

ROJECT REFERENCE NO.	SHEET NO.
11985529	02

TRAFFIC CONTROL AND WORK ZONE SAFETY

In accordance with Article 107-21 of the 2018 Standard Specifications, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in Article 108-7.

Work Zone Traffic Control shall include furnishing, installing, maintaining, relocating and finally removing any and all signs, barricades, drums, cones, flashing arrow boards, truck mounted impact attenuators and all other traffic control devices required to safely perform the work and protect the public. All signs shall be clean, legible, and in good condition as determined by the Engineer.

SAFETY VESTS, SAFETY GLASSES, FACE SHIELDS

All Contractor's personnel, all subcontractors and their personnel, and any material suppliers and their personnel, shall wear an approved reflective safety vest or outer garment meeting ANSI/ISEA 107-2004 Class 2 standards at all times while on the project. All personnel operating string/blade trimming equipment shall wear safety glasses and a face shield.

WORK ZONE SIGNING

All portable signs and stands must meet or exceed the requirements of the National Cooperative Highway Research Program Report 350 for Work Zone Category II Devices, and be listed on North Carolina's approved products list or accepted as traffic qualified by the Traffic Control Section. Use portable work zone signs and stands specifically designed for one another.

Refer to the following:

- · Section 1089 for material specification
- Section 1110 for construction specification
- Standard Drawing 1110 for clearance specification

The W10-10A shall be used for high volume primary and secondary routes. Its dimensions are 48" X 48". It shall be mounted at a minimum height of five (5) feet above the elevation of the outermost edge of travel. The sign shall read "MOWING NEXT 2 MILES" for mowing and "LITTER PICKUP NEXT 2 MILES" for litter pickup, and should be relocated accordingly during the prosecution of work.

The W10-10 shall be used for low volume secondary roads. Its dimensions are 36" X 36". However, the Engineer may require a larger 48" X 48" variant if traffic conditions dictate a need. The sign shall read "GRASS MOWING AHEAD" for mowing and "LITTER PICKUP AHEAD" for litter pickup. Low volume secondary routes are typically short enough that initial signage – either at the beginning of the route, or the beginning of the operation – do not need to be relocated within the same route. However, the Contractor may be directed to relocate signs on specified low volume secondaryroutes for reasons of safety at the Engineer's discretion. If the work zone in question contains a long-arm operation, the sign shall be relocated to maintain a maximum two (2) mile work zone.

DEADHEADING

Deadheading is herein defined as the movement of equipment within the traveled way while not in operation pursuant to the material terms of this contract.

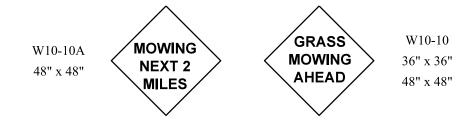
Deadheading may be permitted under the following circumstances:

- Equipment is within a properly signed work zone (refer to "Required Signs" in the Appendix)
- Equipment must briefly enter the traveled way to circumvent an otherwise unavoidable obstacle in the shoulder
 or median within the right-of-way. This includes traversing bridges. The operator must yield to approaching
 traffic.
- Equipment using over/under passes in order to continue work on the other side of a route. All such locations
 should be determined prior to beginning work, and be permitted by the Engineer. The Engineer shall be
 responsible for notifying other authorities should such movements require the equipment to enter jurisdictions
 beyond those of the Engineer.

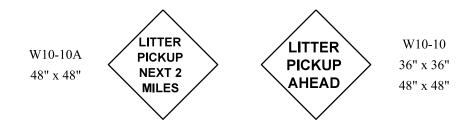
Any deadheading not explicitly permitted under these conditions is forbidden, and such equipment must be transported by trailer.

REQUIRED SIGNS

Grass Mowing Advance Warning Signs (W10-10A and W10-10)



Litter Pickup Advance Warning Signs (W10-10A and W10-10)



LIQUIDATED DAMAGES

TRAFFIC CONTROL

In addition, the Contractor shall incur immediate Liquidated Damages in the amount of **Two Hundred Fifty Dollars** (\$250.00) for each occurrence for failure to provide work zone signing as specified and for each occurrence for failure to remove work zone signing at the end of the day.

LIGHTING AND SIGNAGE

In addition, the Contractor shall incur immediate Liquidated Damages in the amount of **Two Hundred Fifty Dollars** (\$250.00) for each occurrence for failure to provide operational lighting and signing on all equipment as specified.

SAFETY VESTS

In addition, the Contractor shall incur Liquidated Damages in the amount of **One Hundred Dollars** (\$100.00) per employee for each occurrence for failure to wear a safety vest as specified, which includes prohibiting the safety vests being blocked from view by backpacks, etc.

SAFETY GLASSES, FACE SHIELDS

In addition, the Contractor shall incur Liquidated Damages in the amount of **One Hundred Dollars** (\$100.00) per employee for each occurrence for failure to wear a face shield and safety glasses while operating string/blade trimming equipment.

DEADHEADING

In addition, the Contractor shall incur Liquidated Damages in the amount of **Five Hundred Dollars** (\$500.00) per tractor, per occurrence for deadheading equipment in violation of exceptions listed herein.

PROJECT REFERENCE NO.	SHEET NO.
11985529	03

EOUIPMENT

The Contractor shall furnish equipment of sufficient type, capacity, and quantity to safely and efficiently perform the work as specified herein. The Contractor's company name, identification number, and telephone number shall be conspicuously and legibly displayed on each tractor, litter removal vehicle, and Service Vehicle.

The Contractor shall furnish the minimum quantity of fully-operated mowers shown in the Project Special Provisions dedicated to the work outlined herein.

The Contractor must demonstrate to the satisfaction of the Engineer that the mowing equipment to be used in the work is in good working condition (i.e. no excessive fluid leaks; blades sharpened and in good condition) and suitable for performing the work required. All tractors shall have sufficient horsepower to operate their mowers per manufacturer recommendations. All tractor tires shall have adequate tread depth to perform the work required. All equipment safety devices as were originally designed/provided by the manufacturer shall be in place.

The Engineer may reject any equipment that is not operating in a satisfactory manner. Reasons for rejection shall include but not be limited to excessive leaks, tractors that cannot be operated in both forward and reverse gear, and mower attachments that are not capable of acceptable mowing. Contractor shall make arrangements for equipment replacement/repair as needed to satisfy the contract objective. No extension in contract times will be allowed due to rejected equipment.

The Contractor shall be responsible for the equipment provided in this contract at all times and at all locations during the term of the contract. The Contractor shall have no claim against the Department of Transportation for any expense involving damage or loss to the Contractor's equipment (including vandalism, theft, fire and acts of God, etc.) arising out of, or relating to, work performed under this agreement.

SAFETY, LIGHTING, AND SIGNAGE

All tractors shall be equipped so as to conform to the prevailing Occupational Safety Health Act Standards.

The Contractor must furnish, mount, and maintain a W10-11 or W10-11A "CAUTION MOWER" sign on the rear of each mower such that they can be easily read by motorists approaching from the rear. Both sign types are black lettering over a fluorescent orange background. The sign shall have a minimum clearance of one (1) foot from the ground to the bottom of the sign. The sign must not obstruct any safety lighting or the operator's view.

All tractors shall be equipped with one (1) light bar mounted on top of the cab/canopy. The width of the bar shall be seventeen (17) inches or greater, but shall not exceed safe mounting limits of the cab. The bar's light source may be a series of rotating quartz-halogen, incandescent, or LED bulbs; stroboscopic lamps; or static programmable LED. The Engineer may require an alternate pattern should the one chosen be deemed unsafe, inconsistent, or inadequate. The light source shall be amber in color as permitted by N.C.G.S § 20-130.2. The light bar shall be visible from all directions.

The Contractor may choose to elevate the rear-mounted "CAUTION MOWER" sign above the operator for increased visibility to approaching traffic. Since such an elevation would obstruct the view of any single light bar, the Contractor may use two (2) additional overhead stroboscopic perimeter lights instead of the light bar. These lights must be securely attached to the cab, canopy, roll bar, or sign. The lights must be fully viewable from the front and back of the tractor. If mounting placement precludes visibility of the lights from the front and back, additional perimeter lights must be used to attain full visibility of the lights from the front and the back. The elevated sign must not obstruct the rear-view of the operator.

All tractors shall be equipped with one (1) perimeter light mounted on the left rear fender, and one (1) perimeter light mounted on the right rear fender. These lights shall be amber in color.

SERVICE VEHICLES

All vehicles used by the Contractor must be performance worthy by visual and operational inspection. All vehicles, including trailers, used should be properly equipped with lighting per Roadway Standard Drawing 1165.01 Sheet 1 of 1. Trailers shall have rear mounted strobe lights, mounted as high as possible to enhance visibility.

The safety of the public and the convenience of traffic shall be regarded as prime importance. The Contractor shall operate the equipment in a safe manner so as not to create a hazard to the traveling public. Crossing lanes of traffic and erratic driving will be strictly prohibited.

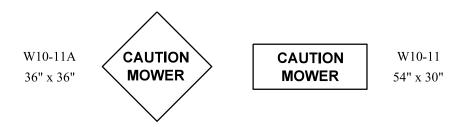
Signs, lights, safety, and other traffic control items are not a pay item, but are considered incidental to other contract items and the Contractor is expected to provide these items.

OPERATION OF EQUIPMENT

All personnel shall be properly trained and qualified to operate the piece of equipment to which they are assigned. The Contractor shall operate the equipment in a safe manner so as not to create a hazard to the traveling public. Insofar as possible, the tractor wheels are to remain off the travel way during mowing operations. The equipment shall not be parked within the State Highway System right of way overnight or at other times when work has been suspended, unless approved by the Engineer.

REQUIRED SIGNS

Caution Mower (W10-11A and W10-11)



REQUIRED WORK CYCLES

All work shall be completed between the hours of 8:00 AM and 5:00 PM Monday through Friday. Extended hours may be granted upon review and approval of a written request by the Contractor.

All work shall begin within five (5) days of the work cycle availability date and be completed by the end of the day on the completion date.

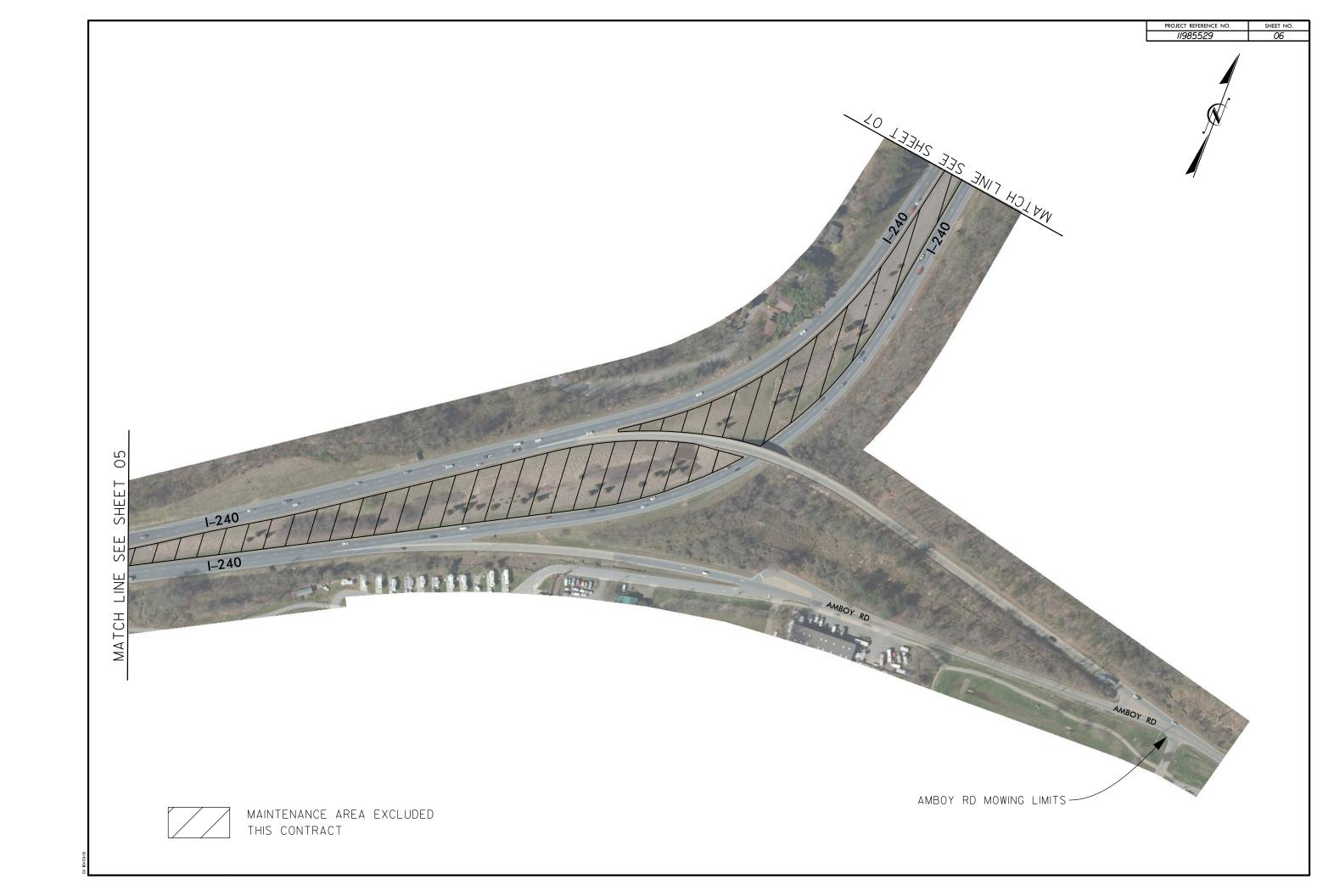
Refer to Intermediate Contract Time Numbers 1, 2, and 3 for liquidated damages applicable to work cycles and hours of work.

Cycle	Availability Date	Completion Date	Work Required in Cycle
1	April 19, 2021	April 30, 2021	Mowing and String/Blade Trimming
2	May 17, 2021	May 28, 2021	Mowing and String/Blade Trimming, Vegetation Removal at Stationary Objects
3	June 14, 2021	June 25, 2021	Mowing and String/Blade Trimming
4	July 12, 2021	July 23, 2021	Mowing and String/Blade Trimming, Vegetation Removal at Stationary Objects
5	August 9, 2021	August 20, 2021	Mowing and String/Blade Trimming
6	September 7, 2021	September 20, 2021	Mowing and String Blade/Trimming, Vegetation Removal at Stationary Objects
7	October 4, 2021	October 15, 2021	Mowing and String/Blade Trimming
8	November 1, 2021	November 15, 2021	Mowing and String/Blade Trimming, Vegetation Removal at Stationary Objects

If the contract is renewed, the availability and completion dates will be provided for the renewal year.







PROJECT REFERENCE NO.

11985529 90 SHEET I-240 I-240 MATCH 08 1-240 I-240 MATCH HANOVER ST MOWING LIMITS MAINTENANCE AREA EXCLUDED THIS CONTRACT

PROJECT REFERENCE N	D. SHEET NO.
1/985529	08

1-240

07

SHEET

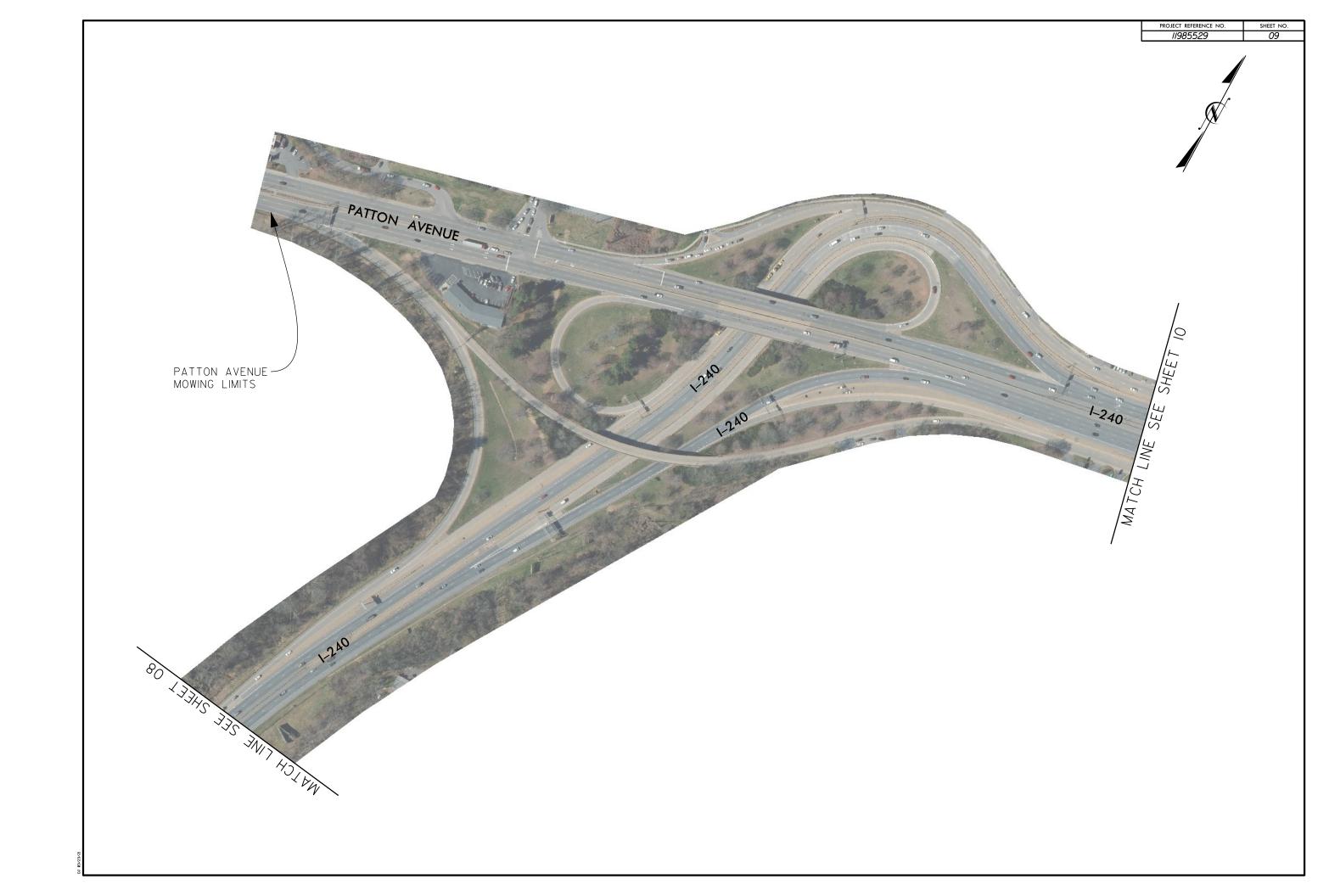
SEE

MATCH LINE

I-240

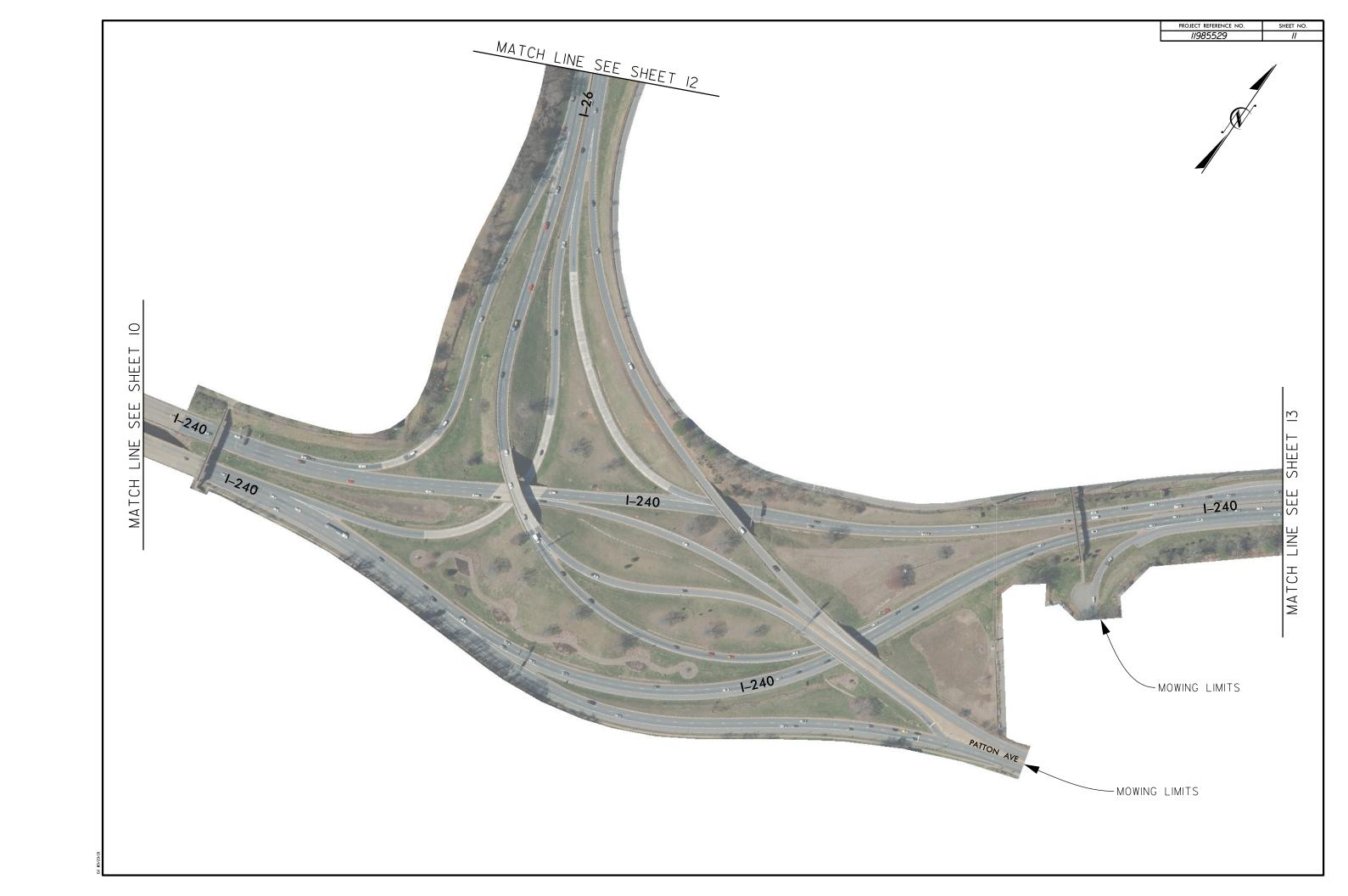


1-240



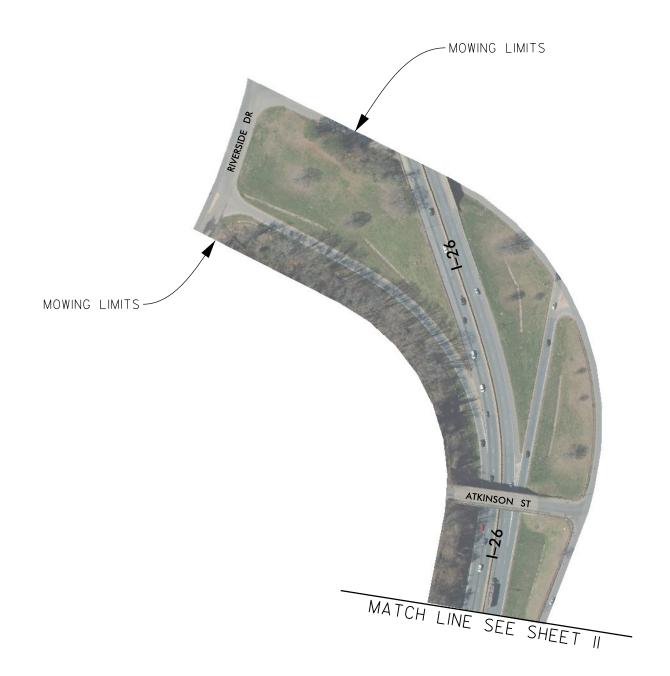
project reference no.

11985529 sheet no. 60 -MOWING LIMITS SHEET SEE I-240 1-240 MATCH LINE I-240 -MOWING LIMITS

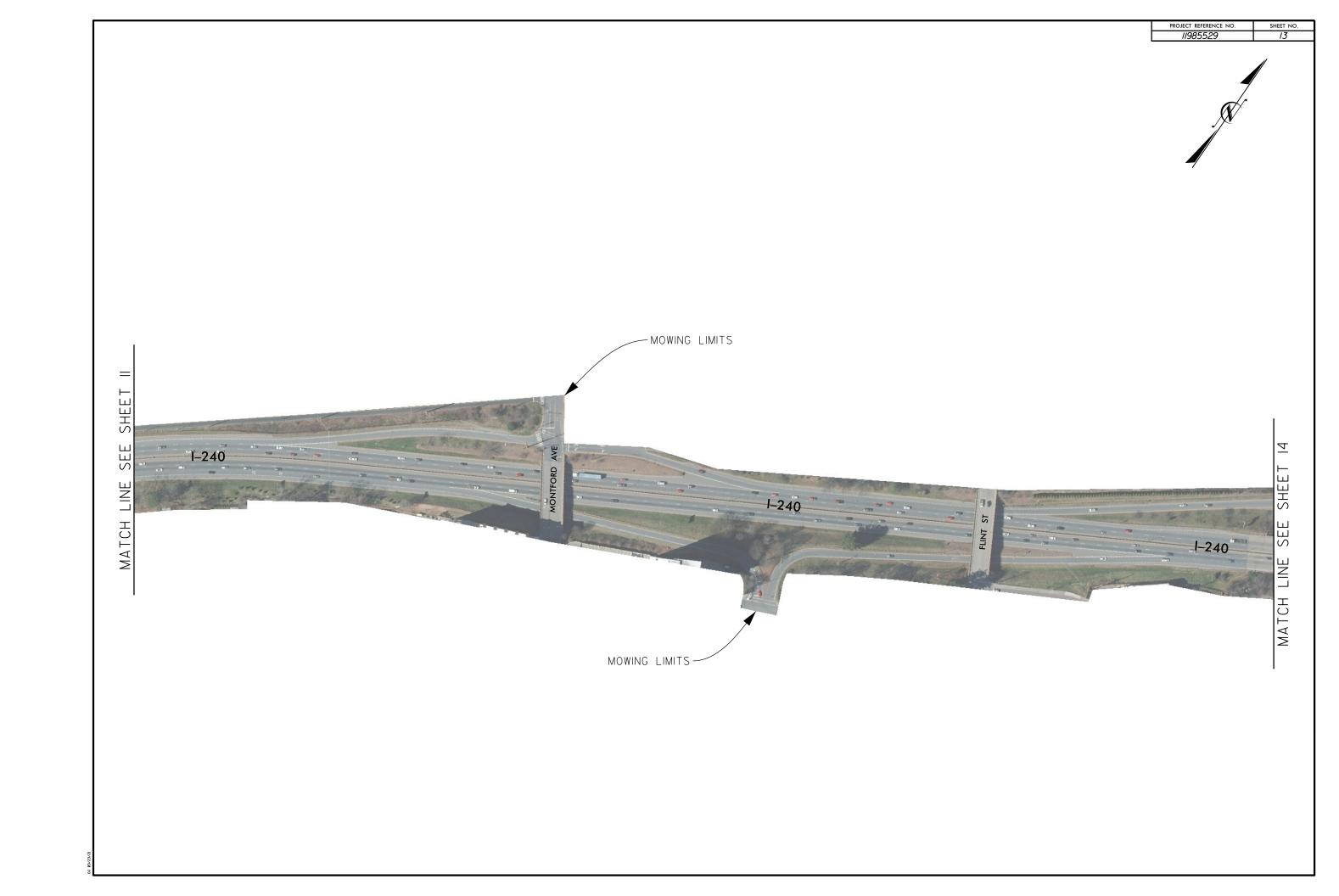


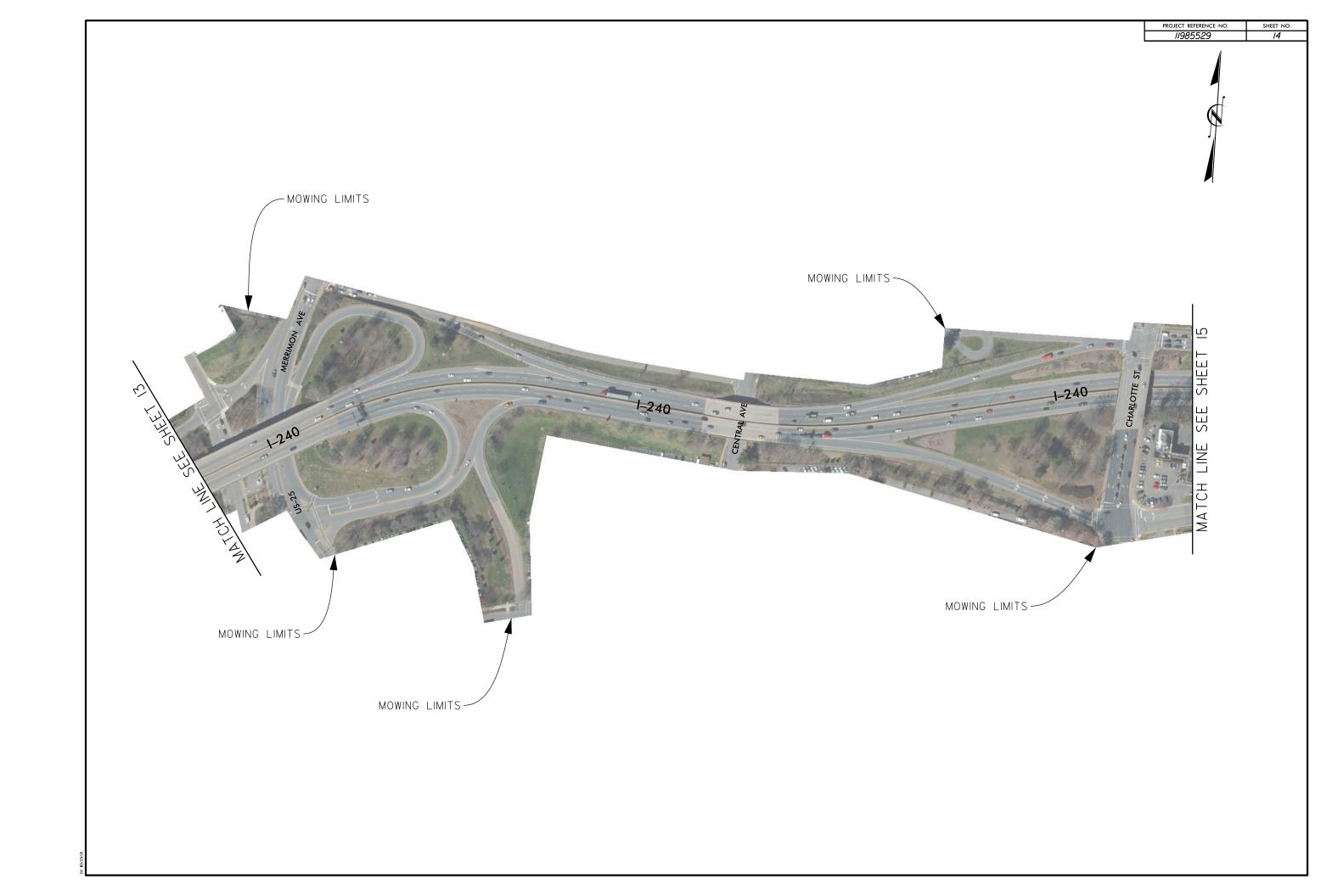
PROJECT REFERENCE NO.	SHEET NO.
11985529	12





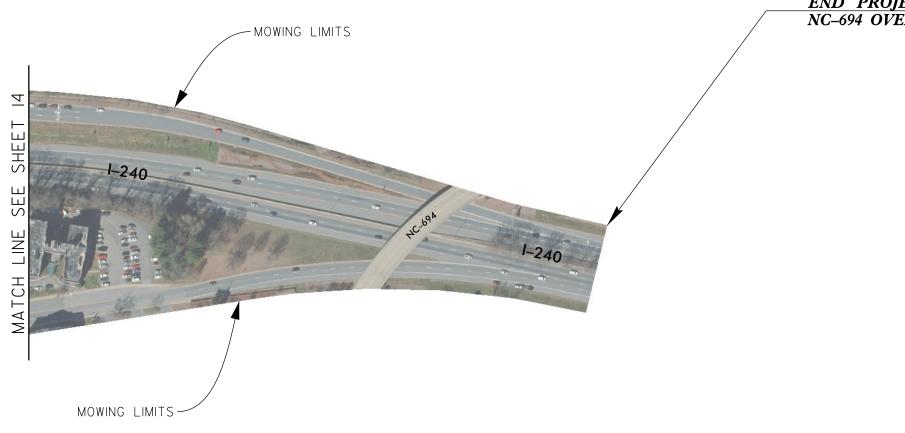
13/23/21





PROJECT REFERENCE NO.	SHEET NO.
11985529	15





END PROJECT 11985529 NC-694 OVERPASS