OF SIX (6) INCHES WITHIN THE DRIVE APPROACH.
- 7. IF EXISTING SUBGRADE MATERIAL IS APPROVED BY THE ENGINEER FOR USE, COMPACT THE
- EXISTING SUBGRADE TO 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY.

 8. NATIVE MATERIAL MAY BE ACCEPTABLE FOR SIDEWALK CONSTRUCTION, IF THE BASE IS
- STABLE AND FREE OF ORGANIC OR DELETERIOUS MATERIALS.
- 9. SIDEWALK RAMPS SHALL BE CONSTRUCTED AT STREET INTERSECTIONS AS DIRECTED AND SHALL COMPLY WITH THE REQUIREMENTS OF MDOT DETAIL R-28 (LATEST VERSION).
- 10. SIDEWALKS MAY MEANDER WITHIN THE RIGHT-OF-WAY TO PROTECT AND PRESERVE NATURAL FEATURES.
- 11. EXPANSION AND CONTRACTION JOINTS SHALL BE PROVIDED PER CITY OF ANN ARBOR STANDARD DETAILS AND SPECIFICATIONS.

SIDEWALK CROSS SECTION, SD-R-9



PROPOSED CURB AND GUTTER

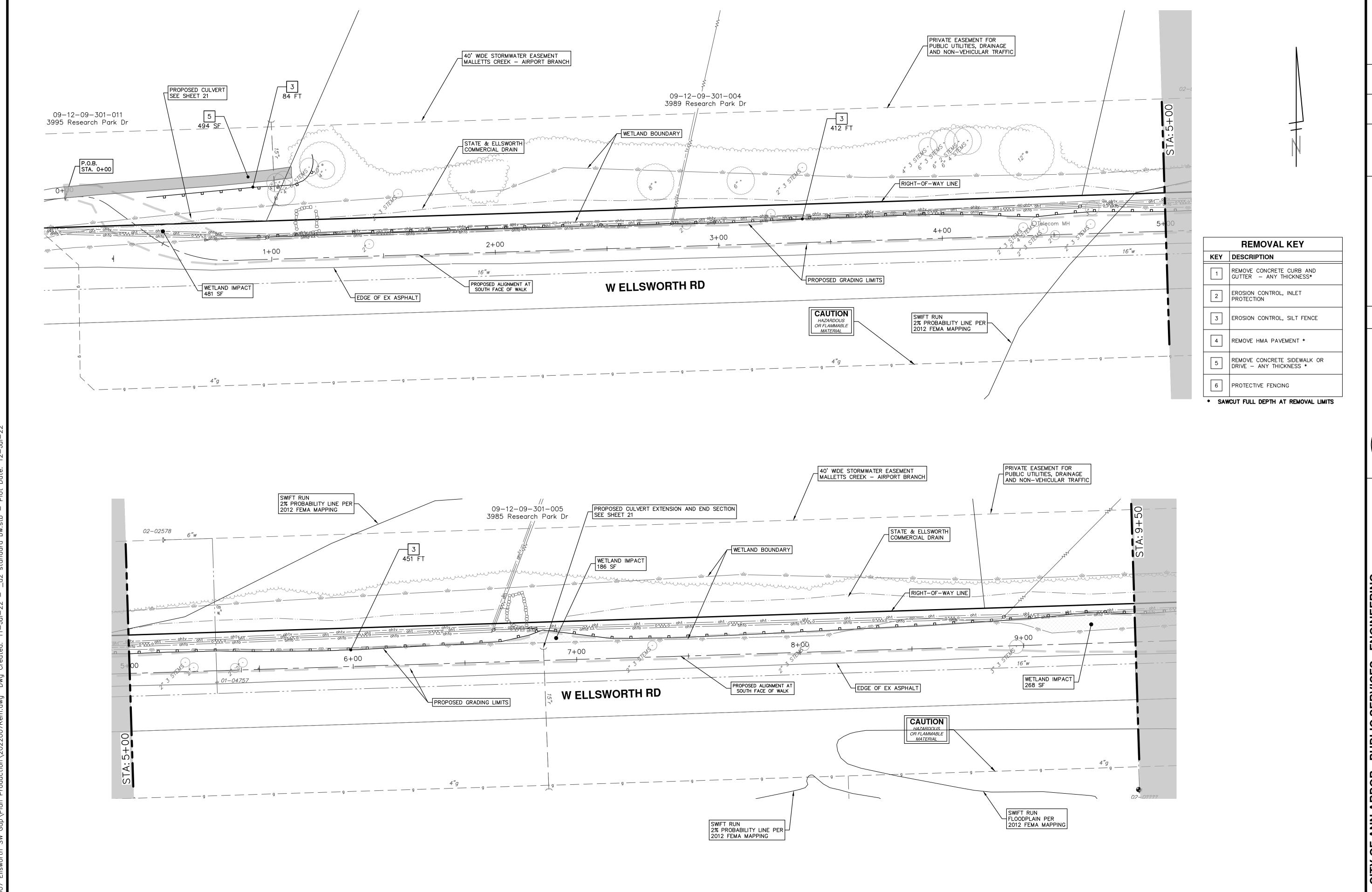
NOT TO SCALE

EXISTING LEGEND PROPOSED LEGEND ------ WATER MAIN Ф+ *FIRE HYDRANT* → HYDRANT (PLAN) GATE VALVE IN BOX -----/-/------/-/ WATER MAIN ABANDONED --- STORM SEWER ⊗ GATE VALVE IN WELL ▼ REDUCER STOP BOX -----/ ----/ STORM SEWER ABANDONED WATER GATE VALVE ₩ WATER VAULT ———— SANITARY SEWER WATER STOP BOX **₩** WELL -----/ ----/ SANITARY SEWER ABANDONED W WATER VAULT ☐ CATCH BASIN (SQ) ——— g —— —— —— GAS MAIN INLET ⊕ CATCH BASIN (RD) — g (Dead)—— — — — GAS MAIN (DEAD) DOUBLE INLET O STORM MANHOLE INLET JUNCTION CHAMBER ☐ NON-CURB CATCH BASIN (SQ) ROUND CATCH BASIN) END SECTION e duct bank ELECTRICAL DUCT BANK STORM MANHOLE O SANITARY MANHOLE DRAIN ARROW O CLEAN-OUT FLARED END SECTION POST SANITARY MANHOLE CLEAN—OUT ♭ SIGN BARREL ☐ HAND HOLE → SIGN ———— fo — — — — FIBER OPTIC ☼ ORNAMENTAL LIGHT PUSH BUTTON fo duct bank FIBER OPTIC DUCT BANK HAND HOLE ------BOUNDARY ③ UNKNOWN MANHOLE _/_/_/____BUILDING TELEPHONE MANHOLE TELEPHONE RISER — — — — 800 — — — — CONTOUR MAJOR O GAS VENT — — — — 799 — — — — CONTOUR MINOR ⊞ GAS BOX EDGE OF WATER ☑ ELECTRICAL RISER FLOODPLAIN Ø UTILITY POLE ---//----//-----//----FENCE ○ LAMP POLE GUY ANCHOR O GUY POLE STONE WALL MONITORING WELL ■ MAILBOX TREELINE SOIL BORING A TRAVERSE POINT EDGE OF BRUSH + BENCH MARK CONDITION OF STREET HEDGE O IRON PIPE ■ MON BOX TREE (DECIDUOUS) TREE (CONIFEROUS) SHRUB (DECIDUOUS) TREE TO REMAIN & PROTECT (DECIDUOUS) CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREAST HEIGHT (INCHES) X 10 TREE TO REMAIN & PROTECT (CONIFEROUS) CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREAST HEIGHT (INCHES) X 10

W WATER MAIN TORM SEWER SANITARY SEWER **FIDER OPTIC** ELECTRICAL ----- CENTERLINE OF DITCH — — CENTERLINE OF ROAD _____//______________________FENCE SILT FENCE PROTECTIVE FENCE · • • • • • • • GUARDRAIL CURB — — — TEMPORARY GRADING PERMIT — 800 — CONTOUR MAJOR CONTOUR MINOR — — — STORM EASEMENT ---- --- SANITARY EASEMENT LIMITS OF CONSTRUCTION LIMIT OF GRADING DETECTABLE WARNING ASPHALT CONCRETE SIDEWALK TREE (DECIDUOUS) TREE (CONIFEROUS) TREE TO BE REMOVED (DECIDUOUS) TREE TO BE REMOVED (CONIFEROUS) STUMP TO BE REMOVED

OF ANN ARBOR - PUBLIC

SHEET No.



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	KB/DF	KB/DF	KB/DF	DRAWN
	27/21/2	27/27/9	27/02/5	DATE
				NOIL

02	ADDENDUM #1	
10	FINAL PLANS	
00	REVIEW SET	
REV.	DESCRIPTION	

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-8647 734-794-6410 www.a2gov.org
RBOR



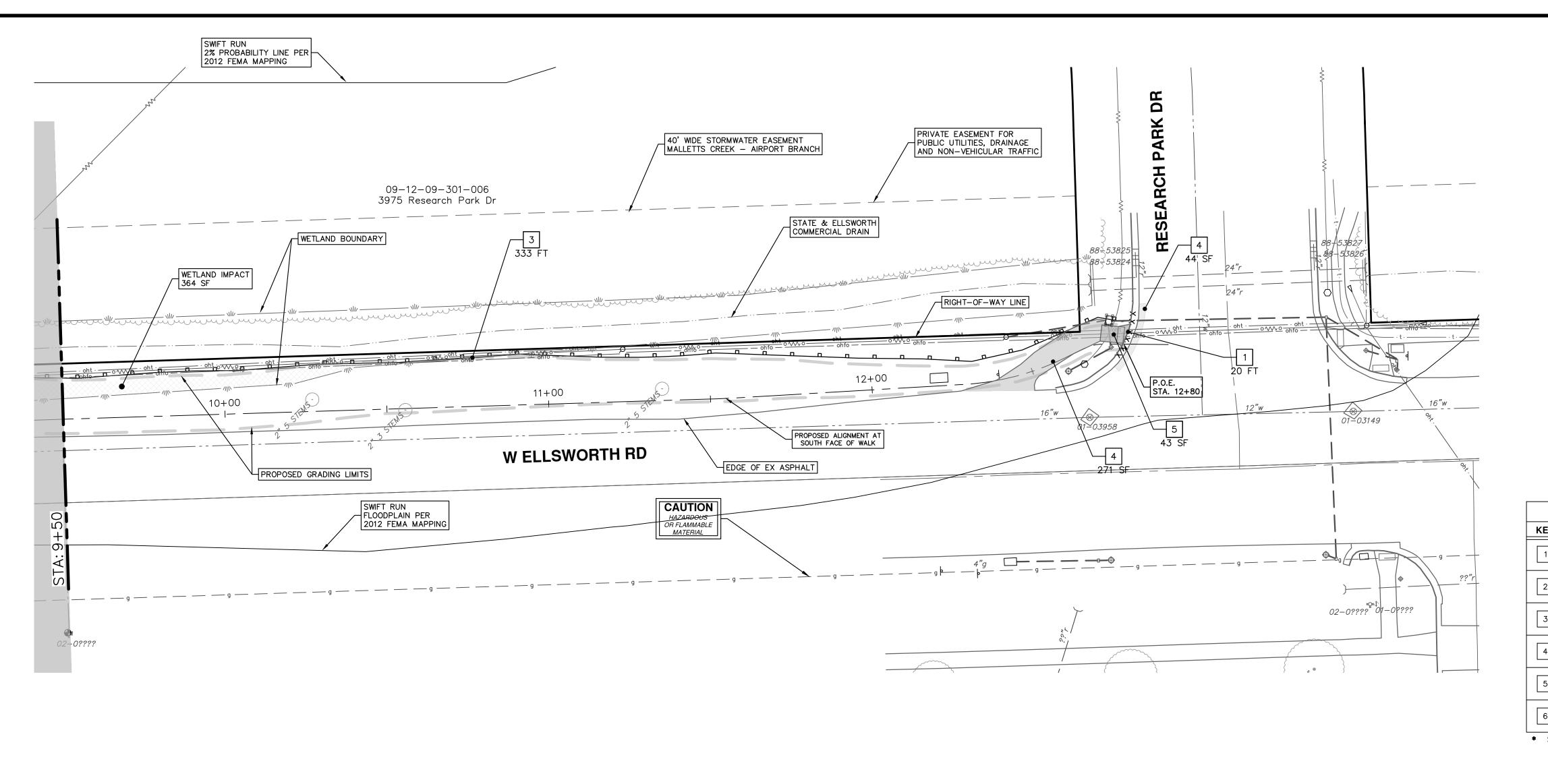
WALK GAP ELIMINATION	F RESEARCH PARK DR.	+00 - STA. 9+50
WAL	F RES	- 00+

ELLSWORTH RD SIDEWALK GA REMOVALS - WEST OF RESEARCH P.O.B. STA. 0+00 - STA. 9+5
--

- PUBLIC SERVICE	ELLSWORTH R REMOVAL	<u> </u>
F ANN ARBOR -		

- DOUBLE OF ANIA AND THE	Ĺ
SCALE: 1" = 20'	
DRAWING No.	

SHEET No.



REMOVAL KEY KEY DESCRIPTION REMOVE CONCRETE CURB AND GUTTER — ANY THICKNESS* 2 EROSION CONTROL, INLET PROTECTION 3 EROSION CONTROL, SILT FENCE 4 REMOVE HMA PAVEMENT * REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS * 6 PROTECTIVE FENCING

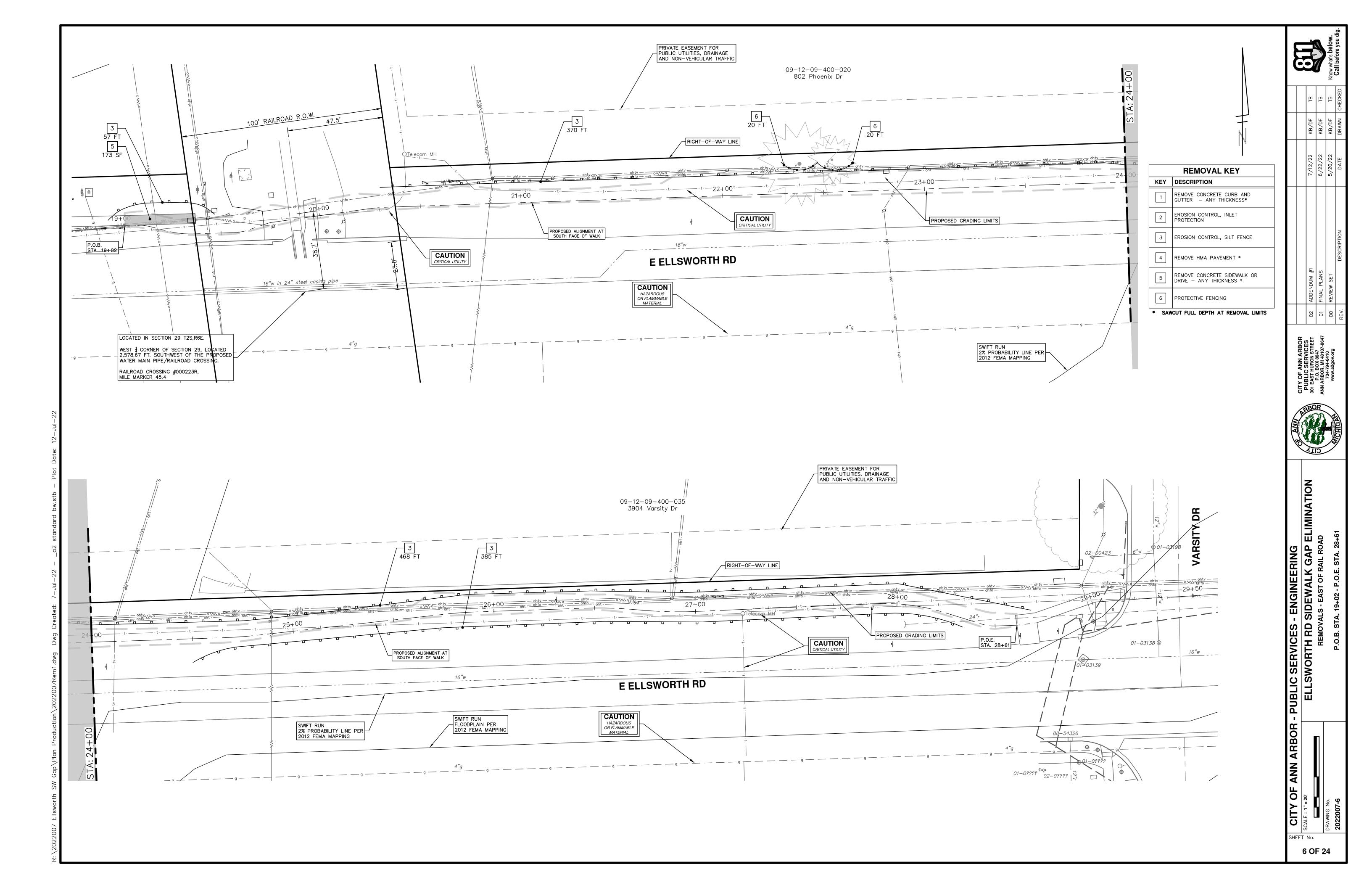
* SAWCUT FULL DEPTH AT REMOVAL LIMITS

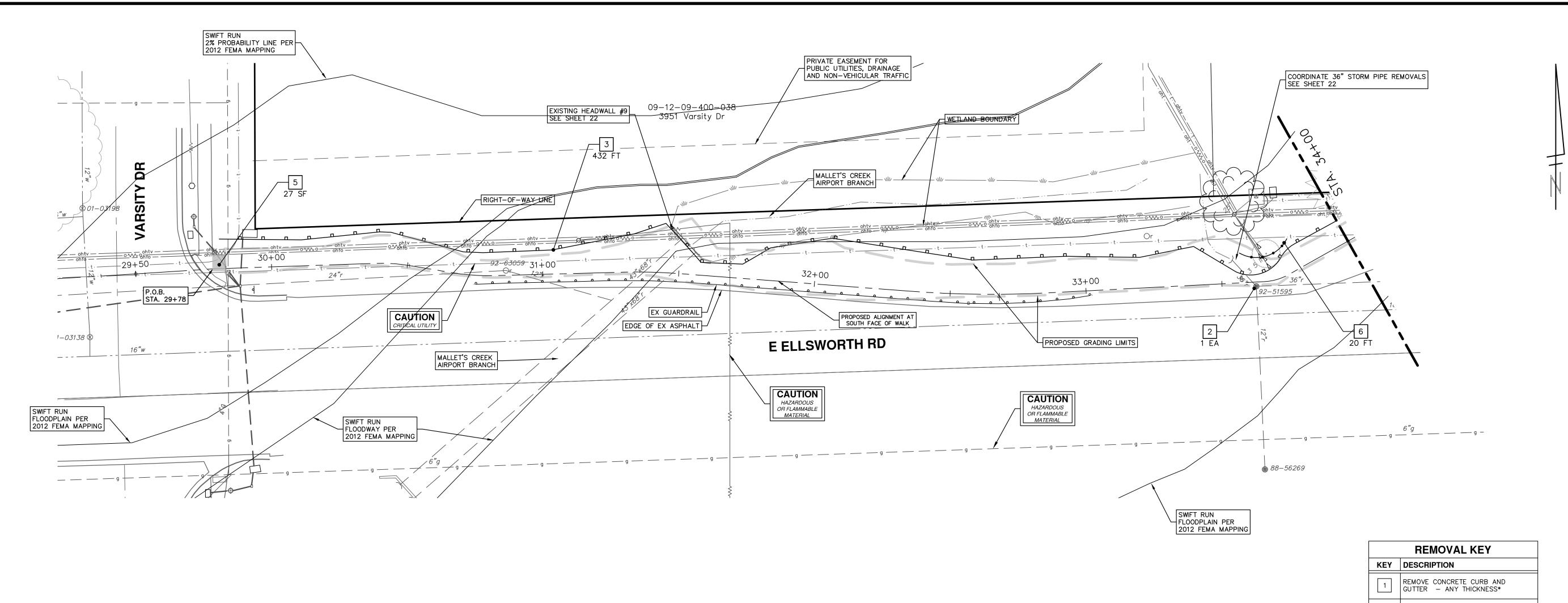
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE: 1" = 20"

ELLSWORTH RD SIDEWALK GAP ELIMINA

REMOVALS - WEST OF RESEARCH PARK DR.





	REMOVAL KEY
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER — ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT *
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS *
6	PROTECTIVE FENCING

^{*} SAWCUT FULL DEPTH AT REMOVAL LIMITS

ADDENDUM #1	7/12/22	KB/DF	TB
FINAL PLANS	6/22/22	KB/DF	TB
REVIEW SET	5/20/22	KB/DF	TB
DESCRIPTION	DATE	DRAWN	DRAWN CHECKED

CITY OF ANN A	PUBLIC SERV 301 EAST HURON	P.O. BOX 86 ANN ARBOR, MI 48	734-794-641	www.a2gov.c
\\ ≥ ×	ABC	OR.		

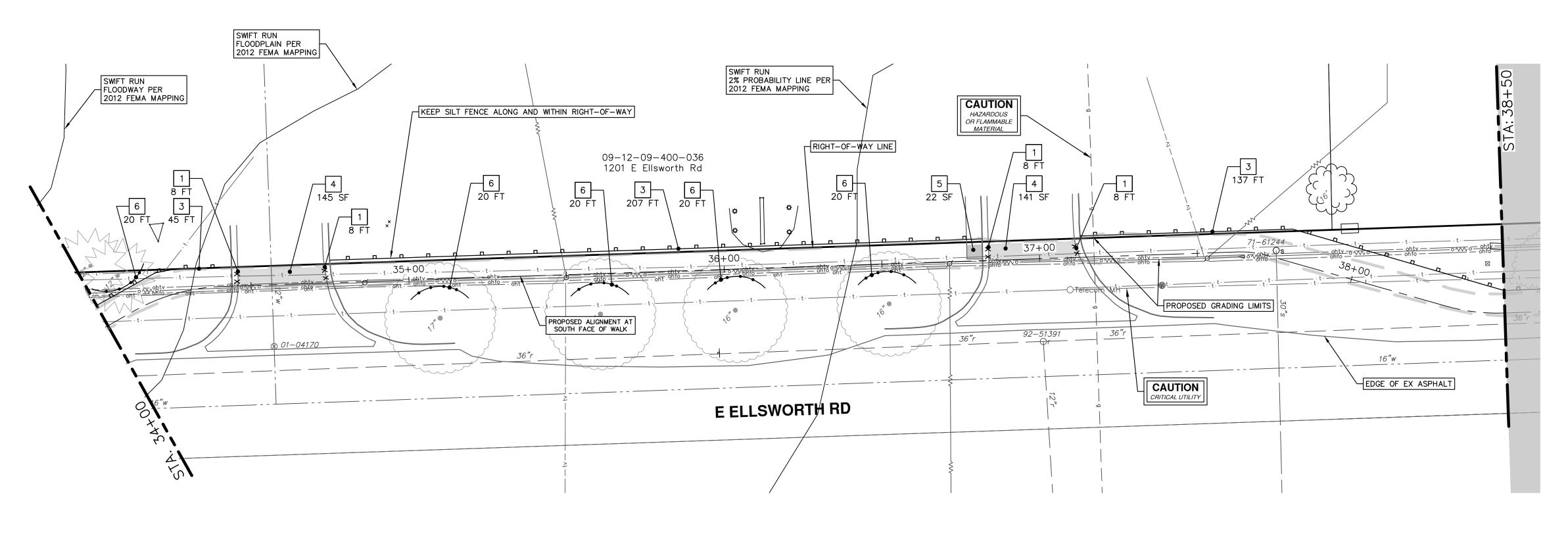


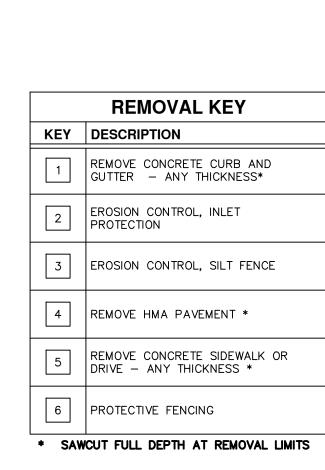
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE: 1" = 20"

ELLSWORTH RD SIDEWALK GAP ELIMINA

REMOVALS - VARSITY DR. TO STONE SCHOOL RD.









CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE : 1" = 20"

BRAWING NO.

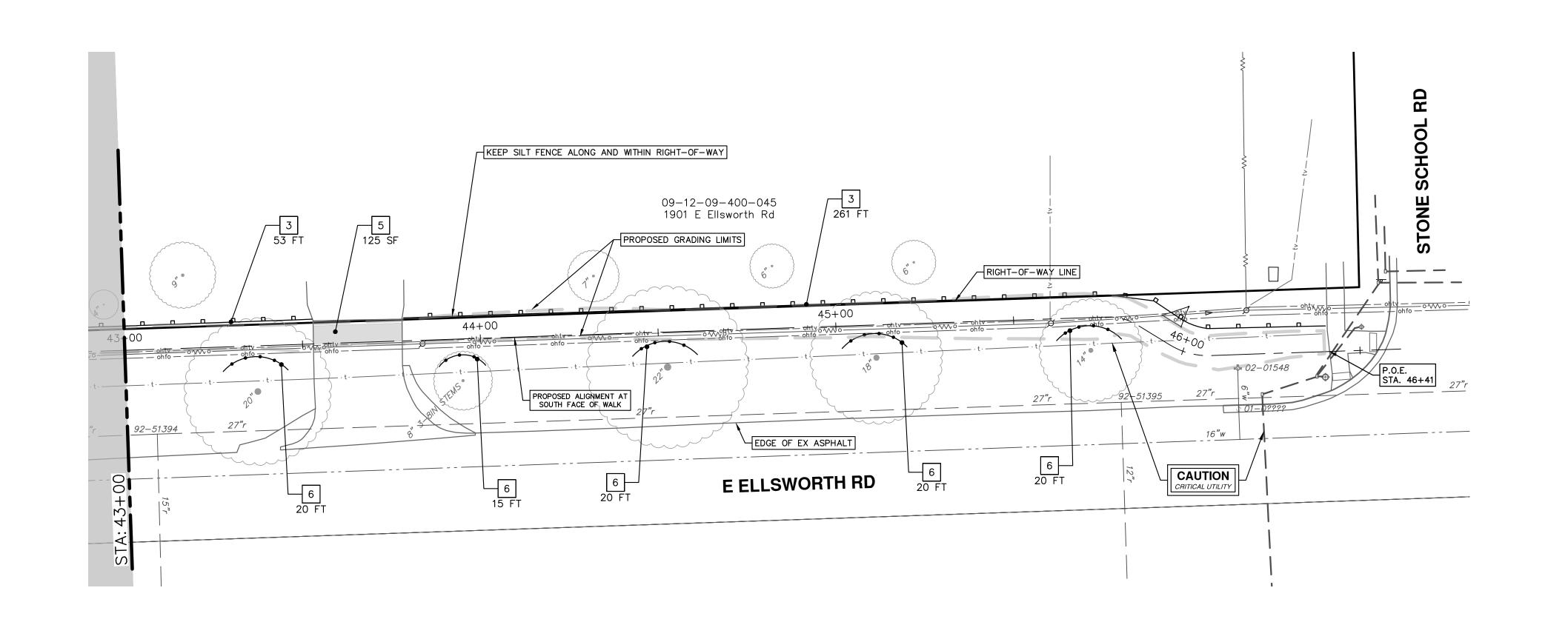
SCALE : 1" = 20"

ELLSWORTH RD SIDEWALK GAP ELIMINA

REMOVALS - VARSITY DR. TO STONE SCHOOL RD.

STA. 34+00 - STA. 43+00

	OR OR	CAUTION HAZARDOUS OR FLAMMABLE MATERIAL	P SILT FENCE ALONG AND WITHIN RIGHT—OF—WAY	STA: 43+00
205 FT RIGHT-OF-WAY LINE		20 FT 217 FT ** -1+00	42+00 onto onto onto onto onto onto onto ont	6 20 FT 43 00
36"r 36"r 36"r 36"r	ALIGNMENT AT ACE OF WALK E ELLSWORTH RD	27"r CAUTION CRITICAL UTILITY	PROPOSED GRADIN	16"w 92-51394
STA: 38+	15"r	-t-		



	REMOVAL KEY
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER — ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT *
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS *
6	PROTECTIVE FENCING

* SAWCUT FULL DEPTH AT REMOVAL LIMITS

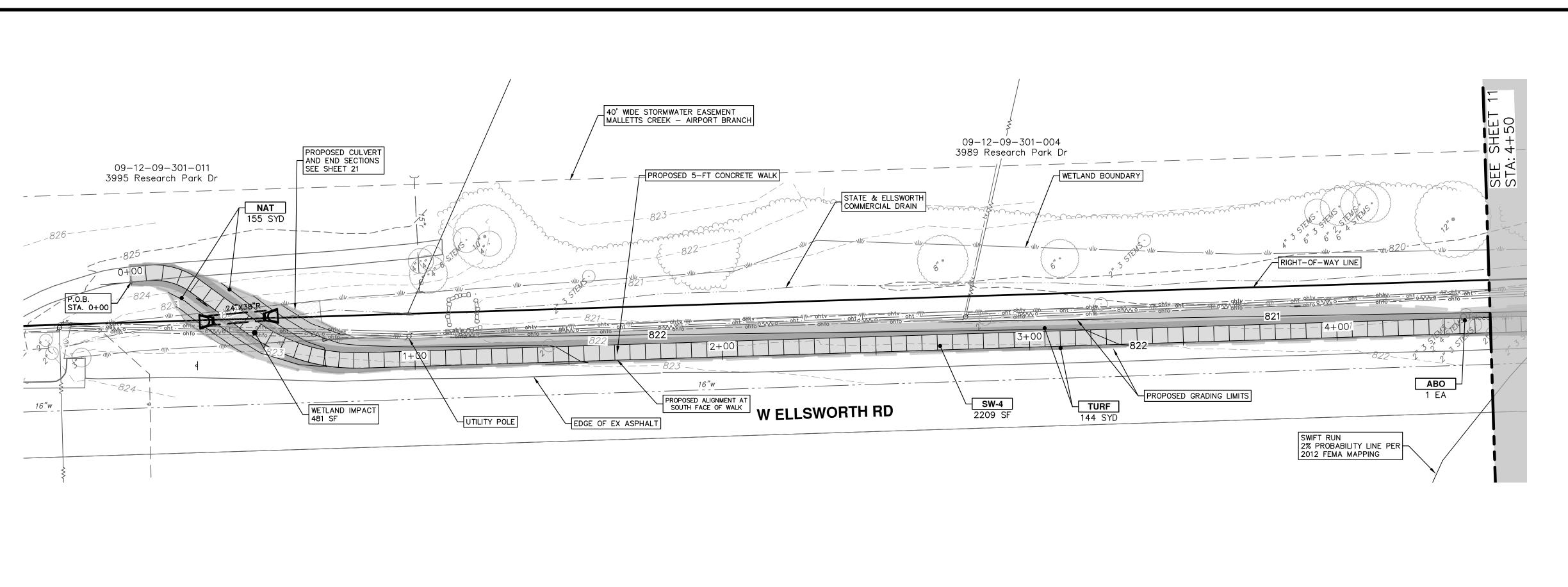
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

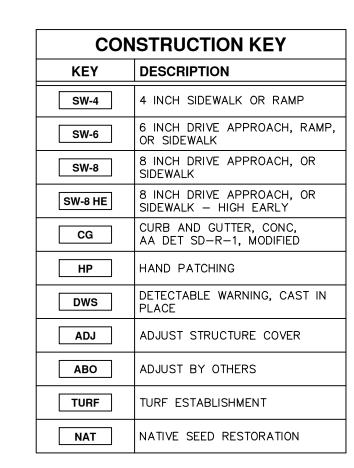
SCALE: 1" = 20

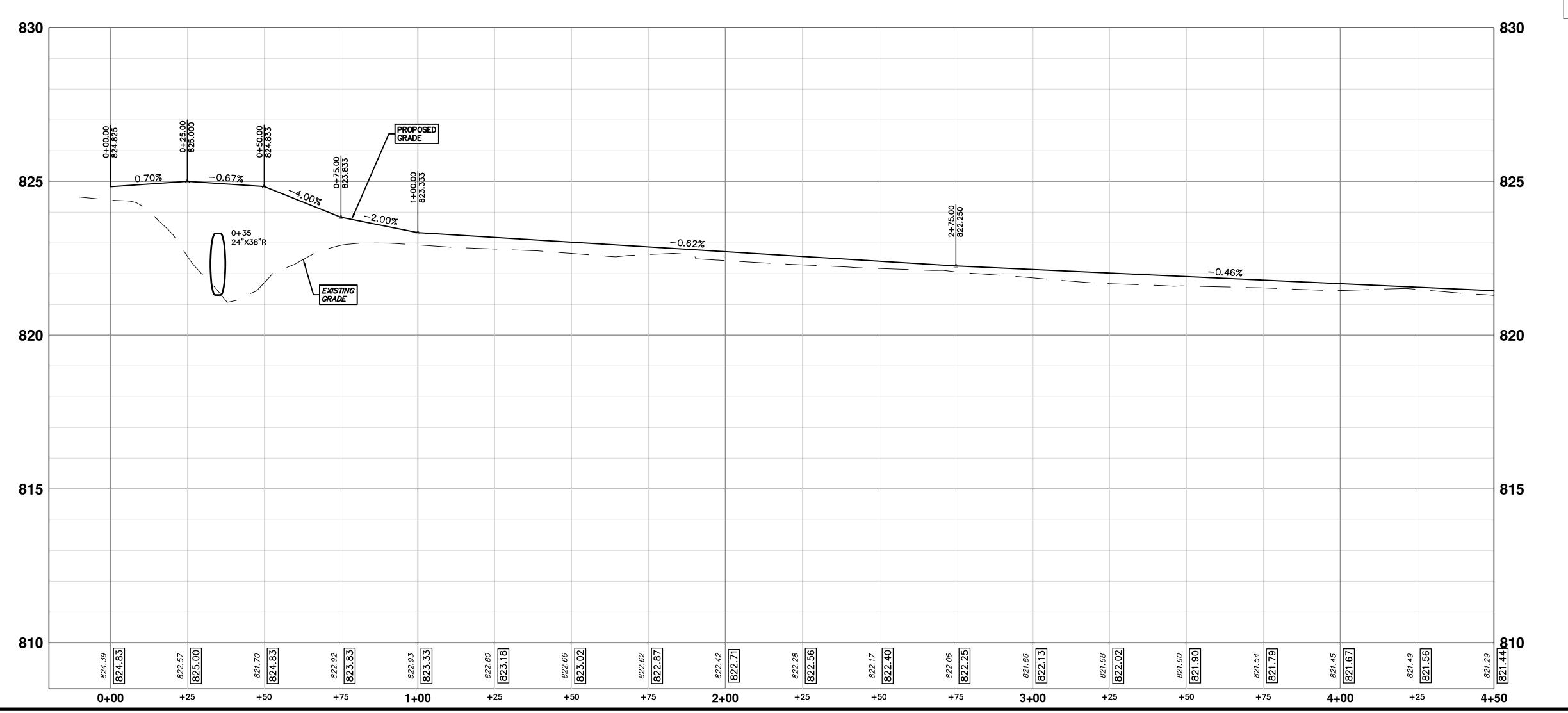
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PRAWING NO.

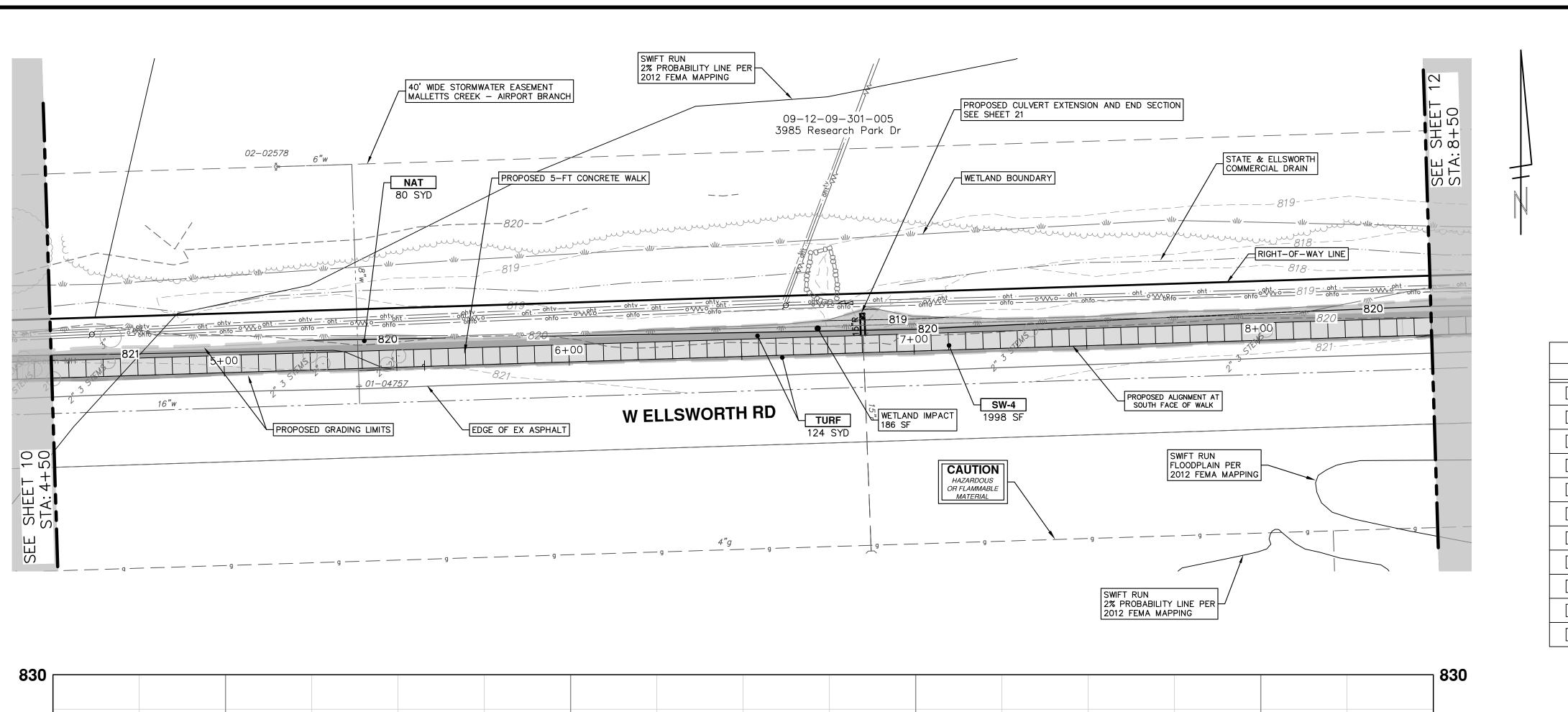
STA. 43+00 - P.O.E. STA. 46+41







#1 7/12/22 NS 6/22/22 T 5/20/22	PTION DATE
1/8 NS	NOILe
O2 ADDENDUM #1 O1 FINAL PLANS O0 REVIEW SET	DESCRIPTION
00 00	REV.
CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-8647 AND ARBORD, MI 48107-867 AND ARBORD, MI 48107-	MICHIGAN
ELLSWORTH RD SIDEWALK GAP ELIMINATION PROPOSED SIDEWALK - WEST OF RESEARCH PARK DR.	P.O.B. STA. 0+00 - STA. 4+50
SCALE PLAN: 1"= 20' PROFILE: 1"= 2' PROPOSED SIDEWAL DRAWING No.	2022007-10



-0.42%

820.44

+50

6+85 15"r

820.67

7+00

+25

+75

820.63

6+00

820.51

+25

820.69

+75

820.77

+50

EXISTING GRADE

-0.46%

820.91

5+00

+25

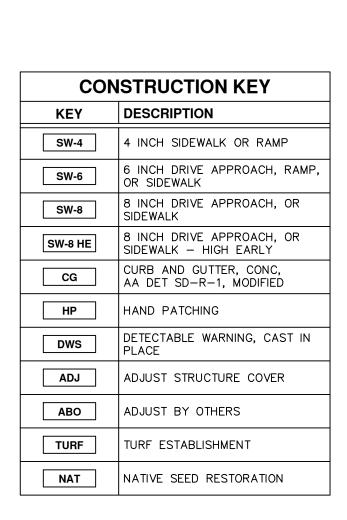
+75

825

820

815

810



0.33%

820.84

+25

820.85

8+00

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+75

820

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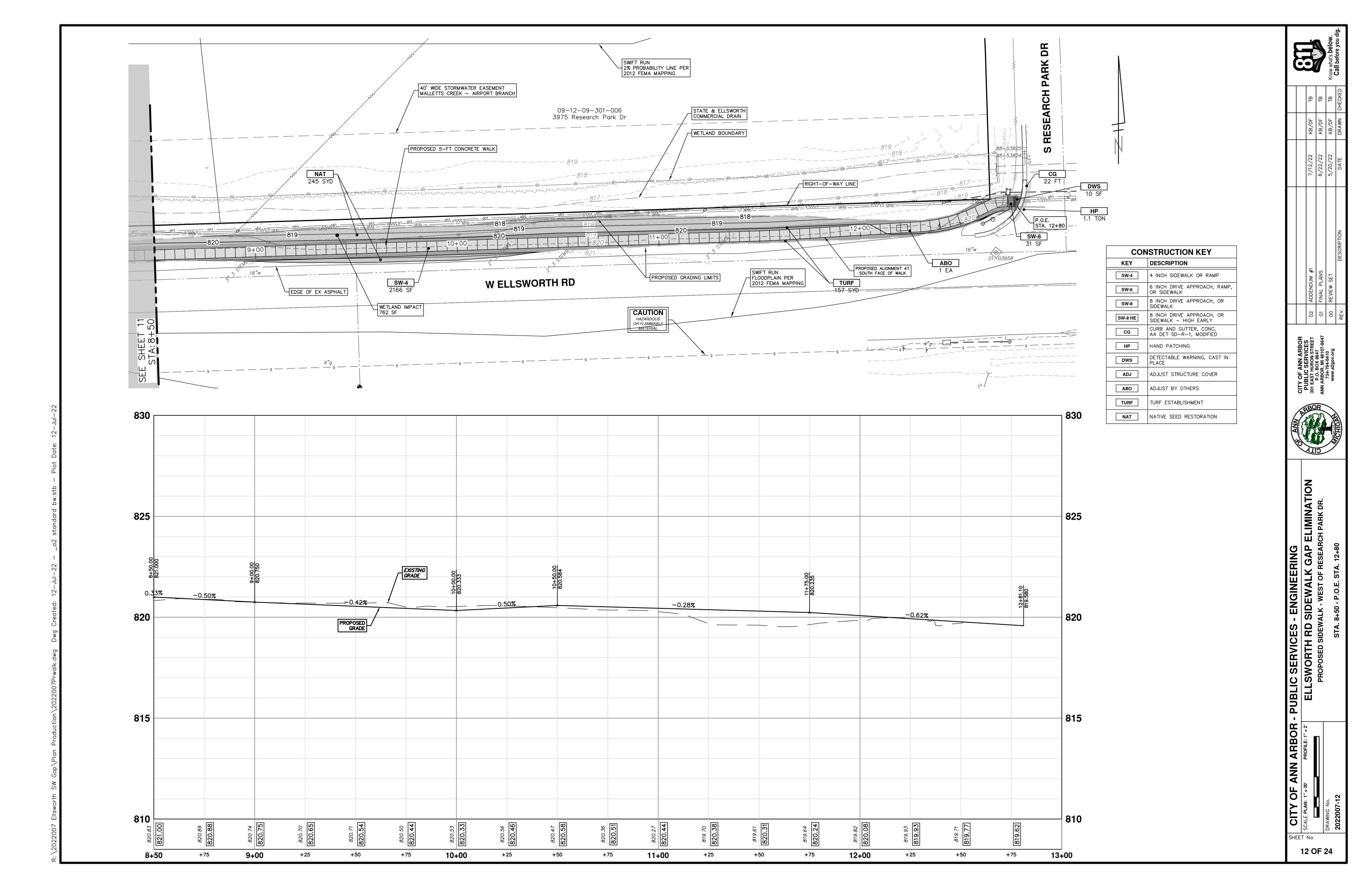
8+50

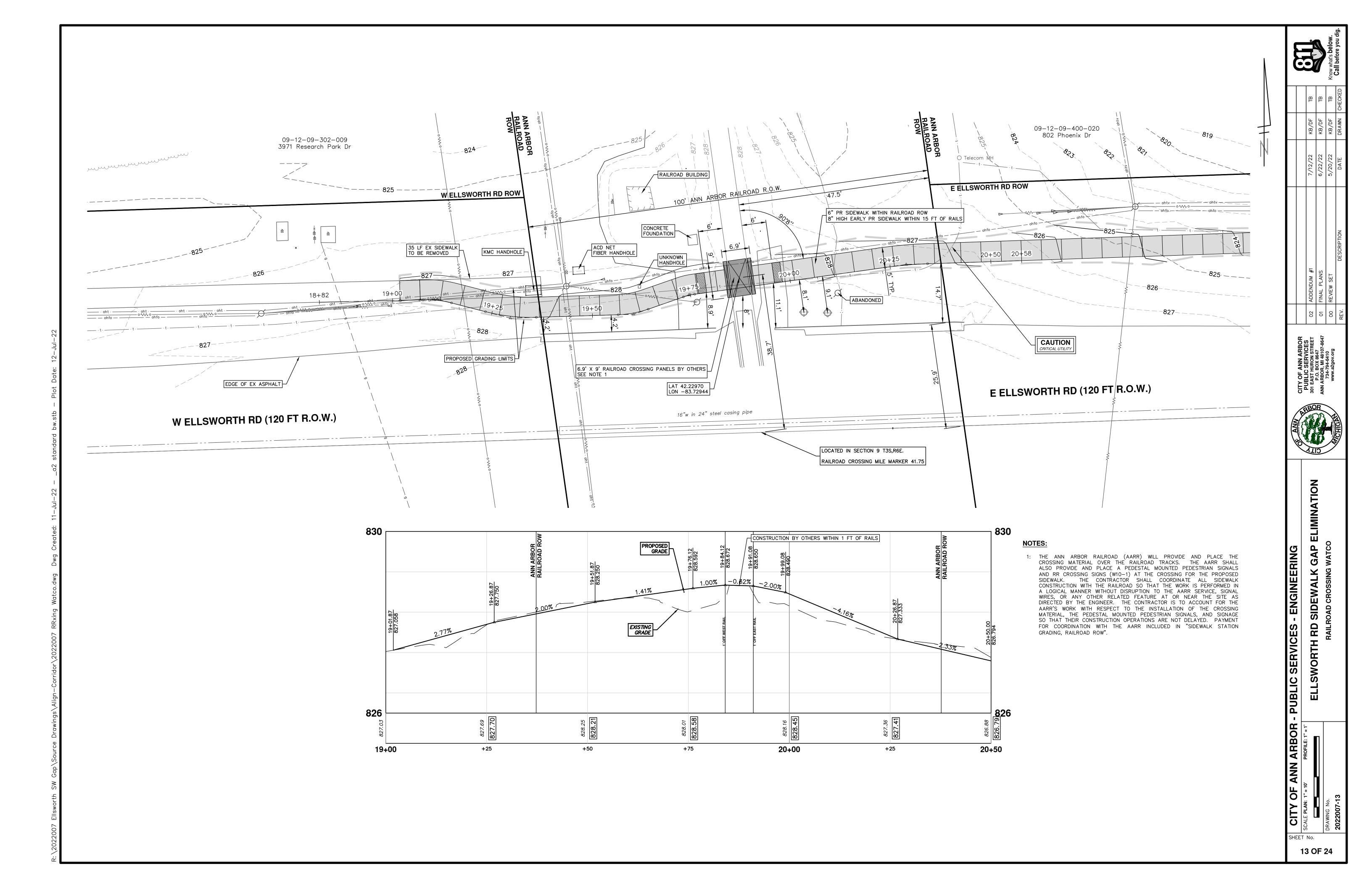
−0.5<mark>0%</mark>

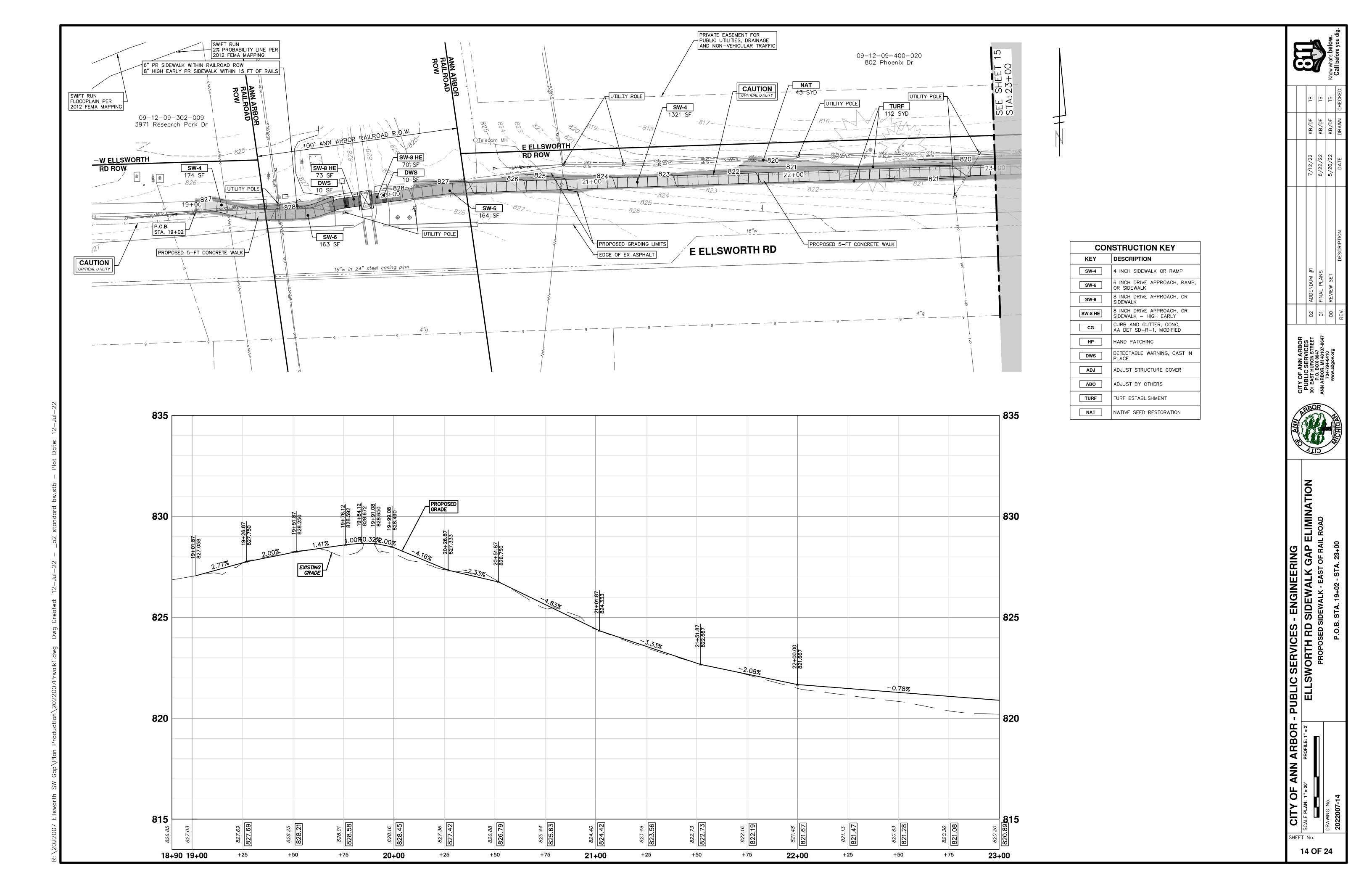
820.76

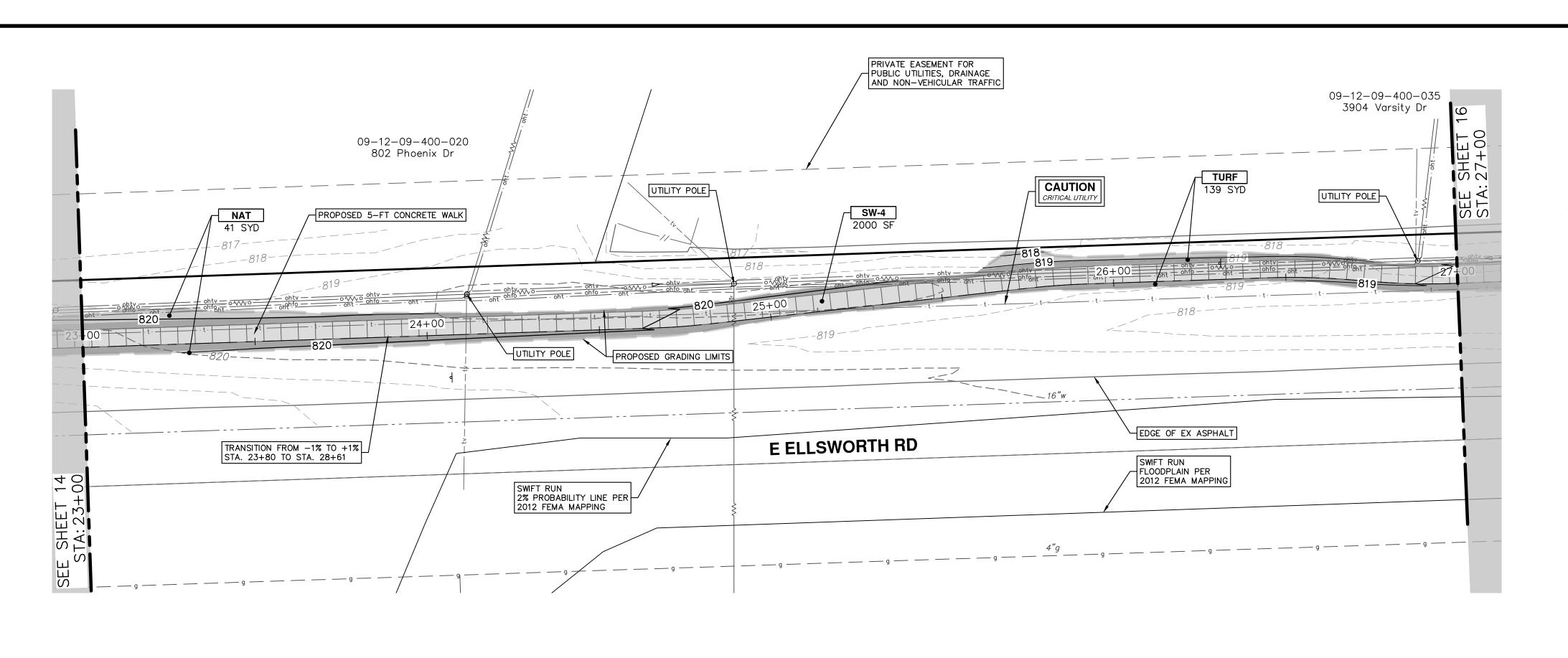
+50

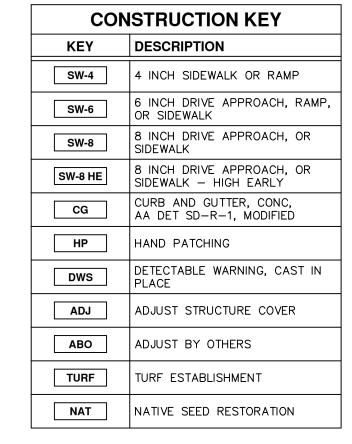






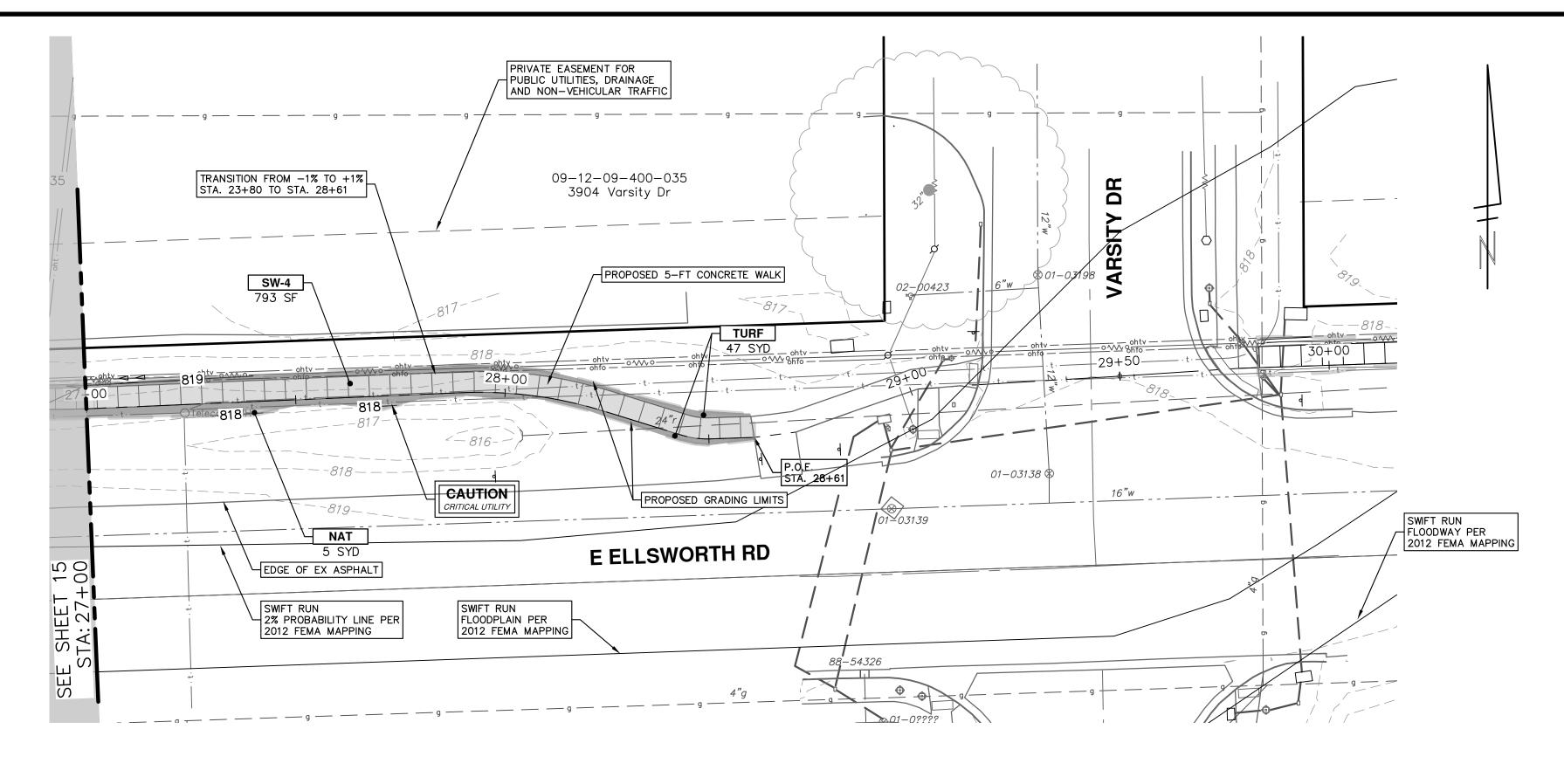




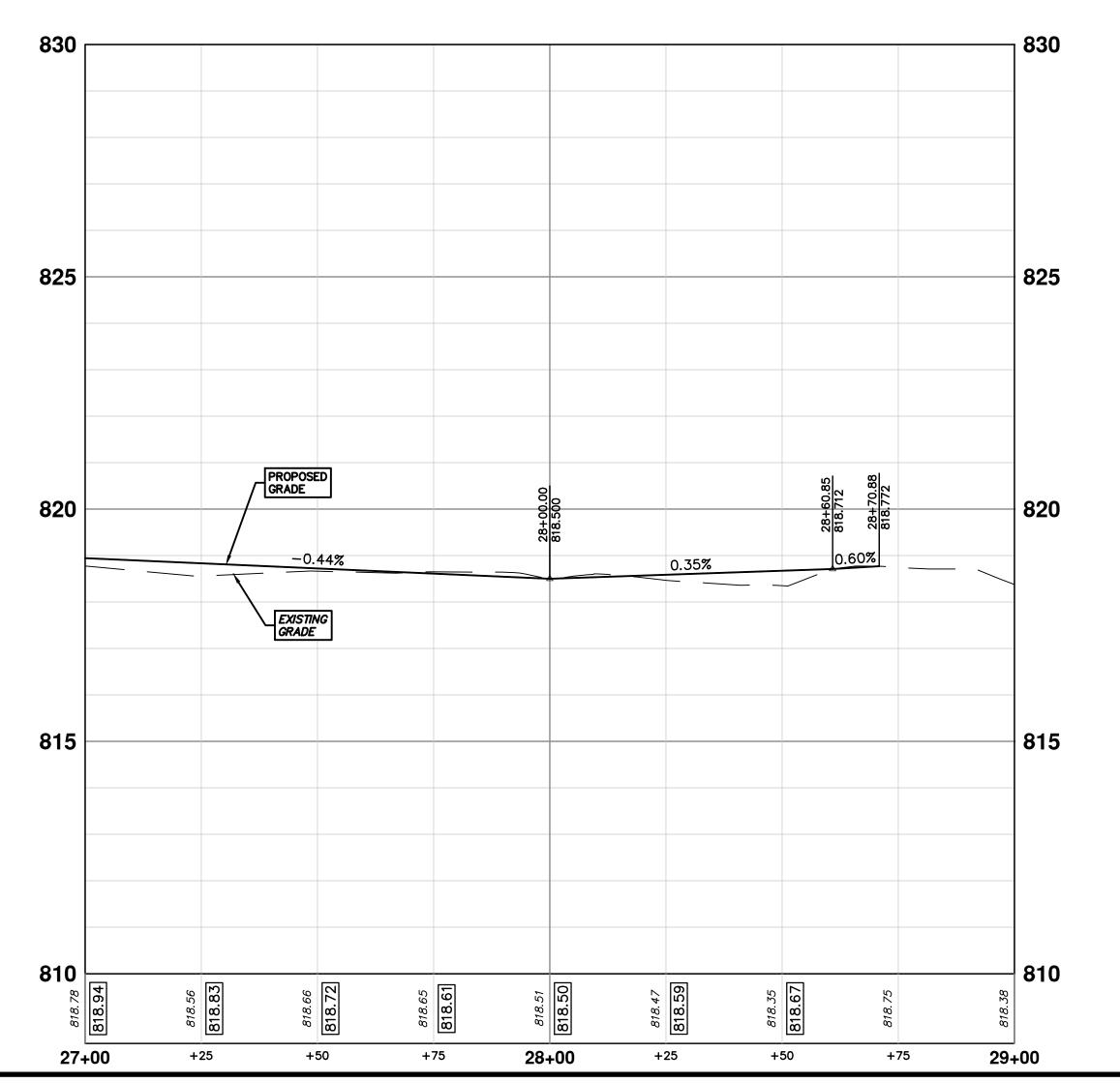


830																830
825																825
		23+50.00 820.500														
820	-0.78%								-0.44%		PROPOSED GRADE					820
										EXISTING GRADE						
815																815
810																<u>8</u> 10
820.20	 +25	820.50 820.50	819.66 820.39	819.68 820.28	819.69 820.17	819.67 05 820.06	+75 819.94	25+00	819.98 25 819.72	819.87 0 819.61	819.50 819.50	819.14 819.39	819.28 819.28	919.08 0 819.17	+75 818.77 819.06	818 818 818 27+00

				Know what's belov	ED Call before you
)F TB	JF TB	JF TB	DRAWN CHECKED
		KB/DF	KB/DF	KB/DF	DRAW
		7/12/22	6/22/22	5/20/22	DATE
		ADDENDUM #1	FINAL PLANS	REVIEW SET	DESCRIPTION
		02	10	00	REV.
		ELIMINATION F	10		
OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING		ELLSWORIH KD SIDEWALK GAP ELIMIN	PROPOSED SIDEWALK - EAST OF RAIL ROAD		SIA. 23+00 - SIA. 27+00
OR -	. 4" - 9'		П		
INN ARE	PROFII E: 1" - 2'				



CONSTRUCTION KEY					
KEY	DESCRIPTION				
SW-4	4 INCH SIDEWALK OR RAMP				
SW-6	6 INCH DRIVE APPROACH, RAMP OR SIDEWALK				
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK				
SW-8 HE	8 INCH DRIVE APPROACH, OR SIDEWALK — HIGH EARLY				
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED				
НР	HAND PATCHING				
DWS	DETECTABLE WARNING, CAST IN PLACE				
ADJ	ADJUST STRUCTURE COVER				
АВО	ADJUST BY OTHERS				
TURF	TURF ESTABLISHMENT				
NAT	NATIVE SEED RESTORATION				



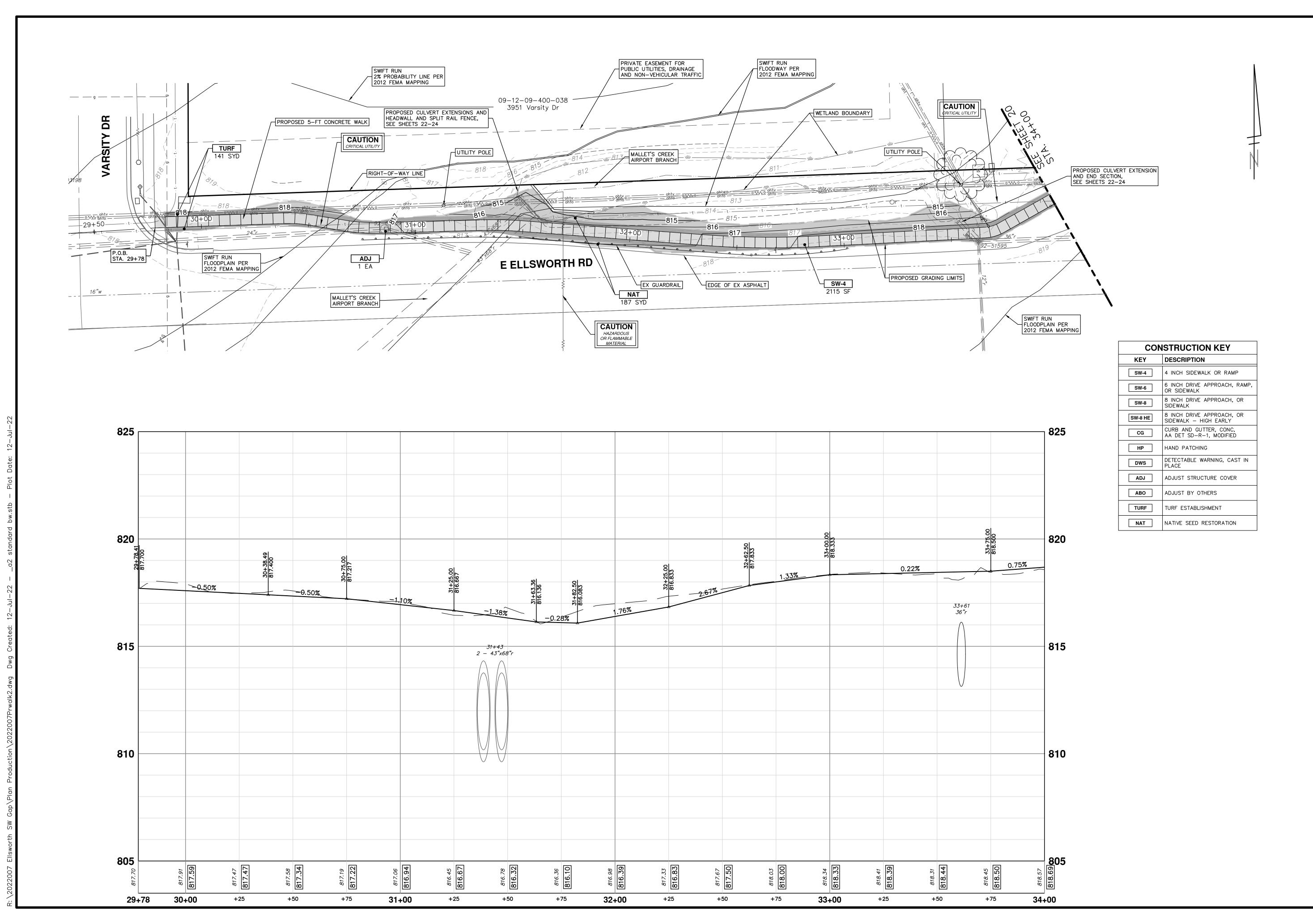
		02	10	5
	CITY OF ANN ARBOR	301 EAST HURON STREET	P.O. BOX 8647 ANN ARBOR, MI 48107-8647	734-794-6410



CITY OF ANN ARBOR - PUBLIC SERVICES - EI

SCALE PLAN: 1" = 20' PROFILE: 1" = 2' ELLSWORTH RD SIE

DRAWING NO





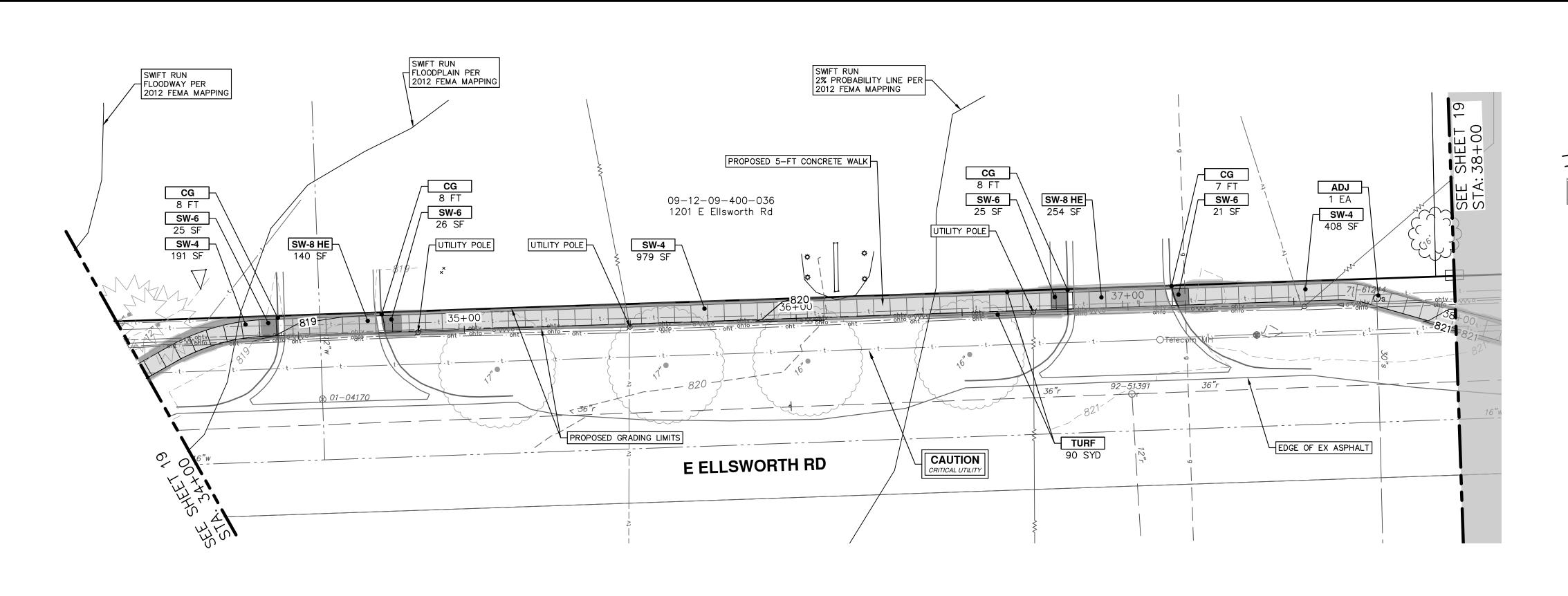
L# WDON	7/12/22	KB/DF	TB
. PLANS	6/22/22	KB/DF	TB
:W SET	5/20/22	KB/DF	TB
DESCRIPTION	DATE	DRAWN	DRAWN CHECKED

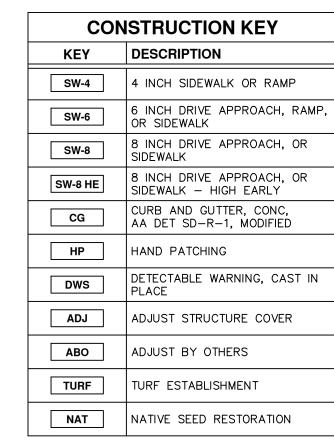


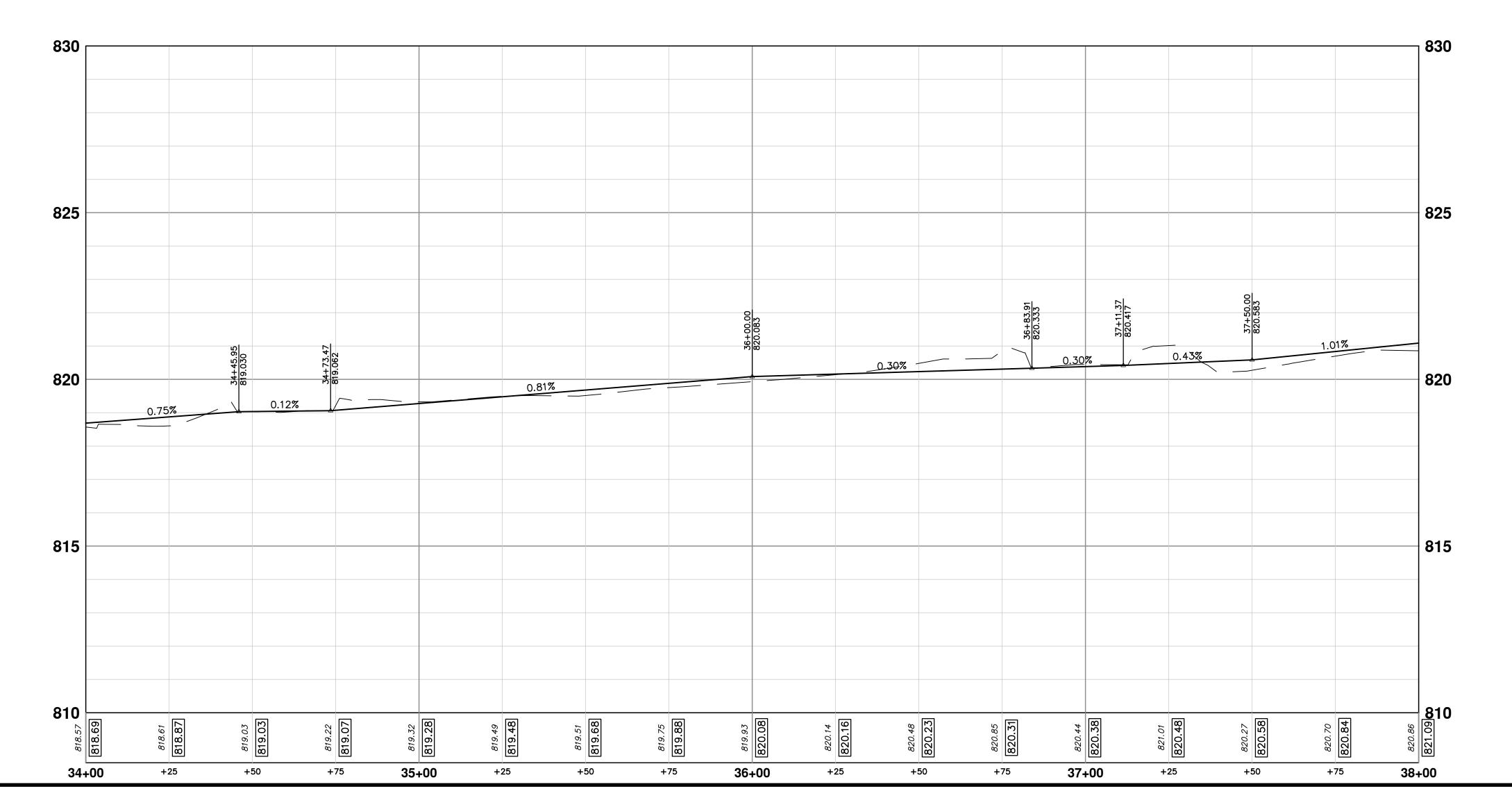
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

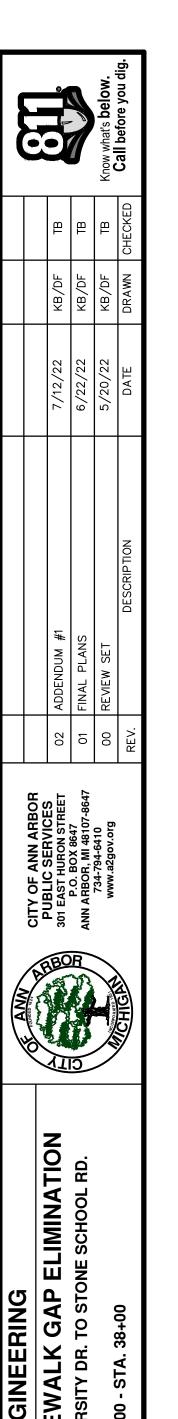
SCALE PLAN: 1" = 20' PROFILE: 1" = 2' ELLSWORTH RD SIDEWALK GAP ELIMINA

PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL





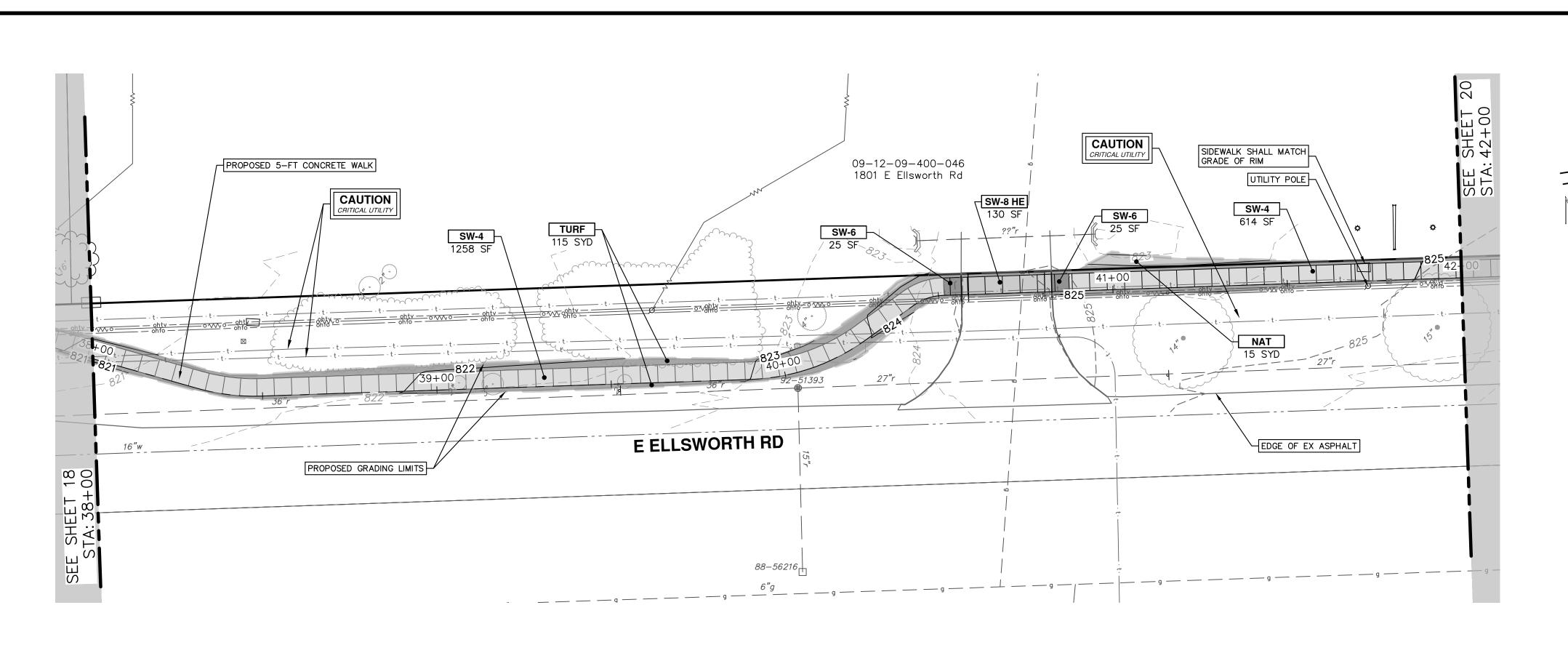




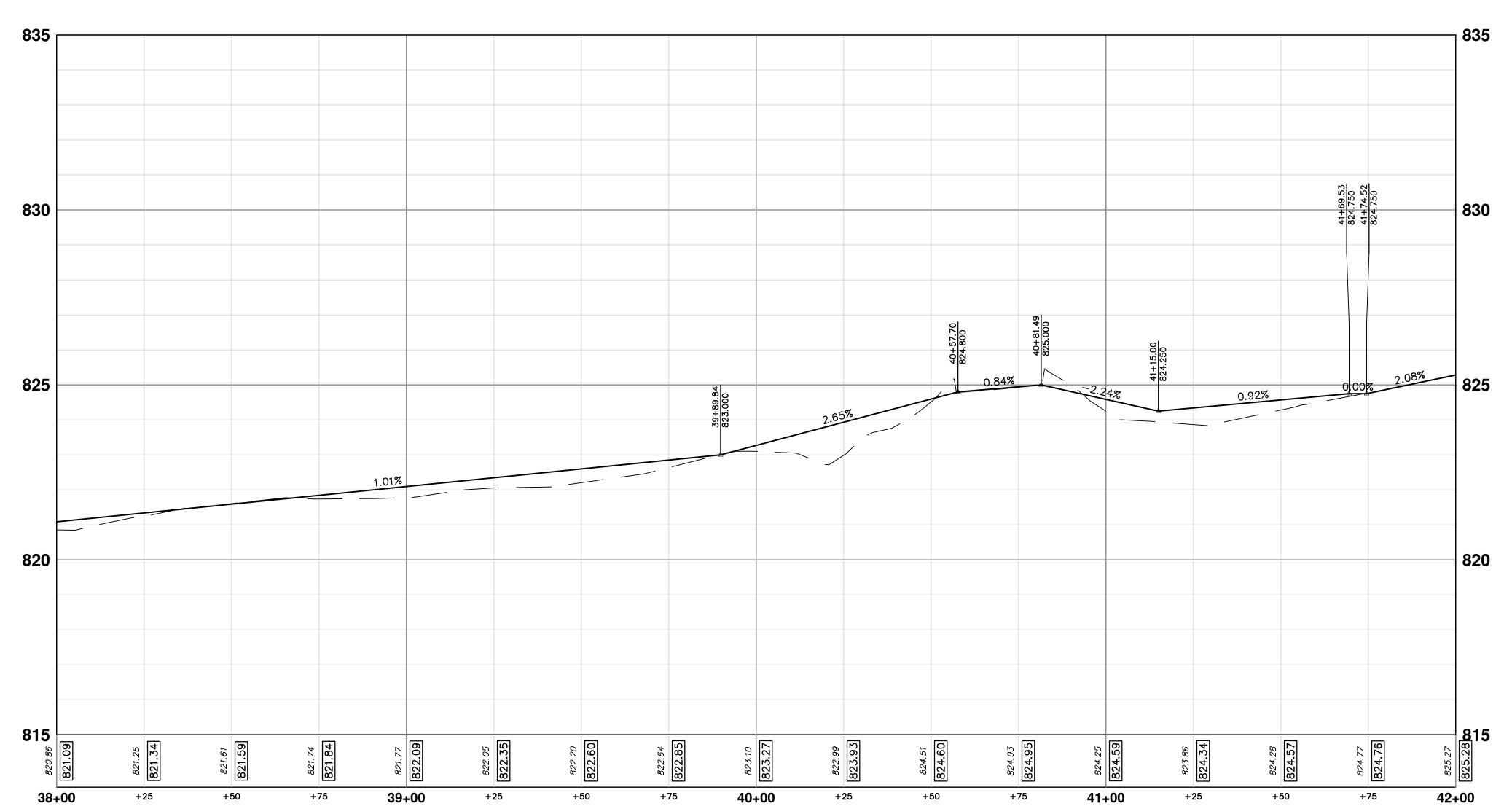
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

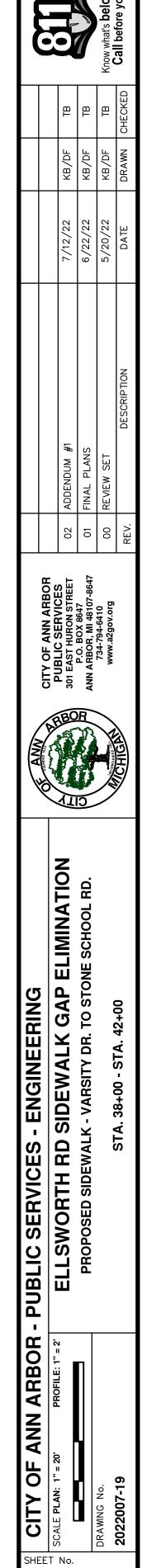
SCALE PLAN: 1" = 20' PROFILE: 1" = 2' ELLSWORTH RD SIDEWALK GAP ELIMINA

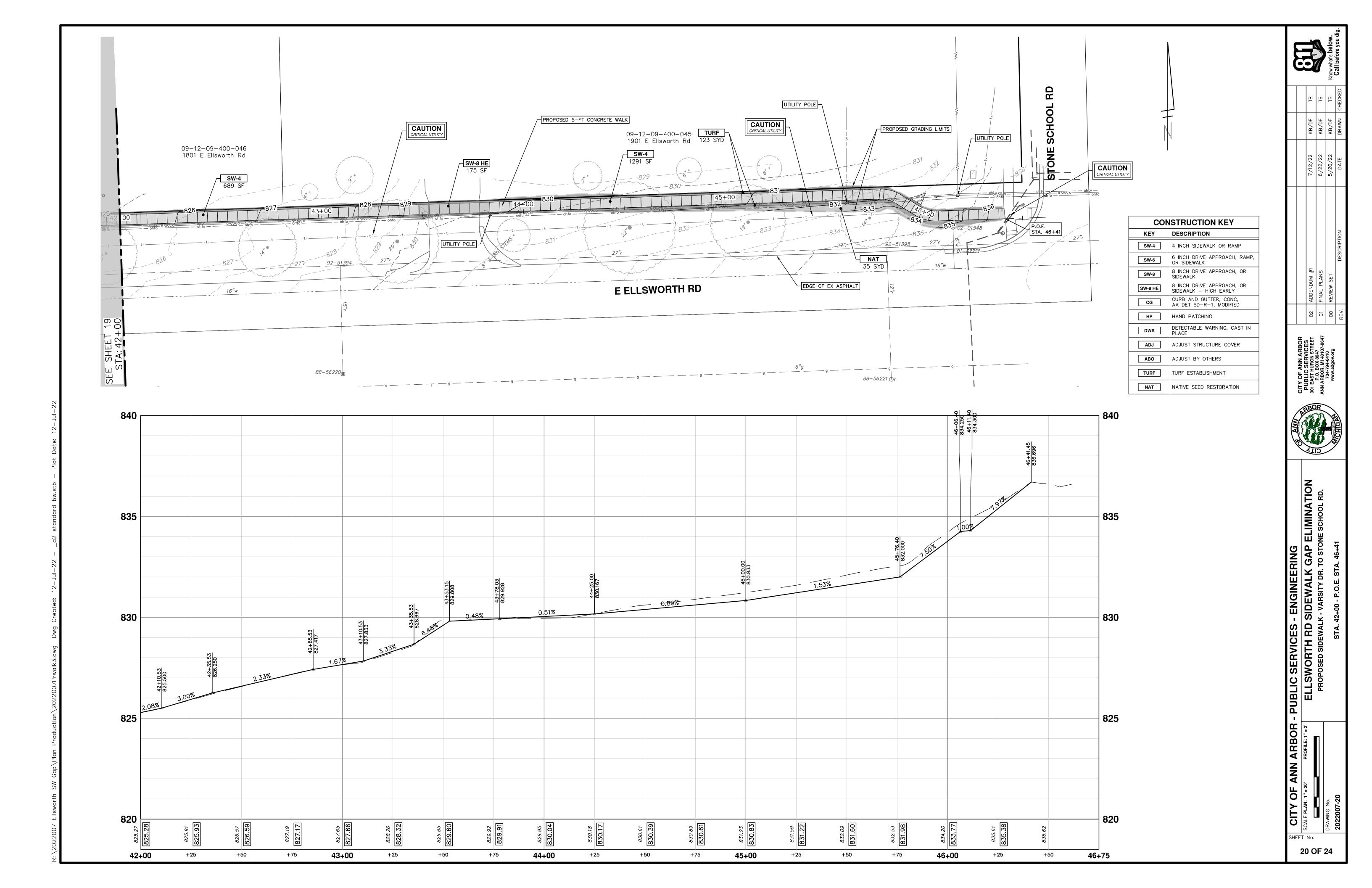
PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL

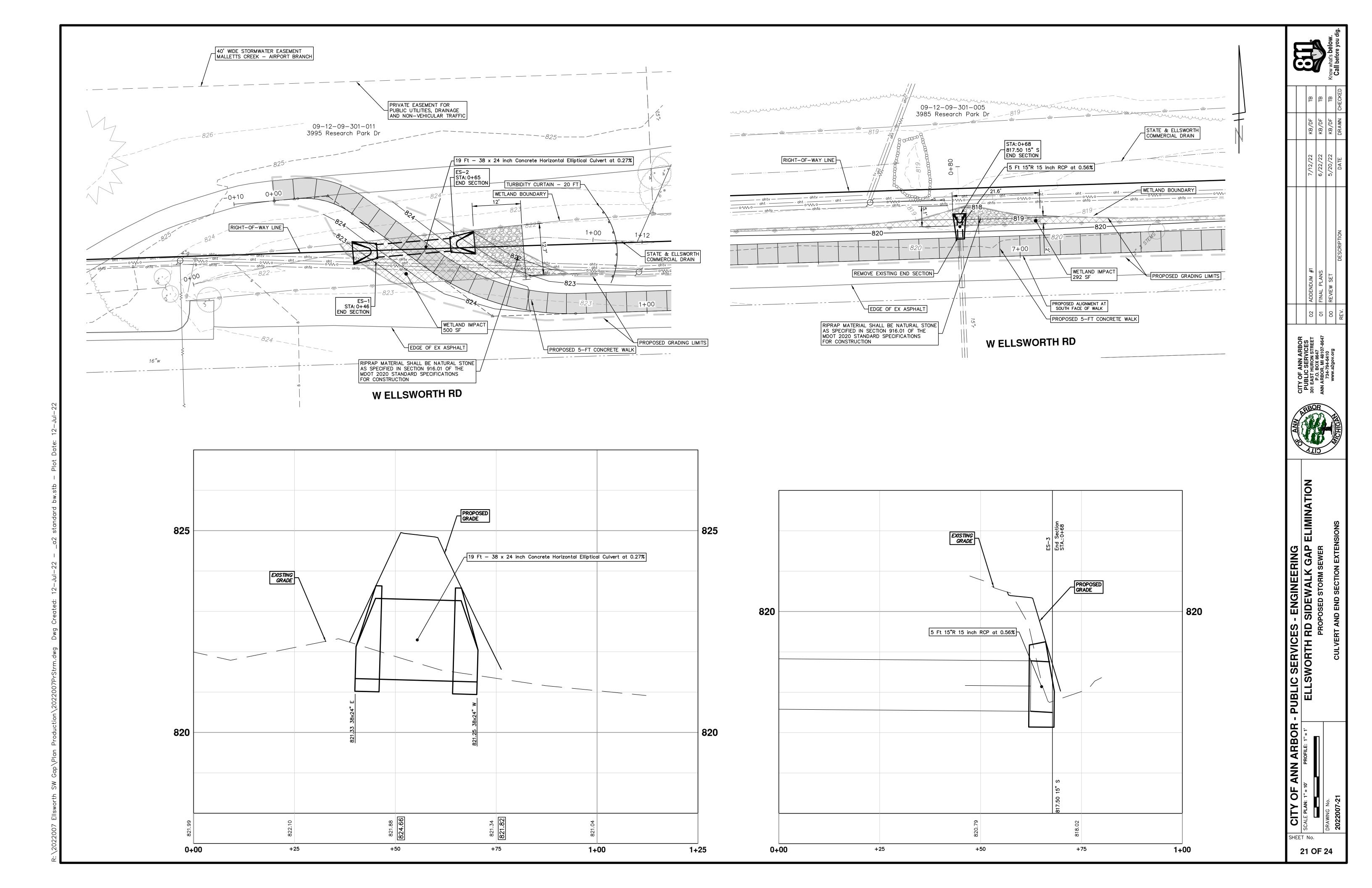


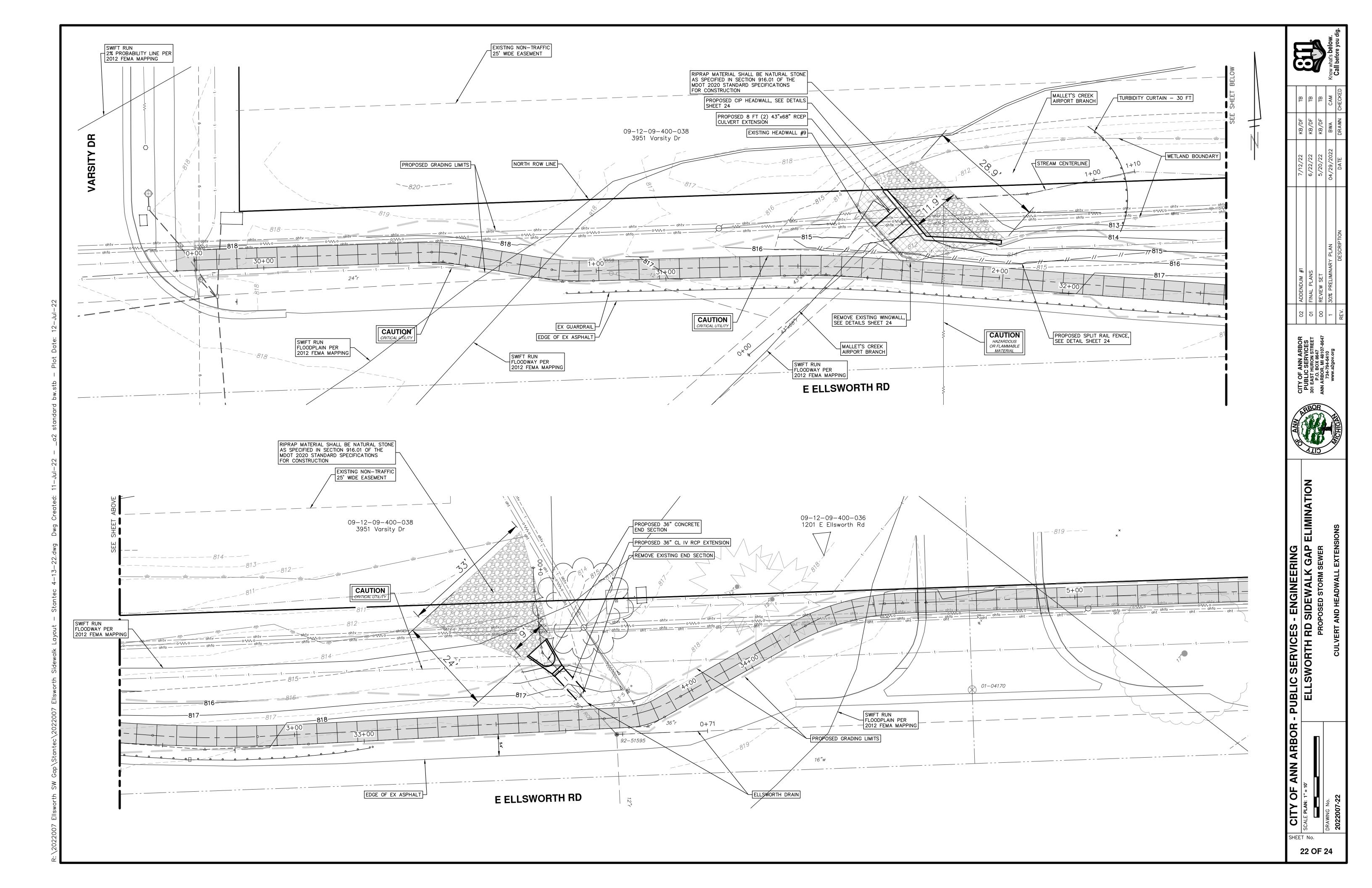
CON	CONSTRUCTION KEY						
KEY	DESCRIPTION						
SW-4	4 INCH SIDEWALK OR RAMP						
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK						
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK						
SW-8 HE	8 INCH DRIVE APPROACH, OR SIDEWALK — HIGH EARLY						
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED						
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DWS	DETECTABLE WARNING, CAST IN PLACE						
ADJ	ADJUST STRUCTURE COVER						
АВО	ADJUST BY OTHERS						
TURF	TURF ESTABLISHMENT						
NAT	NATIVE SEED RESTORATION						

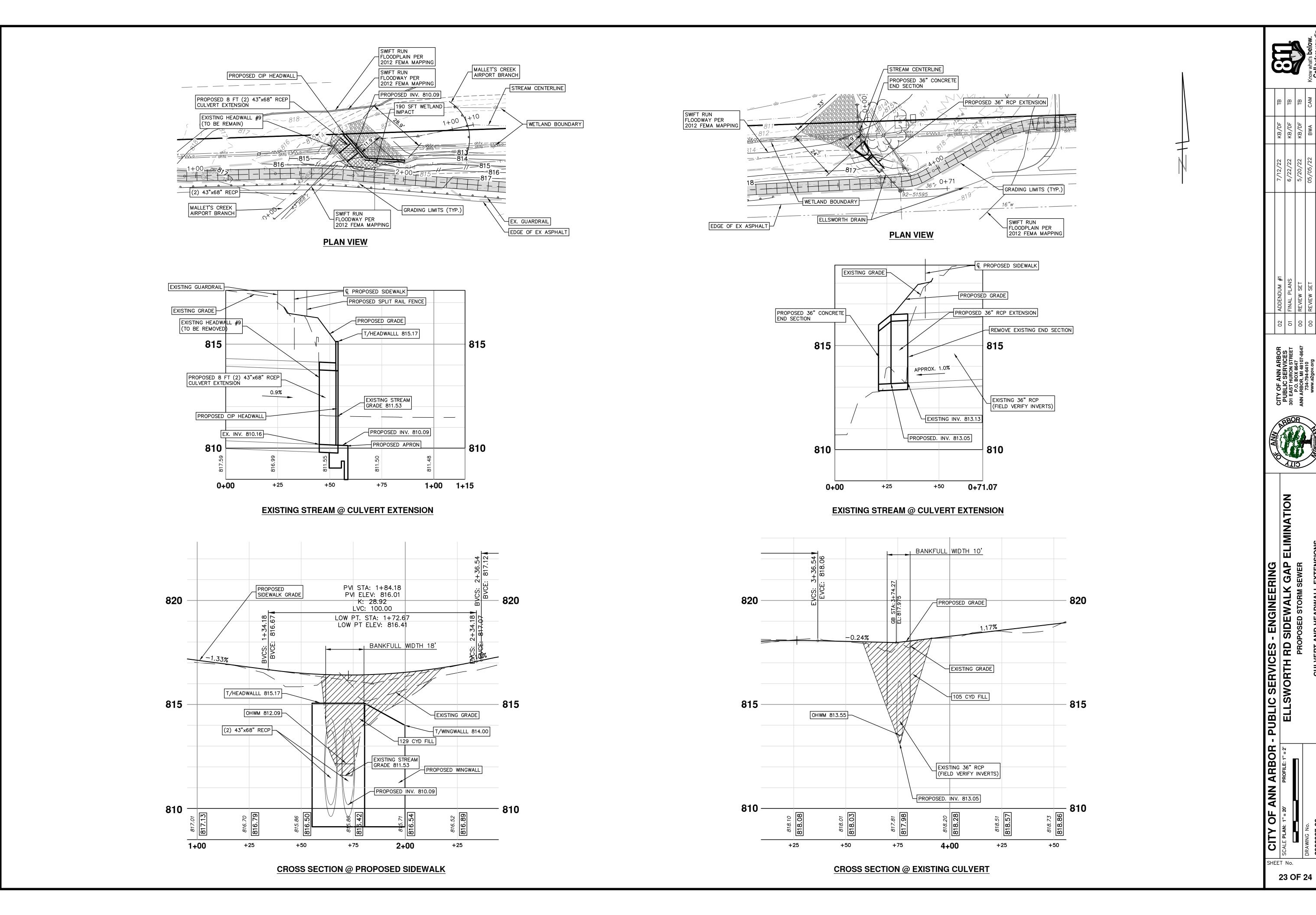












EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS, OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2020 EDITION.

THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES: CONCRETE: GRADE 3000 f'c = 3,000 psi CONCRETE: PRECAST SECTIONS f'c = 5,000 psi STEEL REINFORCEMENT fy = 60,000 psi

ALL EXPOSED CONCRETE CORNERS SHOWN SQUARE ON THE PLANS SHALL BE BEVELED WITH 1/2" TRIANGULAR MOLDINGS EXCEPT AS OTHERWISE NOTED.

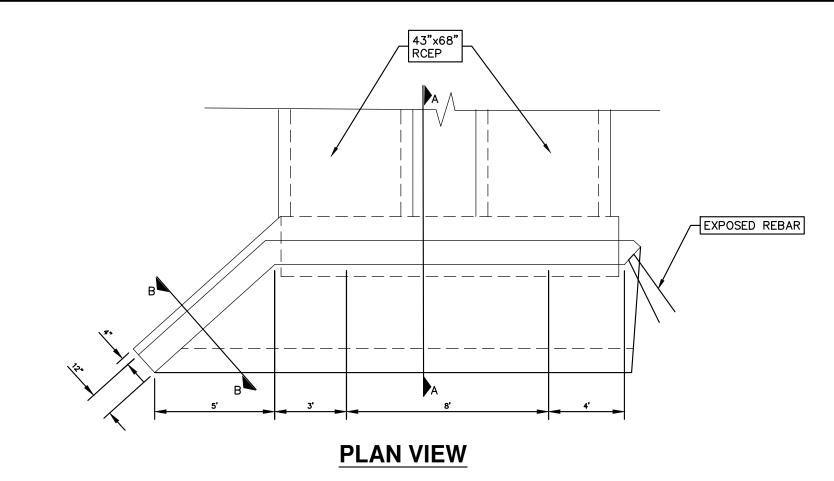
UNLESS OTHERWISE SHOWN ON THE PLANS PROVIDE MINIMUM CONCRETE CLEAR COVER FOR REINFORCEMENT ACCORDING TO THE FOLLOWING:

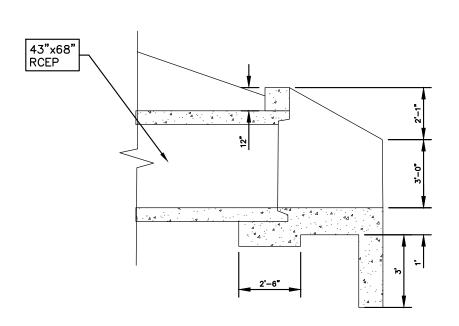
CONCRETE CAST AGAINST EARTH: ALL OTHER UNLESS SHOWN ON PLANS: 2 IN.

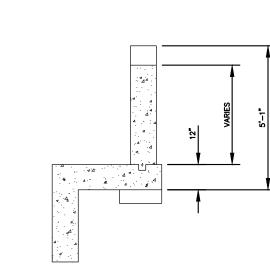
BACKFILL SURROUNDING CULVERT EXTENSION AND CAST IN PLACE CONCRETE WALLS SHALL BE MDOT CL II SAND

SOIL CLASSIFIED AS UNSUITABLE BY THE ENGINEER SHALL BE UNDERCUT AND REPLACED WITH BACKFILL, STRUCTURE, CIP COMPACTED TO 100 PERCENT OF MAXIMUM UNIT WEIGHT. ACTUAL LIMITS OF EXCAVATION WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

A COFFERDAM HAS NOT BEEN PROVIDED FOR THIS STRUCTURE. OTHER MEANS OF WATER CONTROL MAY BE USED, AS APPROVED BY THE ENGINEER. WATER CONTROL WHETHER IT BE BY COFFERDAM OR OTHER APPROVED MEANS, WILL BE INCLUDED IN THE CULVERT EXTENSION BID







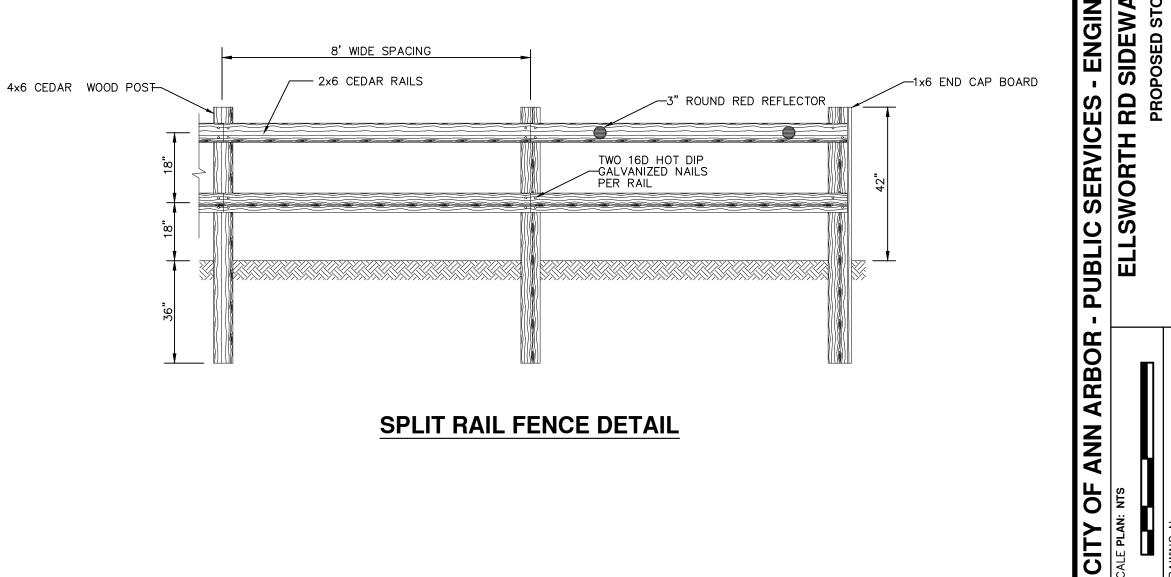
SECTION A-A

SECTION B-B

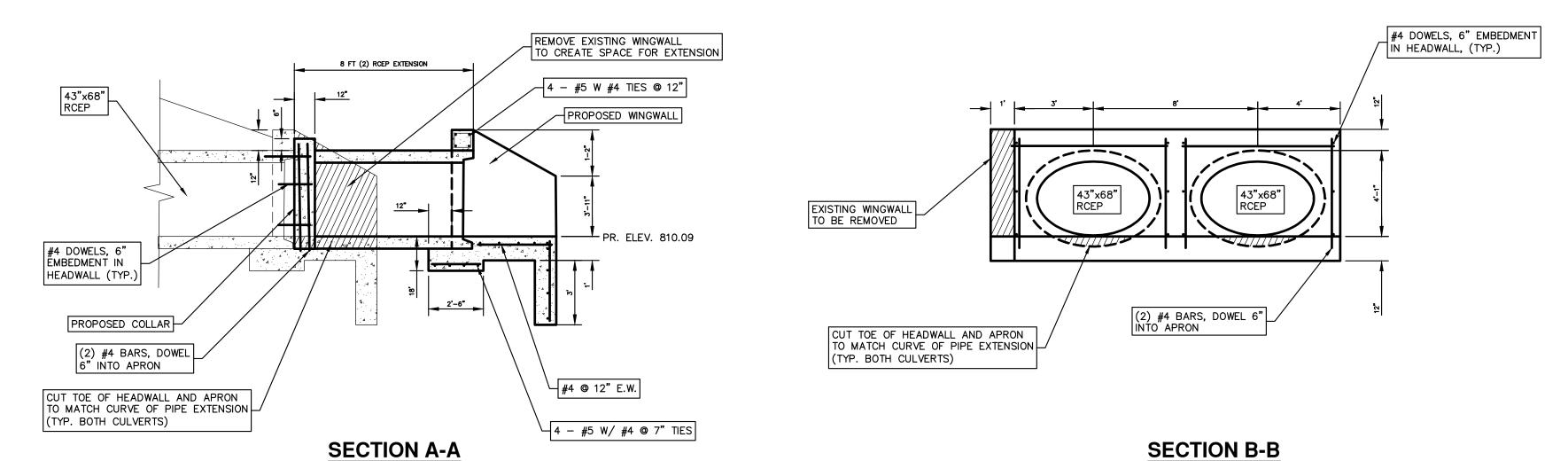
SHEET No.

24 OF 24

EXISTING HEADWALL #9 DETAIL



SPLIT RAIL FENCE DETAIL



SECTION C-C

- #4 @ 12" E.W.

#4 @ 12" HORIZ #5 @ 11" VERT & DOWELS

CULVERT EXTENSION DETAIL