



Montour Falls Complete Streets Plan

Ascend Collaborative Development

June 2, 2022

Executive Summary

Montour Falls Complete Streets Plan

Dear Mayor Ryan,

Thank you for partnering with us on the creation of a Complete Streets Plan for the Village of Montour Falls. We are excited to see the implementation of the projects over the next ten years. Below is the Executive Summary of the Complete Streets Plan.

Plan Rationale: The Montour Falls Complete Streets Initiative was implemented as part of the Village's Commitment to the NY State Climate Smart Community Program and overseen by the Sustainable Montour Falls Sustainability Committee.

Current Conditions Summary: The Plan includes a review of the current street, sidewalks, and visual environment in Montour Falls. The review considered the physical conditions, pedestrian safety, usage, and resilience. The plan also looks at public transportation usage as well as bicycle usage. There are currently 46 streets located in Montour Falls. Of these, 33 are in poor to fair physical condition. Over 70% of all streets are in fair to poor condition. Additionally, there are 24 streets with sidewalks on at least one side of the street. Of these, only seven streets have sidewalks in good to excellent condition, meaning nearly 70% of the streets have fair to poor sidewalks. The street with the highest number of pedestrian accidents is West Main Street, primarily pedestrian accidents are occurring at intersections of side streets and Main Street.

Additional current conditions highlight the lack of public transportation on the evenings and weekends, the poor condition of the visual environment on Main Street, and the lack of directional signage throughout the village for drivers, pedestrians, and bicyclists. A review was also conducted of the infrastructure vulnerability and resilience in relation to current and projected climate changes.

Recommended Priority Projects: Based on the current conditions, projected climate changes, and community feedback; there are six recommended priority projects to be completed in the next five years. The projects include:

- Owego Street (Complete reconstruction)
- Main Street (Facade, streetscape, pedestrian improvements, sidewalk, and street repair)
- South Street (Complete reconstruction)
- SR 14 and SR 224 Visual Environment (Lighting, Landscape, Facade, and Signage)
- Glorious T Intersection Redesign
- Creation of Sidewalk District

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Combined Priority Project Cost Estimate: The cost to the Village of Montour for the implementation of the priority projects is approximately \$6 million. This does not include costs to private building owners for facade improvements. This also does not include ongoing maintenance of the completed projects.

Next Steps: The Complete Streets plan should be used as a roadmap for the adoption of Complete Streets planning in Montour Falls. Achieving the identified projects, however, is dependent on many factors outside of the Village's control, including the availability of funding. A short-term plan of three years should be developed by Sustainable Montour Falls and the Village Board of Trustees to consider the priority projects and secondary projects that need to be accomplished first or that are already underway. The annual reporting will be utilized by the Village of Montour Falls to determine the success of the short-term projects and to determine where to focus the Village's energy and resources next.

It has been our pleasure working with you on this Complete Streets Plan. If we can be of assistance to you on plan implementation, we would love to help.

Sincerely,

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Complete Streets Plan Development
Street and Sidewalks Current Conditions Study
Climate Vulnerability and Sustainability Analysis
Editing and Graphic Design
Glorious T Intersection Study

Prepared on behalf of the Village of Montour Falls under the direction of Sustainable Montour Falls Initiative and the Montour Falls Sustainability Committee.

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Schuyler Hospital
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Sustainable Montour Falls Mission

To help the Village of Montour Falls to be more environmentally and economically sustainable now and for generations to come through the adoption of comprehensive sustainable policies; the undertaking of improvements to its facilities to improve energy efficiency and decrease carbon emissions; the development of long-term funding strategies for large, long-term improvements; and increased coordination between the Village and both private and public entities to reduce waste of both energy and materials and improve energy efficiency throughout the Village of Montour Falls.

Montour Falls Complete Streets Initiative

The Montour Falls Complete Streets Initiative was implemented as part of the Village's commitment to the NY State Climate Smart Community Program and overseen by the Sustainable Montour Falls Sustainability Committee.

*The project was made possible in part through a grant from **Empire State Development**.*

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Montour Falls Complete Streets Policy

The Village of Montour Falls adopted a Complete Streets policy on June 6, 2019, which includes the following guidelines:

- i. The Village will strive to create an interconnected network of streets that are accessible by pedestrians, bicyclists, motorists, and bus riders of all ages and abilities. This includes the safe passage along and across Village streets.
 - a. To achieve these goals, the Village will undertake to identify potential grant or other funding options in order to more fully realize the Complete Streets goals.
- ii. The Village will seek to realize its Complete Streets vision and develop its street projects in ways that are responsible, affordable, balanced and equitable way by considering the needs of all travelers.
- iii. The Village recognizes that not every design element or feature will be needed or feasible for every street project, but commits to the goal of accommodating everyone.
- iv. The Village will incorporate Complete Streets goals into all new construction, reconstruction, and maintenance road projects.
 - a. Complete Streets projects undertaken by the Village may include: improved bus or public transit access, special bus lanes, special bike lanes, sidewalk and curb upgrades, crosswalk upgrades, streetscape and lighting design audits, shade and infrastructure studies, and more.
- v. The Department of Public Works is hereby designated as the lead department in implementing the Complete Streets policy, and shall consult with the Village Board on matters relating to implementing the Complete Streets Policy. The Village Board retains the right of final say on projects within the Village.
- vi. The Village will, to the extent feasible, incorporate the Complete Streets Policy while taking the following into account:
 - a. The additional cost to the Village to incorporate Complete Streets goals and whether that would be excessive or disproportionate to the larger street project.
 - b. For example, whether Complete Streets goals would be too expensive to implement while conducting routine spot pavement repairs or isolated curb or sidewalk maintenance. b. The possibility of creating a public safety risk by the incorporation of Complete Street ideals into a given street project.
 - c. The current and future population of the street or road. i. For instance, that a road is so sparsely populated that it is unlikely to see a rise in pedestrian traffic in the future, even with a sidewalk.
 - d. The current and future economic and sustainable development goals of the Village and whether incorporating Complete Streets goals can be done while maintaining those economic and sustainable development goals.
 - e. The current state of utilities, both Village and those belonging to a utility company, and their placement in a given street, and how Complete Streets goals can be implemented around or incorporating those utilities.
 - f. The built and natural environment, and how implementing Complete Streets Policy goals will impede or strengthen the local character and systems.
 - g. Future physical climate risk due to flooding and extreme heat have been considered, and that the Village consider incorporating these factors into street infrastructure design, as per NYSDEC Flood Risk Management Guidance for Implementation of the Community Risk and Resiliency Act and NYSDEC Guidance for Smart Growth Public Infrastructure Assessment.

1. INTRODUCTION

Traditionally, Complete Streets are streets and sidewalks that are designed and constructed to serve everyone - pedestrians, bicyclists, and drivers. They take into account the transportation needs of everyone, including children, older adults, and people with disabilities or impaired mobility. The Village of Montour Falls takes a broader approach to Complete Streets. The Village’s Complete Street Plan considers not only the actual design and construction of the streets and sidewalks, but also the visual environment, sustainability, and Climate Smart best practices. With this in mind, the plan reviews and recommends projects based on all of the above considerations as well as those below.

- SAFETY
- ACCESSIBILITY
- HEALTHY AND ACTIVE LIVING
- ENVIRONMENTAL SUSTAINABILITY AND RESILIENCY
- COMMUNITY AND NEIGHBORHOOD CHARACTER
- ECONOMIC GROWTH AND STABILITY
- MAINTENANCE



The Village of Montour Falls Complete Streets policies and projects are aimed at changing village streets from places where the goal is to get vehicles through the village at the fastest speeds possible, to enjoyable places where all users are safely accommodated, the natural environment is protected and enhanced, the visual environment is taken into consideration, businesses grow and can support a robust and diverse workforce, maintenance is consistent and ongoing, and climate change is anticipated. The Village’s Complete Streets projects include the following elements:

- Pedestrian, ADA Compliant, and Bicycle Safety Elements
- Visual-Environment and Streetscape Elements
- Traffic Calming and Access Management Elements
- Transit and Parking Elements.
- Green Infrastructure and Sustainability Elements
- Maintenance Elements

2. CURRENT CONDITIONS

In fall 2021, the Village of Montour Falls contracted with Larson Design Group to conduct a current conditions study of all of the village's streets and sidewalks. A review was also conducted on pedestrian accidents, the visual environment, infrastructure related climate vulnerability, street usage, current policies and projects, and public transportation. Additionally, several public engagement activities were held to solicit the concerns and suggestions of Montour Falls businesses and residents.



Community Outreach

Extensive community outreach was conducted to source citizen opinions regarding street and sidewalk condition and possible design and remediation efforts.

- Sustainability Committee Survey (5 completed surveys)
- Sustainability Showcase Community Survey (15 completed surveys)
- Focus Group held in January 2022

Street and Sidewalk Infrastructure Study

Below are the summarized results of the infrastructure study carried out by Larson Design Group. Street and sidewalk infrastructure was rated on a scale from Poor to Excellent, reflecting the overall condition of the surface. Results of the

infrastructure study can be found in Appendix B. A full map of the results can be found in Appendix C.

Streets with infrastructure rated Poor to Fair:

- | | | | |
|-----|--------------------|-----|----------------------------|
| 1. | Owego Street | 17. | N. Lhommedieu Street |
| 2. | W. South Street | 18. | S. Seneca Street |
| 3. | S. College Ave | 19. | Ayers Street |
| 4. | S. Mulberry Street | 20. | Mill Street |
| 5. | E. South Street | 21. | N. College Avenue |
| 6. | N. Mulberry Street | 22. | Rock Cabin Road |
| 7. | E. Main Street | 23. | Tracy Street |
| 8. | Lee Street | 24. | Washington Street |
| 9. | Montour Street | 25. | E. Broadway Street |
| 10. | Walker Street | 26. | E. Catlin Street |
| 11. | Canal Street | 27. | Fallsview Drive |
| 12. | W. Broadway | 28. | N. Seneca Street |
| 13. | Schuyler Street | 29. | Raymond Street |
| 14. | Clinton Street | 30. | Cook Street |
| 15. | Mary Layton Drive | 31. | Coykendall/ Park Hill Road |
| 16. | Turner Park | 32. | Smith Lane |

Sidewalks with infrastructure rated Poor to Fair:

- | | | | |
|----|--------------------|-----|--------------------|
| 1. | Owego Street | 7. | S. Genesee Street |
| 2. | W. South Street | 8. | E. Main Street |
| 3. | Henry Street | 9. | Lee Street |
| 4. | S. College Avenue | 10. | W. Broadway Street |
| 5. | S. Mulberry Street | 11. | Clinton Street |
| 6. | N. Mulberry Street | 12. | Mary Layton Drive |

Pedestrian Safety Assessment

The following is a list of streets with pedestrian-involved accidents in the past ten years as identified by the Built Environment Assessment. Recent improvements completed in 2021 along SR 14 and SR 224 include pedestrian safety measures that should lead to decreased pedestrian-involved accidents. The complete Built Environment Assessment can be found in Appendix D.

- | | | | |
|----|--------------------------|-----|----------------------|
| 1. | W. Main Street | 7. | Clinton Street |
| 2. | SR 14 (Catharine Street) | 8. | N. Lhommedieu Street |
| 3. | CR 224 (Clawson Blvd.) | 9. | Rock Cabin Road |
| 4. | Owego Street | 10. | S. Lhommedieu Street |
| 5. | Henry Street | 11. | Steuben Street |
| 6. | S. Genesee Street | 12. | Belle Cornell Drive |

Public Transportation Assessment

Public Transportation in Montour Falls is provided by Schuyler County Transit. Schuyler County Transit, established in 2010, was created to meet the transportation needs of residents and visitors of Schuyler County. As of April 2022, there were four daily routes into and out of the Village. The four routes are the Village Connection (connecting Odessa, Montour Falls, Watkins Glen, and Burdett), Tompkins Connection (connecting Montour Falls and Ithaca), Elmira Connection, and the Corning Connection. The Village Connection route runs hourly Monday to Friday from 7:30am to 5:30pm. The Ithaca Connection route runs five times daily Monday to Friday between 6am to 4pm. The Elmira Connection route runs Monday to Friday five times a day between 6am to 6:30pm. The Corning Route runs twice daily Monday to Friday between 6:45am to 5pm. All buses run approximately 260 days per year. There are six bus stops in Montour Falls: Schuyler Hospital (served by Village Connection and Tompkins Connection); Main Street, Havana Glen, Flats on Broadway, and Rock Cabin Trailer Park (served by Village Connection); and the Human Services Complex (served by Village Connection, Elmira Connection, and Corning Connection).



The number of riders originating in Montour Falls for 2021 for all routes was 2,878 (the Elmira route was added in early 2022 and is not included in the totals). This was similar to previous years. The most used route was the Inter-Village Route with a total of 2,779 riders. The Ithaca route had 90 riders and the Corning route only had 9 riders. The Village Connection bus stops were utilized in the following order: Flats on Broadway (660), Havana Glen (598), Main Street (539), Schuyler Hospital (476), Human Services Complex (181), and Rock Cabin Trailer Park (110). The remaining 215 riders were picked up at locations throughout the village (service available to seniors and riders with disabilities). A complete breakdown of ridership can be found in Appendix J.

Extensive study has identified two critical areas for needed improvements for public transportation within the Village: for one, increased hours of service to include weekends, evenings, and holidays; and two, increased ridership. Currently, there are no public transportation routes in Montour Falls that operate on weekends, holidays, or evenings. Most riders use the Inter-Village route. The Inter-Village route is utilized for daily errands including shopping and appointments. Very few riders use the bus for commuting to work. This is due in part to the lack of weekend and evening hours. Similarly, very few riders utilize public transportation for leisure as the service hours are not sufficient for leisure travel. Public transportation is missing both workers and leisure riders.

This contributes to the secondary of needed improvement which is low ridership. With the limited service hours, ridership is low with an average of 11 riders per day on all routes. A more thorough analysis and study needs to be completed to determine if increased service hours or a modification in service hours would translate into increased ridership.

Visual-Environment Assessment

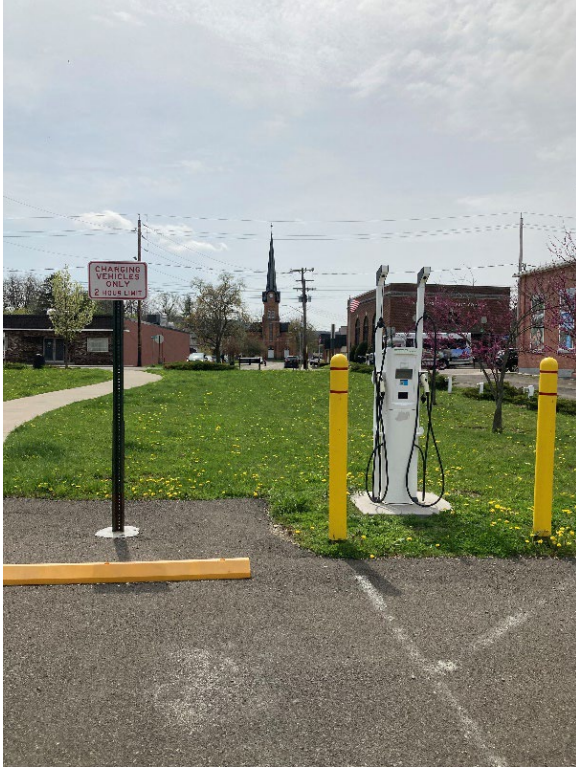
A Visual Environment Assessment was conducted for the primary streets with a special focus on SR 14, CR 234, and Main Street. The Visual Environment was assessed using five criteria: Lighting, Landscape, Facade/ Property Condition, Trash Receptacles, and Signage. With the exception of the Catharine Valley Trail, all of the streets were assessed as having a Visual Environment of poor to fair.

Streets assessed as Poor to Fair:

- | | | | |
|----|-------------------|----|--------------------------|
| 1. | Owego Street | 5. | SR 14 (Catharine Street) |
| 2. | W. Main Street | 6. | CR 224 (Clawson Blvd.) |
| 3. | W. South Street | 7. | Canal Street |
| 4. | S. Genesee Street | 8. | Catharine Valley Trail |

Bicycle Use Assessment

(Catharine Valley Trail physical infrastructure is part of the Streets and Sidewalk Infrastructure and Usage Assessment. Bicycle usage within the village cannot be determined without further study. However, due to the overall poor condition of the majority of the streets and sidewalks within the village, it is unsafe to travel via bicycle throughout most of the village.)



Current Sustainability Village Codes, Policies, Guidelines, and Projects

All Sustainability Policies, Guidelines, and Projects, including those related to street design, construction, and maintenance, can be found on the Village's Sustainability Webpage at www.villageofmontourfalls.com/sustainability.html. The Building Code website is <https://www.villageofmontourfalls.com/code-enforcement.html>. The webpages are kept up to date.

Sustainability Assessment

An overview of the existing sustainability initiatives in the Village of Montour Falls was conducted to assist with the development of proposed Complete Streets projects. The assessment reviewed the current conditions as well as how the proposed projects will contribute to the existing sustainability goals and initiatives established by the community.

As a participating municipality in the Climate Smart Communities' program, the Village of Montour Falls has completed multiple projects concerning the preservation and protection of natural resources including the development of a Natural Resource Inventory which accounts for all existing natural resources whose criteria is established by the Village and the New York State Department of Conservation. Significant natural resources include the surrounding Catherine Valley Wetlands which surround the entire village but are primarily located north of the Village. The Shequaga Falls located within the Village is also another valuable natural resource that was identified as a significant natural area within the Village.

In addition to valuable natural assets within the Village identified within the NRI, the Village also has special geographical and geologic characteristics that make the community vulnerable to climate change. These include the fact that the Village is located within a valley with highly saturated soils that have poor drainage across the municipality. As a result, much of the region experiences ponding and flooding due to these various characteristics that makes the Village particularly vulnerable to water damage from extreme precipitation.

As climate change increases the overall intensity of precipitation within the region, complete streets and green infrastructure can reduce overall vulnerability to flooding and contamination/ harm of existing wildlife habitat and natural resources. Green drainage technology such as permeable pavement, Rain Gardens, Bioswales, and Rainwater Harvesting can provide the Village with a cushion and maximization of water absorption capacity to mitigate flash flooding and contaminated runoff from damaging existing ecological resources. Reducing contaminated runoff and increasing green infrastructure can also mitigate damage to existing natural water filtration systems such as marshes and riparian buffers.

The assessment considered three broad categories as they relate to sustainability: Infrastructure, GHG Emission, and Ecological Issues. While complete streets are meant to address the overall safety and

structural issues at hand and at the same time can act as a beautification strategy to increase overall desirability of the Village, one of the core reasons the Village is implementing Complete Streets is to redevelop streets and sidewalks to reduce and even eliminate issues like road flooding and land erosion.

Many roads within the Village have and continue to experience issues associated to erosion and flooding as a result of a lack of or poor infrastructure development. Owego Street is one such arterial that has been identified as a road that not only has a lack of stormwater infrastructure but poses threat to residents and vehicles that use the road. Another such road that has issues associated with flooding and erosion is N. LHommedieu Street located on the eastern side of the municipality that is relatively low-lying and experiences ponding in parts of the road as a result of poor drainage. Other roads that are within the Village limits but not within the municipal jurisdiction are State Route 14 and Steuben Street (Route 224) which have been identified as essential arterials that have issues related to road erosion and infrastructure degradation. While a separate analysis on structural condition has been conducted, this assessment is meant to provide an understanding of the existing factors that are harmful to the environment and community, and thus the necessity for the Village to invest in road infrastructure as a component to increase overall resilience and sustainability.

The Village of Montour Falls has developed over time to serve the automobile as the main transit mode within the community. Within the past decade however with the development of the Catherine Valley Trail, the Village has seen an increase in bicycle usage across the region. In May 2018, a bikeshare company established a network of bikeshare systems across Schuyler County between the Village of Montour Falls and Watkins Glen. However, with the overall lack of usage of the system especially with the COVID-19 Pandemic, the program was discontinued in 2020. Other public transit systems in the area include Schuyler County Transit, which has a bus line that connects the Village of Montour Falls to Watkins Glen to the North and Corning/ Elmira to the south.

While the Village of Montour Falls has limited transit systems, it is in a unique position as the municipality is situated along a bike trail as well as bus route and is a reasonable commuting distance to Watkins Glen and Odessa NY. By developing complete streets across the Village and increasing interconnective routes between communities like Watkins Glen and Odessa, the Village can not only increase overall pedestrian friendly development but also decrease overall Greenhouse Gas emissions with the reduced use of automobiles for short distance travel, which does account for a significant amount of localized vehicular traffic in the region. According to the Cornell Program for Applied Demographics, the projected population is expected increase over time and with the higher desirability of the Finger Lakes Region, the Watkins Glen-Montour Falls Catherine Valley Region will likely also see an increase in population as well as overall increase in tourism. As a result, developing pedestrian friendly transit infrastructure and public transit systems cannot increase quality of life within the community, but also encourage pedestrian-oriented development that would help reduce overall GHG emissions over time.

Overall Current Condition Findings

Streets with the highest overall infrastructure, visual environment, and safety issues are ranked below from the worst overall condition to the relatively better overall condition. However, none of the streets listed below rank higher than Fair.*

- | | | | |
|----|-----------------|----|----------------------|
| 1. | Owego Street | 4. | Henry Street |
| 2. | W. Main Street | 5. | South College Avenue |
| 3. | W. South Street | 6. | S. Mulberry Street |

- | | | | |
|-----|--------------------------|-----|--------------------|
| 7. | E. South Street | 17. | N. Genessee Street |
| 8. | N. Mulberry Street | 18. | Walker Street |
| 9. | S. Genessee Street | 19. | Canal Street |
| 10. | N. Lhommedieu Street | 20. | Schuyler Street |
| 11. | E. Main Street | 21. | Ayers Street |
| 12. | Lee Street | 22. | Washington Street |
| 13. | Montour Street | 23. | E. Broadway |
| 14. | SR 14 - Catharine Street | 24. | E. Catlin Street |
| 15. | W. Broadway | 25. | Fallsview Drive |
| 16. | SR 224 - Clawson Blvd. | 26. | N. Seneca Street |

*Includes feedback from the community surveys and usage.



3. RECOMMENDATIONS

The following sections outlines priority and secondary project areas within the village, as well as projected timelines for completion of said projects. Priority projects are explained in greater detail, with specific site conditions and potential upgrades identified, and comprehensive design recommendations noted. Potential funding sources are also identified, providing guidance to the Village for financing of various projects.

Priority Projects

The following projects are hereby identified to be completed within the next five years. Priority Projects will be given priority in funding through the general fund as well as a priority when researching and applying for grants.

- Owego Street (Complete reconstruction)
- Main Street (Facade, streetscape, pedestrian improvements, sidewalk, and street repair)
- South Street (Complete reconstruction)
- SR 14 and CR 224 Visual Environment (Lighting, Landscape, Facade, and Signage)
- Glorious T Intersection
- Creation of Sidewalk District

Owego Street

Current Conditions: Owego Street is a primary residential street located on the west side of the Village. The street generally runs north to south and contains approximately 51 residences. It is estimated that the current street design was constructed in the 1950's and has been said that the street was once the primary arterial road through the Village until the construction of SR 14. The street has only seen occasional maintenance/repairs as needed through the years. A noticeable trait, unique to Owego Street (the section from W. South Street to Mary Layton Dr.), is that it was constructed with concrete gutters in lieu of traditional curbing. The gutters are



ineffective at removing stormwater and are often clogged. This frequently leads to localized flooding. Also noticeable is the fact that the roadway surface sits very high above the bottom elevation of the gutters creating a very deep “ditch” for vehicles to cross at driveways. Most residents have installed some type of ramp, plate, or blocking to soften the impact on vehicles as they cross.

Infrastructure: Recognizing that a major rework of the street will eventually be required, the Village has made it a priority to upgrade the underground utilities in the area. Natural gas was upgraded in 2018. Water mains, hydrants, and services were replaced in 2019. Sewer mains were relined, and services replaced in 2021. Only the stormwater drainage system remains to be upgraded.

Roadway: In addition to the gutter elevation issue at the drives, the overall condition of the street pavement is poor. The extensive utility work has created a patchwork of trench repairs while the original pavement surface is cracked and crumbling. The overall surface is uneven and rough. The current wearing surface has outlived its useful life.

Gutters/Sidewalks/Lighting: Conditions vary along Owego Street. The concrete gutters are cracked and uneven because of numerous repairs/patching, which contributes to ponding. The sidewalk quality varies from nearly new (because of recent utility work) to very old, cracked and uneven. Surface materials vary and include concrete and asphalt, and sections have no walkway at all. Street lighting was recently upgraded to high-efficiency LED fixtures, but they are mounted on existing utility poles and are far enough apart to make lighting levels uneven.

Recommendations: Given the age of the infrastructure and the deterioration noted above, it is recommended that a new roadway surface be constructed. To improve access to driveways and improve surface drainage it is recommended that the new road surface elevation be modified, and the gutters removed and replaced with a traditional curbing design. The modified road surface will require the complete replacement of the roadway section and a new stormwater collection system including pipes and inlets. Portions of the sidewalk that are new can remain, but most of the walks should be demolished and replaced with new ones at the same elevation to match the existing driveways/yards. Street lighting could be upgraded at this time to increase the number of fixtures and decrease the spacing to provide even and more consistent lighting levels.

The project includes completion of the Owego Street infrastructure engineering, including new stormwater infrastructure, repaving of the street surface, and repair or replacement of sidewalks as necessary. The preliminary engineering has been completed and cost estimates have been completed utilizing Larson Design Group, an engineering firm specializing in municipal infrastructure, and contracted with the Village to provide municipal engineering services. (Task 1) The Village will conduct community engagement to solicit community input, especially input from the residents that live on Owego Street. (Task 2) Larson Design Group will complete the street infrastructure engineering taking into consideration Complete Streets and Climate Smart Best Practices and (Task 3) prepare the construction bid documents. (Task 4) Larson will also assist the Village in drafting an RFP for construction services. (Task 5) The Village will issue the RFP for construction services and (Task 6) will review the proposals with assistance from Larson Design Group and will select the best proposal considering price, experience, timeframe availability, and familiarity with green infrastructure. (Task 7) The Village will contract with the selected construction firm and develop a construction timeline and final budget. (Task 8) The Village will work with DEC regarding permitting for the stormwater infrastructure. (Task 9) Construction will commence. Throughout construction, the Village will have a staff member and a Larson Design representative on-site daily and weekly. Upon construction completion, the Village will conduct a final inspection.

The project will also be completed utilizing green technology: While this project requires basic infrastructural upgrades as discussed above, additional recommendations include the installation of rain gardens, bioswales, and permeable pavement in areas of ponding along the road, or as a center divider between the new sidewalk/ bike line and vehicular lane. This could reduce the overall amount of ponding and filter the runoff to mitigate the contamination of surrounding waterbodies. A center divider and increased green space along the road would also discourage vehicular traffic from traveling down the road at high speeds. By capturing the runoff from the road, the community will see an improvement in overall water quality in the local streams.

Finally, by implementing green technology like rain gardens and bioswales, the green technology will act as carbon and GHG absorbers and help improve the overall air quality and help reduce the emissions from the vehicles that travel the street.

Regarding direct municipal emissions, building fuel usage will not change as the project is unrelated, municipal electricity usage will decrease nominally with the installation of LED lights, and municipal vehicle and wastewater emissions are not expected to not change.

For community GHG emissions, overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions.

Cost Estimate:	\$2.4 million
Possible Funding Sources:	Empire State Development, NYS DOT TAP, CDBG

Main Street

The Main Street Project will consist of two parts; Public improvements (including sidewalks, street trees, green space, etc.); and Private improvements (building facades and other improvements).



Current Conditions: Main Street is bisected by SR 14 and continues as East Main Street and West Main Street. East Main Street is a primary residential street. East Main Street runs east/west and contains approximately 28 residences and two commercial buildings. The street has seen only occasional maintenance/repairs through the years. West Main Street is a mixed-use street with commercial buildings, government buildings, single-family homes, and mixed-use buildings. West Main Street generally runs east/west, terminating on the west end at Genesee Street in the Glorious T, and contains approximately six commercial buildings, three government buildings, two single family homes, and fifteen mixed-use buildings.

Roadway: The overall condition of the street pavement varies from Fair on East Main to Good on West Main. The main areas of concern are at the many intersections on West Main Street. The crossroads are Poor and in disrepair. Flooding often occurs directly off Main Street on the secondary streets.

Sidewalks/Lighting/Parking/Charging Stations: The sidewalks vary from Fair on East Main Street to Good on West Main Street. Most of the sidewalk issues occur at intersections. The intersections often pool water and ice over in the winter, causing a dangerous intersection crossing area. West Main Street Intersections are the most dangerous for pedestrians in the entire village. Street lighting on West Main Street has been recently upgraded to high-efficiency LED fixtures on decorative poles. There are several public parking lots located on or near West Main Street. The street also provides adequate on Street parking. There are no issues with a lack of parking. There are four total public electric vehicle charging stations located directly off West Main Street. The Village will be installing an additional high speed charging station in fall 2022.

Public Greenspace: Currently, the Village cares for the street trees and flower baskets on Main Street. There are a few empty tree pits as well as a couple of damaged trees. The Village owns two public greenspaces on West Main Street, the park on the corner of Main Street and Owego Street, and the greenspace located next to the Post Office. In addition, the Village maintains the park located midway down Main Street across from the Mechanic's Club.

Private Building Facades: The facades of the combined 21 commercial and mixed-use buildings vary in condition from Excellent to Poor.

Recommendation: Given the varying condition of facades, greenspaces, and other visual and infrastructure components of Main Street, the central recommendation is to develop projects and programs to redevelop the street over a number of years. The recommendations are also complicated by the fact that the buildings along Main Street are owned by private individuals. Incentives, funding, and education can be used to assist the building owners to make improvements. Each project and program will require additional planning.

The various projects and programs can be divided into public and private improvements. The public improvements include repairing and repaving the sections of Main Street that are in fair condition, repairing the sidewalks at the crosswalks, improving village signage, and developing the two Village-owned greenspaces into utilized greenspaces. The private improvements include building facade renovations, energy efficiency upgrades, and community buy-in for beautification initiatives.

The projects will be completed utilizing green technology. As the village's main road with the highest density, Main Street could incorporate various types of green infrastructure technology to maximize urban water absorption/ drainage and shade structures to minimize urban heat island effects. Currently the street does not have much green space along the street, except for grass areas located between the sidewalk and curb. According to a community survey conducted in October 2021 regarding Complete Streets, many residents raised concern around the lack of green space on Main Street, particularly with reference to shade structures. The sidewalks along main street have various grass patches with trees sparsely located along the road. Signage, flower planters, and garbage disposal bins are located within much of this green space given the lack of useful applications. This underutilized space can be used to develop rain gardens and bioswales to increase water intake and eliminate the need for traditional stormwater drainage structures. Oftentimes the designs of bioretention practices mimic volume reduction and pollutant removal mechanisms that work in natural systems (US EPA, 2021). The filtered stormwater soaks into the ground, provides water to plants and can help recharge the local groundwater supply. For optimal efficacy, bioretention practices generally need a footprint of approximately 5 to 10 percent of the surrounding drainage area, a soil bed that is a sand/soil matrix to serve as plant growing media, and a design to temporarily pond a small amount of water (typically 6 to 12 inches) above the filter bed. Design engineers typically use bioretention practices to treat small drainage areas that are less than 5 acres. When treating areas larger than one-half acre, bioretention practices often use pretreatment systems such as forebays or filter strips to prevent clogging. This practice could be useful, if not necessary for any bioretention improvements on Main Street, given the debris that accumulates along the curbs. In addition, it can be difficult to convey flow from a large drainage area to a bioretention field. In these cases, multiple successive bioretention practices may work better than a single large system.

While maintenance will be necessary to maintain optimal operation, the overall cost of such structures is minimal once installed. Since the structures involve a combination of perennials and trees as well as a mixture of gravel and



sands/soils that can maximize absorption, the types of plants can vary depending on the surrounding environmental conditions (high heat areas, shady areas, contaminated areas, marshlands, etc.). While Main Street has largely consistent characteristics from east to west, different parts of main street green structures will require consideration to varying environmental conditions (high heat/flash flood hazard, contaminated runoff from gas station, etc.). Supplemental green infrastructure technology such as rainwater storage tanks to recycle water can be utilized in these rain gardens to reserve water during intense heat events. Over time as the green infrastructure vegetation matures, the green space would also act as a shade structure to cool the downtown core.

For proper implementation, the green infrastructure and beautification effort of Main Street will require the participation of local businesses along the street. The Village's new Green Loan Fund will be utilized to provide private businesses the opportunity to improve the building façades of Main Street as well as fund the implementation of the NYStretch Code. As this effort is implemented over time, the Village shall also work with individual businesses to synchronously implement exterior improvement measures such as the aforementioned green technology that would ultimately compliment the Village's effort to increase resilience and sustainability as well as the beautification efforts of Main Streets.

In order to coordinate the beautification efforts and implementation of green infrastructure along Main Street, proper outreach and coordination will need to be executed with individual stakeholders identified by the Village. Because the existing sidewalks on either side of Main Street are relatively wide, the existing layout of street parking and land width does not need to change unless the Village identifies a need for such modification. On the other hand, the implementation of alternative transit routes such as bike lanes will likely reduce the overall street width based on the Village's identified needs for such structures.

Cost Estimate:

Each project will require individual cost estimates. The cost to private buildings will need to be determined by the building owner. The Village has applied for funding to set-up a low interest loan fund to assist building owners with improvements.

Possible Funding Sources:

Village loan fund, County facade grant, NYS Main Street funds

South Street

Current Conditions: South Street is a primary residential street located one block south of Main Street. The street runs generally east/west and contains approximately 34 residences, 5 commercial buildings, and 2 churches. The street has only seen occasional maintenance/repairs as needed through the years.

Roadway: The overall condition of the street pavement is Poor. The original pavement surface is cracked and crumbling, and repairs are a patchwork of materials. The overall surface is uneven and rough. The current wearing surface has outlived its useful life. There is also considerable flooding and water pooling on the street between SR 14 and Owego Street as Mulberry and SR 14.

Stormwater/Sidewalks/Lighting: The stormwater infrastructure is cracked in places, and the surface is inconsistent as numerous patches/repairs have been made. There are also issues with frequent clogging from debris and leaves. The sidewalks are a mix of very old, cracked, and uneven sidewalks, slipper marble sidewalks, and missing sidewalks (especially on East South Street). The surface materials vary and include concrete, asphalt, and slate, with small areas that have no sidewalk at all. Street lighting has been recently upgraded to high-efficiency LED fixtures but is mounted high on the existing overhead utility poles and far apart enough to make the lighting levels uneven.

Recommendations: Given the age of the infrastructure and the deterioration noted above, it is recommended that a new roadway surface be constructed. To improve the access to driveways and improve surface drainage it is recommended that the new road surface elevation be modified and curbing be replaced or repaired. The modified road surface will require the complete replacement of the roadway section. Most of the sidewalks should be demolished and replaced with new ones at the same elevation to match the existing driveways/yards. New sidewalks should be constructed wherever the sidewalk is missing. Street lighting should be better studied at this time to determine if more or better lighting is needed.

The project includes the completion of infrastructure engineering, including new stormwater infrastructure, repaving of the street surface, and repair or replacement of sidewalks as necessary. (Task 1) The preliminary engineering will be completed, and cost estimates will be completed utilizing Larson Design Group, an engineering firm specializing in municipal infrastructure, and contracted with the Village to provide municipal engineering services. (Task 2) The Village will conduct community



engagement to solicit community input, especially input from the residents that live on South Street. (Task 3) Larson Design Group will complete the street infrastructure engineering taking into consideration Complete Streets and Climate Smart Best Practices and (Task 4) prepare the construction bid documents. (Task 5) Larson will also assist the Village in drafting an RFP for construction services. (Task 6) The Village will issue the RFP for construction services and (Task 7) will review the proposals with assistance from Larson Design Group and will select the best proposal taking

into account price, experience, timeframe availability, and familiarity with green infrastructure. (Task 8) The Village will contract with the selected construction firm and develop a construction timeline and final budget. (Task 9) The Village will work with DEC regarding permitting for the stormwater infrastructure. (Task 10) Construction will commence. Throughout construction, the Village will have a staff member and a Larson Design representative on-site daily and weekly. Upon construction completion, the Village will conduct a final inspection.

The project will be completed utilizing green technology. As part of the Village's core, repairs along South Street, much like Owego Street, can implement similar measures to reduce urban flooding such as redesigning of the streets to narrow vehicular lanes, adding center dividers to separate pedestrians from vehicular traffic. The dividers could act as natural drainage systems to reduce runoff and filter out contaminants that would otherwise impact the local waterbodies downstream of the Village.

Regarding assessment based on municipal fuel usage and GHG emissions, building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights. The municipal vehicle changes and wastewater emissions change does not change.

Overall building fuel oil and electricity usage will not change with this project. The South Street improvements will likely encourage more people to walk. According to the US 5 Year Community Survey of 2019, approximately 35% of the population of the village had a commute of 15 minutes or less. It is therefore reasonable to assume that increased walkability and transit access will lead to increased usage of alternative transportation modes, and therefore a reduction in GHG emissions. Lastly, it is also reasonable to assume that new green infrastructure along South Street will lead to overall better air quality through carbon sinks, and lower surface temperatures because of increased shade structures.

Cost Estimate:	\$1.7 million
Possible Funding Sources:	Empire State Development, CDBG, TAP

SR 14 and CR 224 Visual Environment

As part of the Complete Streets planning process, a lighting study and concept plan for SR 14 was completed by Larson Design Group. Additionally, the Visual Environment (especially lighting and signage) is included in the Regional Strategic Plan completed by SCOPED in 2020.

Current Conditions: The current lighting is functional but does not add to the visual environment or historical character of the village. In 2019, the Village replaced all lightbulbs with LED high-efficiency lightbulbs. This has resulted in significant energy and cost savings to the Village. However, the current lighting is not built for pedestrians, is uneven, and doesn't adjust based on the time of day or weather conditions. It is also very industrial-looking and doesn't add to the character of the village. New lighting will add to the character of the village and will improve the pedestrian and economic environment of the village.

The Village, in anticipation of placing the new lighting within the next five years, installed new conduits during the sidewalk repave in 2021. The cost of the new conduit was \$250,000. Additionally, signage into the village and along SR 14 is outdated and/or needs improvement to better promote the community character.

Recommendation: The Montour Falls Downtown Lighting Project will include the purchase and installation of 136 new streetlamps along SR14 and CR224. The project includes the purchase and installation of 136 poles, 136 luminaires, and 47,370 linear feet of wiring. The poles will be historic in look but will be built to the highest efficiency standards available. In accordance with DOT standards, the poles will be installed approximately 80ft apart on each side of the road. The lighting will alternate on the sides of the road to assure maximum efficiency and safety for drivers and pedestrians while also being mindful of light pollution and energy waste. The light bulbs will be on timers and will adjust based on the time, weather, and other conditions. The actual poles to be purchased and installed will be determined by the community. Larson Design Group completed the lighting study to determine the project specifics. (Task 1) They will provide three design options based on design, cost, schematics, efficiency, and availability to the Village Board. (Task 2) The Village Board will engage the community in selecting a pole. The pole will reflect the culture, history, and future of The Village. (Task 3) The Village will issue the RFP for the purchase of the pole and installation services and (Task 4) will review the proposals with assistance from Larson Design Group and will select the best proposal, and will take into account price, experience, timeframe availability, and familiarity with green lighting infrastructure. (Task 5) The Village will contract with the selected firm and develop a timeline and final budget. (Task 6) The Village will work with DOT regarding permitting for the lighting infrastructure. (Task 7) Installation will commence. Throughout the installation, the Village will have a staff member and/or a Larson Design representative on-site daily and weekly. Upon completion of the installation, the Village will conduct a final inspection.

The installation of the lights will improve safety, both for drivers and pedestrians, and improve the overall infrastructure of The Village. The lights will be maintained by the Village Public Works Department and have a life expectancy of at least 50 years for the poles and 20 years for the luminaires. The project will benefit all community residents, visitors, businesses, and commuters in The Village. On average, between 10,000 and 15,000 vehicles travel daily through Montour Falls on SR 14 (seasonally dependent).

New signage at the entrances of Montour Falls will be placed to instill a sense of place and community character. New signage will also be installed at the intersection of SR 14 and Main Street to direct traffic down Main Street and to downtown businesses, Glorious T and Shequaga Falls.

The project will also be completed utilizing green technology. By installing LED lights, the overall energy consumption is projected to decrease by approximately 50%, which can significantly reduce the overall municipal GHG consumption. As streetlights are often luminated for 12 hours per day, the average energy consumption for a single light would be 1.2kWh (100 watts per hour). This is equivalent to 0.08 gallons of diesel fuel or two miles worth of emission traveled by an average vehicle. As this accumulates, with 100 lights, this is approximately 8 gallons of diesel fuel and 200 miles traveled by the average vehicle every day. The upgrades can significantly reduce overall municipal GHG emissions by approximately 60kWh or approximately 5 gallons of fuel per day, thus contributing to lower emissions.

Additionally, by increasing overall green infrastructure technology, the road will see an overall increased quality of air and reduced temperatures from the shade structures. As the village's main roads with the highest density, SR 14 and Main Street could incorporate various types of green infrastructure technology to maximize urban water absorption/ drainage and shade structures to minimize urban heat island effect. Currently the street does not have large amounts of green space along the street, except for grass areas located between the sidewalk and curb. This underutilized space can be used to develop rain gardens and bioswales to increase water intake and eliminate the need for traditional stormwater drainage structures. In addition, the use of rainwater storage tanks to recycle water can be utilized in these rain gardens to reserve water during intense heat events. As the green infrastructure vegetation matures over time, the green space would also act as a shade structure to cool the downtown core.

Technology like rain gardens, riparian buffers along the creek, and bioswales can help wildlife as well as lead to beautification of the street and discourage vehicular traffic from traveling at high speeds. This project can therefore substantially reduce overall GHG emissions and contribute to the town's sustainability goals.

Cost Estimate:	\$1.3 million
Possible Funding Sources:	TBD

Glorious T Intersection

A design summary for this project can be found in Appendix K.

Sidewalk District

Current Conditions: The Current Conditions Inventory completed in October 2021 assessed the sidewalks in the village. Of the 25 streets with sidewalks, 12 were rated as having Fair or Poor sidewalks. Currently, it is the responsibility of the property owner to maintain, repair, and replace the sidewalks located in front of their property. However, due to years of neglect, sidewalks within the village are in serious disrepair. The Village has made sidewalk repair a priority and the Village Code Enforcement Officer has made identification and notification a priority. However, enforcement is difficult, costly, and time intensive. The establishment of a sidewalk district would elevate much of the issues regarding sidewalk maintenance in the Village.

Recommendation: Formation of a sidewalk district for the purposes of maintenance, repair, and replacement. In instances where sidewalks along public streets front or traverse multiple properties, the Village's preference is that a sidewalk district is formed throughout the village, with the cost of construction and/or maintenance to be equitably assigned to benefiting properties. When sidewalk districts are formed for construction purposes, funds for construction are to be levied via a special district tax, which in turn is to be based on a formula that equitably assigns cost while taking into consideration property characteristics such as street frontage, assessed value, land use, and other factors.

The project will also be completed utilizing green technology by replacing and installing new sidewalks that absorb carbon and/ or are water permeable.



Estimated Cost:

NA. The cost of administering, enforcing, and making repairs will come from the special district tax.

Possible Funding Sources:

NA (see above)

Secondary Projects

The following projects are identified to be completed within the next ten years. Secondary projects will be considered for funding through the general fund and in grant applications. Secondary projects will also be reviewed annually for worsening conditions that may necessitate expediting the improvements.

- Henry Street (Safety and infrastructure improvements)
- South College Avenue (Safety and infrastructure improvements)
- Mulberry Street (Safety and infrastructure improvements)
- Genesee Street (Safety, infrastructure, and Signage improvements)
- N. Lhommedieu Street (Safety and infrastructure improvements)

4. Measuring Progress

The Sustainable Montour Falls Sustainability Committee will be tasked with monitoring progress towards the stated Complete Streets and Climate Smart goals by annually reporting on the following metrics:

1. Rate of Accidents (both pedestrian and motor vehicle)
2. School participation in pedestrian/bicycle safety education
3. Number of community events that encourage walking or bicycling
4. Percentage of children walking or biking to school
5. Driver, pedestrian, and cyclist behaviors and awareness of traffic (vehicular, walking, and cycling) laws
6. Number and type of targeted enforcement activities
7. Street and intersection assessments and ratings
8. Installation, repair, and maintenance of sidewalks, crosswalks, bike lanes, paved shoulders, shared lanes, traffic calming measures, multi-use paths, lighting, street trees, and signage
9. Public and private investments in Complete Streets improvements
10. Increased sustainability and resilience resulting from decreased carbon emissions and improved flood resiliency (Appendix E)

A Reporting Template has been developed to assist the Sustainability Committee with measuring progress. (Appendix I).



The goal of the above plan is to provide a roadmap for the adoption of Complete Streets planning in Montour Falls. All projects identified herein should be completed within the next ten years. Achieving this, however, is dependent on many factors outside of the Village's control, including the availability of funding. A short-term plan of three years should be developed by Sustainable Montour Falls and the Village Board of Trustees to consider the priority projects and secondary projects that need to be accomplished first or that are already underway. The annual reporting will be utilized by the Village of Montour Falls to determine the success of the short-term projects and to determine where to focus the Village's energy and resources next.

Appendices

Appendix A: Montour Falls Complete Streets Policy

A Resolution in Support of Complete Streets Planning
June 6th, 2019

Introduction

Whereas the Village of Montour Falls seeks to create a sustainable, accessible streetscape that promotes multiple modes of transportation, and;

Whereas “Complete Streets” are streets that are planned, designed, operated, and maintained to enable safe access to all users, and;

Whereas the Village seeks to promote multimodal transportation as a means of reducing emissions related to vehicle use, which in turn creates greater air quality, and;

Whereas intentional and sustainable design of Village infrastructure projects promote a healthier environment and is in line with the Village’s commitment to promote sustainability as outlined in the Climate Smart Communities Pledge Resolution, passed by the Village Board on June 21st, 2018;

The Village of Montour Falls hereby votes to adopt the following Complete Streets Policy as a guiding principle for the improvement of our transportation infrastructure and recommends the policy’s adoption into the forthcoming Comprehensive Plan as a means of ensuring its effects in future projects.

Complete Streets Policy Provisions

“Complete Streets” refers to streets that are intentionally designed for the purpose of promoting equal access to the Village’s network of streets across all modes of transportation. Most often, this takes the following forms, which the Village hereby adopts as project guidelines:

- i. The Village will strive to create an interconnected network of streets that are accessible by pedestrians, bicyclists, motorists, and bus riders of all ages and abilities. This includes the safe passage along and across Village streets.
 - a. To achieve these goals, the Village will undertake to identify potential grant or other funding options in order to more fully realize the Complete Streets goals.
- ii. The Village will seek to realize its Complete Streets vision and develop its street projects in ways that are responsible, affordable, balanced and equitable way by considering the needs of all travelers.
- iii. The Village recognizes that not every design element or feature will be needed or feasible for every street project, but commits to the goal of accommodating everyone.
- iv. The Village will incorporate Complete Streets goals into all new construction, reconstruction, and maintenance road projects.
 - a. Complete Streets projects undertaken by the Village may include: improved bus or public transit access, special bus lanes, special bike lanes, sidewalk and curb upgrades, crosswalk upgrades, streetscape and lighting design audits, shade and infrastructure studies, and more.

- v. The Department of Public Works is hereby designated as the lead department in implementing the Complete Streets policy, and shall consult with the Village Board on matters relating to implementing the Complete Streets Policy. The Village Board retains the right of final say on projects within the Village.
- vi. The Village will, to the extent feasible, incorporate the Complete Streets Policy while taking the following into account:
 - a. The additional cost to the Village to incorporate Complete Streets goals and whether that would be excessive or disproportionate to the larger street project.
 - i. For example, whether Complete Streets goals would be too expensive to implement while conducting routine spot pavement repairs or isolated curb or sidewalk maintenance.
 - b. The possibility of creating a public safety risk by the incorporation of Complete Street ideals into a given street project.
 - c. The current and future population of the street or road.
 - i. For instance, that a road is so sparsely populated that it is unlikely to see a rise in pedestrian traffic in the future, even with a sidewalk.
 - d. The current and future economic and sustainable development goals of the Village and whether incorporating Complete Streets goals can be done while maintaining those economic and sustainable development goals.
 - e. The current state of utilities, both Village and those belonging to a utility company, and their placement in a given street, and how Complete Streets goals can be implemented around or incorporating those utilities.
 - f. The built and natural environment, and how implementing Complete Streets Policy goals will impede or strengthen the local character and systems.
 - g. Future physical climate risk due to flooding and extreme heat have been considered, and that the Village consider incorporating these factors into street infrastructure design, as per NYSDEC Flood Risk Management Guidance for Implementation of the Community Risk and Resiliency Act and NYSDEC Guidance for Smart GrowthPublic Infrastructure Assessment.

Appendix B: Street and Sidewalk Current Conditions Study



Complete Streets Field Survey Summary

The Complete Streets Field Survey was conducted in November of 2021. The survey was performed by one inspector using means of both walking and driving the Village's streets. The inspector started the survey at the South of the Village along Jackson Hill Road and worked North along SR-14. Roads with no sidewalks were driven at a slow pace to visually inventory road conditions. Streets with sidewalks, primarily within the center of the Village, were walked on both sides to inventory condition of road and both sidewalks. One final pass driving along each road was then done by the inspector to ensure no road conditions were overlooked while walking.

In scoring the Village's streets the inspector looked for the following road conditions: cracking, evenness of sidewalks, potholes, erosion along shoulder, and vegetation growth along sidewalks. These factors were then used by the inspector to assign a rating to each street ranging from 1: Poor to 4: Excellent. Each street was rated based on the opinion of the inspector using the conditions listed above.

Street N-S	Street Rating	Sidewalk Rating (E)	Sidewalk Rating (W)	Images	Comments
SR 14 (N Catherine St.)	3	4	4	5096	Minimal cracking
Belle Cornell Dr.	4	N/A	N/A	5059	-
Mill St.	2	N/A	N/A	5061	Cracking, erosion along shoulder
N Genesee St.	4	2	3	5049 - 5051	Uneven cracked sidewalks
Schuyler St.	2	3	4	5053	Considerable cracking
S Genesee St.	3	3	2	5046 - 5048	Some cracking, uneven sidewalk
Montour St.	2	3	3	5038, 5039	Considerable cracking
Canal St.	2	3	N/A	5034, 5035, 5045	Cracking, sidewalks overgrown
Owego St.	1	2	3	5028 - 5031	Cracking, potholes, uneven, steep shoulder
Henry St.	2	2	2	5056 - 5058	Some cracking, uneven sidewalk
Clinton St.	2	N/A	2	5091	Some cracking
Raymond St.	2	N/A	N/A	5027	Eroded on East shoulder
S Lhommedieu St.	3	N/A	N/A	5063	Few potholes, minor cracking
S College Ave.	2	2	1	5086	Considerable cracking
S Mulberry St.	2	2	1	5088, 5089	Considerable cracking, sidewalk overgrown
N Mulberry St.	2	2	2	5084	Considerable cracking, uneven, potholes
S Seneca St.	2	N/A	3	5083	Considerable cracking, uneven, potholes
N College Ave.	2	N/A	N/A	5078, 5080	Considerable cracking, sidewalk overgrown
Marina Dr.	4	N/A	N/A	5094	-
Hayes Rd.	3	N/A	N/A	5069	Minimal cracking
N Lhommedieu St.	1	N/A	N/A	5071	Considerable cracking, uneven, potholes
N Seneca St.	1	N/A	N/A	5074	Considerable cracking, uneven, potholes
Rock Cabin Rd.	2	N/A	N/A	5072	Considerable cracking
Lee St.	2	2	2	5042 - 5044	Cracking, uneven
Catherine Valley Trail	3	N/A	N/A	5036, 5095	Limited parking

Street E-W	Street Rating	Sidewalk Rating (N)	Sidewalk Rating (S)	Images	Comments
CR 224 (Clawson Blvd.)	4	4	4	5066, 5067, 5075	-
Steuben St.	3	N/A	N/A	5060	Minimal cracking
Ayers St.	1	N/A	N/A	5093	Considerable cracking, uneven, potholes
W South St.	3	2	2	5040, 5041	Considerable cracking

E South St.	2	2	5090	Cracking, uneven
W Main St.	3	3	5052	Some cracking
E Main St.	4	2	5081, 5082	Sidewalks cracked and uneven
W Broadway St.	2	2	5076, 5077	Cracking, small potholes
Smith Ln.	3	N/A	5055	Minimal cracking
Turner Park	2	N/A	5085	Cracking, uneven
Walker St.	1	N/A	5087	Considerable cracking
Cook St.	4	N/A	5037	-
E Catlin St.	1	N/A	5064	Considerable cracking, uneven, potholes
Jackson Hill Rd.	3	N/A	5022	Cracking, potholes, shoulder eroded
Havana Glen St.	2	N/A	5023 - 5026	Cracking, potholes, shoulder eroded
Cotton Hanlon Rd.	4	N/A	5068	-
E Broadway St.	2	N/A	5070	Cracking, shoulder eroded
Mary Layton Dr.	3	1	5032, 5033	Cracking, sidewalk overgrown and uneven
Tracy St.	4	3	5054	-
Coykendall/ Parks Hill Rd.	1	N/A	5062	Considerable cracking, uneven, potholes
Fallsview Dr.	2	N/A	5065	Some cracking, very steep shoulder
Washington St.	2	N/A	5092	Cracking, potholes

Rating Scale:

- 1: Poor
- 2: Fair
- 3: Good
- 4: Excellent

Complete Streets Planning Study

Village of Montour Falls Survey Images

PREPARED FOR:

Village of Montour Falls
408 West Main Street
P.O. Box 812
Montour Falls, NY 14865

PREPARED BY:

LARSON DESIGN GROUP
1 West Market Street
Corning, NY 14830
Phone: 607-936-7076

LDG Project No.6668-019

March 2022

SUBMISSION QUALITY ASSURANCE	
Prepared By: _____	Date: _____
Checked By: _____	Date: _____
QA/QC'd By: _____	Date: _____



Survey Images



Image 1. Areas along Owego Street.



Image 2. Areas along Owego Street.



Image 3. Areas along North Lhommedieu Street.



Image 4. Areas along North Seneca Street.



Image 5. Areas along Ayers Street.



Image 6. Areas along Walker Street.



Image 7. Areas along East Catlin Street.



Image 8. Areas along Parks Hill Road.



Image 9. Areas along East South Street.



Image 10. Areas along North College Avenue.



Image 11. Areas along South College Avenue.



Image 12. Areas along South Genesee Street.



Image 13. Areas along South Mulberry Street.



Image 14. Areas along North Mulberry Street.



Image 15. Areas along West South Street.



Image 16. Areas along West Main Street.



Image 17. Areas along East Broadway Street.



Image 18. Areas along Washington Street.



Image 19. Areas along Fallsview Drive.

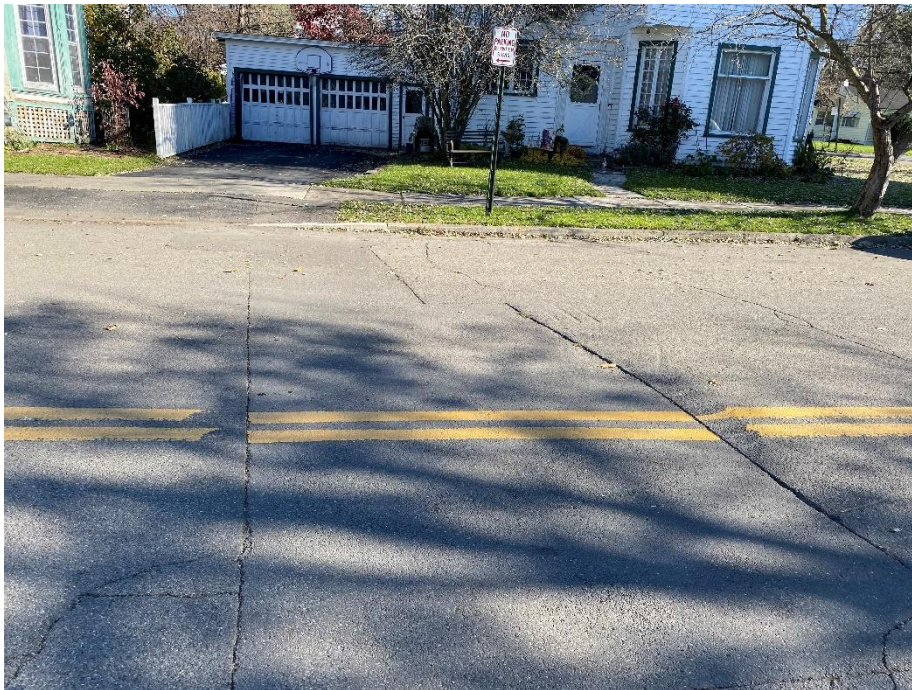
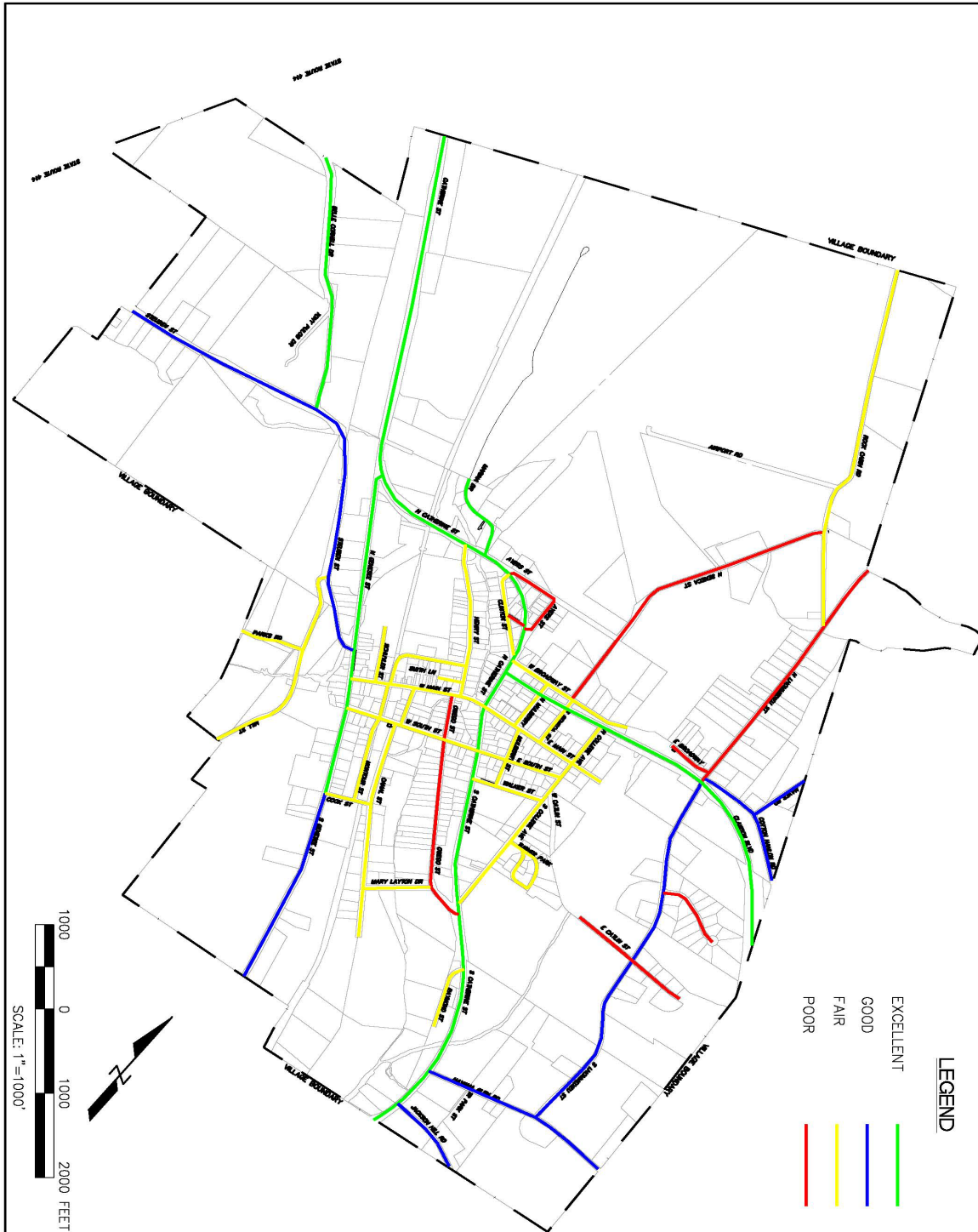



Image 20. Areas along Lee Street.

Appendix C: Street Conditions Map

\\files\projects\6668\6668-019 Montour Falls 2020-21 Retainer\Complete Streets\Complete Streets Survey\6668 Village Map.dwg, C1.1 (2), 3/22/2022 1:45:38 PM, Emick, Tyler



<p>COMPLETE STREETS SURVEY VILLAGE OF MONTOUR FALLS, SCHUYLER COUNTY</p>	<p>VILLAGE STREET RATING MAP</p>		
	MARK	DATE	

© Larson Design Group 2022

VILLAGE STREET RATING MAP

Appendix D: NY-14 Corridor Street Lighting Concept Plan

VILLAGE OF MONTOUR FALLS

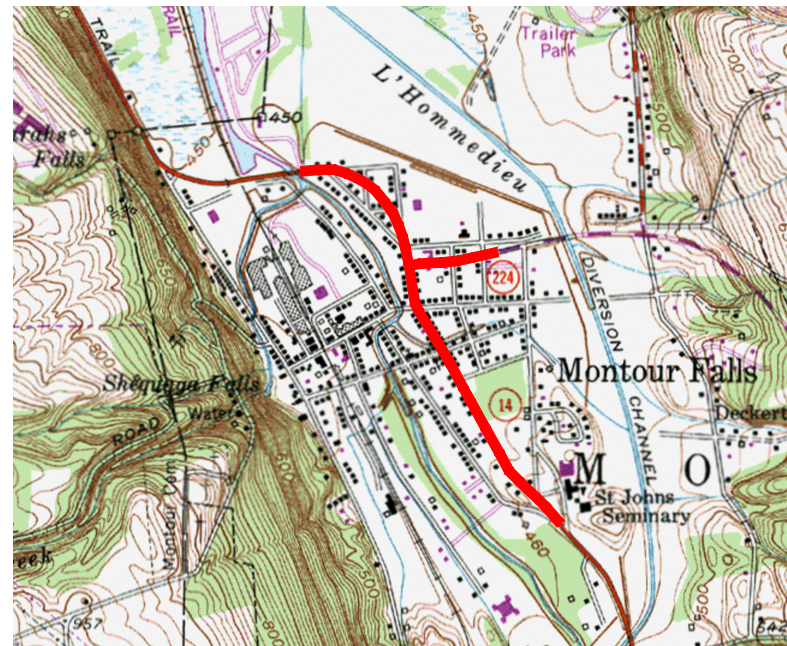
SCHUYLER COUNTY, NEW YORK

NY-14 CORRIDOR STREET LIGHTING

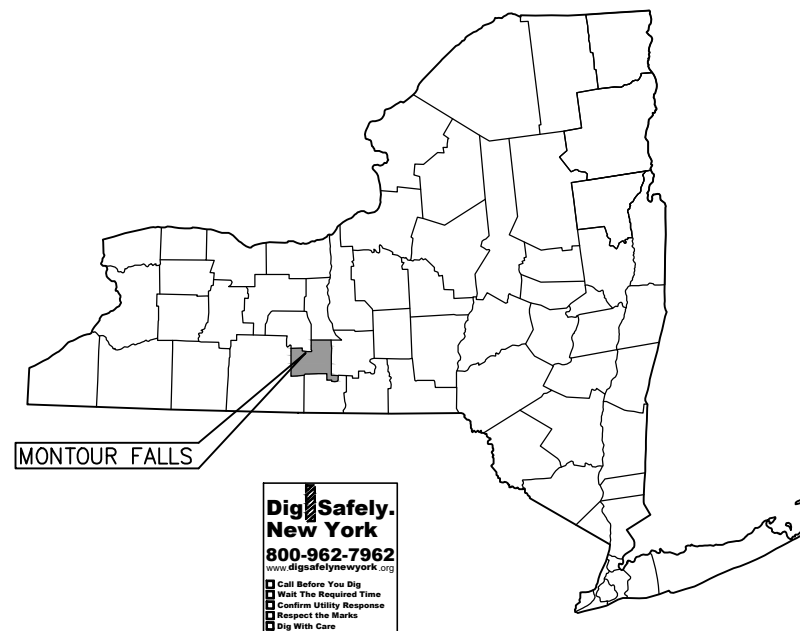
CONCEPT PLAN

FEBRUARY 2020

LDG PROJECT NO. 6668-018



LOCATION MAP
SCALE: 1"=2000'



DRAWING LIST

- G0.01 COVER SHEET
- G2.01 SHEET INDEX
- C2.01 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.02 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.03 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.04 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.05 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.06 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.07 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.08 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.09 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.10 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.11 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.12 CONCEPT STREET LIGHT LAYOUT PLAN
- C8.01 STREET LIGHT FIXTURE DETAILS



NO.	DATE	COMMENTS	ISSUE / REVISIONS
1	3/6/2020	ADDITIONAL LIGHTING PLAN	TWS MDO
0	2/7/2020	ISSUED TO CLIENT	AWK MDO
			BY CHK

COVER SHEET
NY-14 CORRIDOR STREET LIGHTING CONCEPT
VILLAGE OF MONTOUR FALLS, SCHUYLER COUNTY, NEW YORK

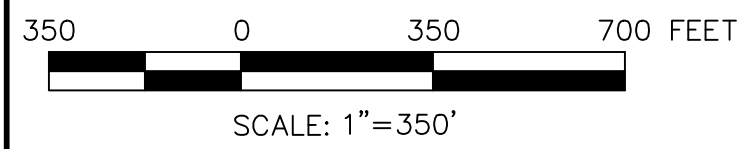
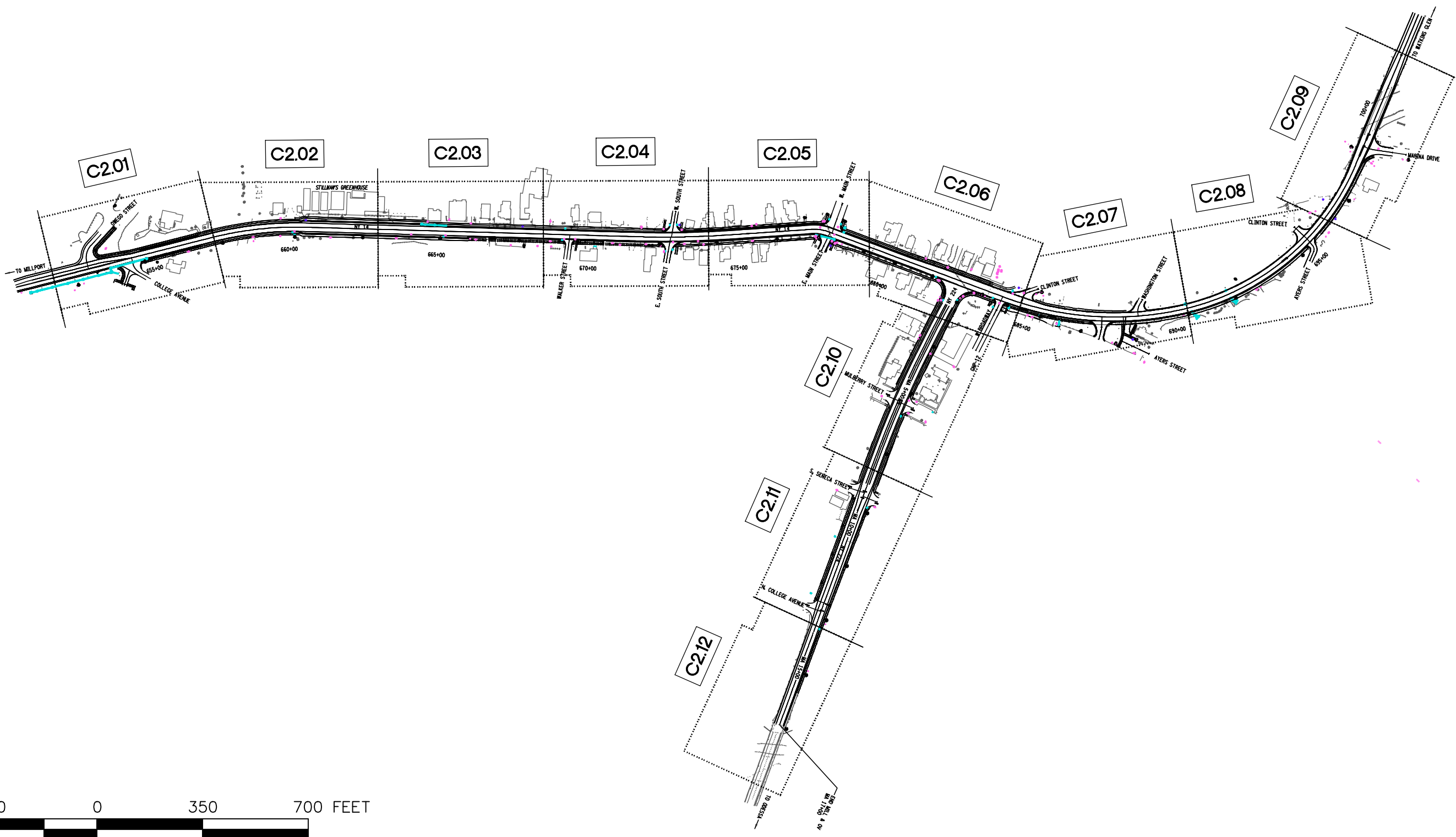
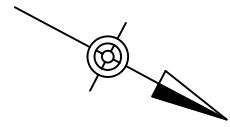
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SHEET NO.: **GO.01**

PROJECT NO.: 6668-018

Basemap and utility information have been shown from plans issued by the New York State Department of Transportation titled "Route 14 Catharine Creek Deck Replacement (BIN 1010890) and Montour Falls Village Paving, Signal and ADA Work" dated October 7, 2019.



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SHEET NO.:

G2.01

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6668-018



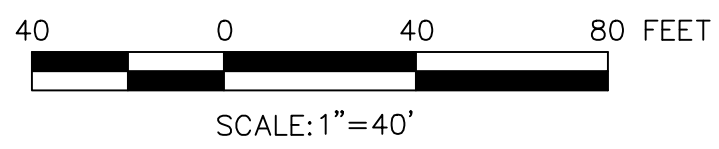
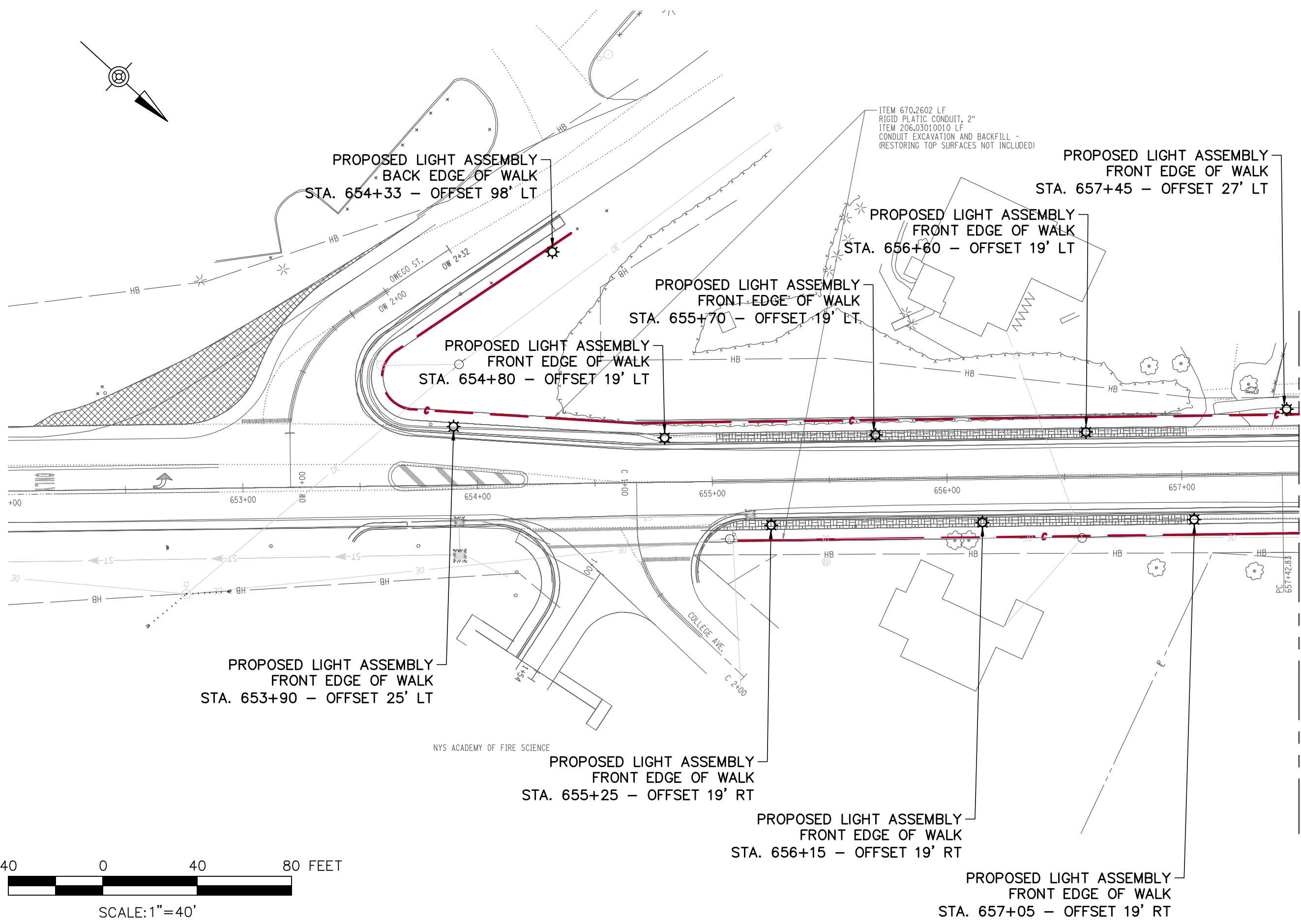
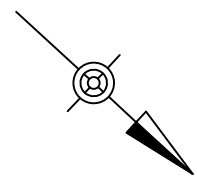
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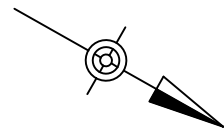
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SHEET NO.: **C2.01**
 PROJECT NO.: 6668-018





PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 658+30 - OFFSET 27' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 659+15 - OFFSET 27' LT

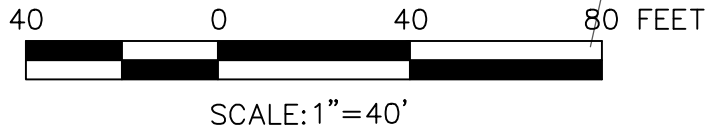
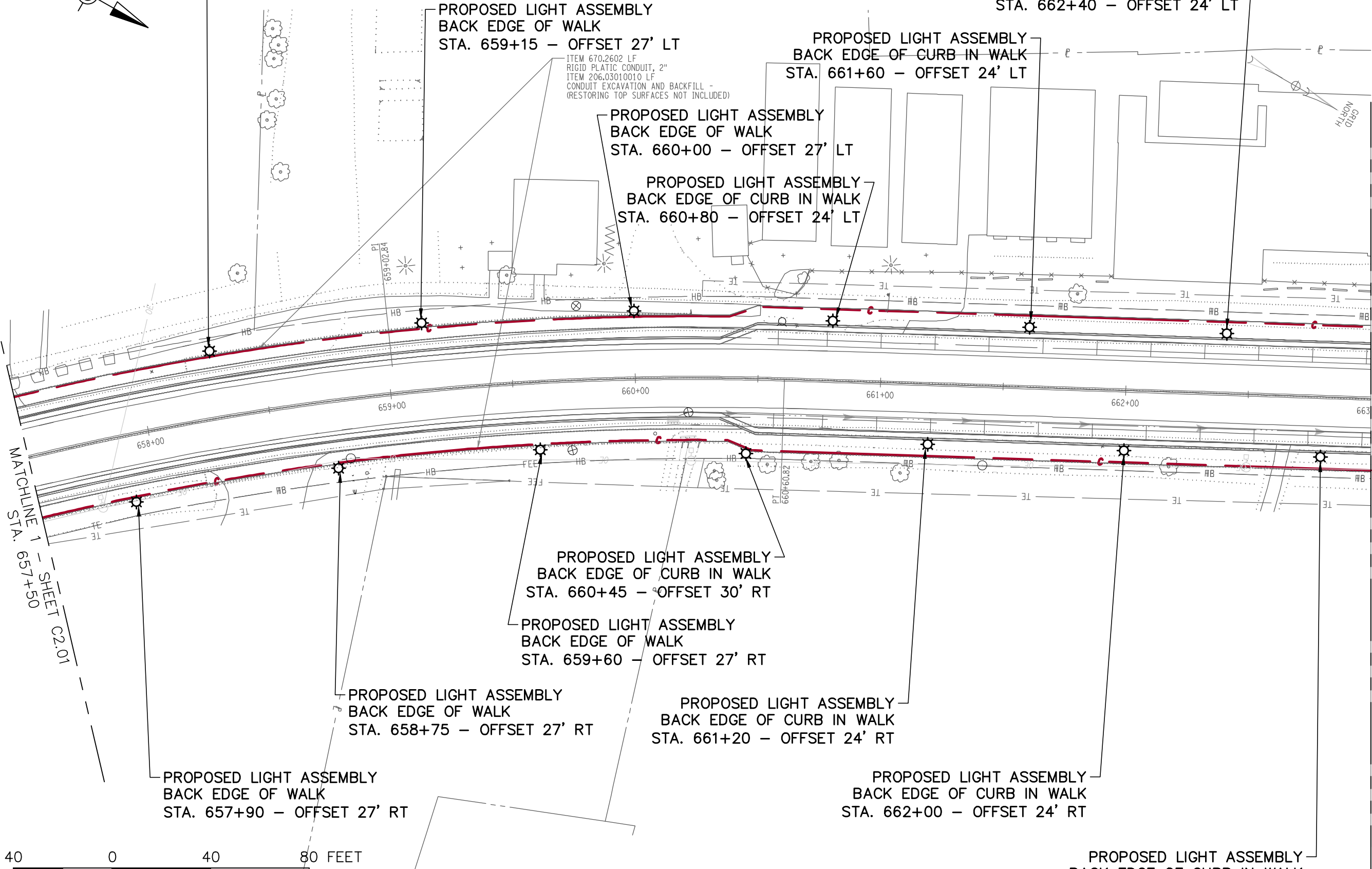
ITEM 670.2602 LF
RIGID PLASTIC CONDUIT, 2"
ITEM 206.03010010 LF
CONDUIT EXCAVATION AND BACKFILL -
(RESTORING TOP SURFACES NOT INCLUDED)

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 660+00 - OFFSET 27' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 660+80 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 661+60 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 662+40 - OFFSET 24' LT



MATCHLINE 2 - SHEET C2.03
STA. 663+00

MATCHLINE 1 - SHEET C2.01
STA. 657+50



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SHEET NO.: **C2.02**
PROJECT NO.: 6668-018

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 662+80 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 662+00 - OFFSET 24' RT

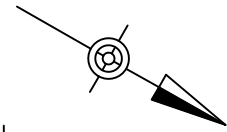
PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 661+20 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 659+60 - OFFSET 27' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 660+45 - OFFSET 30' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 658+75 - OFFSET 27' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 657+90 - OFFSET 27' RT



ITEM 670.2602 LF
RIGID PLASTIC CONDUIT, 2"
ITEM 206.03010010 LF
CONDUIT EXCAVATION AND BACKFILL -
(RESTORING TOP SURFACES NOT INCLUDED)

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 667+90 - OFFSET 29' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 663+10 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 667+15 - OFFSET 29' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 664+00 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 666+40 - OFFSET 29' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 664+80 - OFFSET 20' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 665+65 - OFFSET 29' LT

MATCHLINE 2 - SHEET C2.02
STA. 663+00

MATCHLINE 3 - SHEET C2.04
STA. 668+51

MATCHLINE 2 - SHEET C2.02
STA. 663+00

40 0 40 80 FEET



SCALE: 1" = 40'

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 666+05 - OFFSET 29' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 665+20 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 664+80 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 666+60 - OFFSET 29' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 667+55 - OFFSET 29' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 668+30 - OFFSET 29' RT



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SHEET NO.: **C2.03**

PROJECT NO.: 6668-018



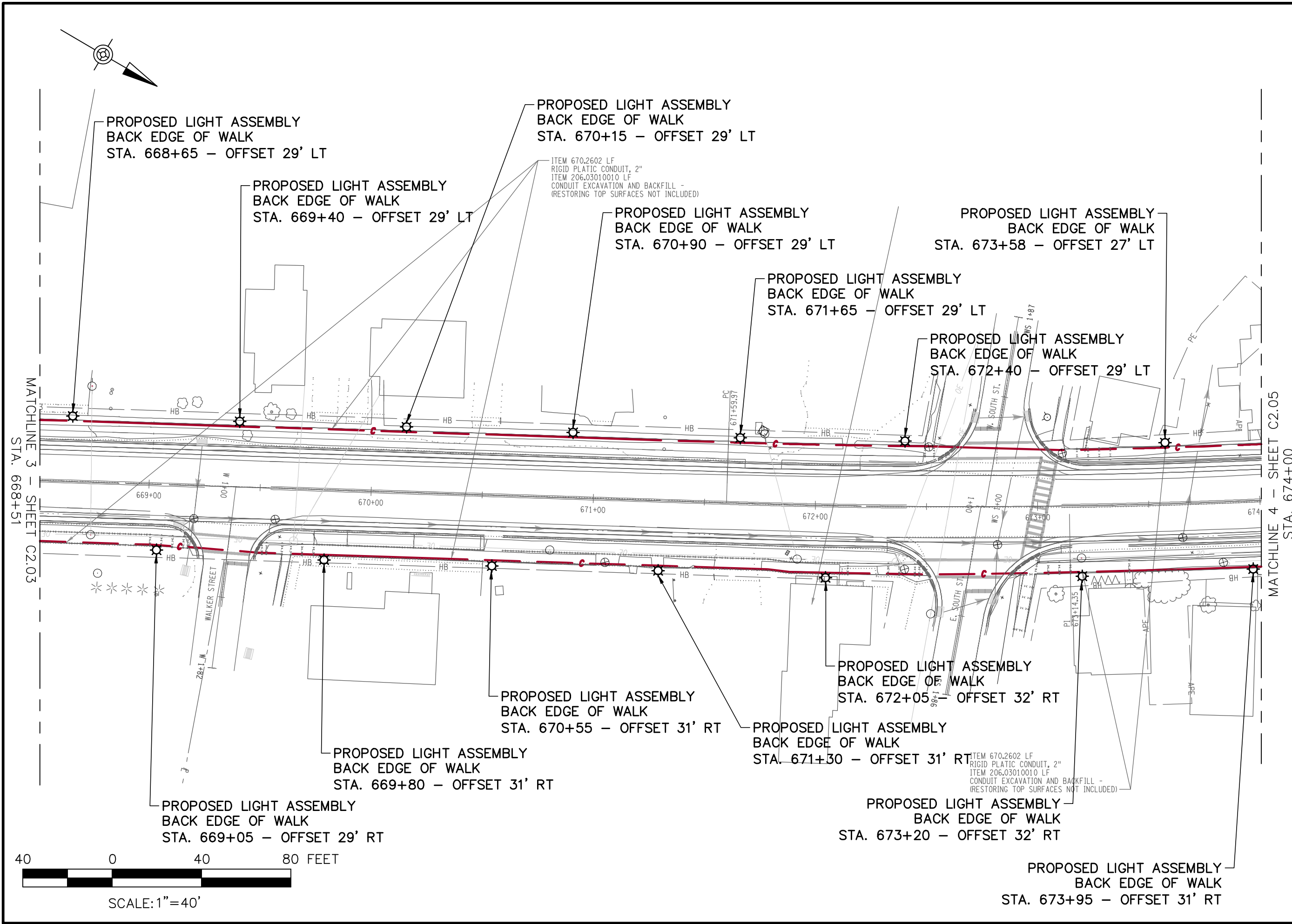
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			BY CHK

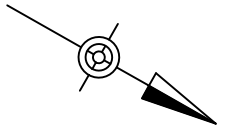
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SHEET NO.: **C2.04**
 PROJECT NO.: 6668-018

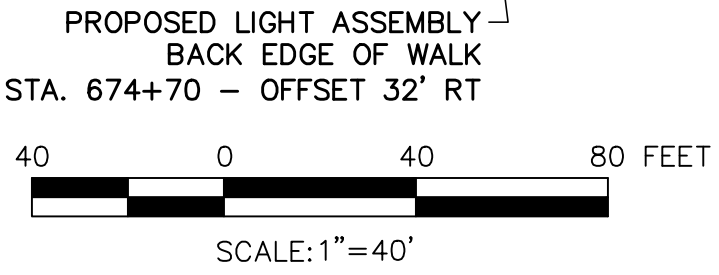
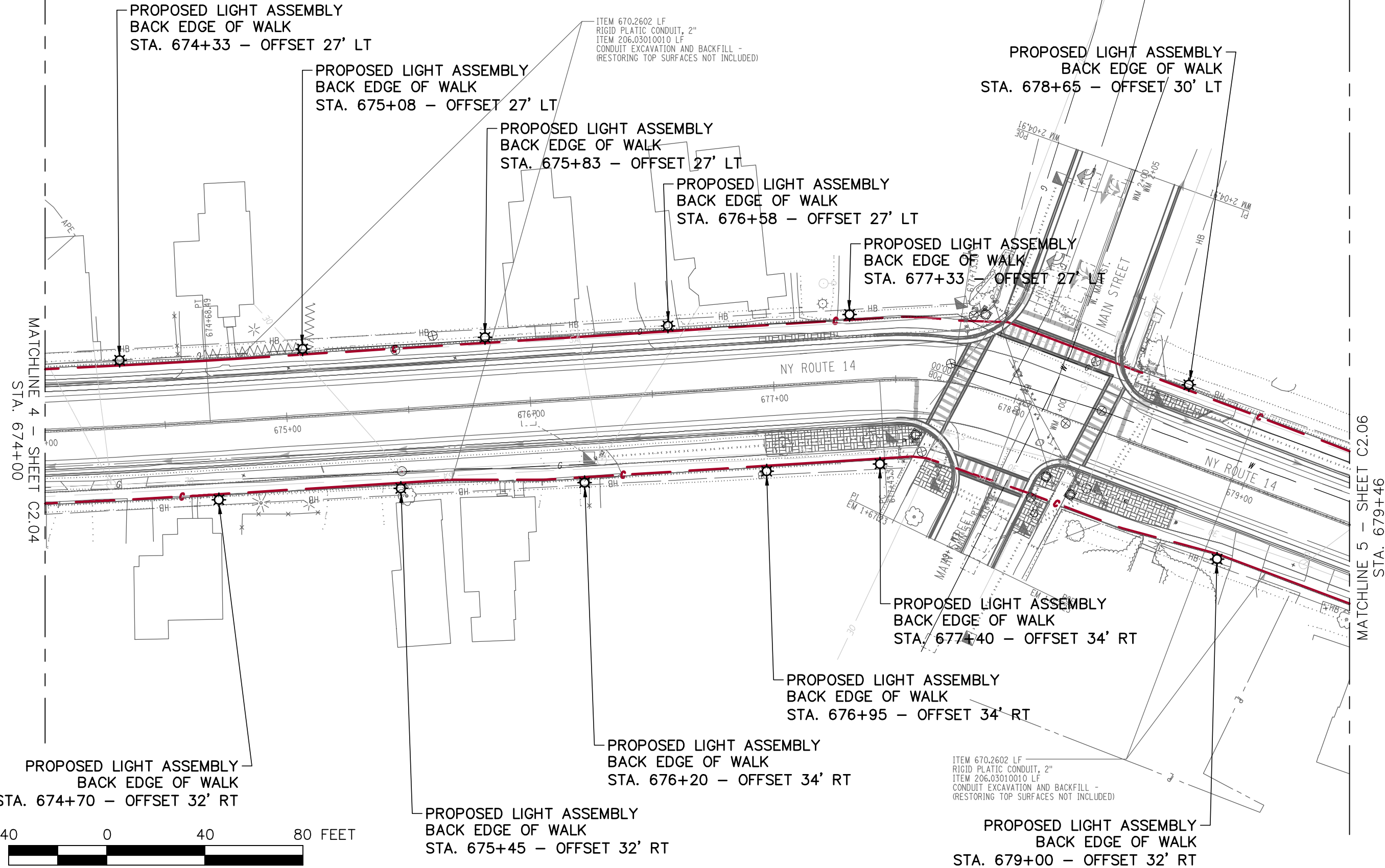




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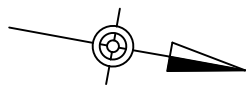


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SHEET NO.: **C2.05**
 PROJECT NO.: 6668-018



PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 679+40 - OFFSET 30' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 683+15 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 683+90 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 680+15 - OFFSET 30' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 682+40 - OFFSET 33' LT

ITEM 680.510101
PULLBOX-CIRCULAR, 15 INCH DIAMETER, REINFORCED CONCRETE

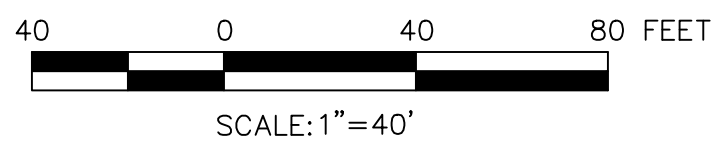
PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 680+90 - OFFSET 30' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 681+65 - OFFSET 31' LT

ITEM 670.2802 LF
RIGID PLASTIC CONDUIT, 2"
ITEM 206.03010010 LF
CONDUIT EXCAVATION AND BACKFILL -
(RESTORING TOP SURFACES NOT INCLUDED)

MATCHLINE 5 - SHEET C2.05
STA. 679+46

MATCHLINE 6 - SHEET C2.07
STA. 684+85



PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 679+75 - OFFSET 32' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 680+50 - OFFSET 32' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 681+25 - OFFSET 32' RT

POTENTIAL POWER SUPPLY

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA2+50 - OFFSET 33' RT

MATCHLINE 9 - SHEET C2.10
STA. MA 2+50

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA1+69 - OFFSET 34' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA2+00 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA1+56 - OFFSET 41' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 684+60 - OFFSET 27' RT



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SHEET NO.: **C2.06**
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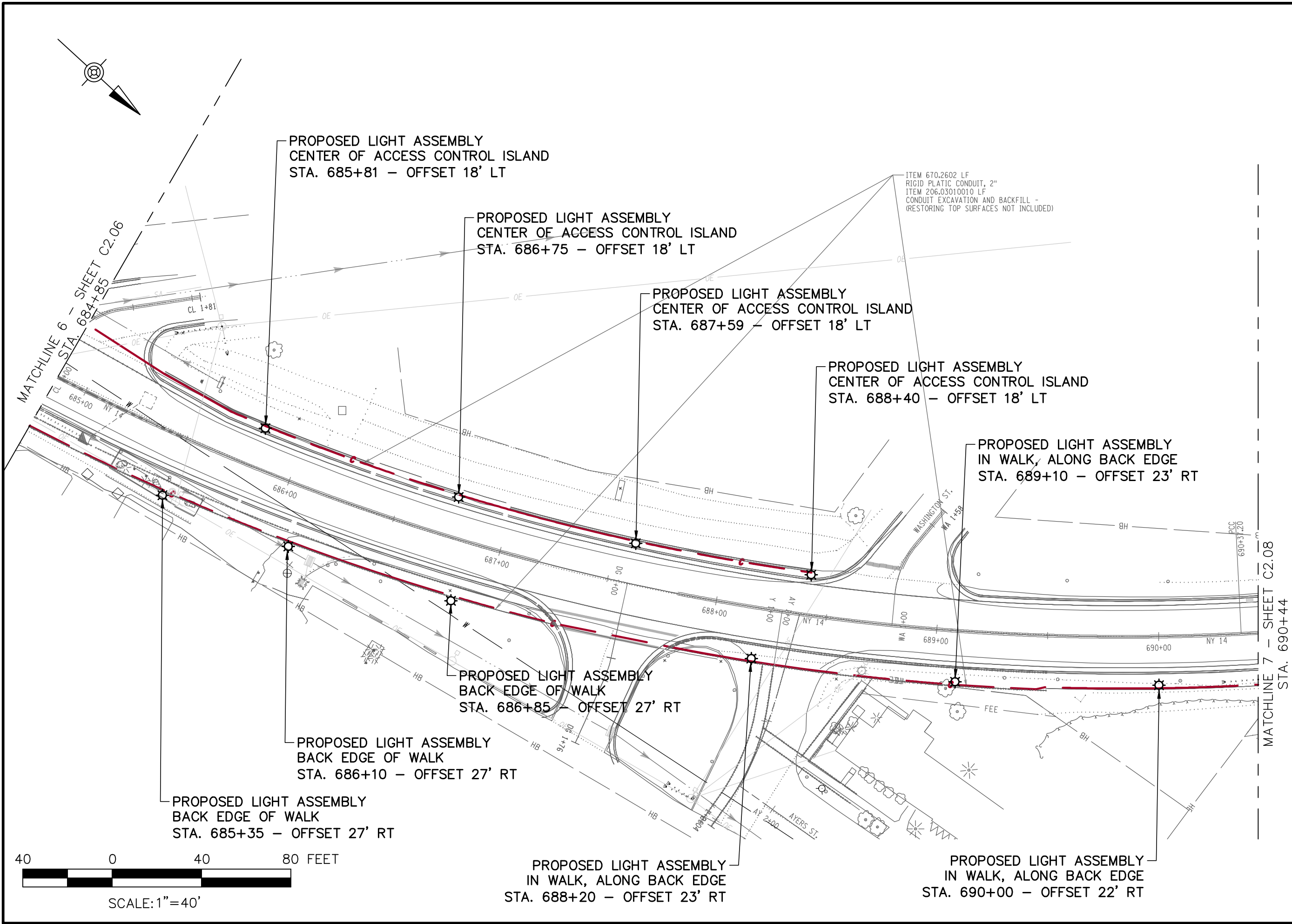
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SHEET NO.: **C2.07**
 PROJECT NO.: 6668-018



PROPOSED LIGHT ASSEMBLY
 CENTER OF ACCESS CONTROL ISLAND
 STA. 685+81 - OFFSET 18' LT

PROPOSED LIGHT ASSEMBLY
 CENTER OF ACCESS CONTROL ISLAND
 STA. 686+75 - OFFSET 18' LT

PROPOSED LIGHT ASSEMBLY
 CENTER OF ACCESS CONTROL ISLAND
 STA. 687+59 - OFFSET 18' LT

PROPOSED LIGHT ASSEMBLY
 CENTER OF ACCESS CONTROL ISLAND
 STA. 688+40 - OFFSET 18' LT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. 689+10 - OFFSET 23' RT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. 686+85 - OFFSET 27' RT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. 686+10 - OFFSET 27' RT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. 685+35 - OFFSET 27' RT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. 688+20 - OFFSET 23' RT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. 690+00 - OFFSET 22' RT

40 0 40 80 FEET
 SCALE: 1" = 40'

ITEM 670.2602 LF
 RIGID PLASTIC CONDUIT, 2"
 ITEM 206.03010010 LF
 CONDUIT EXCAVATION AND BACKFILL -
 (RESTORING TOP SURFACES NOT INCLUDED)



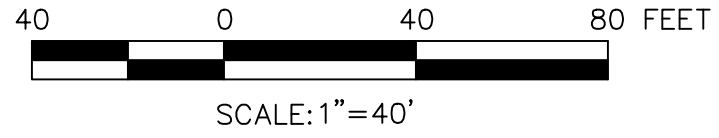
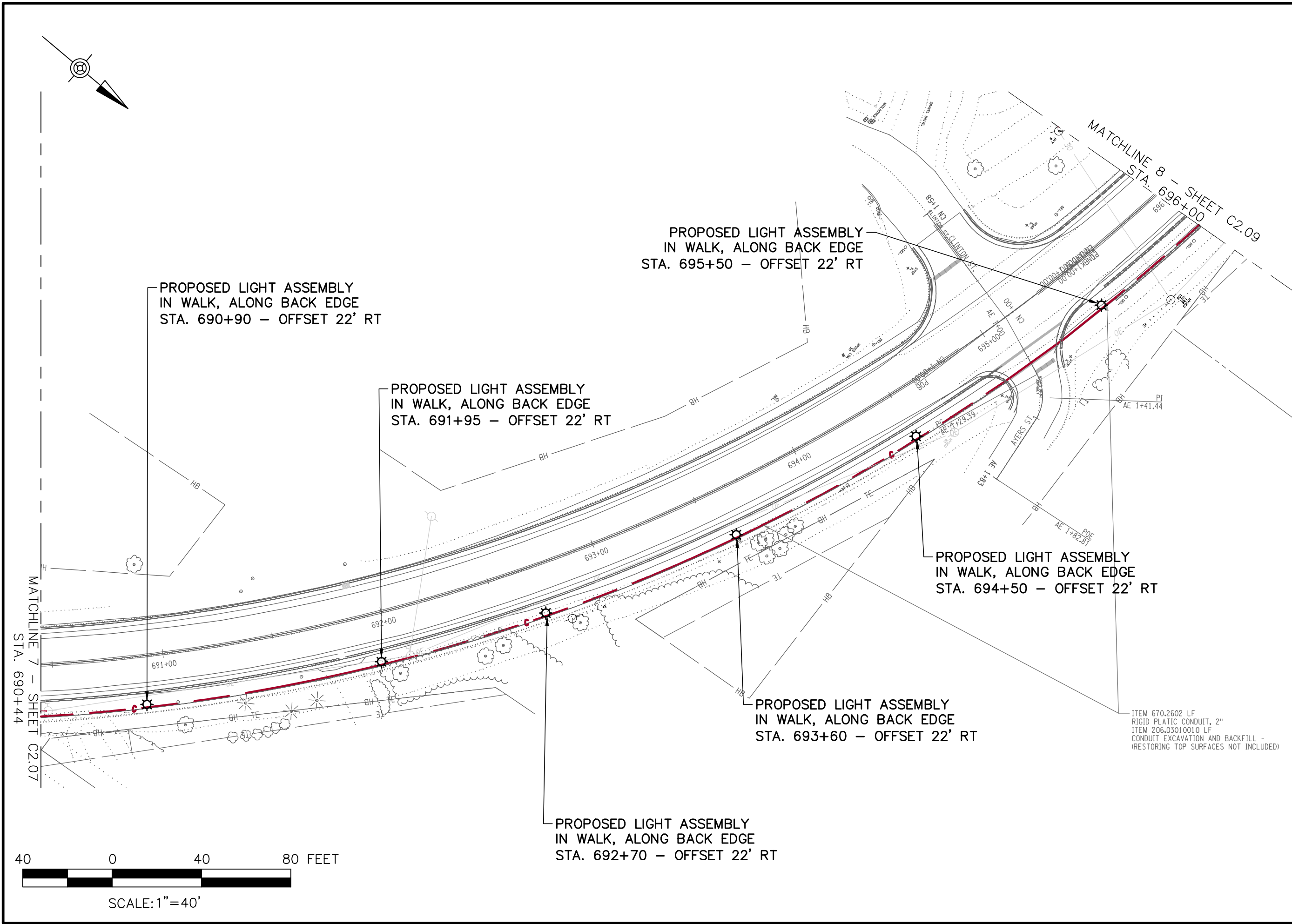
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SHEET NO.: **C2.08**
 PROJECT NO.: 6668-018



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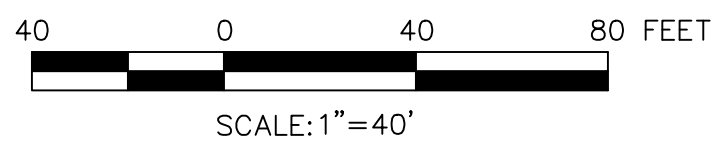
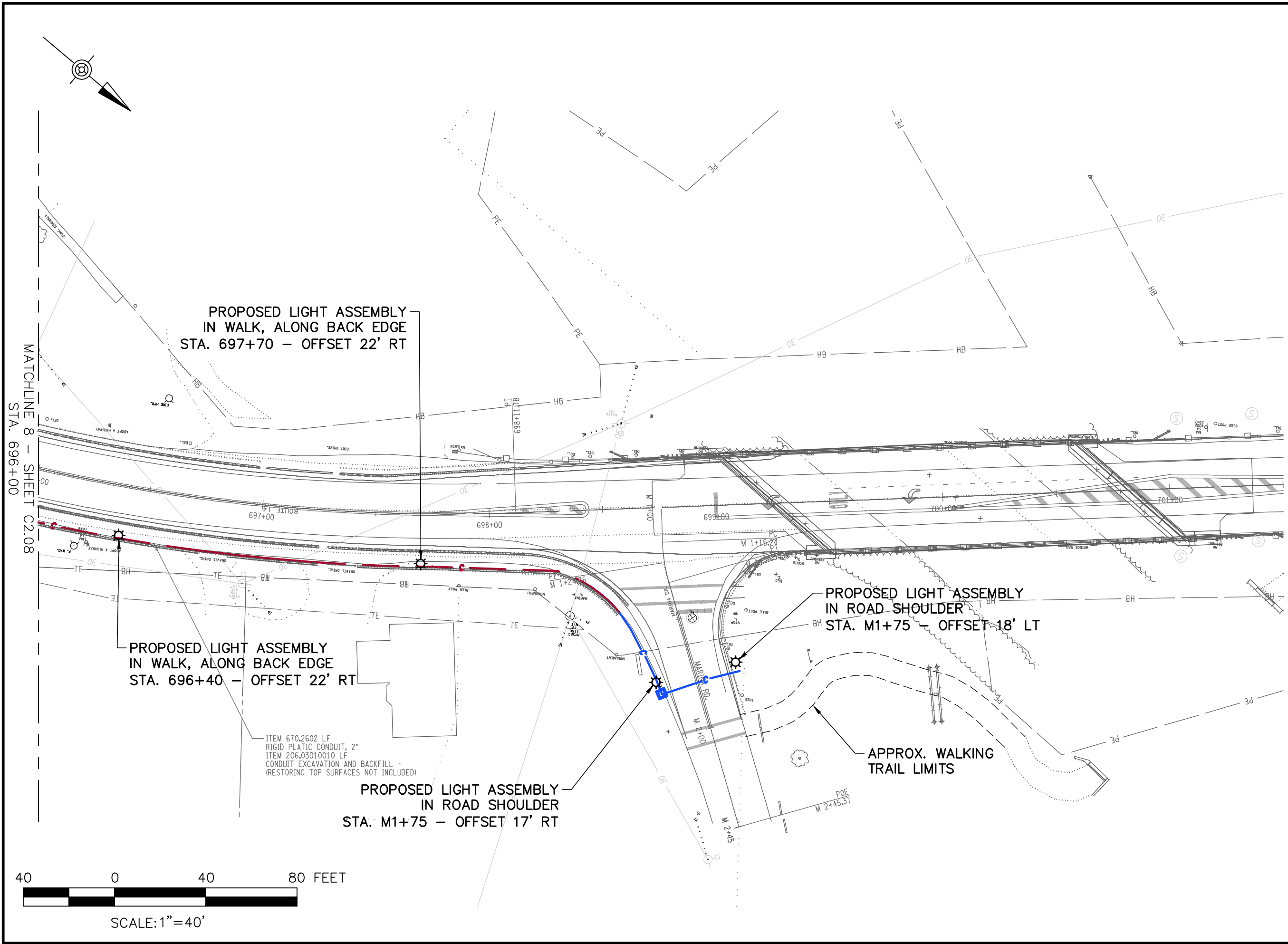
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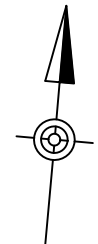
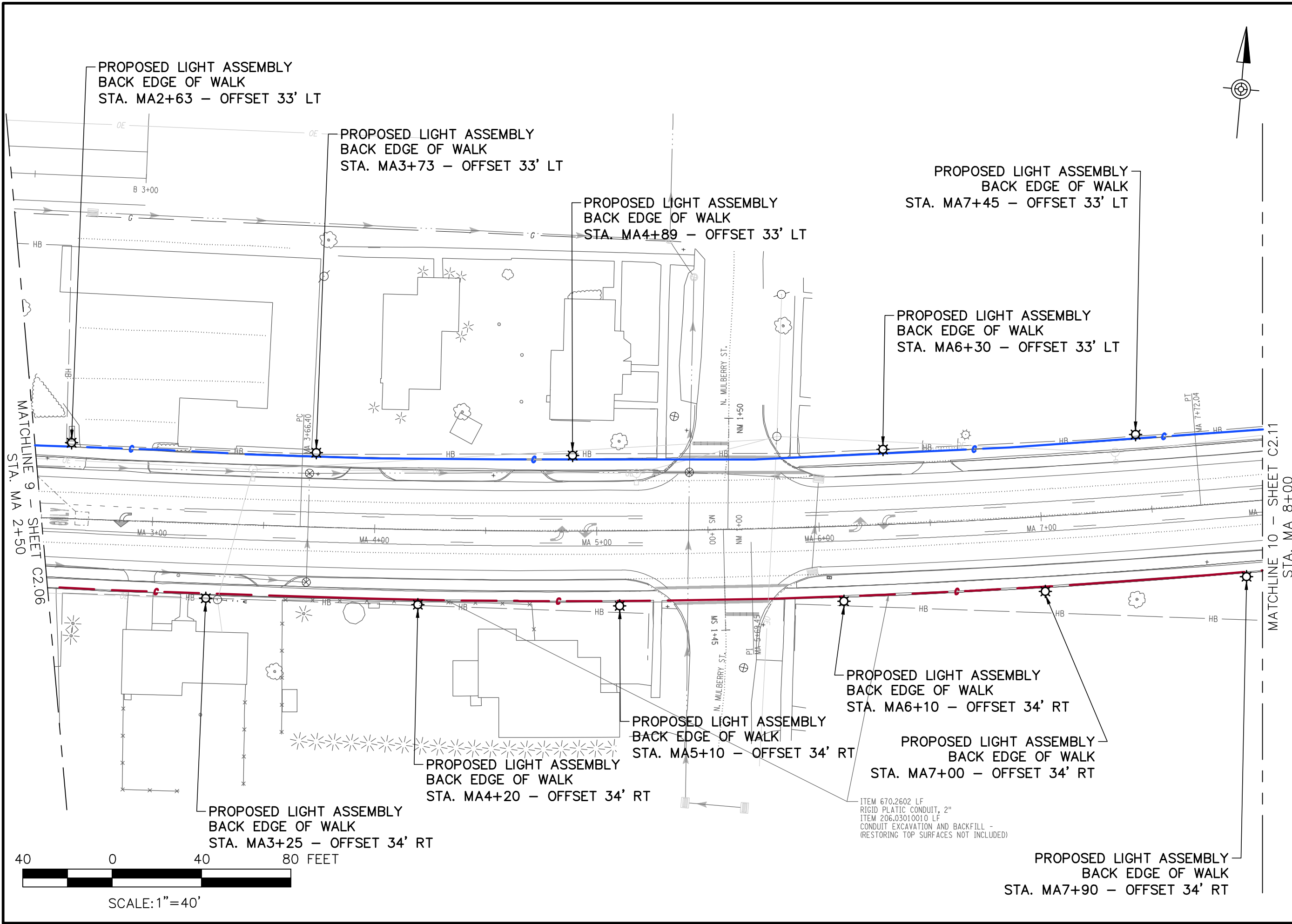
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SHEET NO.: **C2.10**
 PROJECT NO.: 6668-018



PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA8+15 - OFFSET 33' LT

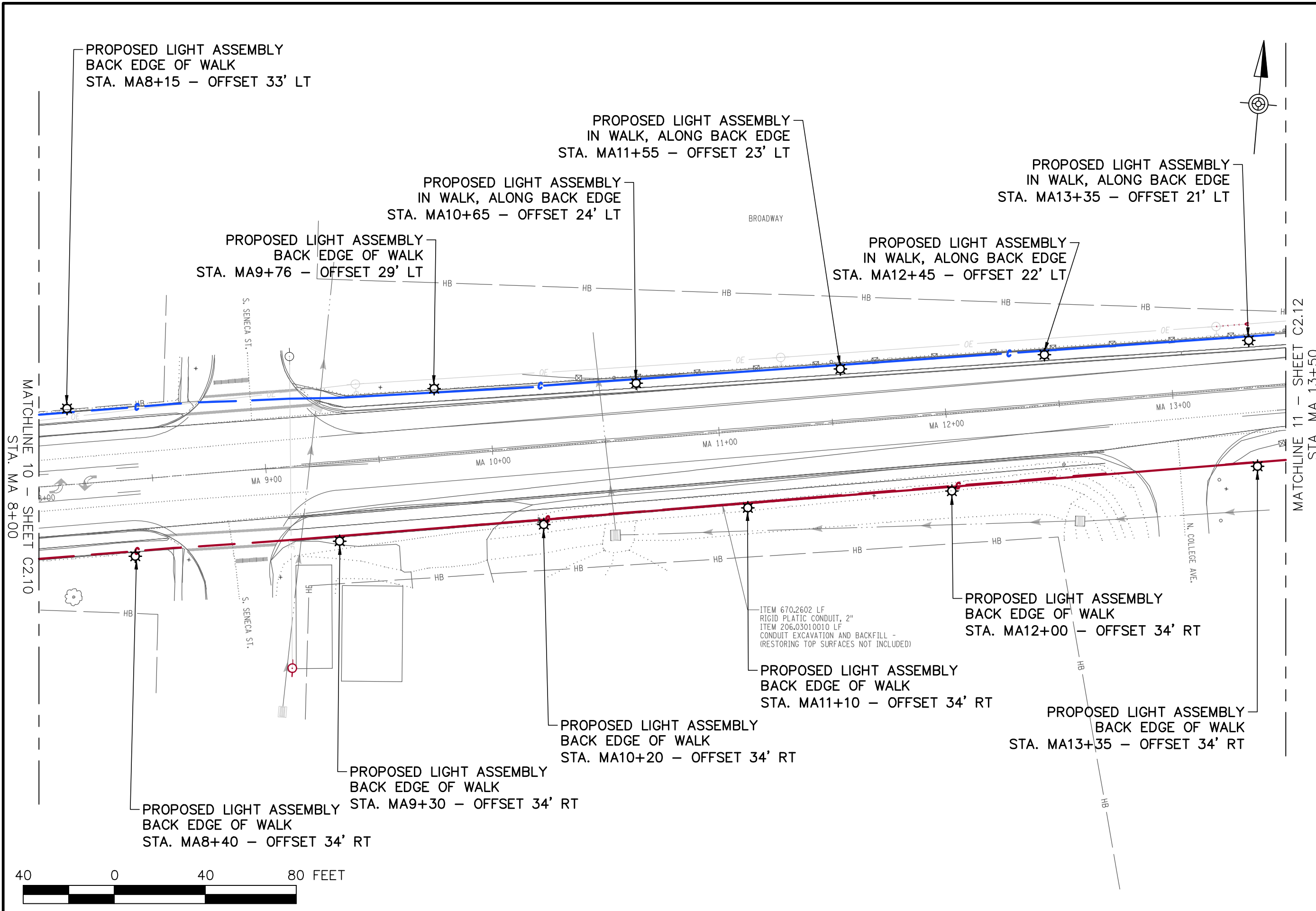
PROPOSED LIGHT ASSEMBLY
IN WALK, ALONG BACK EDGE
STA. MA11+55 - OFFSET 23' LT

PROPOSED LIGHT ASSEMBLY
IN WALK, ALONG BACK EDGE
STA. MA13+35 - OFFSET 21' LT

PROPOSED LIGHT ASSEMBLY
IN WALK, ALONG BACK EDGE
STA. MA10+65 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
IN WALK, ALONG BACK EDGE
STA. MA12+45 - OFFSET 22' LT

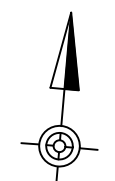
PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA9+76 - OFFSET 29' LT



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40 0 40 80 FEET

SCALE: 1" = 40'



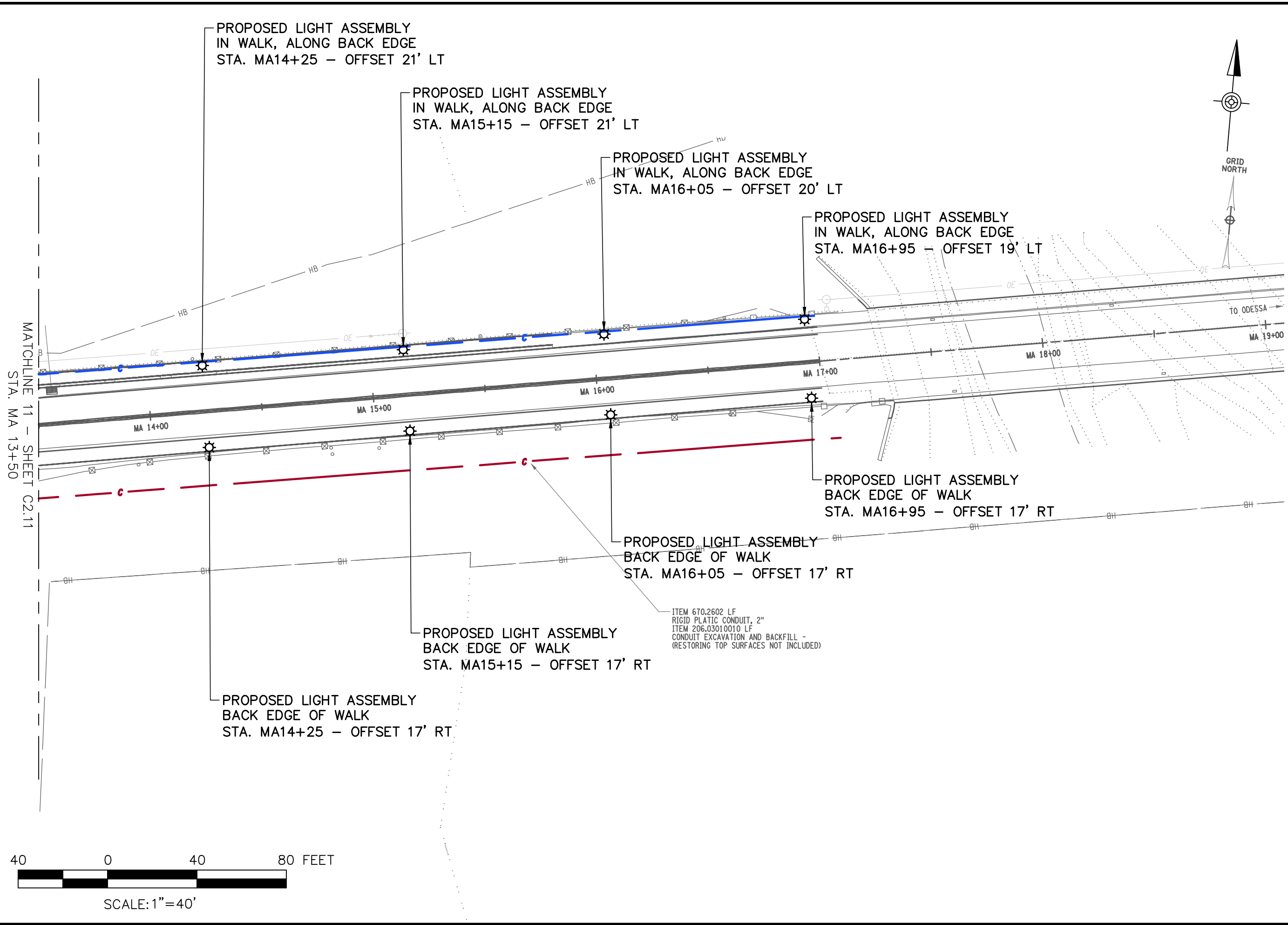
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PROJECT NO.: 6668-018



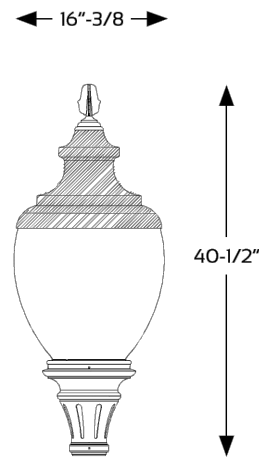
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SHEET NO.: **C2.12**
 PROJECT NO.: 6668-018

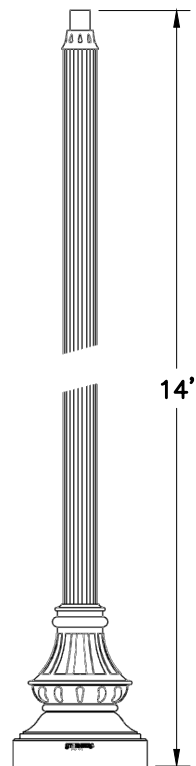


A850SRLED-5P

10'-1/8" W
10'-3/8" H

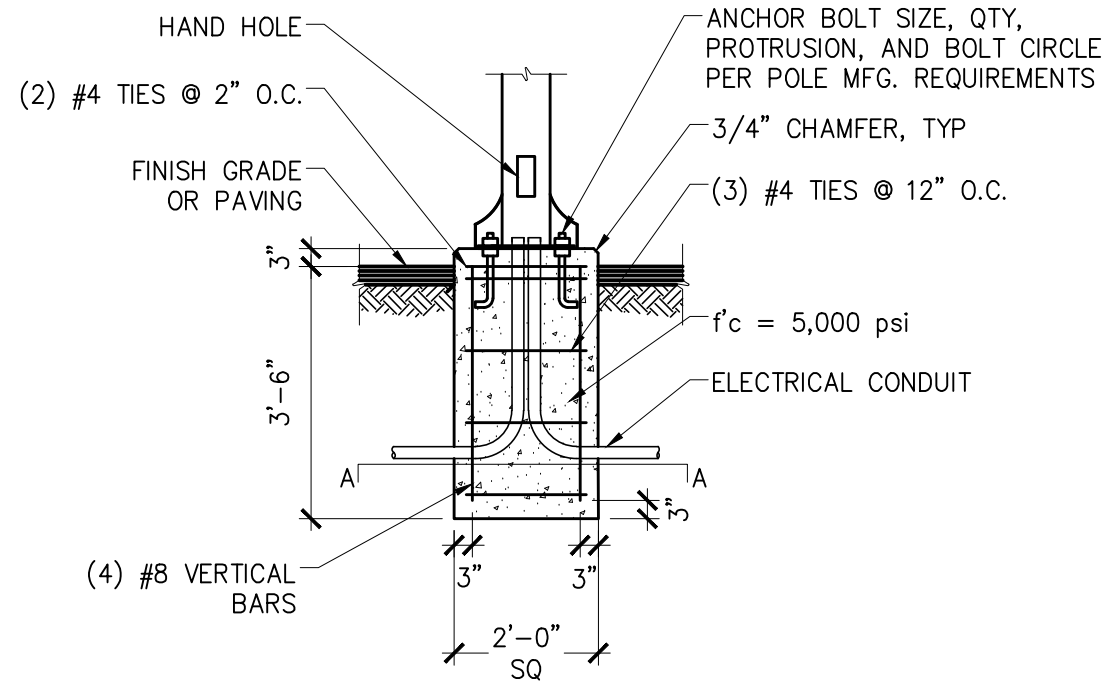


5P or 5T*
Fits 3" OD
x 3" tall
tenon/pole

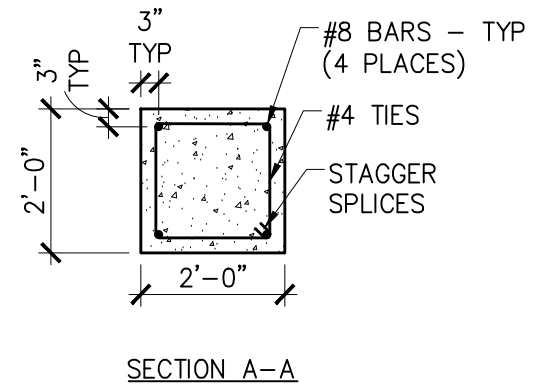


STRAIGHT
FLUTED
SHAFT

1 LIGHT FIXTURE DETAIL
SCALE: NTS



1 LIGHT POLE FOUNDATION
S-1 SCALE: 3/8" = 1'-0"



NO.	DATE	COMMENTS	BY	CHK
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0	2/7/2020	ISSUED TO CLIENT	AWK	MDO

ISSUE / REVISIONS

STREET LIGHT FIXTURE DETAILS
NY-14 CORRIDOR STREET LIGHTING CONCEPT
VILLAGE OF MONTOUR FALLS, SCHUYLER COUNTY, NEW YORK

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SHEET NO.: C8.01
PROJECT NO.: 6668-018

**Conceptual Cost Estimate
March 17, 2020**



Larson Design Group

<u>Village of Montour Falls</u>				
<u>NY-14 Corridor Street Lighting Concept Plan</u>				
<u>Village of Montour Falls, Schuyler County, New York</u>				
Description	Quantity	Unit	Unit Cost	Total
Lighting Pole (Provision, Assembly, Wire)	136	E.A.	\$4,000	\$544,000
Lighting Pole Foundations (Forming, Reinforcing, Conduits, Connections)	136	E.A.	\$1,850	\$251,600
Steel In-Ground Junction Box	6	E.A.	\$1,000	\$6,000
Power Supply Cabinet (Wood Pole Mounted)	4	E.A.	\$4,000	\$16,000
Wire (Provision & Installation in Existing Conduit)	47,370	L.F.	\$3.00	\$142,110
	TOTAL CONSTRUCTION			\$959,710

Contingency @ 10%	\$96,000
Engineering	\$96,000
Legal & Admin	\$70,000
TOTAL PROJECT COST	\$1,221,710

Notes:

1. Conduit previously installed as part of the 2020 NYSDOT Route 14 rehabilitation project.
2. Engineering and Legal fees are estimated and subject to change depending on final project scope.

VILLAGE OF MONTOUR FALLS

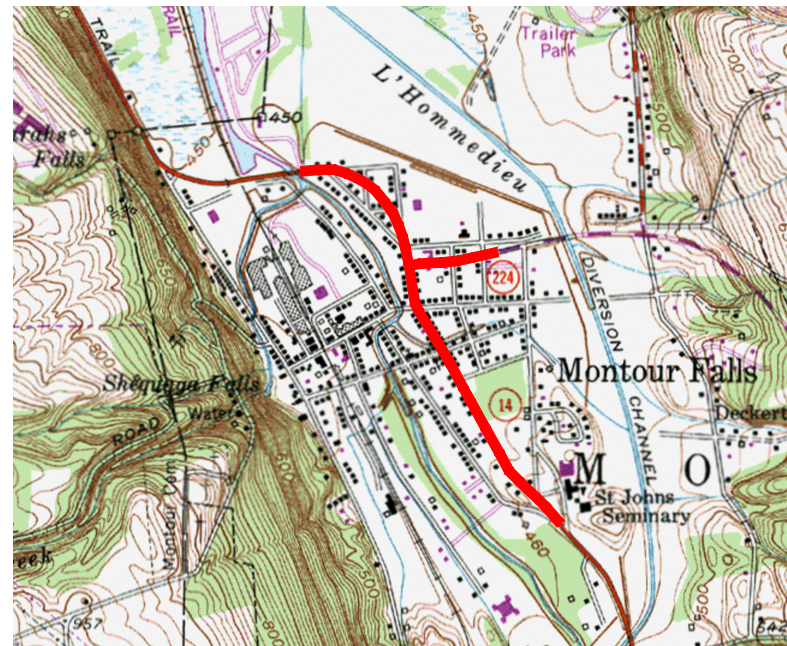
SCHUYLER COUNTY, NEW YORK

NY-14 CORRIDOR STREET LIGHTING

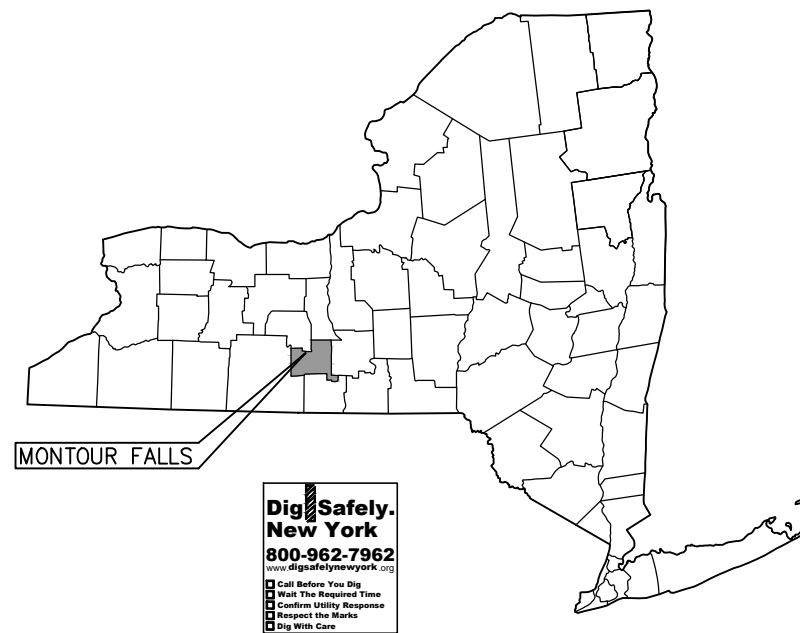
CONCEPT PLAN

FEBRUARY 2020

LDG PROJECT NO. 6668-018



LOCATION MAP
SCALE: 1"=2000'



DRAWING LIST

- G0.01 COVER SHEET
- G2.01 SHEET INDEX
- C2.01 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.02 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.03 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.04 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.05 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.06 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.07 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.08 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.09 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.10 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.11 CONCEPT STREET LIGHT LAYOUT PLAN
- C2.12 CONCEPT STREET LIGHT LAYOUT PLAN
- C8.01 STREET LIGHT FIXTURE DETAILS



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COVER SHEET

NY-14 CORRIDOR STREET LIGHTING CONCEPT

VILLAGE OF MONTOUR FALLS, SCHUYLER COUNTY, NEW YORK

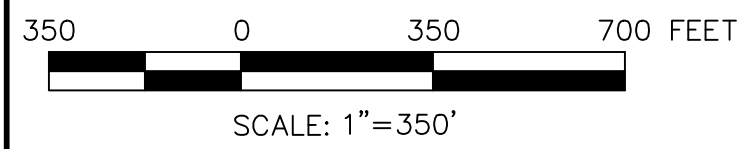
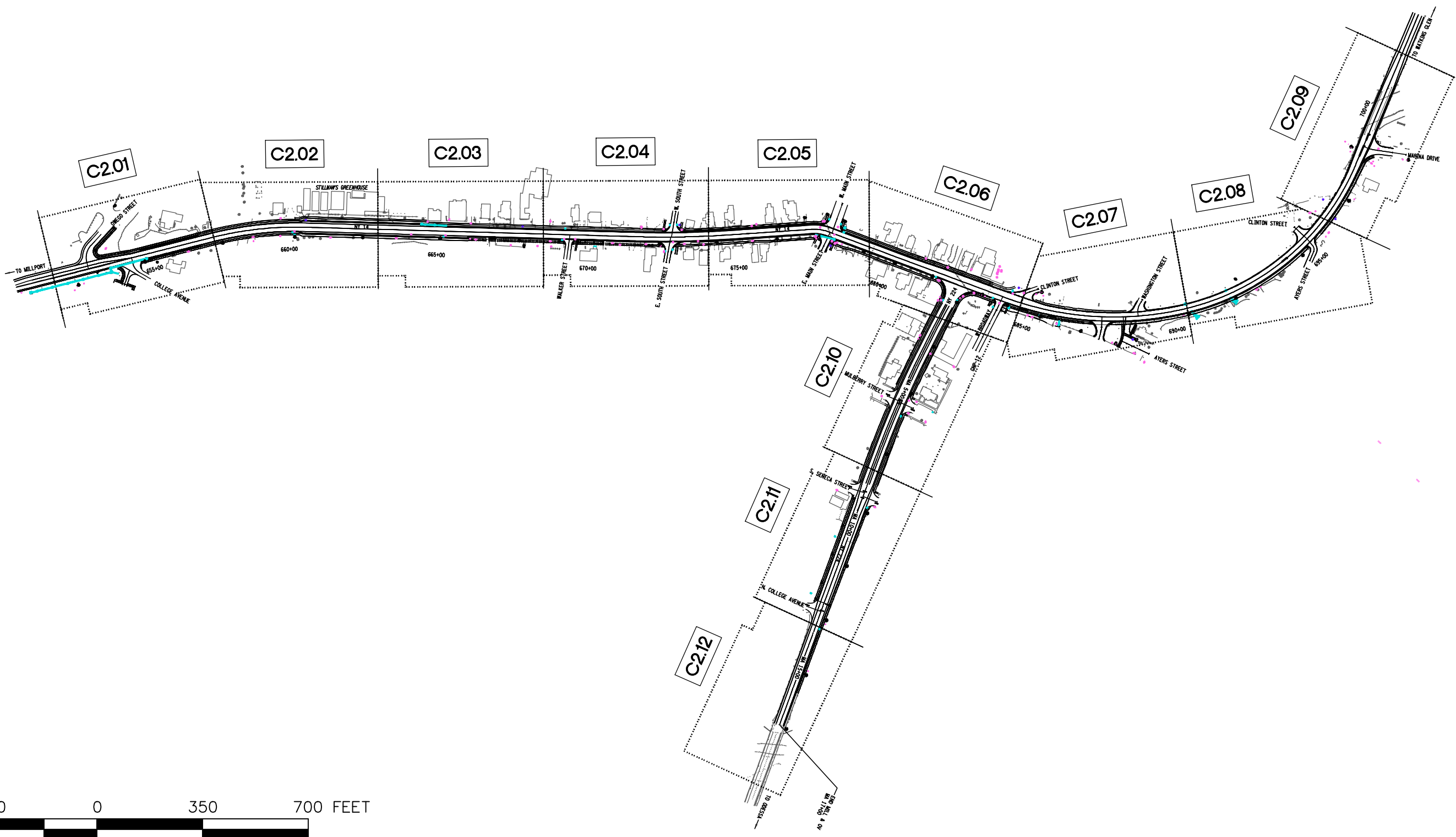
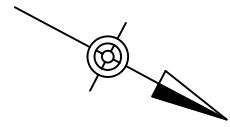
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SHEET NO.: **GO.01**

PROJECT NO.: 6668-018

Basemap and utility information have been shown from plans issued by the New York State Department of Transportation titled "Route 14 Catharine Creek Deck Replacement (BIN 1010890) and Montour Falls Village Paving, Signal and ADA Work" dated October 7, 2019.



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SHEET INDEX

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SHEET NO.: **G2.01**
 PROJECT NO.: 6668-018



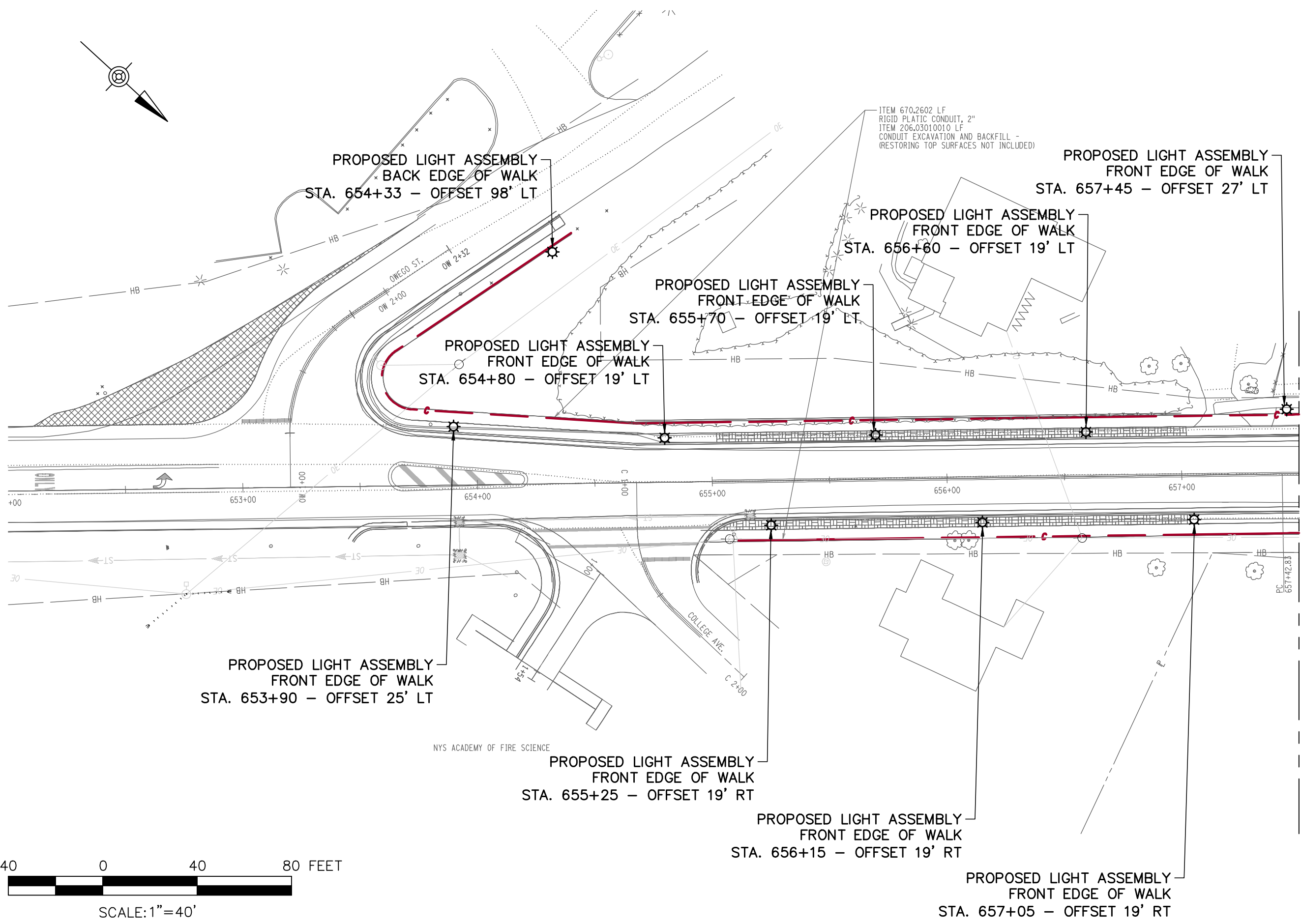
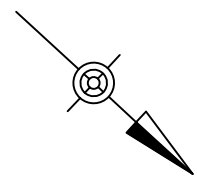
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CONCEPT STREET LIGHT LAYOUT
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SHEET NO.: **C2.01**
 PROJECT NO.: 6668-018



ITEM 670.2602 LF
 RIGID PLATIC CONDUIT, 2"
 ITEM 206.03010010 LF
 CONDUIT EXCAVATION AND BACKFILL -
 (RESTORING TOP SURFACES NOT INCLUDED)

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. 654+33 - OFFSET 98' LT

PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 657+45 - OFFSET 27' LT

PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 656+60 - OFFSET 19' LT

PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 655+70 - OFFSET 19' LT

PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 654+80 - OFFSET 19' LT

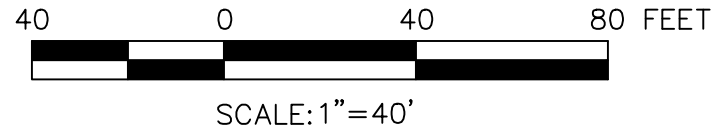
PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 653+90 - OFFSET 25' LT

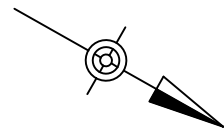
PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 655+25 - OFFSET 19' RT

PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 656+15 - OFFSET 19' RT

PROPOSED LIGHT ASSEMBLY
 FRONT EDGE OF WALK
 STA. 657+05 - OFFSET 19' RT

MATCHLINE 1 - SHEET C2.02
 STA. 657+50





PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 658+30 - OFFSET 27' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 659+15 - OFFSET 27' LT

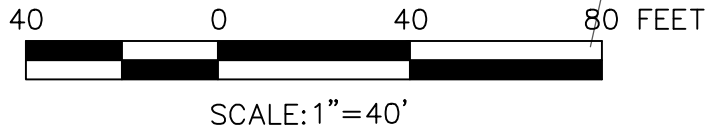
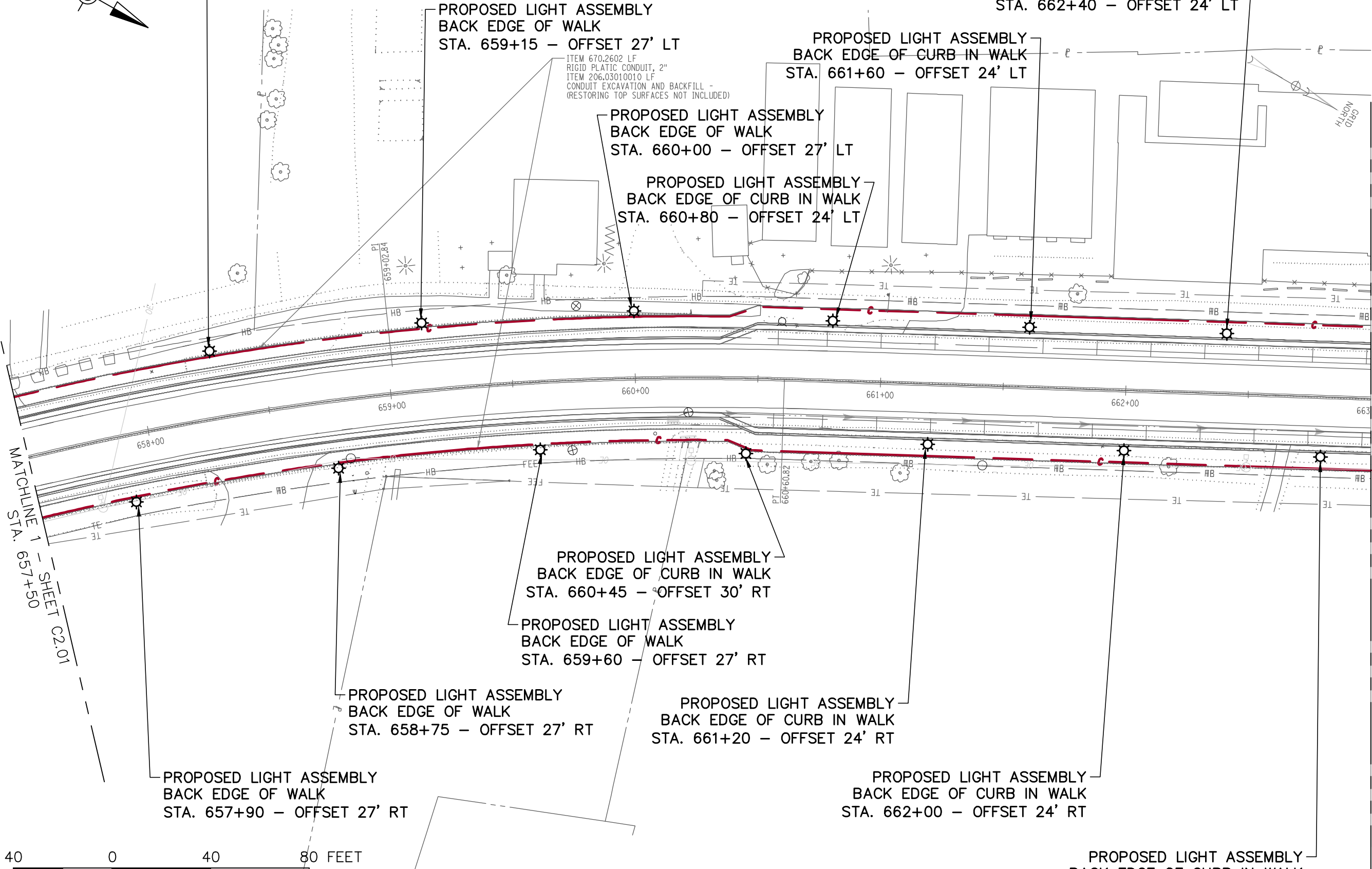
ITEM 670.2602 LF
RIGID PLASTIC CONDUIT, 2"
ITEM 206.03010010 LF
CONDUIT EXCAVATION AND BACKFILL -
(RESTORING TOP SURFACES NOT INCLUDED)

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 660+00 - OFFSET 27' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 660+80 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 661+60 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 662+40 - OFFSET 24' LT



MATCHLINE 1 - SHEET C2.01
STA. 657+50

MATCHLINE 2 - SHEET C2.03
STA. 663+00



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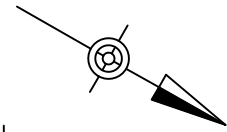
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SHEET NO.: **C2.02**
PROJECT NO.: 6668-018

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 662+80 - OFFSET 24' RT



ITEM 670.2602 LF
RIGID PLASTIC CONDUIT, 2"
ITEM 206.03010010 LF
CONDUIT EXCAVATION AND BACKFILL -
(RESTORING TOP SURFACES NOT INCLUDED)

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 667+90 - OFFSET 29' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 663+10 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 667+15 - OFFSET 29' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 664+00 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 666+40 - OFFSET 29' LT

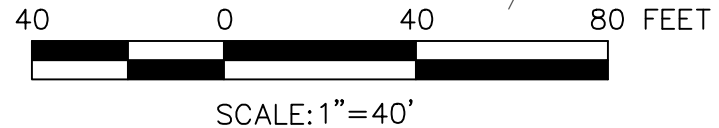
PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 664+80 - OFFSET 20' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 665+65 - OFFSET 29' LT

MATCHLINE 2 - SHEET C2.02
STA. 663+00

MATCHLINE 3 - SHEET C2.04
STA. 668+51

MATCHLINE 2 - SHEET C2.02
STA. 663+00



PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 663+60 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 664+80 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF CURB IN WALK
STA. 665+20 - OFFSET 24' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 666+05 - OFFSET 29' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 666+60 - OFFSET 29' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 667+55 - OFFSET 29' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 668+30 - OFFSET 29' RT



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SHEET NO.: **C2.03**
PROJECT NO.: 6668-018



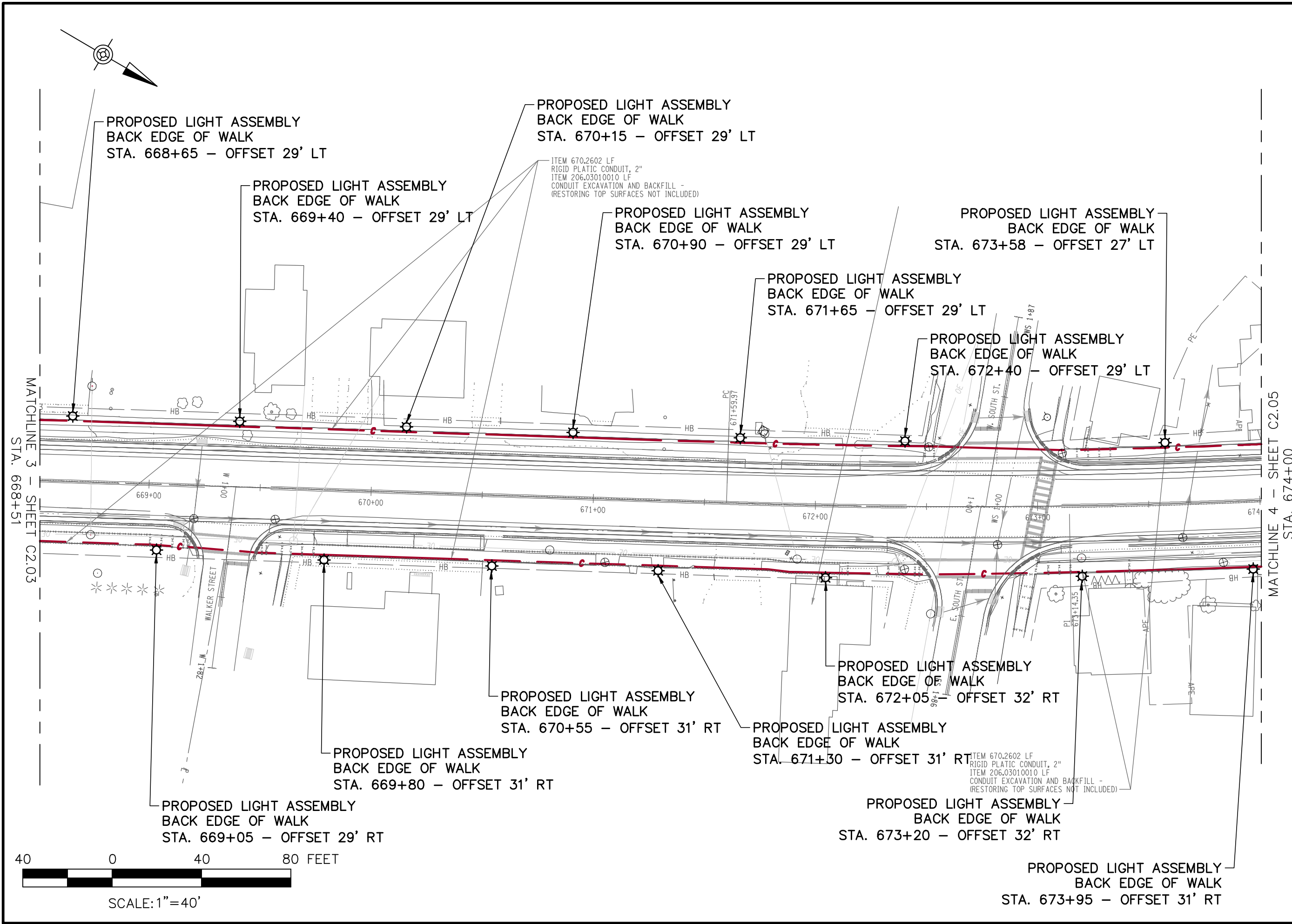
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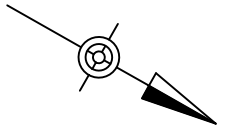
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SHEET NO.: **C2.04**
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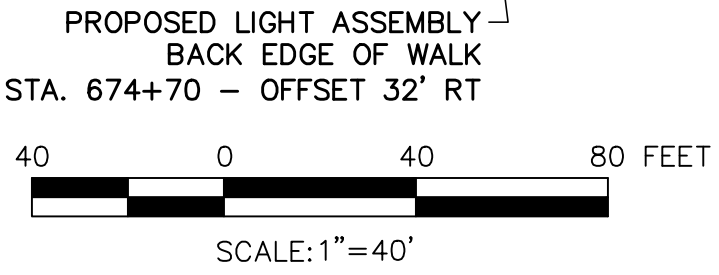
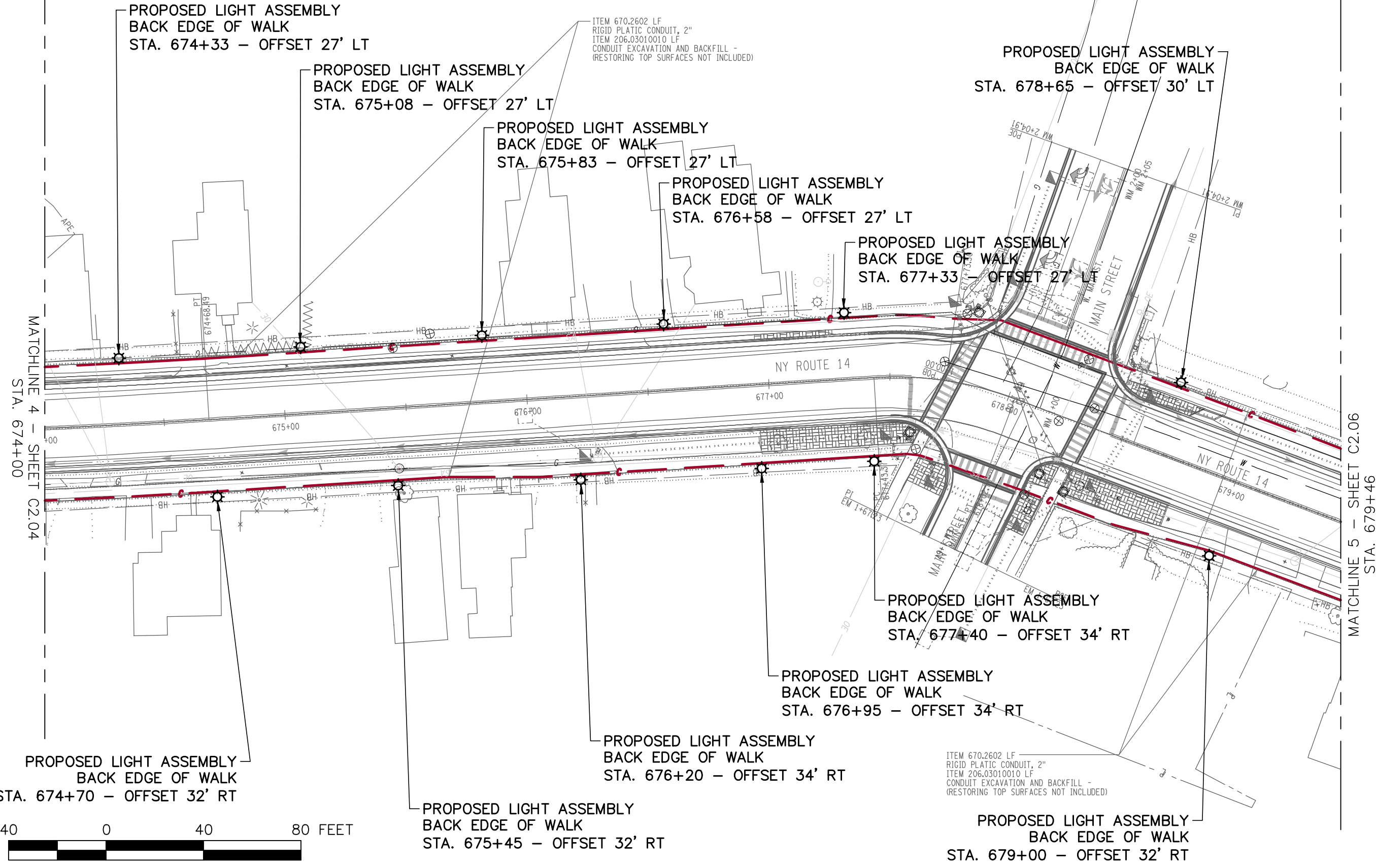




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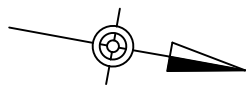


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SHEET NO.: **C2.05**
 PROJECT NO.: 6668-018



PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 679+40 - OFFSET 30' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 683+15 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 683+90 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 680+15 - OFFSET 30' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 682+40 - OFFSET 33' LT

ITEM 680.510101
PULLBOX-CIRCULAR, 15 INCH DIAMETER, REINFORCED CONCRETE

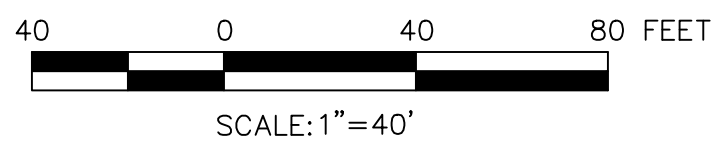
PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 680+90 - OFFSET 30' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 681+65 - OFFSET 31' LT

ITEM 670.2802 LF
RIGID PLASTIC CONDUIT, 2"
ITEM 206.03010010 LF
CONDUIT EXCAVATION AND BACKFILL -
(RESTORING TOP SURFACES NOT INCLUDED)

MATCHLINE 5 - SHEET C2.05
STA. 679+46

MATCHLINE 6 - SHEET C2.07
STA. 684+85



PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA2+50 - OFFSET 33' RT

MATCHLINE 9 - SHEET C2.10
STA. MA 2+50

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 684+60 - OFFSET 27' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 679+75 - OFFSET 32' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 680+50 - OFFSET 32' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. 681+25 - OFFSET 32' RT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA1+56 - OFFSET 41' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA2+00 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
BACK EDGE OF WALK
STA. MA1+69 - OFFSET 34' RT

POTENTIAL POWER SUPPLY



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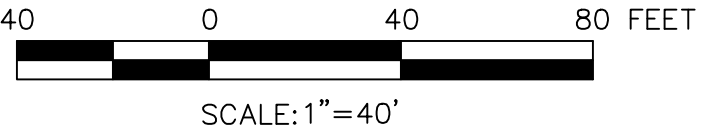
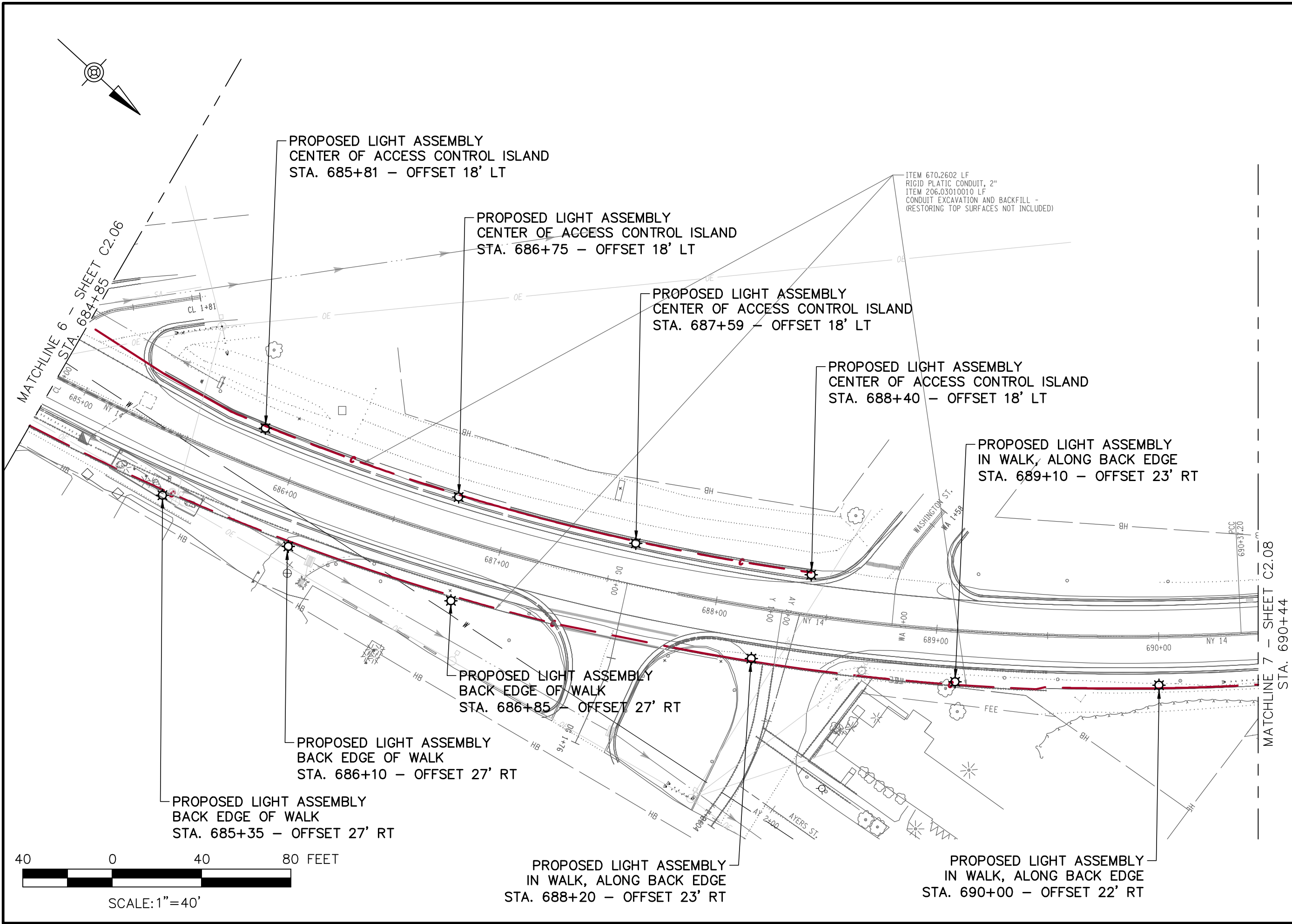
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SHEET NO.: **C2.07**
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 RIGID PLASTIC CONDUIT, 2"
 ITEM 206.03010010 LF
 CONDUIT EXCAVATION AND BACKFILL -
 (RESTORING TOP SURFACES NOT INCLUDED)

MATCHLINE 7 - SHEET C2.08
 STA. 690+44

MATCHLINE 6 - SHEET C2.06
 STA. 684+85



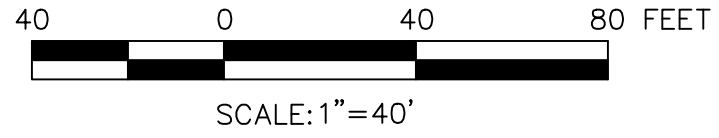
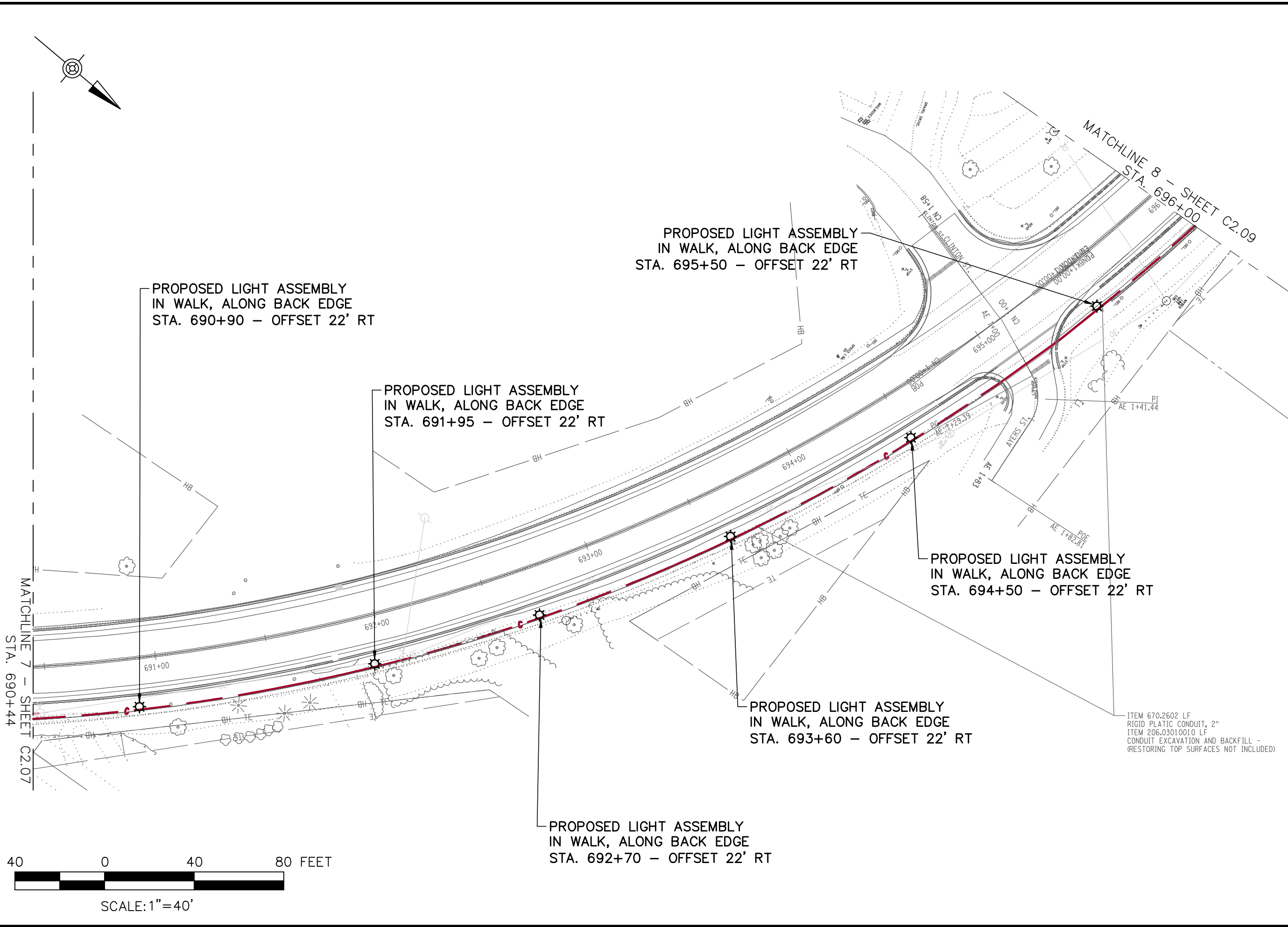
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NO.	DATE
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SHEET NO.: **C2.08**
 PROJECT NO.: 6668-018



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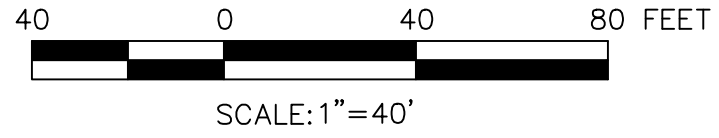
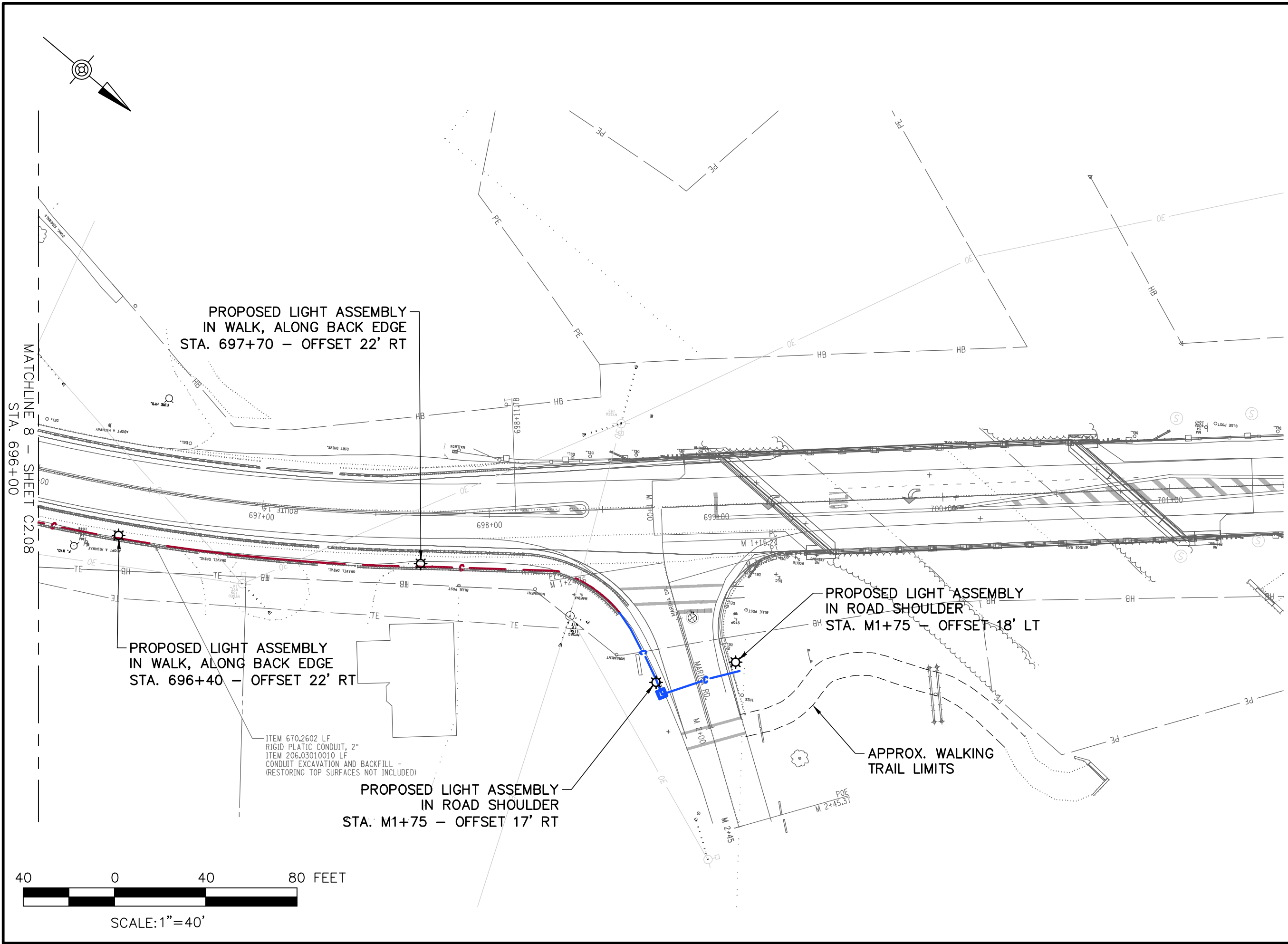
ISSUE / REVISIONS

CONCEPT STREET LIGHT LAYOUT
NY-14 CORRIDOR STREET LIGHTING CONCEPT
 VILLAGE OF MONTOUR FALLS, SCHUYLER COUNTY, NEW YORK

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Village of Montour Falls
 408 W Main Street
 Montour Falls, NY 14865
 PHONE 607.535.7367

SHEET NO.: **C2.09**
 PROJECT NO.: 6668-018





NO.	DATE	COMMENTS	BY	CHK
1	3/6/2020	ADDITIONAL LIGHTING PLAN	TWS	MDO
0	2/7/2020	ISSUED TO CLIENT	AWK	MDO

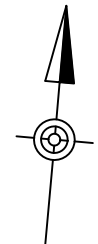
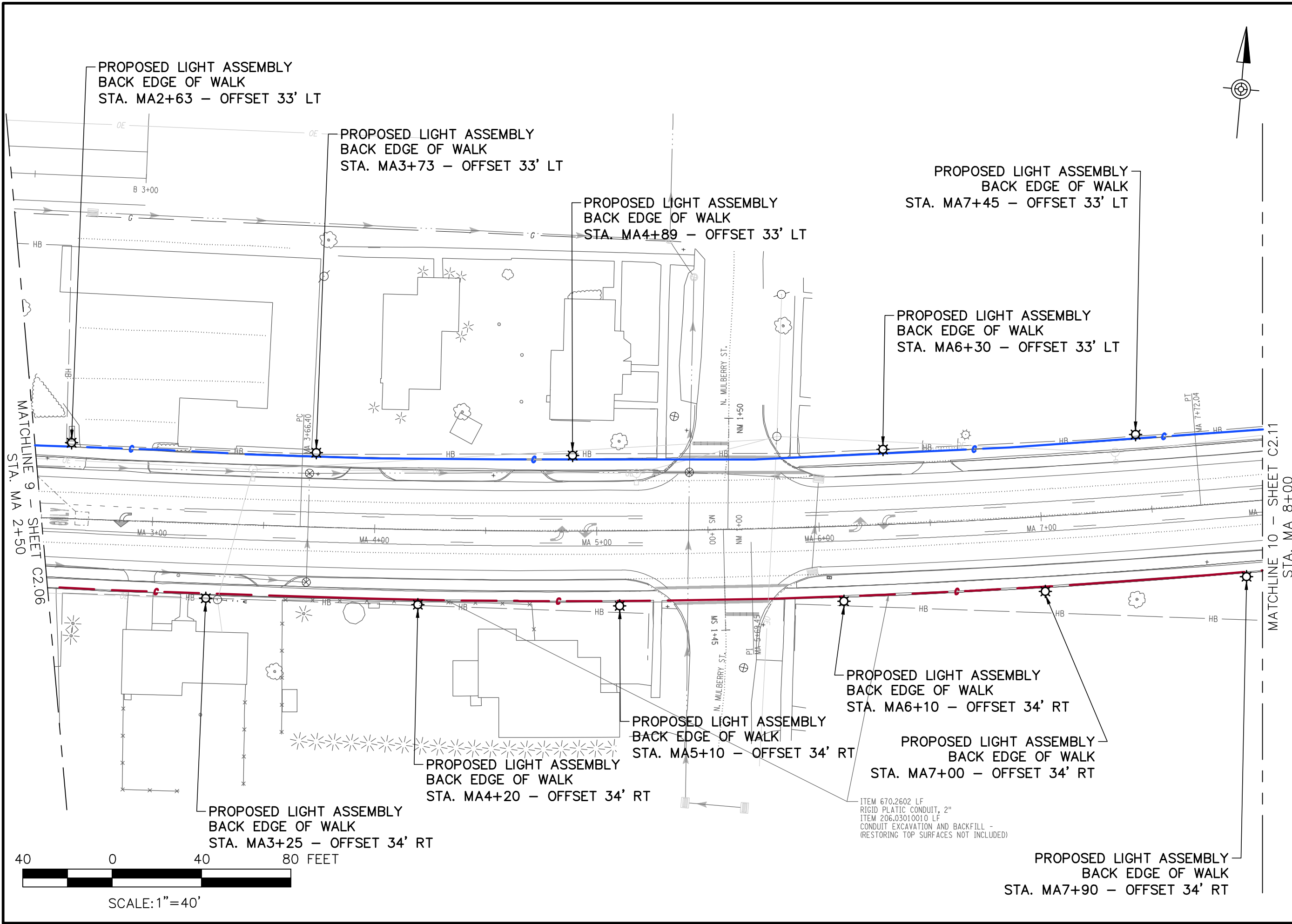
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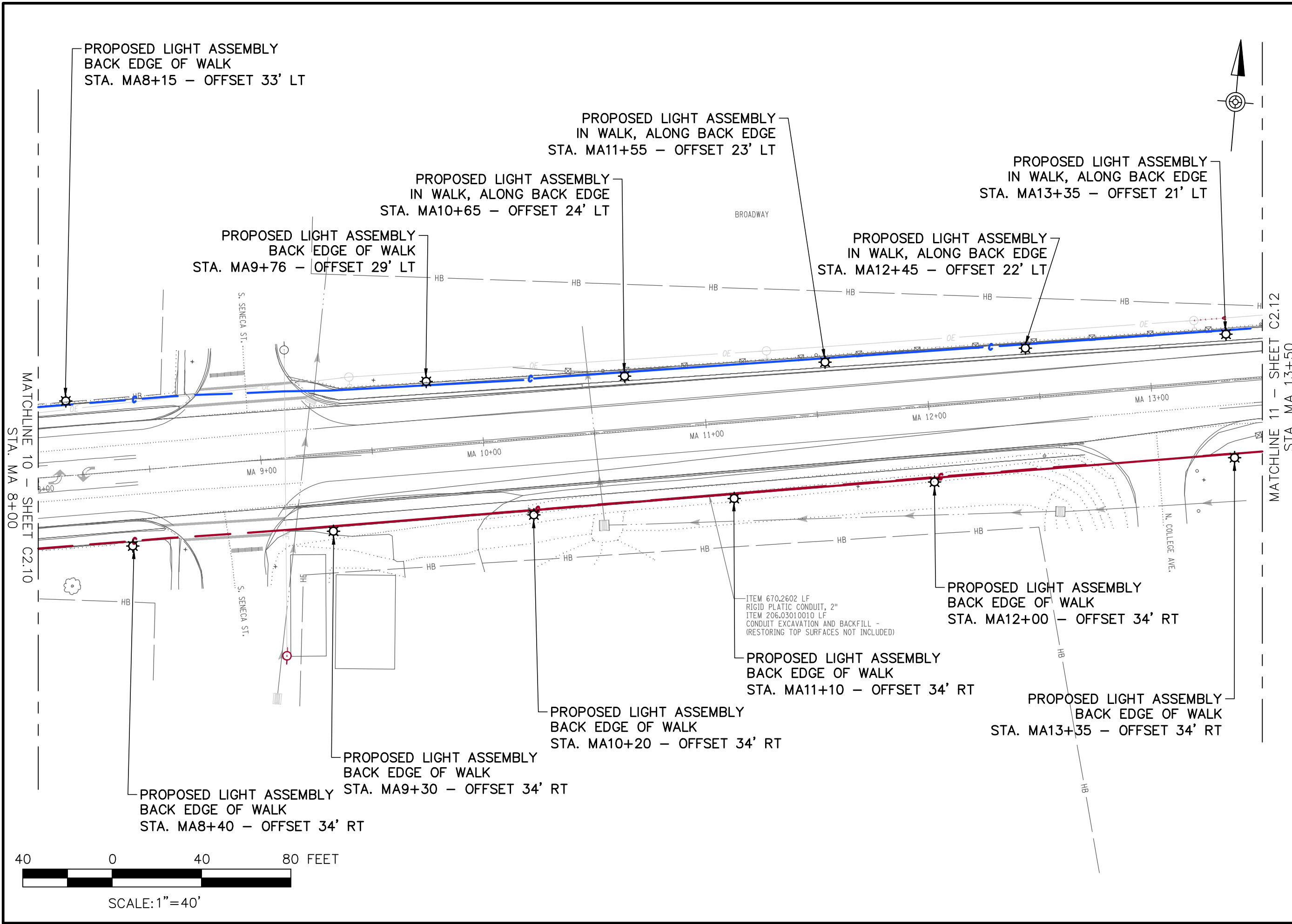
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SHEET NO.: **C2.11**
 PROJECT NO.: 6668-018



PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA8+15 - OFFSET 33' LT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. MA11+55 - OFFSET 23' LT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. MA13+35 - OFFSET 21' LT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. MA10+65 - OFFSET 24' LT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA9+76 - OFFSET 29' LT

PROPOSED LIGHT ASSEMBLY
 IN WALK, ALONG BACK EDGE
 STA. MA12+45 - OFFSET 22' LT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA12+00 - OFFSET 34' RT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA11+10 - OFFSET 34' RT

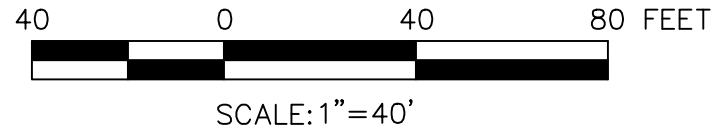
PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA10+20 - OFFSET 34' RT

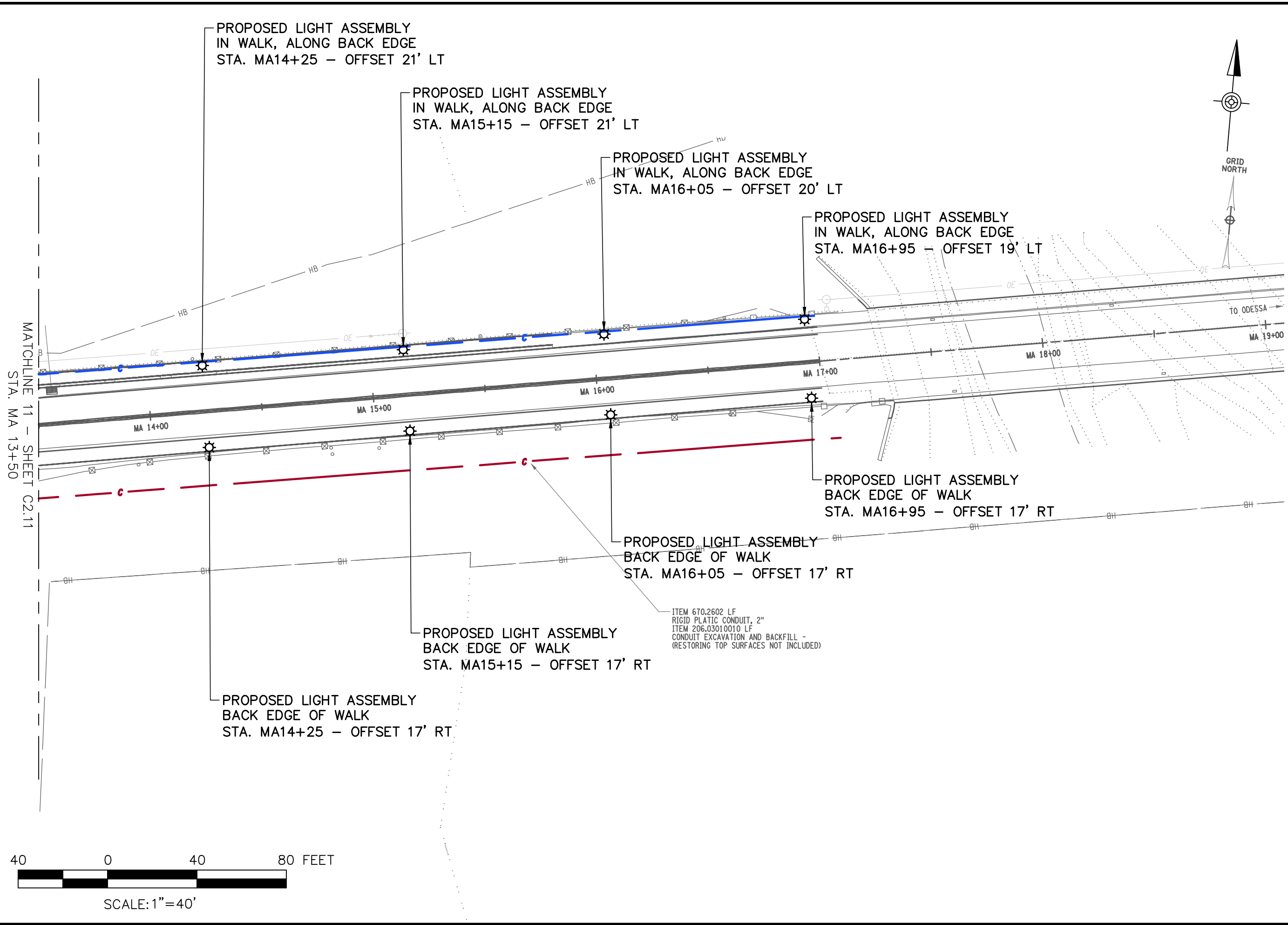
PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA13+35 - OFFSET 34' RT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA9+30 - OFFSET 34' RT

PROPOSED LIGHT ASSEMBLY
 BACK EDGE OF WALK
 STA. MA8+40 - OFFSET 34' RT

ITEM 670.2602 LF
 RIGID PLATIC CONDUIT, 2"
 ITEM 206.03010010 LF
 CONDUIT EXCAVATION AND BACKFILL -
 (RESTORING TOP SURFACES NOT INCLUDED)





NO.	DATE	COMMENTS	BY	CHK
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0	2/7/2020	ISSUED TO CLIENT	AWK	MDO

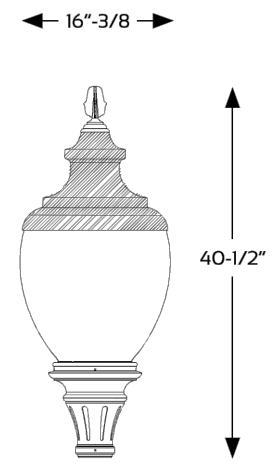
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SHEET NO.: **C2.12**
 PROJECT NO.: 6668-018

ITEM 670.2602 LF
 RIGID PLATIC CONDUIT, 2"
 ITEM 206.03010010 LF
 CONDUIT EXCAVATION AND BACKFILL -
 (RESTORING TOP SURFACES NOT INCLUDED)

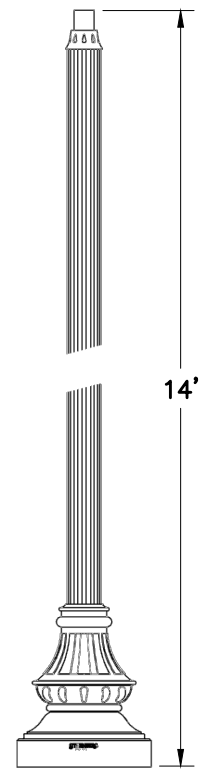


A850SRLED-5P

10'-1/8" W
10'-3/8" H

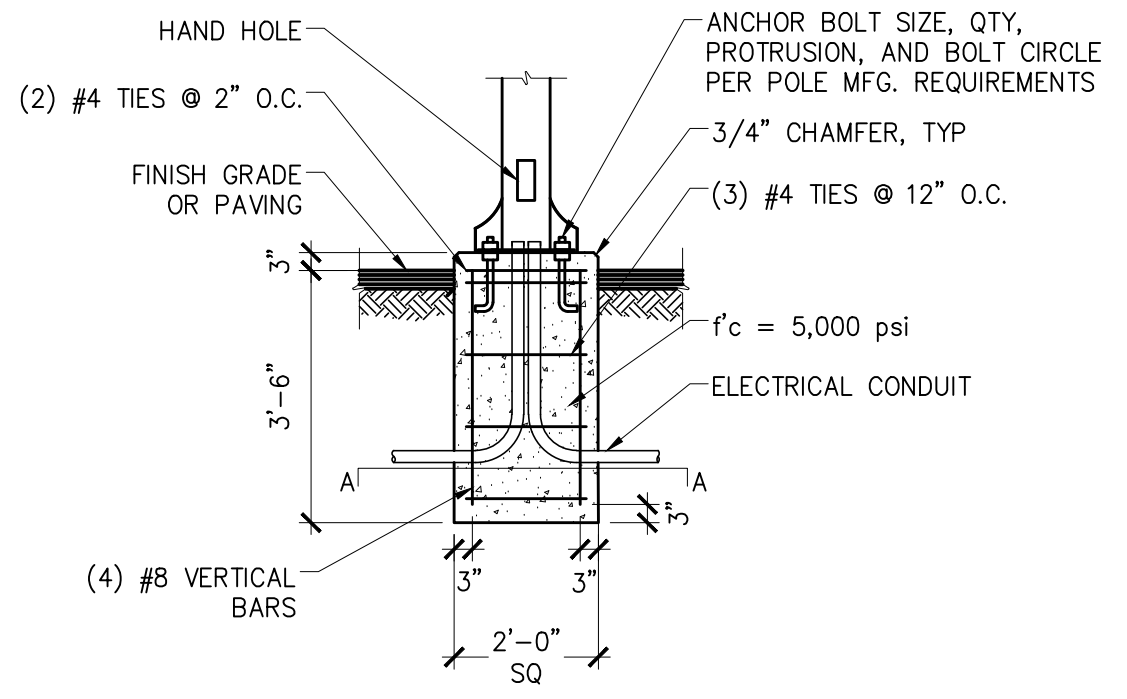


5P or 5T*
Fits 3" OD
x 3" tall
tenon/pole

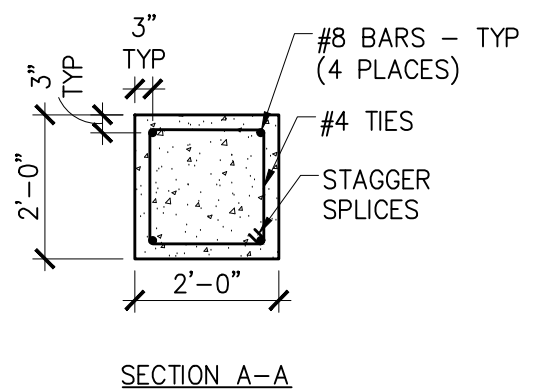


STRAIGHT
FLUTED
SHAFT

1 LIGHT FIXTURE DETAIL
SCALE: NTS



1 LIGHT POLE FOUNDATION
S-1 SCALE: 3/8" = 1'-0"



NO.	DATE	COMMENTS	BY	CHK
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SHEET NO.: C8.01
PROJECT NO.: 6668-018

**Conceptual Cost Estimate
March 17, 2020**



Larson Design Group

**Village of Montour Falls
NY-14 Corridor Street Lighting Concept Plan
Village of Montour Falls, Schuyler County, New York**

Description	Quantity	Unit	Unit Cost	Total
Lighting Pole (Provision, Assembly, Wire)	136	E.A.	\$4,000	\$544,000
Lighting Pole Foundations (Forming, Reinforcing, Conduits, Connections)	136	E.A.	\$1,850	\$251,600
Steel In-Ground Junction Box	6	E.A.	\$1,000	\$6,000
Power Supply Cabinet (Wood Pole Mounted)	4	E.A.	\$4,000	\$16,000
Wire (Provision & Installation in Existing Conduit)	47,370	L.F.	\$3.00	\$142,110
	TOTAL CONSTRUCTION			\$959,710

Contingency @ 10%	\$96,000
Engineering	\$96,000
Legal & Admin	\$70,000
TOTAL PROJECT COST	\$1,221,710

Notes:

1. Conduit previously installed as part of the 2020 NYSDOT Route 14 rehabilitation project.
2. Engineering and Legal fees are estimated and subject to change depending on final project scope.

Appendix E: Built Environment Assessment and Pedestrian Safety Report

Built Environment Assessment and Priority Locations analysis for Montour Falls.

HEAL SCHUYLER - June 2020

Pedestrian improvements were combined by street and then screened through a ranking process using a set of criteria that help blend trade-offs between need and demand. Each of the criteria is described below.

Demand Factors

Schools: Schools within ¼ mile (approximately 1,300 feet) of the corridor or intersection are counted and multiplied by three to arrive at a weighted figure for each project and corridor.

Parks: Parks within ¼ mile (approximately 1,300 feet) of the corridor or intersection are counted and multiplied by one and a half to arrive at a weighted figure for each project and corridor. Proximity to major recreational destinations (such as the beach parks) is weighted more heavily reflecting increased pedestrian activity, scoring four points each.

Public Activity Areas (Community): Community centers, libraries, post offices, City Hall, museums, and other public activity areas within ¼ mile (approximately 1,300 feet) of the corridor or intersection are counted for each project and corridor.

Land Use: Different types of land uses generate varying levels of pedestrian activity. Surrounding land uses are weighted, with (CB) (B1) and (MU1) scoring the highest (five points). Lower intensity Gateway scoring next (four points), healthcare (HC) and residential limited business (RLB) areas scoring three points, moderate density residential (R-2) uses scoring two points, and one family residential (R1) Manufactured home residential (RMH) scoring one point. Land use figures were then multiplied by three to reflect the importance of the criteria.

Need Factors

Safety: Crashes reflect both current pedestrian volumes and the potential need for improvements in Montour Falls in the last ten years.

Crash locations between were analyzed and scored according to the number of crashes with the lowest (one crash) scoring one point and the highest (six to eight crashes) scoring five points.

Missing Sidewalks and Curbs/Gap Closure: The approximate percentage of a corridor and/or intersection and its approaches missing sidewalks and/or curb ramps is considered an important factor related to the need for improvements. This percentage is then multiplied by five. For example, a corridor missing sidewalk on about 50% of its length would score two and a half points ($5 \times .5 = 2.5$). This was not analyzed for Montour Falls yet.

Built Environment Assessment and Priority Locations analysis for Montour Falls.

HEAL SCHUYLER - June 2020

Public Input: Comments by the public collected through surveys and public workshops would be reflected in this criterion. Points are assigned to corridors and specific locations as appropriate based on the number of comments, ranging between one comment (one point) up to 11 comments (five points).

Scoring Method

The scoring method for a sample intersection is presented in Table A-3 below.

Table A-3. Sample Intersection Scoring Method

Sample Street	Number/Type	Factor	Points
Schools	1	3	3
City college	0	3	0
Parks	2	1.5	3
Major visitor destination	0	1.5	0
Community centers	2	1	2
Land use (zoning)	R2 = 2	3	6
Density	6,000 ppsm* = 2	1	2
Safety	2 collisions = 2	1	2
Missing sidewalk**	.25	5	1.25
Missing curb**	.25	5	1.25
Gap closure	0	5	0
Public Comment	2	1	2
Total			23

* ppsm = people per square mile

** .25 indicates 1 of the four approaches or corners of an intersection is missing a sidewalk or curb ramp.

Built Environment Assessment and Priority Locations analysis for Montour Falls.

HEAL SCHUYLER - June 2020

Street	Cross Street	Schools	Parks	Community	Land use	Safety	Missing SW/Curb/Gap	Public	SCORE
W. Main St	Montour St		4.5	3	15	4			26.5
S. Catherine St	Main St		4.5	2	15	5			26.5
N. Catherine St	Clawson Blvd		4.5	2	15	5			26.5
W Main St	Lee St		4.5	4	15	1			24.5
Schuyler St	W. Main St		4.5	3	15	1			23.5
Owego St	W. Main St		3	4	15	1			23
S. Catherine St	South St		4.5	2	15	1			22.5
N. Catherine St	Washington St/Ayer St		4	1	15	2			22
W Main St	Owego St		3	2	15	1			21
N. Catherine St	Ayer St/Clinton St		4		15	2			21
N. Catherine St	Marine Dr		4		15	2			21
W Main St	Henry St		3	2	15	0			20
N. Catherine St	Clinton St		3	1	15	1			20



The Active Communities Tool Assessment Modules

The Active Communities Tool (ACT): An Action Planning Guide and Assessment Modules to Improve Community Built Environments to Promote Physical Activity



<https://www.cdc.gov/physicalactivity/community-strategies/active-communities-tool>



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Note: Links to non-federal government organizations found in this document are provided solely as a service to the reader. These links do not constitute an endorsement of these organizations or their programs by CDC or the Federal Government, and none should be inferred. CDC is not responsible for the content of the individual organization sites listed in this document.

Suggested Citation: Centers for Disease Control and Prevention – Division of Nutrition, Physical Activity and Obesity. *The Active Communities Tool (ACT): An Action Planning Guide and Assessment Modules to Improve Community Built Environments to Promote Physical Activity.* Atlanta, GA: US Department of Health and Human Services; 2019.

For more information about the Active Communities Assessment Tool, contact:

<https://www.cdc.gov/nccdphp/dnpao/state-local-programs/physicalactivity.html>

Version: September 2019

Introduction

The Active Communities Tool Assessment Modules assesses strengths and weaknesses of community plans, policies, and resources for improving community built environments for physical activity. The tool can also monitor progress toward achieving community conditions known to promote physical activity. It is designed to help cross-sector teams create an action plan for improving community built environments that promote physical activity.

The Active Communities Tool Assessment Modules:

- contains six self-assessment modules designed to help users to identify opportunities for action, or engagement, to improve community built environments for physical activity;
- aligns with current scientific evidence as reflected in the Community Preventive Services Task Force recommendations on [Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design](#) and the [Active Travel to School](#), and;
- is based largely on items from existing rating and assessment tools commonly and successfully used in the field.

For further information on how to use the Active Communities Tool Assessment Modules as part of your broader action planning process, see *The Active Communities Tool (ACT): An Action Planning Guide and Assessment Modules to Improve Community Built Environments to Promote Physical Activity*.

Who can use the Active Communities Tool Assessment Modules?

Completing this tool requires input from a cross-sector team. The team may include representatives from public health, land use and transportation, planning, traffic engineering, public works, parks and recreation, school districts, public transit systems, or other community stakeholders.

The Active Communities Tool Assessment Modules are best suited for use with a single municipality (also referred to as community) given that this town or city will have powers of self-governance. A county or region may use the tool; however, plans and policies may differ across municipal jurisdictions within those areas. In counties or regions containing more than one municipality, teams may want to complete the assessment modules separately for each one. For the school-related module, keep in mind that school district boundaries may be different from municipal boundaries.

How to complete the Active Communities Tool Assessment Modules?

There is no single way to complete the Active Communities Tool Assessment Modules. There are many approaches. We encourage you to review *The Active Communities Tool (ACT): An Action Planning Guide and Assessment Modules to Improve Community Built Environments to Promote Physical Activity* to understand how the Active Communities Tool Assessment Modules fit into the broader action planning process.

Information about each of the six assessment modules (e.g., purpose of the module, type of technical expert(s) to involve in completing the module, length of time to complete the module) is noted on each module's cover page and in *The Active Communities Tool Action Planning Guide*.

A few key points to consider:

- Complete the modules selected by the cross-sector team. A key benefit to looking at all the modules is to have a full picture of the opportunities potentially available for your community to act on and to measure progress on community built environment improvements that promote physical activity.
- Complete the Active Communities Tool Assessment Modules as a group effort involving the technical experts relevant to the actionable areas selected. *The public health practitioners may need to contact technical experts in other sectors to complete the modules.*
- Answer each question in each module selecting the answer that best describes your community. If a question does not apply to your community, then mark it as not applicable.

MODULE 1:

STREET DESIGN AND CONNECTIVITY

- » This module assesses the plans, policies, and resources your community uses to design the physical roadway network, for example, regulations or zoning codes, street connectivity, and plans for existing and future streets constructed by the community and through future development.
- » Who should be involved – technical experts with knowledge of the community's zoning policies and codes and subdivision regulations; specifically experts in planning, transportation, and public works.
- » Approximate time to complete – 30 minutes.

Community/Municipality: _____

Term	Definition
Arterial roads	High-capacity roads that primarily deliver traffic from collector roads to freeways/ expressways and between urban centers.
Collector roads	Roads that gather traffic from local roads and deliver traffic to arterial roads.
Comprehensive Plan	The adopted official statement of a governing body of a local government that sets forth (in words, maps, illustrations, and/or tables) goals, policies, and guidelines intended to direct the present and future physical, social, and economic development that occurs within its planning jurisdiction and that includes a unified physical design for the public and private development of land.
High-stress and low-stress streets	Refers to the level of stress the street segment imposes on cyclists. The classification is based on traffic characteristics such as road width, traffic speed, the presence of a parking lane, and whether bikes are in mixed traffic, in bike lanes, or on segregated paths.
Local ordinances	Policies passed by local governing authorities, such as a city council or board of commissioners. They include, but are not limited to zoning regulations, subdivision ordinances, and street design guidelines.
Major and collector street plan	A comprehensive plan and implementation tool for guiding public and private investments in the major streets (Arterial roads and Collector roads) that make up the backbone of the city's transportation system.
Performance measures for connectivity	Quantitative metrics used to evaluate active transportation projects and/or the transportation system. Examples include percent of network constructed, intersection density, or facility miles.
Shared-use paths	Paths that include paved or unpaved accommodations for both pedestrians and bicyclists for transportation or for recreation.
Street connectivity	Refers to the directness of links and the density of connections in a street network. A well-connected network has many short links, numerous intersections, and minimal dead ends.

Please answer these questions based on the community / municipality selected.

PLANS

The **Plans** referred to in this module are those written and adopted by a local authority. Plans can stand alone (topic specific) or be part of a Comprehensive Plan (e.g., Master Plan, General Plan). “Plan” is capitalized to indicate it is adopted by a local authority. These can often be accessed on local government websites or by contacting planning officials within the community or regional transportation/ planning agency (e.g., Metropolitan Planning Organization).

1.1 Does the community have a Plan that identifies high- and low-stress streets?

- Yes
- No
- Not applicable
- Don't know

1.2 Does the community have a Plan that prioritizes higher street connectivity in neighborhoods with high stress streets?

- Yes
- No
- Not applicable
- Don't know

1.3 Does the community have a Major and Collector Street Plan—either as a stand-alone document or as part of a Transportation System Plan or Comprehensive Plan—which describes existing and future streets constructed by the community and through future development?

- Yes, and it is 0–<5 years old
- Yes, and it is 5–<10 years old
- Yes, and it is 10 years or older
- No → skip to #1.8
- Not applicable → skip to #1.8
- Don't know → skip to #1.8

1.4 In the past year, about how often was this Plan consulted by groups or individuals, such as elected officials, the planning department or local developers when making relevant decisions?

- Always
- Usually
- Sometimes
- Rarely
- Never
- Not applicable
- Don't know

1.5 Does this Plan have street connectivity goals?

- Yes
- No
- Not applicable
- Don't know



1.6 In the past year, were any of the street connectivity goals or priorities specified in this Plan accomplished?

- Yes → Describe: _____
- No
- Not applicable
- Don't know



1.7 Does the Plan consider modes of transportation other than automobiles (such as walking, biking, public transportation)?

- Yes
- No
- Not applicable
- Don't know



POLICIES

The **Policies** referred to in the following questions are those written and adopted by a local authority. Policies include local ordinances which are passed by local governing authorities. Policy documents can often be accessed on local government websites or by contacting local government administrators or planning officials within the community.

This section includes questions about the community's residential or commercial regulations and/or zoning codes, which includes land use codes, zoning codes/regulations, subdivision ordinance/regulations, overlay district regulations, and special use district regulations.

1.8 Community residential or commercial regulations or zoning codes

Does the community's residential or commercial regulations or zoning codes:	Yes	No	Not applicable	Don't know
a. Set maximum block lengths or block size requirements?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Set connectivity index standards?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Require stub-outs to ensure connectivity to future developments?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Encourage alleyways?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
e. Allow for or encourage greenways or paths alongside creeks/streams?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Allow for or encourage greenways or paths alongside utility easements?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

1.9 Community subdivision regulations or zoning codes

Does the community's subdivision regulations or zoning codes:	Yes	No	Not applicable	Don't know
a. Discourage cul-de-sacs?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Regulate cul-de-sac length and size?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

1.10 Community subdivision regulations or zoning codes

Does the community's subdivision regulations or zoning codes require or suggest:	Require	Suggest	No	Not applicable	Don't know
a. Pedestrian and street connectivity between neighborhoods?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Cul-de-sacs connect to other destinations via multi-use paths or other pedestrian/bicycle easements?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Residential developments connect by sidewalks or pathways to other neighborhoods?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Residential developments connect by sidewalks or pathways to schools or other community destinations?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

1.11 Community subdivision regulations

Does the community's subdivision regulations require or suggest that all newly constructed or redeveloped streets connect to adjacent neighborhoods and community amenities via:	Require	Suggest	No	Not applicable	Don't know
a. Streets in residential areas?	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Streets in commercial areas?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Sidewalks or shared-use paths in residential areas?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Sidewalks or shared-use paths in commercial areas?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

1.12 Does the community have performance measures for street connectivity?

- Yes → Describe: _____
- No
- Not applicable
- Don't know

RESOURCES

This question asks about resources to support plans, policies, and built environments that impact physical activity.

1.13 Does the community actively invest transportation funding to improve street connectivity?

- Yes → Describe: _____
- No
- Not applicable
- Don't know


Reset MODULE 1 CAUTION: This will clear and reset Module 1.



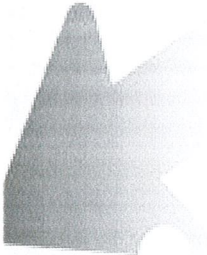

MODULE 2:



INFRASTRUCTURE TO ACCOMMODATE PEDESTRIANS AND BICYCLISTS

- 
- » This module assesses the plans, policies, environments, and resources for infrastructure to accommodate pedestrians and bicyclists, including paved (e.g., greenways) and unpaved (e.g., trails) shared-use paths, bicycle lanes, wide paved shoulders, bicycle routes, and sidewalks.

Module 2 contains three sections.

- Section A – Infrastructure to Accommodate Pedestrians and Bicyclists
 - Section B – Infrastructure to Accommodate Pedestrians
 - Section C – Infrastructure to Accommodate Bicyclists
 - » Sections A, B and C should all be completed if you are interested in improving infrastructure to accommodate pedestrians and bicyclists.
 - » Sections A and B should both be completed if you are mainly interested in improving infrastructure to accommodate pedestrians or want to enhance this portion of your plan.
 - » Sections A and C should both be completed if you are mainly interested in improving infrastructure to accommodate bicyclists or want to enhance this portion of your plan.
- 
- 
- » Who should be involved – technical experts with knowledge of the community's pedestrian and bicycle infrastructure plans, policies, and resources; specifically experts in planning, transportation, and public works.
 - » Approximate time to complete – 150 minutes (if all sections of Module 2 are completed).

Street	Cross Street	Schools	Parks	Community	Land use
W. Main St	Montour St		4.5	3	15
S. Catherine St	Main St		4.5	2	15
N. Catherine St	Clawson Blvd		4.5	2	15
W Main St	Lee St		4.5	4	15
Schuyler St	W. Main St		4.5	3	15
Owego St	W. Main St		3	4	15
S. Catherine St	South St		4.5	2	15
N. Catherine St	Washington St/Ayer St		4	1	15
W Main St	Owego St		3	2	15
N. Catherine St	Ayer St/Clinton St		4		15
N. Catherine St	Marine Dr		4		15
W Main St	Henry St		3	2	15
N. Catherine St	Clinton St		3	1	15
Washington St	Clinton St		4	1	12
S. Catherine St	College Ave	3			13
N. Catherine St	W. Broadway		3	1	12
S. Catherine St	Owego St	3			12
Montour St	South St		4.5	3	9
W South St	Canal St		4.5	3	9
Lee St	South St		4.5	3	9
W. Broadway	Mulberry St		3	1	12
Owego St	W. South St		3	2	9
Henry St	Smith Ln		3	1	10.5
S. Catherine St	Walker St		1.5		13
Canal St	W. South St			3	12
S. Genesee St	W. Main St		3	3	6
Mullberry St	Clawson Blvd		3	1	9
S. Genesee St	W. South St		3	3	6
S. Genesee St	Steuben St		3	3	6
Raymond St	S. Catharine St				12
Mary Layton Dr	Owego St	3			9
Walker St	S. Mulberry St		3		9
N. Catherine St	N. Genesee St		1.5		10.5
Belle P Cornell Dr	Steuben St				9
S. Seneca St	Clawson Blvd		3	1	6
Havana Glen Rd	S. Catharine St			1	9
Clawson Blvd	S. Lhommedieu St				6
N. College Ave	Clawson Blvd		1.5	1	8
Cook St	Montour St				10.5
S. Seneca St	E. Main St		3	1	6
Mullberry St	E. Main St		3	1	6
Henry St	Tracy St		3	1	6
Canal St	Mary Layton Dr	3			6
Trailer Park	Havana Glen Rd		4	1	3
W. Broadway	S. Seneca St		1.5		8.25

Safety	Missing SW/Curb/Gap	Public	SCORE
4			26.5
5			26.5
5			26.5
1			24.5
1			23.5
1			23
1			22.5
2			22
1			21
2			21
2			21
0			20
1			20
2			19
3			19
2			18
2			17
0			16.5
0			16.5
0			16.5
0			16
2			16
1			15.5
1			15.5
0			15
3			15
1			14
2			14
2			14
2			14
1			13
1			13
1			13
4			13
2			12
2			12
6			12
1			11.5
0			10.5
0			10
0			10
0			10
1			10
2			10
0			9.75

Cook St	Canal St	3			6
S. Lhommedieu St	Havana Glen Rd		4		3
S. College Ave	E. Main St		1.5	1	6
College Ave	Walker St		1.5		6
Rock Cabin Rd	N. Ihommendieu St/Skyline Dr				3
S. College Ave	E. South St		1.5		6
S. Genesse St	Cook St				7
Steuben St	Mill St			1	5
Cotton Hanlon Rd	N. Ihommendieu St				6
E. Broadway	N. Ihommendieu St				6
Catherin Creek Park Rd	S. Lhommedieu St / E. Catlin St		1.5		3
Fallsview Dr	S. Lhommedieu St		1.5		3
College Ave	Turner Park				4.5
Hayes Rd	Cotton Hanlon Rd				3
Mills St	Coykendall Rd				3
Rock Cabin Rd	N. Seneca St				3
Montour Townsend Rd	WGMf Rd				3

0			9
2			9
0			8.5
1			8.5
5			8
0			7.5
0			7
1			7
1			7
0			6
1			5.5
1			5.5
0			4.5
1			4
1			4
1			4
0			3

Appendix F: Environmental and Sustainability Analysis



MONTOUR FALLS NY COMPLETE STREETS ENVIRONMENTAL AND SUSTAINABILITY ANALYSIS

June, 2022

An analysis of Montour Fall's NY Complete Streets Projects

Author: Osamu J. Tsuda
Sustainability Planner

Introduction

This section is dedicated to examining the various sustainability components of Montour Falls Complete Streets. While much of the plan examines the various economic and structural aspects of the streets and infrastructure in Montour Falls, as part of the Village's effort to encourage sustainable development throughout the community, this section has been dedicated to developing strategy to examine how the Village can incorporate sustainability throughout each of its projects. This section accomplished this goal through a series of qualitative and quantitative methodologies that align with regional, state, and federal sustainability guidelines. These sections are as follows:

Greenhouse Gas Emissions Reduction - This section is dedicated to examining and evaluating projects based on their ability to help reduce the Village GHGs. As the Village of Montour Falls is committed to being a leader in promoting small-community sustainable development in New York State, the municipality highly prioritizes projects that help reduce the Village's overall emissions on a governmental as well as community level. While the effects of how specific projects will reduce GHG emissions are all estimated projections based on available data, the ultimate goal is to help the community determine which projects are most relevant to the Village's sustainability goals. The methodology used was developed using existing planning documents developed by the Village as well as the guidelines set forth by the National Complete Streets Coalition of Smart Growth America, a non-profit, non-partisan alliance of public interest organizations and transportation professionals committed to the development and implementation of Complete Streets policies and practices. Additional guidance was provided by the New York State Energy Research Development Authority (NYSERDA) Clean Energy and Climate Smart Communities Program to which the Village is an active participant.

Vulnerability Impact Assessment and Reduction - As climate change and extreme weather events become more apparent across the Finger Lakes and the Northeastern Region, the Village of Montour Falls looks to redesign and reimagine their community in a way that would be more resilient and even thrive, despite the projected extreme weather events that are expected to occur over the coming years. This chapter examines how each complete street project will help increase resilience and mitigate potential property loss through structural and system improvements. The section utilizes the Schuyler County 2016 Hazard Mitigation Plan as well as the recently developed Village of Montour Falls Climate Vulnerability Assessment that measures the impact of projected weather patterns within the Village. The section also examines how each project will impact the Village on an environmental and ecological level, especially in regards to the community natural resources identified in the Montour Falls Natural Resources Inventory. Ultimately, the section provides a ranking that is intended to help the Village determine the top projects that will help the community increase resilience and protect existing natural resources.

Sustainability Analysis - this section provides a comprehensive assessment of how each identified project will help the Village increase overall sustainability and economic development through strategic project identification. In general, this section is meant to combine the GHG and Climate Vulnerability component in addition to other factors to determine which projects are best suited in regards to increasing sustainability within the

Village. However, it also provides additional recommendation as to how the community can improve the sustainability component of each project.

Effects on Municipal GHG Emissions Reduction: Methodology

This scoring system is based on the Municipal GHG inventory methodology and the factors used to calculate “municipal emissions”. In the Municipal Operations GHG inventory, the methodology is meant to calculate all municipal emissions from building fuel usage, building electricity usage, municipal vehicle fuel usage, to wastewater treatment emissions. Because the projects have not been implemented, the score will estimate the ultimate effect of each project using the score system below.

Step 1:

Criteria	Description	Scoring Criteria
Building Fuel Usage Change	This factor considers the effect of the project on municipal building fuel usage. Each project will get a score based on how much it decreases, increases, or doesn't change the municipal building fuel usage on a cumulative scale (i.e., for all buildings)	The scoring is applied to all categories as follows: -2 = increases emissions by a significant level. -1 = increases emissions by a modest level. 0 = does not change overall emissions. 1 = decreases emissions by a modest level.
Building Electricity Usage Change	This factor considers the effect of the project on municipal building electricity usage. Each project will get a score based on how much it decreases, increases, or doesn't change the municipal building electricity usage on a cumulative scale (i.e., for all buildings)	2 decreases emissions by a significant level.
Vehicle Usage Change	This factor considers the effect of the project on municipal vehicle usage. Each project will get a score based on how much it decreases, increases, or doesn't change the municipal vehicle fuel consumption on a cumulative scale (i.e., for all vehicles considered in the Municipal Operations GHG Inventory)	Definition between significant, modest, and none: Per the target emission goals stated in the Village Climate Action Plan, the Village looks to decrease emissions 20% by 2026 versus baseline year 2018. This number will be used as a differentiation between significant and modest. That is: - -2 = Significant increase: Over +20% - -1 = Modest Increase: Between 0 and +20% - 0 = No Change: 0% - 1 = Modest Decrease: Between 0 and -20%
Wastewater Treatment Emissions Change	This factor considers the effect of the project on the municipal wastewater treatment plan and its	

	reduction, increase, or non-changing effects on GHG emissions overall.	- 2 = Significant Decrease: Over -20% in emission increase for each project.
--	--	--

Example:

Make Main Street a complete street.

Step 2:

As per 2018 Emissions, the largest source of emissions was from stationary combustion (i.e., building emissions), accounting for 38%; second was municipal vehicle emissions accounting for 36%; 20% accounted by the wastewater treatment plant; and finally, 6% for the municipal electricity usage.

This percentage will be applied to the score from Step 1 to weigh the overall cumulative effect from each project. Such as in the following manner:

Building Fuel Usage Change Score x 0.38

Building Electricity Usage Change Score x 0.06

Vehicle Usage Change Score x 0.36

Wastewater Treatment Emissions Change Score x 0.2

Step 3:

The four weighted scores from Step 2 will then be added together to compute a final single score for each project.

Results
STEP 1

Project Name	Building Fuel Usage Change	Municipal Electricity Usage Change	Vehicle Usage Change	Wastewater Treatment Emissions Change	Rationale for scoring
State Route 14 Reconstruction	0	1	0	1	Building and municipal vehicle fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. Increasing green infrastructure in the Village will drastically decrease runoff and thus overall emissions from wastewater treatment and will be ranked as +1.
Owego Street Reconstruction	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
Main Street Façade Reconstruction	0	1	0	1	Building and municipal vehicle fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. Increasing green infrastructure in the Village Main Street will drastically decrease runoff and thus overall emissions from wastewater treatment and will be ranked as +1.
South Street Reconstruction	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The

					municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
Henry Street	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
South College Avenue.	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
Mulberry Street	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
Genesee Street	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
N. Lhommendieu Street	0	1	0	0	Building fuel usage will not change as the project is unrelated.

					Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.
State Route 224	0	1	0	1	Building and municipal vehicle fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. Increasing green infrastructure in the Village will drastically decrease runoff and thus overall emissions from wastewater treatment and will be ranked as +1.
South Street	0	1	0	0	Building fuel usage will not change as the project is unrelated. Municipal electricity usage will decrease nominally with the installation of LED lights, thus a score of +1 is applied. The municipal vehicle change and wastewater emissions change does not change and thus a score of 0 is applied.

NOTE: Score is an integer value ranging from -2 to 2.

STEP 2 & 3

Project Name	Building Fuel Usage	Building Elec	Vehicle Usage	Wastewater Trea	Final Score
State Route 14 Reconstruction	0	1	0	1	0.26
Owego Street Reconstruction	0	1	0	0	0.06
Main Street Façade Reconstruction	0	1	0	1	0.26
South Street Reconstruction	0	1	0	0	0.06
Henry Street	0	1	0	0	0.06
South College Avenue.	0	1	0	0	0.06
Mulberry St.	0	1	0	0	0.06
Genessee St.	0	1	0	0	0.06
N. Lhommendieu St.	0	1	0	0	0.06
State Route 224	0	1	0	1	0.26
South Street	0	1	0	0	0.06

Effects on Community GHG Emissions Calculation Methodology:

This scoring system is based on the Community GHG Inventory methodology and the factors used to calculate “community emissions”. In the Community Operations GHG inventory, the methodology is meant to calculate all community emissions from stationary combustion (house/building emissions), mobile combustion (vehicular emissions), to electricity usage. While other factors are also considered, their overall emissions are insignificant and thus are disregarded in this case. For more details on all emissions, please consult the community greenhouse gas inventory. Because the projects have not been implemented, the score will estimate the ultimate effect of each project using the score system below.

Step 1:

Criteria	Description	Scoring Criteria
Stationary Combustion Change	This factor considers the effect of the project on stationary building fuel usage/ combustion within the Village of Montour Falls. Each project will get a score based on how much it decreases, increases, or doesn't change the building fuel combustion on a cumulative scale within the Village boundaries (i.e., for all buildings)	The scoring is applied to all categories as follows: -2 = increases emissions by a significant level. -1 = increases emissions by a modest level. 0 = does not change overall emissions. 1 = decreases emissions by a modest level. 2 decreases emissions by a significant level.
Electricity Usage Change	This factor considers the effect of the project on overall Village electricity usage. Each project will get a score based on how much it decreases, increases, or doesn't change the electricity usage on a cumulative scale (i.e., for all buildings)	Definition between significant, modest, and none: Per the target emission goals stated in the Village Climate Action Plan, the Village looks to decrease emissions 20% by 2026 versus baseline year 2018. This number will be used as a differentiation between significant and modest. That is:
Mobile Combustion Change	This factor considers the effect of the project on vehicle usage by Village residents. Each project will get a score based on how much it decreases, increases, or doesn't change the vehicle fuel combustion on a cumulative scale (i.e., for all vehicles considered in the Community GHG Inventory)	<ul style="list-style-type: none"> - -2 = Significant increase: Over +20% - -1 = Modest Increase: Between 0 and +20% - 0 = No Change: 0% - 1 = Modest Decrease: Between 0 and -20%

		<p>- 2 = Significant Decrease: Over -20% in emission increase for each project.</p>
--	--	--

Step 2:

As per 2018 emissions, the largest source of emissions was from mobile combustion (i.e., vehicular emissions), accounting for 56%; second was stationary combustion accounting for 31%; and finally, 12% for community electricity usage.

This percentage will be applied to the score from Step 1 to weight the overall cumulative effect from each project. Such as in the following manner:

Stationary Combustion Change Score x 0.31

Electricity Emissions Change Score x 0.12

Mobile Combustion Change Score x 0.56

Step 3:

The four weighted scores from Step 2 will then be added together to come up with a final single score for each project.

Results

STEP 1

Project Name	Stationary Combustion Change	Electricity Usage Change	Mobile Combustion Change	Rationale for scoring
State Route 14 Reconstruction	0	1	1	Building fuel usage is unrelated to this project and will unlikely change with State Route 14 reconstruction. However, with increased green infrastructure and trees will decrease overall downtown temperatures with shade and thus decreased usage for air conditioning (according to the American Planning Association); thus, decreasing air conditioning usage by a modest level and will be given +1. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
Owego Street Reconstruction	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
Main Street Façade Reconstruction	0	1	1	Building fuel usage is unrelated to this project and will unlikely change with main street reconstruction. However, with increased green infrastructure and trees will decrease overall

				downtown temperatures with shade and thus decreased usage for air conditioning (according to the American Planning Association); thus, decreasing air conditioning usage by a modest level and will be given +1. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
Owego Street Reconstruction	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
Henry Street	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
South College Avenue	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely

				encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
Mulberry Street (SN)	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
Genesee Street	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
N. Lhommendieu Street	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit

				and thus a decrease in GHG emissions and will be given +1.
State Route 224	0	1	1	Building fuel usage is unrelated to this project and will unlikely change with State Route 224 reconstruction. However, with increased green infrastructure and trees will decrease overall downtown temperatures with shade and thus decreased usage for air conditioning (according to the American Planning Association); thus, decreasing air conditioning usage by a modest level and will be given +1. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.
South Street	0	0	1	Overall building fuel and electricity usage will not change with this project. The project will likely encourage people to walk more – according to the US 5 Year Community Survey for 2019, approximately 35% of the population within the Village has a commuting time of less than 15 minutes. It is reasonable to assume that increasing the walkability will lead to increased use of alternate transit and thus a decrease in GHG emissions and will be given +1.

NOTE: Score is an integer value ranging from -2 to 2.

*Most streets within the Village already have significant greenery and thus are unlikely to change in temperature significantly and thus the use of urban heating is only used for the most urban areas, Main Street, and State route 14 and 224.

STEP 2 & 3

Project Name	Stationary Combustion	Electricity En	Mobile Combustio	Final Score
State Route 14 Reconstruction	0	1	1	0.68
Owego Street Reconstruction	0	0	1	0.56
Main Street Façade Reconstruction	0	1	1	0.68
Owego Street Reconstruction	0	0	1	0.56
Henry Street	0	0	1	0.56
South College Avenue.	0	0	1	0.56
Mulberry St. (SN)	0	0	1	0.56
Genessee St.	0	0	1	0.56
N. Lhommendieu St.	0	0	1	0.56
State Route 224	0	1	1	0.68
South Street	0	0	1	0.56

NOTE: These scoring methodologies do not account for the difference municipal versus community emissions. Thus, while the scores might look similar between the effects of each project and its addition/reduction in GHG emissions to government and community emissions, please note that the results should be interpreted entirely separate from each other. The score will ultimately be used to rank each project based on its effects on emissions reduction.

Climate Vulnerability Analysis and Complete Streets

As the climate changes, extreme weather events like flooding, droughts, and severe windstorms are likely to cause increased damage to property and municipal infrastructure. Existing infrastructure in need of repair is likely to become overwhelmed by these extreme weather events and as a result start eroding over time. With the implementation of complete streets and green infrastructure, the community will be able to mitigate these damaging effects and through strategic project implementation and design, will be able to increase resilience over time.

In 2021, the Village of Montour Falls conducted a climate vulnerability assessment to determine its vulnerability to climate change and the potential monetary damage that would be incurred as a result of various storm scenarios. As the climate vulnerability assessment's purpose was solely meant to "assess" the vulnerability, no advisement in regards to specific projects/ strategy to mitigate the effect was provided. Rather, the County's 2016 Hazard Mitigation Plan provides a comprehensive overview of the region's issues which this section will use to better understand the potential implications of complete streets. It is the purpose of this section to review the specific complete street projects and determine how these individual physical modifications can reduce vulnerability to each identified hazard. For Schuyler County, the following hazards have been identified in the following manner:

The top three rated hazards were:

- Flooding
- Severe Wind/Tornado
- Cyber Attack

The Medium-High rated hazards included:

- Hazardous Materials Release - In Transit
- Active Shooter
- Pandemic
- Severe Ice Storm
- Severe Winter Storm

Medium rated hazards included:

- Critical Infrastructure Failure
- Landslides
- Food Contamination
- Major Transportation Accidents

Medium-Low rated hazards included:

- Hurricanes/Tropical Storm
- Extreme Temperatures
- Biological Agent Release
- Improvised Explosive Device
- Radiological Dispersal Device

Low rated hazards included:

- Earthquakes
- Drought
- Animal Disease
- Wildfire
- HazMat Release
- Major Fires (non-wildfire)
- Internet Connectivity Failure

Very low rated hazards included:

- Improvised Nuclear Device
- Sustained Power Outage
- Natural Gas/Propane Storage
- Radiological Release (fixed site)

Based on the above information provided in the 2016 hazard mitigation plan, this section aims to better understand how green infrastructure will mitigate the impacts to these various hazards and ultimately benefit the community. However, because green infrastructure is less relevant and effective toward human caused disasters such as cyber security disruptions or gas leakage, this analysis will only consider the impacts to flooding, droughts, landslides, and severe storms. The analysis will be a crosswalk between projected impact without green infrastructure development and the scenario under which the infrastructure exists.

Analysis of Hazards:

Flooding

According to the US EPA, the average 100-year floodplain is projected to increase 45 percent by the year 2100, while the annual damages from flooding are predicted to increase by \$750 million. Localized flooding is especially expected to increase, especially in areas that already struggle from flash flooding. Based on an analysis completed by the EPA, green infrastructure can reduce and almost eliminate all runoff volume (99%) in areas affected by flash flooding. Such effective infrastructure, guaranteed to reduce flooding includes:

- rain gardens
- underground infiltration trenches
- underground storage and infiltration system
- regional stormwater ponds

Such infrastructure can not only reduce flooding but can also filter the runoff water that ultimately replenishes the water table and mitigate issues like contaminated water and harmful algal bloom. While climate change can cause major issues to communities, especially those that are already located in flood hazard areas like Montour Falls, incorporating green infrastructure into existing roads and walkways can drastically reduce overall vulnerability and lead to safer and healthier communities in the long run.

Drought

Extreme weather means more days with intense rain, but also more days with no rain and thus droughts. As communities prepare for increasing extreme weather, utility infrastructure will be stressed from increased demand during these events and potentially even fail as a result. While Montour Falls is located in a relatively water-rich region, especially being surrounded by wetlands, lakes, streams, and green space, as the climate changes, the existing ecosystem will likely be stressed from extended periods of no rainfall, leading to degraded water supply and potential harm to the aquatic environment.

Strong Wind

As storm patterns intensify over time, wind events will also likely increase in severity and cause damage to existing buildings, structures, and even nature. According to the Schuyler County Hazard Mitigation Plan, extreme wind events account for the majority of property damage and downed trees after a storm. While unlike flooding, it is impossible to mitigate damage caused by wind as it is not confined to a specific region or zone. Existing infrastructure that is eroding or suffers from a lack of maintenance is vulnerable to major damage caused by wind events, leading to other cascading failures and damages.

Analysis within Montour Falls

The following is an analysis of the efficacy of complete streets on reducing future climate related disasters like flooding, strong winds, and droughts.

Flooding

According to the 2016/2020 Schuyler County Hazard Mitigation plan, 151 parcels, approximately \$21 million worth of property is located within the 100-year floodplain within the Village of Montour Falls. According to the National Oceanic and Atmospheric Association, since 2010, one major event in September 2011 was reported and caused closure of route 14, one lane to be covered by water for about 100 feet. Since this event, no event was reported in the national databases in regards to flash floods, though it is notable to mention that other minor flash flooding did occur within the Village, causing road closures and property damage in various parts of the Village.

According to the 2019 Montour Falls Levee Study, most of the Village is either located within a 100- or 500-year flood zone as depicted in Figure 1. Figure 2 depicts the critical facilities located within the Village that provide the municipality and community with vital services and which must be operating and accessible at all times. Therefore, the roads that provide direct access are critical arterials. It is vital therefore for these roads to be properly maintained and updated to withstand any urban flooding.

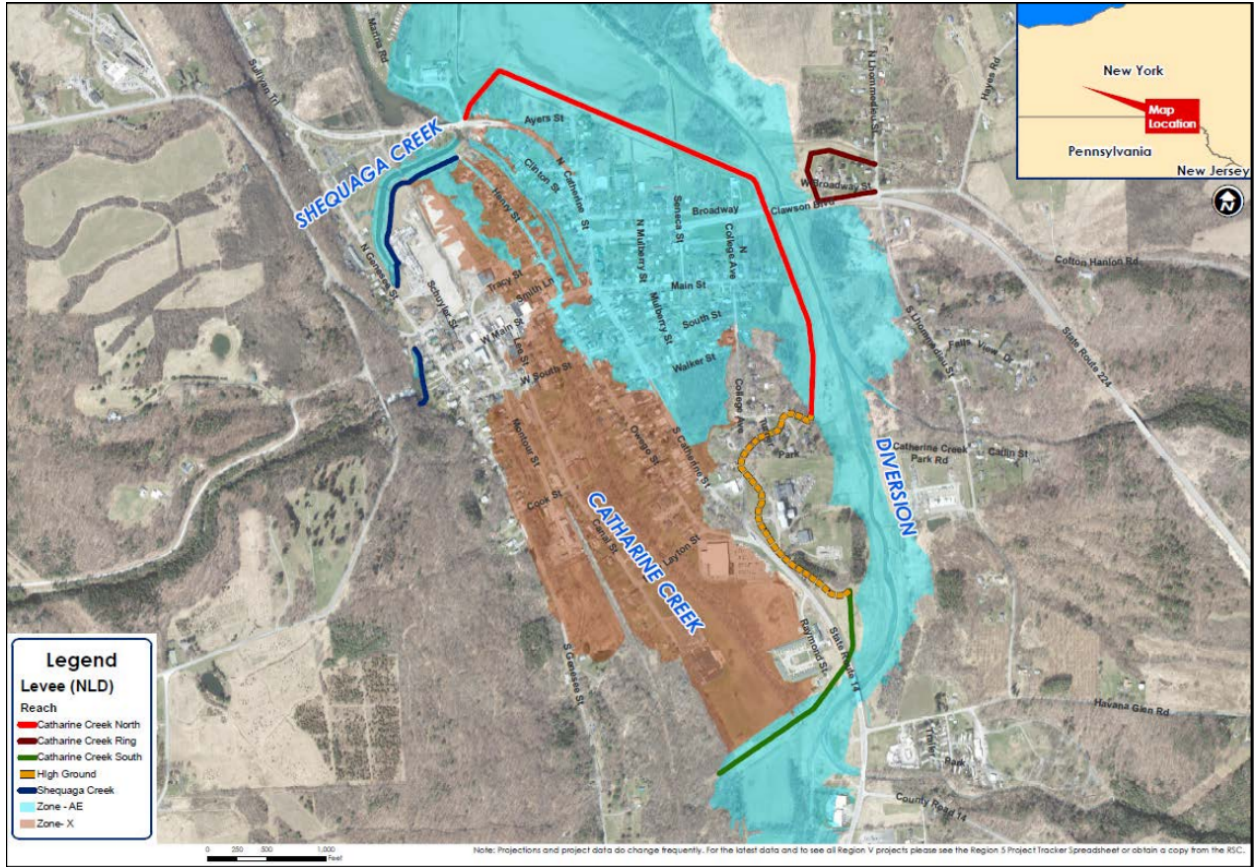


Figure 1 Flood Zones within the Village of Montour Falls

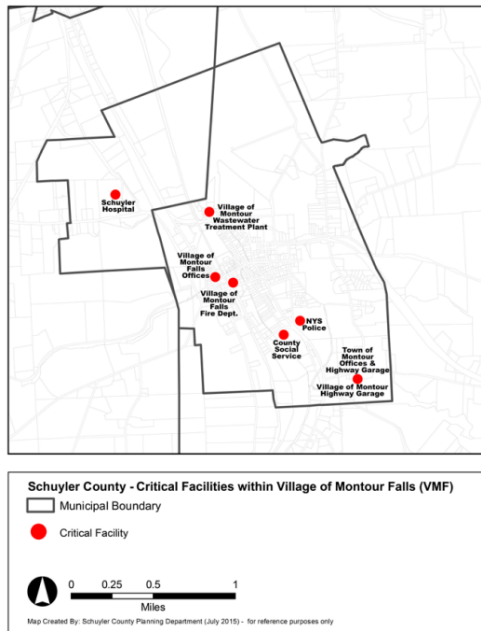


Figure 2 Critical Facilities within the Village of Montour Falls

Drought

Droughts have historically been a rare occurrence across New York State. As historical trends depict, however, the occurrence of droughts is becoming more frequent and water shortage has become a common occurrence across the Finger Lakes region. As the 2016 Schuyler County Hazard Mitigation Plan states, the occurrence of droughts and water shortages are projected to become more frequent over time and thus intervention is needed to mitigate the effects of such events.

Green infrastructure can be one way to increase resilience to droughts. As droughts become more of a common occurrence, the effects of such events will cause water supply disruption, degradation, and even ecosystem disruption. In order to mitigate the effects of such events, installing systems that can be resilient to such fluctuations can be extremely beneficial. Installing green infrastructure such as rain gardens and green streets can help replenish local groundwater reserves. These infiltration-based practices and others located in parking lots, along streets, and near buildings can allow rainwater to slowly soak into the ground as it would in a natural setting. While some of the water will evaporate or be soaked up by plants, enough will be stored to make a difference.

Strong Winds

With intense weather comes stronger winds and green infrastructure can help mitigate the damaging effects of these events. While it is impossible to stop intense winds from causing some damage to a community, green infrastructure can help dampen the effects of such storms.

As trees and vegetation mature over time, they act as a natural barrier for the strong wind gusts. In many cities and towns that do not have any green infrastructure and bare open space, it is common to experience constant gusts of wind that can over time cause damage within the municipality. According to FEMA, green and natural barriers can reduce the damaging effects of strong winds and snow gusts which can lead to hazardous driving conditions unless properly addressed.

Finally, as the green infrastructure is a grouping of vegetation, the network of the plant species can act as a supporting system to reduce the overall stress for the plants themselves. For trees and plants that are isolated, it is more likely that the greenery does not develop or develops at a slower rate. However as green infrastructure is an engineered ecosystem to have a resilient plant network, the system becomes more resilient and effective overtime to not only withstand higher winds but also become more effective as they mature.

The assessment will be conducted in the following manner.

Step 1:

Determine whether the project addresses flood related concern to critical routes/ critical facilities - 1 point.

Determine whether the project addresses drought related concern within the Village - 1 point.

Determine whether the project addresses strong wind related concern within the Village - 1 point

Project Name	Addresses Flooding	Addresses Drought	Addresses Strong Winds	Total Points	Rationale
State Route 14 Reconstruction	1	0	0	1	This project currently is underway and according to the NYS DOT a number of cosmetic changes are being made including the rebuilding of the curb and the accessibility features.
Owego Street Reconstruction	1	0	0	1	The project proposes a complete reconstruction of the road infrastructure system to mitigate flooding and hazardous road conditions. Proposals include drainage and pavement repair related issues.
Main Street Façade Reconstruction	1	1	1	3	As this project was ranked as a priority in the engineering assessment, much of the work involves cosmetic improvements including barrier repair

					and green space construction. Green infrastructure shall reduce flood and drought and the green barriers shall also increase wind flow.
South Street Reconstruction	1	0	0	1	The infrastructure was reported as poor to fair and substantial improvements are needed. By addressing the various structural issues including drainage, the various localized flooding and ponding issues shall be addressed.
Henry Street	1	0	0	1	The infrastructure was reported as poor to fair and substantial improvements are needed. By addressing the various structural issues including drainage, the various localized flooding and ponding issues

					shall be addressed.
Mulberry Street	1	0	0	1	The infrastructure was reported as poor to fair and substantial improvements are needed. By addressing the various structural issues including drainage, the various localized flooding and ponding issues shall be addressed.
Genesee Street	1	0	0	1	The infrastructure was reported as poor to fair and substantial improvements are needed. By addressing the various structural issues including drainage, the various localized flooding and ponding issues shall be addressed.
N. Lhommendieu Street	1	0	0	1	The infrastructure was reported as poor to fair and substantial improvements are needed.

					By addressing the various structural issues including drainage, the various localized flooding and ponding issues shall be addressed.
State Route 224	1	0	0	1	The infrastructure was reported as poor to fair and substantial improvements are needed. By addressing the various structural issues including drainage, the various localized flooding and ponding issues shall be addressed.

Step 2:

Ranking: projects will be ranked from highest to lowest based on how their projects will address climate and community concerns around natural hazards.

Project Name	Project Description	Does the project incorporate green infrastructure?	If not where and how can green infrastructure be incorporated?
State Route 14 Reconstruction	Concrete, Concrete Reinforcing, Precast Structural Concrete. Metals, Structural Steel Framing, Structural Steel for Bridges, Steel Joist Framing, Steel Joist Girder Framing.	Yes	NA

	<p>Thermal and Moisture Protection, Expansion Control. Finishes, High-Performance Coatings. Specialties, Signage, Traffic Signage. Electrical, Exterior Lighting, Lighting Poles and Standards, Roadway Lighting. Earthwork, Embankments, Erosion and Sedimentation Controls, Slope Protection, Gabions, Riprap, Special Foundations and Load-Bearing Elements, Driven Piles. Exterior Improvements, Bases, Ballasts, and Paving, Flexible Paving, Rigid Paving, Fences and Gates, Retaining Walls.</p>		
Owego Street Reconstruction	<p>Road would need significant structural improvements regarding stormwater improvements. Parts of the road are eroding due to runoff and flooding in isolated areas. Pavement repairs and refacing will be needed.</p>	No	<p>Green infrastructure could be used in sections of the street to increase overall drainage. The DPW municipality shall consult with the municipal board to determine best use of green infrastructure along the street.</p>
Main Street Façade Reconstruction	<p>Proposed improvements include repairing the existing curb and improving drainage systems by implementing green infrastructure such as bioswales, permeable pavement, Rainwater</p>	Yes	NA

	Harvesting, Planter Boxes, and Downspout Disconnection. These various structures would be installed in various sections of the main streets with beautification and accessibility of the public space as a top priority.		
South Street Reconstruction	Ponding and localized flooding are issues in some parts of the street. Degraded infrastructure and roads, along with lack of sidewalk accessibility is an issue along parts of the road. Increasing accessibility along this road, especially around the core part of the urban center can drastically improve safety.	No	Green infrastructure could be used in sections of the street to increase overall drainage. The DPW municipality shall consult with the municipal board to determine best use of green infrastructure along the street.
Henry Street	A relatively low traffic road. Given its proximity to the steam, flooding and erosion can be an issue. Upgrades in stormwater systems can be useful and increase overall resilience of the area. Accessibility improvements such as sidewalk installations can also be an addition to the road.		Green infrastructure could be used in sections of the street to increase overall drainage. The DPW municipality shall consult with the municipal board to determine best use of green infrastructure along the street.
Mulberry Street	South Mulberry Street has a small stream that can cause localized flooding along the	No	Parts of the road can use green infrastructure alternatives, especially for

	<p>road. Structural reinforcements and safety measures will need to be installed to increase overall resilience along the road. Additional sidewalk and accessibility structures could also increase overall safety of the area.</p>		<p>stormwater management purposes.</p>
<p>Genesee Street</p>	<p>Parts of the road have ponding that can cause road closures and erosion. Infrastructure improvements, especially along the Shequaga Falls outlet that passes under the road need structural reinforcements and safety structures to increase resilience. Additional sidewalk improvements and parking area can be used to reduce overall congestion along the Falls Park. The Glorious T (intersection of Main/ Genesee Street) will further be addressed by Cornell Students and will be included as a supplemental report in this plan.</p>	<p>Yes - Further information TBD</p>	<p>NA</p>
<p>N. Lhommendieu Street</p>	<p>The peripheral road north of State Route 414 has ponding and isolated flooding that can cause erosion and subsequent closures. Increasing green infrastructure and safety measures, especially along the</p>	<p>No</p>	<p>This project could have green infrastructure improvements under the consultation of the local residents, especially around the two creeks that pass under the road.</p>

	<p>areas where the streams pass under the road can be improved with. Work with the DPW and landowners would be needed to streamline the process of infrastructure improvements and potential green infrastructure alternatives. Additional safety structures such as sidewalks can improve overall walkability of the area.</p>		
State Route 224	<p>This road is under the jurisdiction of the State DOT - thus modifications and improvements would need to be in consultation with various state agencies. As the road does not have any greenery, improvements can include green infrastructure that can help with reducing overall runoff downhill in the Village core.</p>	Yes	NA

Sustainability Analysis

This section will conduct an overview of the existing sustainability initiatives in the Village of Montour Falls, proposed project from the complete streets, and how they will contribute to the existing sustainability goals and initiatives established by the community.

Sustainability Initiatives in Montour Falls

The Village of Montour Falls is an active participant in the New York State Energy Development Authority (NYSERDA) Clean Energy Communities Program and, as of 2019 became a Bronze certified Climate Smart Community (NYSERDA, 2022). As part of its involvement in the program, the municipality has been working on various sustainability initiatives including the complete streets plan to increase resilience and decrease overall carbon emissions. As a result of the municipality's active participation, in 2022 the Village has completed major clean energy-related projects from installing LED streets lights, installing energy efficient HVAC technology in municipal buildings, to conducting a climate vulnerability assessment and greenhouse gas inventories.

The complete streets plan is a result of the Village passing the complete streets policy in 2019 as part of New York's Complete Streets Act which:

“Establishes Complete Streets principles that encompass the consideration of the needs of all users of our roadways, including pedestrians, bicyclists, transit riders, motorists, and people of all ages and abilities. The New York State Department of Transportation (NYSDOT) is committed to evaluating all the forms of transportation that are widely recognized to support economic growth, safety, and sustainability goals.”

While the Village looks to develop complete streets to increase safety, accessibility, and stimulate economic development, a major component of the plan is to promote environmentally friendly transit technologies and through strategic project implementation, not only reduce greenhouse gas emissions, but also preserve the existing natural and environmental resources to mitigate the degradation of the natural ecosystem.

Effects of Climate Change on Community

This section explores the various effects of climate change and the role of complete streets as part of the community effort to reduce vulnerability to intensifying weather events and as well as GHG emissions and impact on surrounding environment.

Infrastructure

Infrastructure is a vital component to a community's operation and existence. While the nation's infrastructure earned a C- in the 2021 Infrastructure Report Card, New York faces infrastructure challenges of its own. For example, driving on roads in need of repair in New York costs each driver \$625 per year for automobile-related damage, and 9.9% of bridges are rated structurally deficient 9 (USACOE, 2021).

The Village of Montour Falls, like many Upstate New York communities has been faced with increased threats to climate change at the same time struggle with a lack of resources to adequately maintain and upgrade the existing municipal infrastructure and thus are faced with eroding and degraded roads, sidewalks, stormwater structures and bridges. While

complete streets are meant to address the overall safety and structural issues at hand and at the same time can act as a beautification strategy to increase overall desirability of the Village, one of the core reasons to implement complete streets is to develop streets to reduce and even eliminate issues like road flooding and land erosion.

Many roads within the Village have and continue to experience issues associated to erosion and flooding as a result of a lack of or poor infrastructure development. Owego Street is one such arterial that has been identified as a road that not only has a lack of stormwater infrastructure but poses threat to residents and vehicles that use the road. Another such road that has issues associated with flooding and erosion is North Hommedieu Street located on the eastern side of the municipality that is relatively low-lying and experiences ponding in parts of the road as a result of poor drainage. Other roads that are within the Village limits but not within the municipal jurisdiction are State Route 14 and Steuben Street (Route 224) which have been identified as essential arterials that have issues related to road erosion and infrastructure degradation. While a separate analysis on structural condition has been conducted, this overview is meant to provide an understanding of the existing conditions of each road, the existing factors that are harmful to the environment and community, and thus the necessity for the Village to invest in road infrastructure as a component to increase overall resilience and sustainability.

GHG Emissions with Existing Transit System

Complete Streets are essential in order to make it possible for Americans to drive less and use streets to get around more easily via foot, bike, and public transit. The 2001 National Household Transportation Survey finds that 50 percent of all trips are three miles or less and 28 percent of all trips are one mile or less - a distances that is easily traversable by foot or bicycle. Yet 72 percent of trips under one mile are now made by automobile, in part because of incomplete streets that make it dangerous or unpleasant for non-automotive users. Complete Streets would help convert many of these short automobile trips to multi-modal travel. Other studies have calculated that 5-10 percent of urban automobile trips can reasonably be shifted to non-motorized transport.

New York State, with the exception to New York City, is largely a sparsely populated state with long stretches of road that connect small communities together. As the State has an extensive transportation system, much of this system is geared towards automobiles, including in urban areas like Buffalo, Syracuse, Rochester, and Albany. This type of infrastructure centered around automobiles has created sprawling development that discourages and even impedes individuals from walking, biking, and even using public transit. As a result, most people living in Upstate New York have come to rely solely on their personal automobiles.

The Village of Montour Falls, like most municipalities, has developed over time to serve the automobile as the main transit mode within the community. Within the past decade however with the development of the Catherine Valley Trail, the Village has seen an increase in bicycle usage across the region (Cornell University, 2012). In May 2018, a bikeshare company established a network of bikeshare systems across Schuyler County between the Village of Montour Falls and Watkins Glen (Schuyler County, 2018). However, with the overall lack of usage of the system especially with the COVID-19 Pandemic, the program was discontinued in 2020. Other public transit systems in the area include Schuyler County Transit, which has a

bus line that connects the Village of Montour Falls to Watkins Glen to the North and Corning/ Elmira to the south.

While the Village of Montour Falls has limited transit systems and networks compared to urban communities, it is in a unique position as the municipality is situated along a bike trail as well as bus route and is a reasonable commuting distance to Watkins Glen and Odessa NY. By developing complete streets across the Village and increasing interconnective routes between communities like Watkins Glen and Odessa, the Village can not only increase overall pedestrian friendly development but also decrease overall Greenhouse Gas emissions with the reduced use of automobiles for short distance travel, which does account for a significant amount of localized vehicular traffic in the region, according to the US Census (addressed in GHG emissions section). According to the Cornell Program for Applied Demographics, the projected population is expected increase over time and with the higher desirability of the Finger Lakes Region, the Watkins Glen-Montour Falls Catherine Valley Region will likely also see an increase in population as well as overall increase in tourism (Cornell University, 2022). As a result, developing pedestrian friendly transit infrastructure and public transit systems cannot only increase overall accessibility, but also increase overall desirability of the area. Key regions that that have higher amounts of localized traffic include State Route 14 between the Village of Montour Falls and Watkins Glen/ Elmira, State Route 224 between Odessa and the Village of Montour Falls, and Steuben Street that provides access to Schuyler Hospital. As these arterials are currently developed in a manner to accommodate vehicular traffic, incorporating complete streets would likely decrease overall short distance commuting and thus GHG emissions.

Finally, in addition to decreasing vehicular traffic between communities, reducing vehicular usage through complete streets within the Village is also a critical step to encouraging pedestrian and public transit-oriented development, as well as increasing overall safety. The downtown region which primarily consists of Main Street, while having adequate and accessible sidewalks, could incorporate other features such as bike lanes and greenery to encourage non-vehicular traffic. Other roads like Genesee Street, South Street, Owego Street, and Canal Street, lack basic components of complete streets like sidewalks and, while not primary arterials, could benefit from increasing comprehensive infrastructure to increase pedestrian accessibility and safety. By promoting complete streets across the community and encouraging interconnected alternative transit networks across the region, the Village would not only increase quality of life within the community, but also encourage pedestrian-oriented development that would help reduce overall GHG emissions over time.

Ecological Issues and Environmental

Many parts of New York State have valuable environmental resources that act as vital components to the overall environmental quality of the region. Much of the Finger Lakes have fragile and sensitive ecosystems that provide the community with necessary resources for sustaining wildlife and overall community wellbeing. Wetlands are especially sensitive to climate change and changing environmental conditions that influence the overall groundwater quality in the region. Additionally, these environmental resources provide critical drainage and filtration to agricultural and industrial runoff that would otherwise cause cascading issues. Preserving these critical environmental resources is not only beneficial to the local

wildlife and ecosystem, but also to the community. According to New York Climate Smart Communities:

Maintaining the integrity and ecological health of natural areas is a key part of preventing the release of greenhouse gas (GHG) emissions that is associated with development. In addition, certain natural, undeveloped areas serve as a buffer against some types of extreme weather that are increasing with climate change; for example, wetlands often have the capacity to absorb floodwaters and, as a result, they help prevent flood damage to infrastructure in developed areas.

As a participating municipality in the Climate Smart Communities' program, the Village of Montour Falls has completed multiple projects concerning the preservation and protection of natural resources including the development of a Natural Resource Inventory which accounts for all existing natural resources whose criteria is established by the Village and the New York State Department of Conservation. According to the document, significant natural resources include the surrounding Catherine Valley Wetlands which surround the entire village but are primarily located north of the Village and below the Village of Watkins Glen. The Shequaga Falls located within the Village is also another valuable natural resource that was identified as a significant natural area within the Village.

In addition to valuable natural assets within the Village identified within the NRI, the Village also has special geographical and geologic characteristics that make the community vulnerable to climate change. These include the fact that the Village is located within a valley with highly saturated soils that have poor drainage across the municipality. As a result, much of the region experiences ponding and flooding due to these various characteristics that makes the Village particularly vulnerable to water damage from extreme precipitation.

As climate change increases overall intensity of precipitation within the region, complete streets and green infrastructure can reduce overall vulnerability to flooding and contamination/ harm of existing wildlife habitat and natural resources. Green drainage technology such as permeable pavement, Rain Gardens, Bioswales, and Rainwater Harvesting can provide the Village with a cushion and maximization of water absorption capacity to mitigate flash flooding and contaminated runoff from damaging existing ecological resources. Reducing contaminated runoff and increasing green infrastructure can also mitigate damage to existing natural water filtration systems such as marshes and riparian buffers. Therefore, implementing green infrastructure through complete streets can have a significant benefit to the existing natural resources as well as the natural systems that help maintain the surrounding ecology.

Existing Mitigation Strategy - Priority Parameters

As the Village is required to establish a mitigation strategy per Federal Emergency Management Agency requirements to qualify for federal mitigation grant programs, the community has established guidelines to reduce vulnerability and damage from climate change and natural disasters. These mitigation strategies were established in the form of municipal projects in collaboration with Schuyler County and range from social programs to structural projects, originally developed in 2016.

Table 1 Existing Mitigation Strategy for Montour Falls

Project Name	Description	Timeline
Tree Maintenance	The Villages of Odessa, Montour Falls, and Watkins Glen will continue to provide brush pickup services and/or drop off locations to encourage residential tree maintenance.	Ongoing
Increase awareness of stream flood stages	Install real-time water level monitoring gauge on Catharine Creek in Montour Falls near the Route 14 bridge by the NYS Fire Academy	Ongoing
Montour Falls Flood Damage Reduction Project	This project, implemented by the State of New York in the 1950s, included the excavation of a diversion channel for Catharine Creek and levees and berms around the diversion channel and Shequaga Creek to contain flooding.	1950s
Levee Recertification	Recertification of the existing levee that surrounds the Village. This includes the inspection of the existing structure and approval through New York State.	2021

The projects described are mostly consistent to the Village’s concern around climate adaptation, flood mitigation and natural disaster reduction which is consistent with the current Complete Streets plan strategy. The prioritization table in the following section incorporates components of hazard mitigation and provides recommendations as to how the community can increase overall resilience.

Climate Change Complete Streets Plan

Climate change is an increasing threat to communities across New York. According to CLIMAID from NYSERDA, while precipitation volume is not expected to change over time, climate models do predict that communities will likely see an increase in intensity of storms and reduced frequency in number and length of precipitation events on an annual basis.

As the Village of Montour Falls is largely located in a flood zone, having infrastructure that can control and withstand intense flash flooding and variable temperatures is critical to maintaining a healthy and safe community. Flood control and natural resource protection starts from the most basic elements of infrastructure systems like pavement which cover large sections of developed areas of the municipality. Strategy to increase safety and reduce

flashflood/ ponding volume include narrowing street width to allow for slower traffic and maximizing green space to allow for drainage; increasing permeable pavement systems where possible; and reducing overall blacktop surfaces to minimize heat generated from the surfaces (National Complete Streets Coalition, 2012).

In addition to the pavement, landscaping is also a vital design component to reduce flooding, heat, and even help beautify the community. Bioswales, planters, rain gardens, and street trees - are mutually beneficial for mobility and ecology. Such green elements are increasingly found to be important deterrents of accidents and injuries and contribute to a more comfortable and visually interesting environment for all users. Traffic-calming elements like chicanes, islands, and curb extensions - all popular in creating complete streets - provide site opportunities for bioswales, street trees, and rain gardens. These green systems not only benefit the local wildlife habitat, but also act as carbon reduction structures that reduces the overall community's carbon footprint.

The Village of Montour Falls has various opportunities to increase green infrastructure throughout the municipality, including Main Street, Genesee Street, Catherine Street, Montour Street, South Street, and other areas that are surrounding the downtown core. According to outreach conducted in October 2021 regarding complete streets, majority respondents were supportive of increasing green infrastructure and complete streets throughout the Village, in comparison to the existing streets which offer little to no green space and limited pedestrian access.

Strategic Project Implementation

As this plan provides a list of projects that are ranked based on community priorities, the following section will rank each project based on its overall goals, objectives, and purpose, cross-walked with the existing state and federal programs focusing on climate change and renewable energy development. Each project will receive points based on its alignment with the program relevance and applicability. The state and federal programs that will be used as crosswalks to measure each project's relevance to climate change and resilience are listed and reviewed below. While this list is not exhaustive, these programs have direct alignment with Montour Falls and Complete Streets and thus can act as a guideline to orient the Village to strategically design and implement its projects.

NYSERDA Climate Smart Communities Program

Climate Smart Communities (CSC) is a New York State program that supports local governments in leading their communities to reduce greenhouse gas emissions, adapt to the effects of climate change, and thrive in a green economy. The benefits of participating include leadership recognition, free technical assistance, and access to grants. Local governments participate by signing a voluntary pledge and using the CSC framework to guide progress toward creating attractive, healthy, and equitable places to live, work, and play.

NYSERDA Clean Energy Communities Program

Launched in August 2016, NYSERDA's Clean Energy Communities program is for local government officials and staff who want their communities to benefit from the new clean energy economy but struggle with tight budgets and limited staff. By providing grants, coordinator support, and clear guidance for implementing a range of high-impact clean

energy actions, NYSERDA is helping local governments save money, grow the local economy, and improve the environment.

FEMA Community Rating System

The Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the minimum requirements of the National Flood Insurance Program (NFIP). Over 1,500 communities participate nationwide.

In CRS communities, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community's efforts that address the three goals of the program:

1. Reduce and avoid flood damage to insurable property
2. Strengthen and support the insurance aspects of the National Flood Insurance Program
3. Foster comprehensive floodplain management

FEMA BRIC

Building Resilient Infrastructure and Communities (BRIC) will support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards.

The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

DEC Water Quality Improvement Program

The Water Quality Improvement Project (WQIP) program is a competitive, statewide reimbursement grant program open to local governments and not-for-profit corporations to implement projects that directly address documented water quality impairments, improve aquatic habitat, or protect a drinking water source. This funding is for construction/implementation projects, not projects that are exclusively for planning.

EPA Urban Water Small Grants Program

Since the inception of the Urban Waters Small Grants Program in 2012, the program has awarded approximately \$6.6 million in grants to 114 organizations across the country and Puerto Rico. The grants are competed and awarded every two years, with individual award amounts of up to \$60,000.

Healthy and accessible urban waters can help grow local businesses and enhance educational, recreational, social and employment opportunities in nearby communities. The Urban Waters Small Grants are expanding the ability of communities to engage in activities that improve water quality in a way that also advances community priorities.

Improving urban waters requires various levels of government and local stakeholders (e.g., community residents, local businesses, etc.) to work together in developing effective and long-term solutions with multiple benefits.

Scoring Criteria

While the above programs address climate change and its associated hazards, from GHG emissions reduction to flood mitigation, the following criteria are an all-inclusive list of priorities listed in each program and associated with the Climates Smart Community Pledge elements. This includes:

- GHG Emission Reduction (Decrease Energy Use) through developing alternative infrastructure.
- Incorporate Green Infrastructure Systems/ Protect Ecosystem (Implement Climate Smart Land Use).
- Increase Resilience to Climate Change (Enhance resilience to climate change)
- Develop unique solutions to addressing climate-related issues (Innovation)
- Increase overall operations performance (performance)

These criteria will be used to score each project by examining its overall purpose, objective, and function within the community. This will use a scoring system between the range of -1 to 1, each value being defined as follows:

- **A score of -1** implies that the project reduces the community’s capacity to improve on the identified measure. E.g., A score of -1 for GHG Emissions Reduction implies that the project will likely lead to an increase in GHG emissions.
- **A Score of 0** implies that the project does not affect the community’s ability nor capacity to improve on the identified measure. E.g., A Score of 0 for GHG emissions Reduction implies that the project will neither increase nor decrease GHG emissions.
- **A Score of 1** implies that the project increases the community’s capacity to improve on the identified measure. E.g., A Score of 1 for GHG Emissions Reduction implies that the project will likely lead to a reduction in GHG emissions.

These scores will be summed up to identify priority projects for this plan and full justifications of priority projects along with overall enhancement recommendations will be given following the scoring evaluation.

Scoring Results

Project Name	GHG Emissions Reduction	Green Infrastructure/ Ecological Protection	Increase Resilience	Unique Solutions	Increase performance	Final Score
Owego Street	1	1	1	0	1	4
West Main Street	1	1	1	1	1	5
West South Street	1	1	1	0	1	4
Henry Street	1	1	1	0	0	3
South College Avenue	1	1	1	0	0	3

South Mulberry Street	1	1	1	0	0	3
East South Street	1	1	1	1	1	5
North Mulberry Street	1	1	1	0	0	3
South Genesee Street	1	1	1	1	1	5
North Lhommedieu Street	1	1	1	0	1	4
East Main Street	1	1	1	1	1	5
Lee Street	0	1	1	0	-1	1
Montour Street	1	1	1	1	-1	3
State Route 14	0	1	1	0	0	2
West Broadway	1	1	1	0	0	3
State Route 224	1	1	1	0	-1	2
North Genesee Street	1	1	1	1	1	5
Walker Street	1	1	1	0	0	3
Canal Street	1	1	1	0	0	3
Schuyler Street	1	1	1	0	0	3
Ayers Street	1	0	0	0	0	1
Washington Street	1	0	0	0	0	1
East Broadway	0	1	1	0	0	2
East Catlin Street	0	1	1	0	0	2
Fallsview Road	0	1	1	0	0	2
North Seneca Street	0	1	1	0	0	2

Detailed Justification for top projects ranking

Owego Street:

Owego Street has historically been affected by flooding due to lack of road maintenance and lack of stormwater infrastructure in general. The street, while not a major road, does serve for local vehicular and pedestrian traffic and acts as a connecting road to multiple businesses and institutions. While a large part of the Village is located in a flood zone, this street in particular is consistently affected by flooding due to uncontrolled flooding and runoff from surrounding areas.

Additionally, even though the street is centrally located within the Village, its pedestrian and safety infrastructure are in poor condition. By improving and installing these basic features, the residents would significantly benefit from these modifications over time. Given the significance of the project, this road has received a scoring of 4, as it would likely decrease GHG emissions through the installation of sidewalks, protecting environment through improvement of stormwater system, increase resilience through flood mitigation, and as a result increase overall performance of the municipality's operation from a sustainability perspective.

Main Street (East/ West):

As the Village's main arterial and community center, Main Street provides critical services to the overall municipal functions. There are numerous businesses located along Main Street along with municipal government services buildings and residential buildings. While the street does have pedestrian and stormwater infrastructure, parts of the road are in disrepair and require upgrading in order to sustain the high volume of thru traffic.

The project has received a 5/5 rating as the project would likely include improvement of existing pedestrian infrastructure, installation of green stormwater drainage systems along the street, as well as consideration to other modes of transportation such as bicycles along Main Street.

South Street:

South Street runs adjacent to main street and is located in close proximity to the Village's core urban center. This street is primarily residential but has multiple commercial/ service-related facilities located along the street. While there are basic safety features like sidewalks installed along the road, similar to Owego Street, these systems are in disrepair and the lack of stormwater infrastructure has led to eroding curbs and pedestrian lanes.

This project has been given a score of 4/5 as the reconstruction of this street would increase resilience, encourage pedestrian traffic, and increase protection of natural resources through the installation of proper stormwater structures.

Henry Street:

Henry Street is a low traffic residential street. Currently the street has sidewalks along either side of the road, but sections are in disrepair and require substantial improvement (described in following sections). Stormwater upgrades are also needed as the street experiences flooding in sections of the street and thus subsequent erosions of existing infrastructure.

Improvements include existing surface repaving and sidewalk reconstruction and stormwater redevelopment. Upgrading the existing pedestrian lanes can help reduce thru traffic and thus

help reduce GHG emissions. In addition, the stormwater infrastructure can help reduce the overall runoff that is produced by the impermeable blacktop and thus reduce the contamination of local water sources and ecological resources. Finally, the upgraded road will also reduce vulnerability to flooding as a result of better controlled stormwater and developing necessary drainage systems. Thus, this project received a 3/5 rating.

Mulberry Street:

Mulberry Street is a small segment of road, in comparison to other streets. This road however requires some substantial improvements to mitigate flooding and increase overall safety for residents. The street is primarily residential and does have sidewalks along the street. Much like the rest of the Village however, the street requires substantial improvement to increase safety of the existing road. This project received a 3/5 because basic improvements would increase resilience and encourage non-vehicular modes of transit.

College Avenue:

College Avenue is a low traffic residential street. Currently the street has little to no sidewalks along the road, and similar to the other streets discussed above, College Avenue suffers from old and eroding infrastructure. Stormwater upgrades are also needed as the street experiences flooding in sections of the street and thus subsequent erosions of existing stormwater structures.

Improvements include existing surface repaving and sidewalk reconstruction/ development and stormwater redevelopment. Upgrading the existing pedestrian lanes can help reduce thru traffic and thus help reduce GHG emissions. In addition, the stormwater infrastructure can help reduce the overall runoff that is produced by the impermeable blacktop and thus reduce the contamination of local water sources and ecological resources. Finally, the upgraded road will also reduce vulnerability to flooding as a result of better controlled stormwater and developing necessary drainage systems. Thus, this project received a 3/5 rating.

North Lhommedieu Street:

This road is located on the periphery of the Village and is primarily a residential road that is situated in a low lying and thus flood prone area. The road lacks or has sidewalks in disrepair and stormwater infrastructure that is overwhelmed by the intensifying extreme weather events.

This project received a 4/5 as the reconstruction of the street would not only increase pedestrian use of the road, but also reduce runoff from improved stormwater infrastructure systems. This would reduce overall GHG emissions, protect the local ecology, increase resilience, and the community's overall performance.

Genesee Street:

Genesee street is a long arterial that stretches from the north of the Village to the South. The road does not necessarily suffer from flooding; however, the road lacks basic pedestrian infrastructure, despite the route running through the center of the Village. Stormwater infrastructure is lacking or non-existent along some parts of the road. This road also has significant local and non-local thru traffic. Thus, this project received a 5/5 rating as by developing sidewalks and bike lanes would not only encourage use by pedestrians and cyclists coming from the Catherine Valley Trail, but also by increasing stormwater infrastructure

would reduce ponding and erosion from flash flooding, thus protecting the local ecological resources and reducing vulnerability to intense weather events.

Recommendations for Incorporating Additional Sustainability Measures in Projects

Owego Street: While this project requires basic infrastructural upgrades as discussed above, additional recommendations include the installation of rain gardens, bioswales, and permeable pavement in areas of ponding along the road, or as a center divider between the new sidewalk/ bike line and vehicular lane. This could reduce the overall amount of ponding and filter the runoff to mitigate the contamination of surrounding waterbodies.

South Street: As part of the Village's core, South Street, similar to Owego Street can implement similar measures to reduce urban flooding such as redesigning of the streets to narrow vehicular lanes, adding center dividers to separate pedestrian from vehicular traffic. The dividers could act as natural drainage systems to reduce runoff and filter out contaminants that would otherwise impact the local waterbodies downstream of the Village.

Main Street: As the Village's main road with the highest density, Main Street could incorporate various types of green infrastructure technology to maximize urban water absorption/ drainage and shade structures to minimize urban heat island effect. Currently the street does not have large amounts of green space along the street, except for grass areas located between the sidewalk and curb. This underutilized space can be used to develop rain gardens and bioswales to increase water intake and eliminate the need for traditional stormwater drainage structures. In addition, the use of rainwater storage tanks to recycle water can be utilized in these rain gardens to reserve water during intense heat events. As the green infrastructure vegetation matures over time, the green space would also act as a shade structure to cool the downtown core.

Genesee Street: As one of the higher trafficked roads in the Village, Genesee Street underdeveloped and lacks the capacity to handle the various types of vehicles that utilize the road. Situated along the Catherine Valley Trail, the road is often used by cyclists and hikers connecting from the northern entrance to the southern entrance. Currently, the road does not have any bike lanes nor sidewalks. Additionally, the street also has bus and larger vehicular traffic that utilize the road which can often lead to congestion. Thus, as the street is developed, having clearly defined user paths and lanes is critical to increase safety and reduce overall congestion. While road markings can be useful, ultimately, redesigning the streets to have green center dividers (that would act as green infrastructure) would act as safety barriers and discourage vehicular traffic from traveling at high speeds.

Remaining Minor Streets: All remaining streets discussed above, while unique, have similarities in that they all act as local residential roads that have low traffic volume. As a result, developing bike lanes on such roads would not be necessary given the low traffic volume and overall slow speed of such minor roads. However, the currently underutilized green space between the curb and sidewalk can be repurposed to incorporate green infrastructure to increase drainage capacity and minimize flash flooding and localized ponding. Assuming all streets that currently lack sidewalks would eventually be developed to accommodate this additional element, utilizing the space between the sidewalk is mutually beneficial to local residents and wildlife.

References

- NYSERDA. (2010). *Climate Action Plan Interim Report*. Albany NY: New York State. Retrieved January 2022, from <https://www.dec.ny.gov/energy/80930.html>
- Smart Growth America. (2017, August 10). *Implementing Complete Streets in small towns and rural communities*. (N. Azeez, Editor, & N. Azeez, Producer) Retrieved January 2022, from Smart Growth America: <https://smartgrowthamerica.org/implementing-complete-streets-small-towns-rural-communities/>
- Smart Growth America. (2020). *Driving Down Emissions*. Washington DC: Smart Growth America/ Transportation for America. Retrieved January 2022, from <https://smartgrowthamerica.org/wp-content/uploads/2020/10/Driving-Down-Emissions-FINAL.pdf>
- United States Environmental Protection Agency. (2011). *Energy Efficiency in Local Government Operations*. Washington DC: US EPA. Retrieved January 2022, from https://www.epa.gov/sites/default/files/2015-08/documents/ee_municipal_operations.pdf
- Village of Montour Falls. (2021). *Village Operations Climate Action Plan*. Montour Falls, NY: Village of Montour Falls. Retrieved January 2022, from https://www.villageofmontourfalls.com/uploads/8/6/7/9/86796416/govt-cap-montourfalls-final__before_public_input_.docx.pdf
- Village of Montour Falls/ WSP USA. (2021). *VILLAGE OF MONTOUR FALLS COMMUNITY GHG INVENTORY*. Montour Falls NY: WSP. Retrieved December 2021, from https://www.villageofmontourfalls.com/uploads/8/6/7/9/86796416/final_vmf_community_ghg_inventory_summary_2018_baseline.pdf
- Village of Montour Falls/ Cornell Cooperative Extension. (2019). *Village of Montour Falls Government Operations GHG Inventory*. Cornell Cooperative Extension. Ithaca, NY: 2019. Retrieved January 2022, from <https://www.villageofmontourfalls.com/uploads/8/6/7/9/86796416/montourfallsgovernmentinventory2019final.pdf>
- Cornell University. (2012). *Catherine Marsh Conceptual Development Plan*. Ithaca: Cornell University. Retrieved from <https://www.schuylerville.us/DocumentCenter/View/1514/Route-14-Catharine-Mars-Concept-Plan>
- Cornell University. (2022). *Projected Population*. Retrieved from Cornell Program for Applied Demographics: <https://pad.human.cornell.edu/counties/projections.cfm>
- National Complete Streets Coalition. (2012). *Complete Streets*. NCSC. Retrieved from <https://nacto.org/wp-content/uploads/2012/06/National-Complete-Streets-Coalition-No-Date.pdf>

NYSERDA. (2022). *Climate Smart Communities*. Retrieved from Climate Smart Communities:
<https://climatesmart.ny.gov/>

Schuyler County. (2018, May). *Lime Bike*. Retrieved from
<https://www.fingerlakes.org/news/lime-bringing-bikeshare-watkins-glen>

USACOE. (2021). *Infrastructure Report Card - NY*. USACOE. Retrieved from
<https://infrastructurereportcard.org/state-item/new-york/>

Appendix G: Community Response Surveys

Survey Number	Email	Home Zipcode	Canal Street	Walker	South	Bike Infrastructure	Waterfall	Mill Street Ditch	Sidewalk	Greenspace	Temporary on street dining	Mulberry	Lee	College	Genesee
1	Sjust@stny.nyc.gov	14865	x	x											
2		14865			x			Needs dredging							
3					flooding and drainage issues										
4		14845				more needed	Bigger parking lot								
5		14865				Pave the bikeway			x						
6									x						
7		14865								need more greenspace native plants/ rain garden					
8	eatbooger@yahoo.com	14865							x						
9	gus23dcs76@gmail.com	14865									x				
10		14865											Widen fire truck pullout		
11		14865													
12		14865				More signs, don't pave			x						x
13	antoinetteholmes@gmail.com	14865													
14		14865													
15		14865													
16	Jrw6798@gmail.com	14865			x	x			x	x		x			
17															
18															
19		14865							x						
20		14865													

Sustainability Committee

Appendix H: Focus Group Minutes

Complete Streets Focus Group Summary

When: January 13, 2022, at 2pm

Via Zoom

Attendance: Jessica Westlake, Village Resident and Amanda Demaria, Consultant

The focus group was held to discuss the four primary Complete Streets Projects to be included in the Final Complete Streets Plan. The four projects are Owego Street redesign and reconstruction; Main Street Pedestrian, Facade, and Green Space Improvements; South Street Redesign and Reconstructions; and Glorious T Intersection redesign. A discussion was also had regarding public transportation in Montour Falls as well as additional concerns and suggestions. The focus group summary is divided by project.

Ms. Westlake is a lifelong resident of Montour Falls. Ms. Westlake also works in Montour Falls and is a parent to three teenagers. She owns a home in the Village. Over 90% of the time, she walks within the Village instead of driving. She also utilizes public transportation for longer commutes when it is feasible.

Ms. Westlake agreed that Owego Street should receive the highest priority. As a walker, she stated that the sidewalks (especially on the east side) are in bad condition. She has also seen how unsafe the road is especially for walkers to the elementary school. She has also experienced flooding on the street.

Ms. Westlake also stated that Main Street needs improvements to make it more community and pedestrian friendly. She stated that East Main Streets is especially pedestrian-unfriendly and dangerous. It is missing several sections of sidewalks. Recently, repairs have been made on East Main and Mulberry and that section is much better. Overall conditions of Main Street sidewalks include water pooling, flooding, uneven, missing, and dangerous crosswalks. Additional improvements should include adding and improving the green space on the street, adding and maintaining street trees, and making improvements to the park at Main and Owego. The park is not utilized to its full extent. A playground can be added to encourage children and teens to go to the park. There is no playground located in the village besides at the Elementary School and Havana Glen which are far from the Village Center and not easily accessible for pedestrians or bikers.

Ms. Westlake stated that South Street is missing several sections of sidewalks and curbing. She stated that the sidewalk on the northside of South Street between Canal and Owego is very slippery and dangerous

Ms. Westlake's main concern for the Glorious T is the lack of parking for visitors to the T.

Ms. Westlake also has some recommendations for public transportation. She stated that the schedule is not adequate for people that work or go to school. The bus stops running early in the day and starts late. The bus also does not run on weekends. This is very inconvenient for most employees and students.

Additional concerns include North L'Hommedieu and South Mulberry. North L'hommedieu is a very dangerous road for pedestrians and bicyclists. The sidewalk ends shortly after Broadway; however, many low-income residents live further down the street at the Rock Cabin Trailer Park. There have been several pedestrian accidents over the last few years. The street is also very dangerous for bicyclists as

the roadway is narrow and there are no sidewalks. The road is also very dark at night and lacks any lighting.

Ms. Westlake also stated that South Mulberry Street is in very bad condition. There are no curbs which leads to severe flooding into yards. Also, due to no curbs, vehicles park on the street in people's yards. This leads to erosion of the yards and increased runoff. There is also a sharp drop off from the grass onto the roadway in some spots. This may be caused by the previous curbing that has been removed. Lastly, the street is missing large sections of the sidewalk.

Appendix I: Current Conditions Data Spreadsheet

Complete Streets Current Conditions Summary

Street	Street Rating	Sidewalk Rating (E)(N)	Sidewalk Rating (W)(S)	Daily Traffic	Pedestrian Safety	Community Identified Priority	Primary Variable Score	Street Type
Owego St.	4	3	2	3	3	4	19	Mixed
W Main St.	2	2	2	3	4	4	17	Commercial
W South St.	3	3	3	2	2	3	16	Neighborhood
Henry St.	3	3	3	2	3	1	15	Neighborhood
S College Ave.	3	3	4	2	2	1	15	Neighborhood
S Mulberry St.	3	3	4	2	1	2	15	Neighborhood
S Genesee St.	2	2	3	3	3	1	14	Mixed
N Mulberry St.	3	3	3	2	1	2	14	Neighborhood
E South St.	3	3	3	2	2	1	14	Neighborhood
N Lhommedieu St.	4	N/A	N/A	N/A	3	1	8	Mixed
SR 14 (Catherine St.)	2	1	1	4	4	1	13	Commercial
Montour St.	3	2	2	3	2	1	13	Neighborhood
Lee St.	3	3	3	2	1	1	13	Neighborhood
E Main St.	3	3	3	2	1	1	13	Neighborhood
W Broadway St.	3	2	3	3	1	1	13	Neighborhood
N Genesee St.	1	3	2	3	1	2	12	Mixed
CR 224 (Clawson Blvd.)	1	1	1	4	4	1	12	Commercial
Walker St.	3	3	N/A	2	2	2	12	Neighborhood
Schuyler St.	3	2	1	3	1	1	11	Neighborhood
Canal St.	3	2	N/A	3	1	2	11	Neighborhood
Ayers St.	4	N/A	N/A	N/A	2	1	7	Neighborhood
Washington St.	4	N/A	N/A	N/A	2	1	7	Neighborhood
N Seneca St.	4	N/A	N/A	N/A	1	1	6	Neighborhood
E Catlin St.	4	N/A	N/A	N/A	1	1	6	Neighborhood
E Broadway St.	4	N/A	N/A	N/A	1	1	6	Neighborhood
Fallsview Dr.	4	N/A	N/A	N/A	1	1	6	Neighborhood

Visual-Environment Summary

Street	Landscape	Trash Receptacles	Signage	Secondary Variable Score
Owego St.	4	4	4	12
W Main St.	3	1	2	6
W South St.	4	4	4	12
S Genesee St.	4	4	3	11
SR 14 (Catherine St.)	1	1	2	4
CR 224 (Clawson Blvd.)	3	3	3	9
Canal St.	4	4	4	12
Catherine Valley Trail	1	1	3	5

Street and Sidewalk Rating

- 1 – Excellent
- 2 – Good
- 3 – Fair
- 4 – Poor

Traffic Rating

- 1 – <100
- 2 – 100-999
- 3 – 1000-5000
- 4 – >5000

Community Priority Rating

- 1 – 0
- 2 – 1-2
- 3 – 3-4
- 4 – >4

Visual Environment Rating

- 1 – Excellent
- 2 – Good
- 3 – Fair
- 4 – Poor

Pedestrian Safety Rating Scale (HEAL) (2010-2019)

- # of pedestrians in car-related accidents
- 1 – 0-1
- 2 – 2-5
- 3 – 6-10
- 4 – >10

Appendix J: Reporting Template

Complete Streets Annual Reporting Template		Date Completed:		Completed by:		Presented to the board on:
Measurement Category	Change from the previous year	Total Number	Types of events, program, changes	Total Investment (\$)	Description of event, program, improvements, etc.	Recommendations
Rate of Accidents (both pedestrian and motor vehicle)						
School participation in pedestrian/bicycle safety education						
Number of community events that encourage walking or bicycling						
Percentage of children walking or biking to school						
Driver, pedestrian, and cyclist behaviors and awareness of traffic (vehicular, walking, and cycling) laws						
Number and type of targeted enforcement activities						
Street and intersection assessments and ratings						
Installation, repair, and maintenance of sidewalks, crosswalks, bike lanes, paved shoulders, shared lanes, traffic calming measures, multi-use paths, lighting, street trees, and signage						
Public and private investments in Complete Streets improvements (\$)						
Increased sustainability and resilience resulting in decreased Carbon Emissions and Improved Flood Resiliency						

Appendix K: Schuyler County Transit Ridership Report

Fixed Route Montour Falls Passengers by Stop 12/15/20-12/14/21		
Route	Stop	Passengers
Corning	HSC	9
Tompkins	Montour Flag	57
	Genesee Flag	19
	Schuyler Hospital	14
Village	Broadway	660
	Catherine Court	49
	Havana Glen	598
	HSC	181
	Main & Montour	539
	N. Owego St	96
	Primary Care	12
	Rock Cabin	110
	S. Owego St	58
	Schuyler Hospital	476
Total:		2878
Information provided Schuyler County Transit on 12/15/2021		

Appendix L: Glorious T Design Study