MEMORANDUM

CITY OF WATERTOWN, NEW YORK
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT
245 WASHINGTON STREET, ROOM 305, WATERTOWN, NY 13601
PHONE: 315-785-7741 – FAX: 315-782-9014

TO: Planning Board Members

FROM: Michael A. Lumbis, Planning and Community Development Director

SUBJECT: Site Plan Approval – 514, 528 and 540 State Street

DATE: December 29, 2022

Request: Site Plan Approval for the construction of a 2,738 sq. ft. Taco Bell restaurant and associated site improvements at 514, 528 and 540 State Street, Parcel Numbers 12-03-126.000, 12-03-127.000 and 12-03-128.000

Applicant: Stephanie Albright, P.E. of APD Engineering on behalf of Hospitality Syracuse

Proposed Use: Restaurant (Sales-Oriented Retail)

Property Owners: Jon Lennox and North Drive In Theater Corporation

Submitted:	
Property Survey: Yes	Preliminary Architectural Drawings: Yes
Site Plan: Yes	Preliminary Site Engineering Plans: Yes
Vehicle and Pedestrian Circulation Plan: Yes	Construction Time Schedule: Yes
Landscaping and Grading Plan: Yes	Description of Uses, Hours & Traffic Volume: Yes

SEQRA: Unlisted

Jefferson County 239-m Review: No

Zoning Information:	
District: Commercial	Maximum Lot Coverage: N/A
Setback Requirements: F: 20', S: 5', R: 25'	Buffer Zones Required: Yes

Project Overview: Hospitality Syracuse is proposing to construct a 2,738 square foot Taco Bell Restaurant and associated site improvements at 514, 528 and 540 State Street, Parcel Numbers 12-03-126.00, 12-03-127.000 and 12-03-128.000. The three parcels are currently under contract and will be

conveyed to Fairlane Drive, LLC once the site plan has been approved. It is proposed that the parcels will then be combined into one prior to construction.

Existing Conditions: The existing property consists of two vacant parking lots and a vacant Trailways building and parking lot. The proposed project will demolish the existing building and site features to construct the Taco Bell and associated parking lot, utilities, lighting and landscaping.

Vehicular and Pedestrian Circulation: The site is located on the corner of State Street and Winthrop Streets. There are four existing curb cuts along State Street and one existing curb cut on Winthrop Street. The project will reduce the curb cuts on State Street to two, with one being an exit only from the drive through lane and the other being a full entrance/exit. The curb cut on Winthrop Street will be for two-way traffic.

The plans depict the location of the curb cuts to be closed and/or relocated on State Street and Winthrop Street and indicate that the curb is to be replaced with a curb reveal in accordance with City standards. What is not indicated on the plans is the proposed landscape treatment for the area where the driveway aprons are to be removed. Treatment could be either the installation of brick pavers to match the existing pavers that are currently located in the margin area or lawn area. It is the City's preference that the area where the driveway aprons are removed be converted to lawn areas. Additionally, the City recommends that the entire margin area, exclusive of the new driveways, be changed to lawn areas. This would reduce the impervious area of the site even further, eliminate uneven surfaces and trip hazards, match the treatment behind the sidewalk and throughout the site and overall be more aesthetically pleasing.

Winthrop Street is a one-way street, with traffic entering from State Street. As the Planning Board will recall, the applicant was originally requesting that Winthrop Street be changed to two-way traffic, but the request has since been withdrawn.

Section 310-47 of the Zoning Ordinance of the City of Watertown requires five spaces for every 1,000 sq. ft. of commercial floor area, exclusive of utility and storage areas. The required number of spaces for a building of this size is 14, and 25 spaces are being proposed.

The site design will allow for 17 cars to be stacked in the drive through lanes. Cars will enter the drive through at a single-entry point and as they make their way south, the lane will widen and split to allow for two rows of stacking. An additional four vehicles could stack toward State Street and an additional five vehicles could stack toward Winthrop Street if necessary. There will be two order points, one pre-pay window and one pick-up window. The exit lane is proposed to be 24 feet wide to allow both right and left turn stacking to exit onto State Street.

A truck turning movement plan has been included in the submission packet. The plan shows that both delivery trucks and fire trucks will access the site from the main entrance on State Street. The circulation of the site is not ideal for these types of large vehicles, so the trucks will need to do a three-point turn in order to exit the site. This could be problematic if customers are trying to access the site during the same time as a large delivery truck is on site. The applicant should discuss whether deliveries are completed outside of normal operating hours or during business hours.

The Engineering Department reviewed the traffic analysis provided by the consultant and agrees that the development will not have a significant impact on State Street or Winthrop Street with regards to traffic patterns or disruptions to traffic flow on State Street. According to the Traffic Impact Assessment completed by GTS Consulting, the additional traffic generated by the proposed Taco Bell development

will have no notable or significant impact on traffic operations on State Street or at the adjacent Winthrop Street intersection. There are adequate gaps in traffic to accommodate turning movements into and out of the development, adequate sight lines in each direction, no significant queuing concerns from the adjacent signals, and no capacity concerns.

Zoning: 528 and 540 State Street were previously split zoned, with Commercial zoning along the front and Residence C in the rear. The applicant applied to the Planning Board at the November 1, 2022 meeting for a zone change from Residence C to Commercial. The Planning Board recommended approval of the zone change, and the City Council approved it at their December 5, 2022 meeting. All three parcels are now zoned Commercial. The proposed use is an allowed use-by-right in a Commercial District.

Setbacks: The Commercial District requires that the building is setback a minimum of 20 feet from the front parcel line. The submitted site plan shows the proposed building setback to be 13.4 feet. The applicant applied to the Zoning Board of Appeals for an Area Variance to request relief from the required 20-foot front building setback. The Zoning Board of Appeals approved the request at the December 21, 2022 to allow for the 13.4-foot front building setback. All other required setbacks have been met.

Landscaping and Buffers: According to Section 310-59, Paragraph C of the City Zoning Ordinance, each use in a Commercial District shall have a strip of land at least 15 feet in any required front yard and at least five feet in width in any required rear and side yards, which shall be maintained as a landscaped area.

The submitted site plan shows the required five-foot landscape buffers on the sides and rear of the site. However, a portion of the front landscape buffer is only 8.5 due to the reduced building setback. The applicant applied to the Zoning Board of Appeals for an Area Variance to request relief from the required 15-foot front landscape buffer and reduce it to 8.5 feet. The variance application was approved by the Zoning Board of Appeals on December 21, 2022.

According to the Landscaping and Buffer Zone Guidelines adopted by the City of Watertown Planning Board a landscape plan is required as part of every site plan review application. Landscaping is required to minimize the negative impacts from development by creating visual and noise buffers between adjoining property uses and promoting harmonious streetscapes.

As noted above, Section 310-59, Paragraph C of the City Zoning Ordinance requires a 15’ strip of land in the front yard which shall be maintained as a landscaped area. The Landscaping and Buffer Zone Guidelines discuss the appropriate treatment for these types of areas. The guidelines recommend in the landscaped strip one large deciduous tree planted every 40’ or one small to medium deciduous tree planted every twenty feet with planting beds in between the trees. The applicant has provided a strip of land that is 15.5’ wide but no trees are shown along the State Street frontage and only one tree is shown along Winthrop Street. The applicant shall revise the landscaping plan to include one large deciduous tree planted every 40’ or one small to medium deciduous tree planted every twenty feet with planting beds in between the trees in the areas along the street rights-of-way.

The guidelines also recommend interior parking lot trees and landscaping located in landscaped islands throughout the site at a minimum average density of 1 shade tree for each 15 parking spaces or fraction thereof. With the applicant proposing 25 parking spaces, two interior parking lot trees would be required. The applicant has proposed three interior parking lot trees, one at each end of the southern parking area and one located near the dumpster enclosure, thereby meeting this recommendation.

The guidelines also recommend exterior parking lot landscaping be provided around the perimeter of any parking/paved areas. The landscaped strip should be a minimum of 8' wide and within the strip one large deciduous tree planted every 40' or one small to medium deciduous tree planted every 20' or one large coniferous tree planted every 20' should be provided. The applicant is proposing a 5.5' landscaped strip along the eastern property line (along the drive-thru) with three small to medium maturing new trees and one large maturing tree, which does not quite meet the recommended spacing. The applicant shall revise the landscaping plan to include one large deciduous tree planted every 40' or one small to medium deciduous tree planted every 20' or one large coniferous tree planted every 20' along the eastern property line.

Additionally, Section 310-59, Paragraph A of the City Zoning Ordinance requires a strip of land a minimum of five feet in width up to a maximum of 15' in width be maintained as a landscaped area where the front, side and rear yard in a nonresidential district abuts any land in a residential district. The entire south side of the Taco Bell site abuts a residential district meaning that the buffer zone requirement applies to this area. The applicant has provided the minimum five-foot width along the property line in the area of the drive thru lanes and approximately 12' along the proposed parking spaces that abut the southern property line.

For these types of areas between Non-Residential and Residential Zoning Districts, the Landscaping and Buffer Zone Guidelines state that the landscaped strip shall be a minimum of fifteen (15') wide. Within the landscaped strip, one (1) large deciduous tree (2" caliper minimum) shall be provided every thirty five (35) linear feet, along with planting beds in between the trees containing assorted shrubs or one (1) small to medium deciduous tree (1.5" caliper minimum) shall be provided every twenty (20) linear feet, along with planting beds in between the trees containing assorted shrubs or one (1) large coniferous tree (6' minimum), stagger planted shall be provided every fifteen (15) linear feet. In addition to the required trees and shrubs, a six (6) foot high opaque fence (stockade or equal) should be provided. All fencing shall be in conformance with Section 310-26.1, Fences, of the Zoning Ordinance.

While the width of the buffer along the southern side of the site understandably varies due to various site layout needs, the composition of the buffer is lacking. No trees or shrubs are shown along the parking spaces. They must, however, be provided. Along the drive thru lanes, no shrubs are proposed, and only a few trees have been provided but not at the recommended spacing or correct tree type. The applicant shall revise the landscaping plan to include one large deciduous tree planted every 40' or one small to medium deciduous tree planted every 20' or one large coniferous tree planted every 20' along the southern site boundary to adequately buffer the residentially zoned areas.

The applicant has proposed a six-foot board on board fence along a portion of the southern and eastern side of the site to screen the proposed restaurant from the church and neighboring parcels located to the east.

In order to plant the required trees in the landscaped areas, it may require relocation/shifting of the water and storm sewer lines. The water line can be easily shifted/rotated to the north to provide space for trees along the parking spaces and the catch basins can be shifted slightly to push the alignment of the storm sewer main away from the center of the planting areas.

Finally, when developing the revised landscaping plan, the applicant should keep in mind species diversity. No one tree species may take up more than fifteen percent of the total amount of plantings. If desired by the applicant, Planning staff can provide a list of tree species that will be drought resistant and low maintenance in order to increase survivability in these areas.

Comprehensive Plan: The City's adopted Comprehensive Plan recommends the future land use character area of this area as Urban Mixed Use/Downtown Transition. The plan describes the Urban Mixed-Use land use area as follows:

"The Urban Mixed-Use areas are historic areas generally located between the Central Business District (CBD) and residential neighborhoods where land use transitions from intense urban business to lesser intense residential and compatible non-residential uses. These transitional areas begin to have obvious changes in building types, architectural styles, lot sizes, and pedestrian activity. Buildings are generally lower in height and parking may be onsite, preferably behind or at the side of the building to avoid a suburban look. Buildings are designed to be visually appealing with shorter setbacks to address the sidewalk and help reinforce a positive pedestrian experience."

Regarding consistency with the planned future land use character area, a restaurant is one of the uses envisioned for this district, as it fits well between the downtown and residential districts. While the applicant was required to obtain an area variance to reduce the front yard setback, shorter setbacks are mentioned in the description of this character area as a means of creating a pedestrian-oriented quality for those walking between downtown and the residential areas. This proposal is in harmony with the Comprehensive Plan.

Hydrology: The Engineering Department has reviewed the engineering report and agrees that the post-developed flows from the construction of the project will not increase the stormwater volume or redirect existing flows to adjacent properties. The disturbed area is less than one acre, therefore a SWPPP is not required for the development.

Lighting: The photometric plan submitted shows a significant amount of light spillage onto the church property to the rear. This light spillage is the result of a flood light on an existing utility pole at the rear of the site, directing light to the church parking lot. The applicant is proposing to remove this pole as part of the project. The applicant will work with the church to replace the light in order to provide lighting for their parking lot.

The applicant will be removing all other existing site lighting and replacing with new LED fixtures. There is an existing streetlight in the ROW of State Street that will need to be relocated as it conflicts with the proposed site access. The streetlights are owned by National Grid. The applicant must coordinate with and obtain permission from National Grid for the proposed street light relocation.

SEQR: The City Council has already issued a Negative Declaration pursuant to SEQRA. The Council adopted a resolution on December 5, 2022, finding that changing the approved zoning classification of a portion of 528 and 540 State Street from Residence C to Commercial and the construction of the site plan will not have a significant impact on the environment. The Council considered the "whole action" of the proposed development, including the granting of Site Plan Approval, when it reached this determination.

Other: As required in the site plan application, the applicant has shown a proposed concrete snow storage area on the site, located at the southern most section of the property, below the drive-thru order points. The size of the concrete snow storage area is somewhat excessive, measuring approximately 30' x 60'. The applicant should reduce the size of the snow storage area by 10' on the west, south and east sides to provide a larger landscaped buffer more suitable for the long-term survival of the plant material placed there and to reduce the amount of impervious area on the site.

Permits: The applicant must obtain the following permits and other documentation, minimally, prior to demolition and construction: Demolition Permit, Building Permit, General City Permit (for work within the right-of-way), Sanitary Sewer Connection Permit, Water Supply Permit, and a Zoning Compliance Certificate.

Summary: The following should be discussed by the Planning Board and included as contingencies in the motion to recommend approval of the site plan:

1. The applicant shall combine the lots prior to the issuance of a building permit by way of a new metes and bounds description that is filed with the County Clerk.

2. The applicant shall install grass areas or brick pavers in the margin where the driveway aprons are proposed for removal.

3. The applicant should discuss whether deliveries are completed outside of normal operating hours or during business hours.

4. The applicant shall revise the landscaping plan to include one large deciduous tree planted every 40' or one small to medium deciduous tree planted every twenty feet with planting beds in between the trees in the areas along the street rights-of-way.

5. The applicant shall revise the landscaping plan to include one large deciduous tree planted every 40' or one small to medium deciduous tree planted every 20' or one large coniferous tree planted every 20' along the eastern property line and along the southern site boundary to adequately buffer the residentially zoned areas

6. The applicant must coordinate with and obtain permission from National Grid for the proposed street light relocation.

7. The applicant should reduce the size of the snow storage area by 10' on the west, south and east sides to provide a larger landscaped buffer more suitable for the long-term survival of the plant material placed there and to reduce the amount of impervious area on the site.

8. The applicant must obtain the following permits, minimally, prior to demolition and construction: Demolition Permit, Building Permit, General City Permit (for work within the right-of-way), Sanitary Sewer Connection Permit, Water Supply Permit, and a Zoning Compliance Certificate.

cc: City Council Members
Michael Delaney, City Engineer
Stephanie Albright, APD Engineering
Michael McCracken, Hospitality Syracuse

APD ENGINEERING | ARCHITECTURE

APD Project No. 22-0408

December 19, 2022

Planning and Community Development Dept.
City of Watertown
245 Washington Street, Room 305
Watertown, NY 13601

RE: Taco Bell Watertown – Planning Board Submittal

Mr. Lumbis,

On behalf of our client Hospitality Syracuse Inc., we are pleased to present the enclosed information for your review for the proposed construction of a Taco Bell along State St and Winthrop St in the City of Watertown. Our scope of work includes demolition of an existing building and construction of a 2,700± SF Taco Bell building along with associated site improvements. The three parcels making up the proposed lot will be consolidated into one prior to construction.

Please find enclosed the following per your requirements:

1) Fifteen (15) copies of the Letter of Intent (This Letter)
2) Fifteen (15) copies of the completed and signed application form
3) Fifteen (15) copies of the Letters of Authorization from the property owners
4) Fifteen (15) copies of SEQR short form EAF
5) Fifteen (15) copies of the Engineer's Report
6) Two (2) copies of the Post-Construction Stormwater Management Plan
7) Two (2) copies of the Traffic Impact Assessment
8) Fifteen (15) copies of the following plans/sets (3 Full Sized, 12 11”x17”, unless noted otherwise)
    a) Site Development Plans
    b) Truck Turning Movements, TT1
    c) LSI Photometric Plan
    d) Building Elevation (15 sets of 11x17)
    e) Building Floor Plan (15 sets of 11x17)
    f) Dumpster Enclosure detail (15 sets of 11x17)
9) One flash drive containing submittal material
10) One (1) $150 check

Should you have any questions, comments, or need additional information, please feel free to contact me at 585-742-0204 or salbright@apd.com.

Sincerely,

Stephanie Albright

Stephanie Albright, P.E.
Senior Civil Engineer

cc: M. McCracken (Hospitality Syracuse Inc)

Headquarters
615 Fishers Run, Victor, NY 14564
phone 585.742.2222 • fax 585.924.4914
web www.apd.com • email info@apd.com

Office Locations
P.O. Box 11626, Santa Ana, CA 92711 • phone/fax 714.987.1380

October 10, 2022

City of Watertown
245 Washington St
Watertown NY 13601

RE: Letter of Authorization – 514 & 528 State St

To Whom it may concern,

This letter serves as formal authorization for APD Engineering and Architecture, Fairlane Drive LLC, and/or Hospitality Syracuse Inc and its agents or employees to submit on my behalf and represent me on matters relating to applications to the City of Watertown for the building, planning, and zoning requests associated with the proposed Taco Bell Development.

Tax Map #12-03-126 and 12-03-127

Sincerely,

Jon Lennox
Property Owner

October 11, 2022

City of Watertown
245 Washington St
Watertown NY 13601

RE: Letter of Authorization – 540 State St

To Whom it may concern,

This letter serves as formal authorization for APD Engineering and Architecture, Fairlane Drive LLC, and/or Hospitality Syracuse Inc and its agents or employees to submit on my behalf and represent North Drive In Theater Corp on matters relating to applications to the City of Watertown for the building, planning, and zoning requests associated with the proposed Taco Bell Development.

Tax Map #12-03-128

Sincerely,

North Drive In Theater Corp
Property Owner Alexander Papayanakos

Headquarters
615 Fishers Run, Victor, NY 14564
phone 585.742.2222 • fax 585.924.4914
web www.apd.com • email info@apd.com

Office Locations
P.O. Box 11626, Santa Ana, CA 92711 • phone/fax 714.987.1380

City of Watertown
SITE PLAN APPROVAL APPLICATION FORM

City of Watertown, Planning and Community Development Dept.
245 Washington Street, Room 305, Watertown, NY 13601
Phone: 315-785-7741 Email: planning@watertown-ny.gov

Received:

Please Note: The Site Plan Approval Application form is for projects where the building or parking area coverage of the lot will increase by more than 2,500 square feet.

Please provide responses for all sections and submit all required materials as noted on Page 2. Failure to submit all required information by the submittal deadline may result in Staff **not** placing your request on the agenda for the upcoming Planning Board meeting.

PROPERTY INFORMATION:

PROPOSED PROJECT NAME: Taco Bell - Watertown

TAX PARCEL NUMBER: 12-03-126,12-03-127,12-03-128

PROPERTY ADDRESS: State Street; Watertown, NY 13601

ZONING DISTRICT: Commercial

APPLICANT INFORMATION:

NAME: Hospitality Syracuse Inc. c/o Mike McCracken

ADDRESS: 290 Elwood Davis Road; Liverpool, NY 13088

PHONE NUMBER: (315) 451-1957

E-MAIL ADDRESS: mikem@hrgweb.com

PROPERTY OWNER INFORMATION (if different from applicant):

NAME: Jon Lennox (514 and 528 State St), North Drive-In Theater Corp (540 State St)

ADDRESS: Jon Lennox: 555 State St, Watertown NY 13601

North Drive In: PO Box 203 Watertown NY 13601

PHONE NUMBER:

E-MAIL ADDRESS:

ENGINEER/ARCHITECT/LANDSCAPE ARCHITECT INFORMATION:

NAME: APD Engineering & Architecture c/o Stephanie Albright

ADDRESS: 615 Fishers Run; Victor, NY 14564

PHONE NUMBER: (585) 742-0204

E-MAIL ADDRESS: salbright@apd.com

REQUIRED MATERIALS:

** The following drawings with the listed information **ARE REQUIRED, NOT OPTIONAL.** If the required information is not included and/or addressed, Planning Staff **will not** process the Site Plan Application**.**

All of the following drawings **must** be adequately dimensioned, including radii and must use darker line work and text for proposed features than for existing features.

☑ **COVER LETTER:** Must clearly and fully explain the proposed project in sufficient detail.

☑ **BOUNDARY and TOPOGRAPHIC SURVEY:** Depict existing features as of the date of the Site Plan Application. A Professional Land Surveyor licensed and currently registered to practice in the State of New York must perform the survey and create the map. **At least one copy** must contain the surveyor's original PLS wet stamp and an original signature. The rest may be copies thereof. The survey drawing **must** depict and label all of the following:

- **All** existing features and utilities on and within 50 feet of the subject property
- **All** existing property lines (bearings and distances), margins, acreage, zoning, easements, right-of-ways, existing land use, reputed owner, adjacent reputed owners and tax parcel numbers
- One-foot contours are with appropriate spot elevations
- North arrow and graphic scale
- All elevations are North American Vertical Datum of 1988 (NAVD88).

☑ **DEMOLITION PLAN** (if applicable)

- Depict and label **all** existing features on and within 50 feet of the subject property and (using darker text) all items proposed for demolition.

☑ **SITE PLAN:** The drawing must clearly label all proposed features as "proposed" and use darker line work and text for all proposed features than for existing features. It must also include a reference to the coordinate system used (NYS NAD83-CF preferred). In addition, the drawing **must** depict and label all of the following:

- **All** proposed **above** ground features
- **All** proposed easements and right-of-ways
- Land use, zoning, and tax parcel number
- Proposed parking and loading spaces, including all required ADA accessible spaces
- Proposed snow storage areas
- Refuse Enclosure Area (Dumpster), if applicable. **Please note:** Section 161-19.1 of the Zoning Ordinance states, "No refuse vehicle or refuse container shall be parked or placed within 15 feet of a party line without the written consent of the adjoining owner, if the owner occupies any part of the adjoining property."
- North arrow and graphic scale

☑ **GRADING PLAN:** This drawing must depict and label **all** of the following:

- **All** proposed **below** ground features, including elevations and inverts
- **All** proposed **above** ground features, including easements and right-of-ways
- One-foot existing contours (shown dashed and labeled with appropriate spot elevations)
- One-foot proposed contours (shown and labeled with appropriate spot elevations)
- Sediment and Erosion control, unless separate drawings are included as part of a Stormwater Pollution Prevention Plan (SWPPP).
- All elevations are North American Vertical Datum of 1988 (NAVD88).

☑ **UTILITY PLAN:** This drawing must include a note stating, "All water main and service work must be coordinated with the City of Watertown Water Department. The Water Department requirements supersede all other plans and specifications provided." It must also depict and label **all** of the following:

- **All** proposed above and below ground features
- **All** existing above and belowground utilities, including water, sanitary water, stormwater, electric, gas, telephone, cable, fiber optic, etc.
- **All** existing and proposed easements and right-of-ways.

☑ **LANDSCAPING PLAN:** This drawing must depict and label **all** of the following:

- **All** proposed **above** ground features
- **All** proposed trees, shrubs, other plantings and other proposed landscaping additions, keyed to a plant schedule that includes the scientific name, common name, size, quantity, etc. **Please note:** For additional landscaping requirements where nonresidential districts and land uses abut land in any residential district, please refer to Section 310-59, Landscaping of the City's Zoning Ordinance.
- **The Site Plan complies with and meets acceptable guidelines set forth in Appendix A - Landscaping and Buffer Zone Guidelines (August 7, 2007).**

☑ **VEHICULAR AND PEDESTRIAN CIRCULATION PLAN**

- Depict all vehicular **and** pedestrian traffic circulation, including a delivery or refuse vehicle and a City fire truck entering and exiting the property.
- Sidewalks within the City Right-of-Way **must** meet Public-Right-of-Way (PROWAG) standards.
- **The Site Plan is consistent with and, wherever possible, incorporates principles set forth in Appendix B – City of Watertown Complete Streets Policy (January 17, 2017).**

☑ **PHOTOMETRIC PLAN** (if applicable): This drawing must depict and label **all** of the following:

- **All** proposed **above** ground features
- Photometric spot elevations or labeled photometric contours of the property. **Please note:** Light spillage across **all** property lines shall not exceed 0.5 foot-candles.

☑ **CONSTRUCTION DETAILS and NOTES:**

- Provide all details and notes necessary to complete the project including, but not limited to, landscaping, curbing, catch basins, manholes, water line, pavement, sidewalks, trench, lighting, trash enclosure, etc.
- Provide maintenance and protection and traffic plans and notes for all required work within City streets including driveways, water laterals, sanitary laterals, storm connections, etc.
- The drawings must include the following note: "All work to be performed within the City of Watertown margin will require sign-off from a Professional Engineer, licensed and currently registered to practice in the State of New York, that the work was built according to the approved site plan and applicable City of Watertown standards. Compaction testing will be required for all work to be performed within the City of Watertown margin and must be submitted to the City of Watertown Codes Department."

☑ **PRELIMINARY ARCHITECTUAL PLANS** (if applicable): These plans must include **all** of the following for proposed buildings: Floor plan drawings, including finished floor elevations, exterior elevations including exterior materials and colors, as well as roof outlines depicting shape, slope and direction.

☑ **ENGINEERING REPORT**

**** The engineering report at a minimum must include the following:**

- Project location and description
- Existing and proposed sanitary sewer flows and summary
- Water flows and pressure
- Storm Water Pre and Post Construction calculations and summary
- Traffic impacts
- Lighting summary
- Landscaping summary

☑ **COMPLETED SEQR ENVIRONMENTAL ASSESSMENT FORM:** (Contact us if you need help choosing between the Short EAF and the Full EAF). The Complete EAF is available online at: http://www.dec.ny.gov/permits/6191.html

☑ GENERAL INFORMATION

- **All** items must include a valid stamp and an original signature by a Professional Engineer, Architect, Landscape Architect, or Surveyor licensed and currently registered to practice in the State of New York.

- If required, submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the City of Watertown Engineering Department for review to obtain an MS4 SWPPP Acceptance Form.

  Post Construction SWPPP Requirements to Complete:
  In accordance with City Code Section 260, provide the following:
  - *Submit a detailed as-built topographic and boundary survey of the site with all stormwater practices.*
  - *Perform and submit results of insitu infiltration testing, updated drainage area maps and hydraulic calculations in a comprehensive Engineering Report based on As-Built Conditions.*
  - *Submit a detailed post construction Maintenance Plan for all Stormwater Management Practices (SMP's) and provide a Maintenance Agreement with irrevocable letter of credit for approval. Maintenance Agreement shall be filed at the County Clerk's Office as a deed restriction on the property.*

- ****** If required, a copy of all submittals sent to the New York State Department of Environmental Conservation (NYSDEC) for the sanitary sewer extension permit will also be sent to the City of Watertown Engineering Department.

- ****** If required, a copy of all submittals sent to the New York State Department of Health (NYSDOH) will also be sent to the City of Watertown Engineering Department.

- ****** When NYSDEC or NYSDOH permitting is required, the property owner/applicant shall retain a licensed Professional Engineer to perform inspections of the proposed utility work and to certify the completed works were constructed in substantial conformance with the approved plans and specifications.**

- Signage is not approved as part of this submission. It requires a Sign Permit from the City Code Enforcement Bureau. See Section 310-52.2 of the Zoning Ordinance.

- For non-residential uses, the applicant must include the proposed Hours of Operation.

OPTIONAL MATERIALS:

☐ **PROVIDE AN ELECTRONIC (.DWG) COPY OF THE SITE PLAN WITH AS-BUILT REVISIONS.** This will assist the City in keeping our GIS mapping up-to-date.

SUBMITTAL INSTRUCTIONS:

☑ Submit 15 complete collated sets of all required materials, addressed to:

Michael A. Lumbis, Planning and Community Development Director
City of Watertown
245 Washington Street, Room 305
Watertown, NY 13601

If the application requires Jefferson County Planning Board review, then the applicant must submit 16 "sets." Planning Staff will inform the applicant if this is necessary.

☑ Submissions must be collated and properly folded.

☑ If the applicant is not the property owner, the submission must include a signature authorization form or letter signed by the owner authorizing the applicant to apply on behalf of the owner.

☑ For any item(s) not checked in the Site Plan Approval Checklist, attach an explanation and comments.

☑ Provide an electronic copy of the entire submission in the form of a single, combined PDF file of the entire application, including cover letter, plans, reports, and all submitted material.

☑ Submit the required Application Fee

$150 for Site Plan Minor

$250 for Site Plan Major (any proposal to disturb more than 1 acre represents a Site Plan Major)

SIGNATURE

I certify that the information provided above is true to the best of my knowledge.

Applicant's name (please print) Mike McCracken

Applicant's Signature DocuSigned by: DF2A2E8CBC134F1... Date: 12/15/2022

Meeting Information: The Planning Board normally meets at 3:00 p.m. on the first Tuesday of every month in Council Chambers at City Hall, 245 Washington Street. The application deadline is 14 days prior to the scheduled meeting date. Planning Board action does not represent final approval, as the Planning Board only votes to make a recommendation to City Council, which holds the sole authority to grant Site Plan Approval.

Occasionally, due to holidays or other reasons, meetings may occur on other dates and/or times. The City will announce any changes to meeting dates in advance on its website at www.watertown-ny.gov. Planning Staff *strongly* recommends scheduling a pre-application meeting prior to submitting a Site Plan Application. The entire site plan application process typically takes four-to-six weeks, depending on whether the application requires Jefferson County Planning Board review.

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:

Taco Bell - State St Watertown

Project Location (describe, and attach a location map):

514, 528, 540 State St Watertown NY 13601

Brief Description of Proposed Action:

This project proposed to demolish the existing Trailways building and associated appurtenance to construct a +/- 2,600 SF Taco Bell building and associated parking lot, utilities, landscaping, etc. The project includes the rezoning of four parcels from Residence C to Commercial.

Name of Applicant or Sponsor:	Telephone: 315-451-1957
Hospitality Syracuse, Inc.	E-Mail: mikem@hrgweb.com

Address:

290 Elwood Davis Road, Suite 320

City/PO:	State:	Zip Code:
Liverpool	NY	13088

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: City Council - Rezoning and Site Plan Approval, ZBA - Variances (potential), City - Lot consolidation, DOH - Backflow approval	☐	☑

3. a. Total acreage of the site of the proposed action? +/- 0.9 acres
   b. Total acreage to be physically disturbed? +/- 0.9 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? +/- 0.9 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☑ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☑

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____ _____	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ _____	☐	☑

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☐	☑

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☑	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes, a. Will storm water discharges flow to adjacent properties?	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Storm will flow to City storm sewer system within State St.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: Former spills identified on the 540 State St parcel. Applicant is currently obtaining a Phase I and Phase II ESA to determine the extent of potential environmental impacts.	☐	☑

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

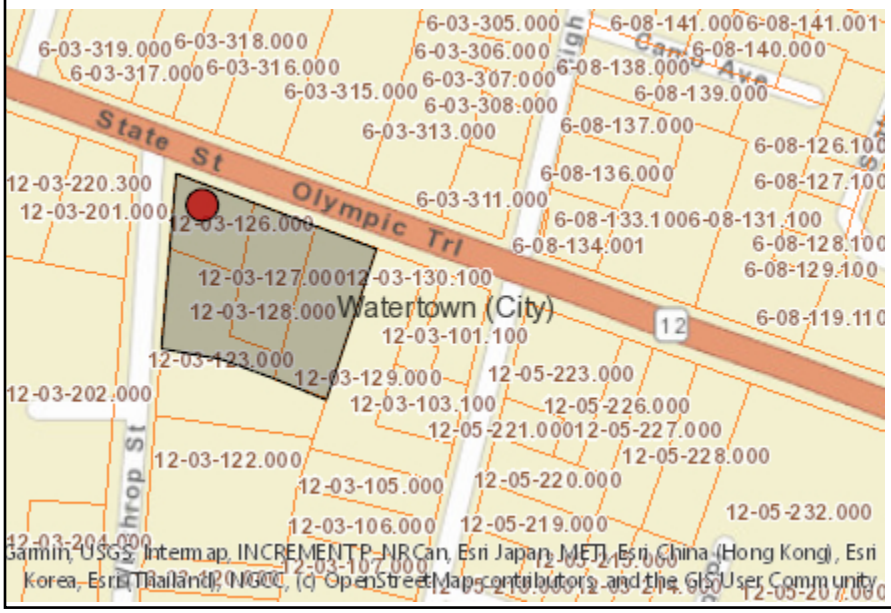
Applicant/sponsor/name: Mike McCracken Date: 11/1/2022

Signature: DocuSigned by: DF2A2F8CBC134F1... Title: Director of Development

PRINT FORM

EAF Mapper Summary Report

Tuesday, October 11, 2022 1:49 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Long-eared Bat
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	Yes

SITE DEVELOPMENT PLANS

FOR

TACO BELL - CITY OF WATERTOWN, NY

STATE STREET
WATERTOWN, NY 13601

ABBREVIATIONS:

ARCH	-ARCHITECT
BC	-BOTTOM OF CURB/EDGE OF PAVEMENT
BW	-BOTTOM OF WALL
CATV	-CABLE TELEVISION
CB	-CATCH BASIN
CM	-CONSTRUCTION MANAGER
CPP	-CORRUGATED POLYETHYLENE PIPE (SMOOTHED LINE)
DIA	-DIAMETER
DIP	-DUCTILE IRON PIPE
DWY	-DRIVEWAY
DYSL	-DOUBLE YELLOW SOLID LINE (4" WIDE EACH UNLESS OTHERWISE NOTED)
ELEV	-ELEVATION
EOP	-EDGE OF PAVEMENT
EOW	-ENGINEER OF WORK
FC	-FLUSH CURB
FO	-FIBER OPTICS
FES	-FLARED END SECTION
F.F.	-FINISH FLOOR
FFE	-FINISH FLOOR ELEVATION
FG	-FINISH GRADE
FH	-FIRE HYDRANT
FS	-FINISH SERVICE
FT	-FEET
INV	-INVERT
IE	-INVERT ELEVATION
G	-GAS
G.C.	-GENERAL CONTRACTOR
GE	-GROUND ELEVATION
HDPE	-HIGH DENSITY POLYETHYLENE PIPE
HP	-HIGH POINT
L	-LENGTH
LF	-LINEAR FEET
LB	-POUNDS
MAX	-MAXIMUM
MIN	-MINIMUM
No.	-NUMBER
N.T.S.	-NOT TO SCALE
O.C.	-ON CENTER
OH	-OVERHEAD ELECTRIC
OHE	-OVERHEAD ELECTRIC
PDC	-PROTECT DURING CONSTRUCTION
P.C.	-PORTLAND CEMENT
P.S.I.	-POUNDS PER SQUARE INCH
PVC	-POLYVINYL CHLORIDE
PVT	-PRIVATE
RTE	-ROUTE
R&R	-REMOVE AND REPLACE
S	-SLOPE
SQ. FT.	-SQUARE FEET
SQ. YD.	-SQUARE YARD
SF	-SQUARE FEET
SYSL	-SINGLE YELLOW SOLID LINE (4" WIDE UNLESS OTHERWISE NOTED)
T	-TELEPHONE
TB	-THRUST BLOCK
TC	-TOP OF CURB
TF	-TOP OF FOOTING
TG	-TOP OF GRATE
TW	-TOP OF WALL
TYP	-TYPICAL
W	-WATER
W/	-WITH
W/L	-WATERLINE

LOCATION SKETCH
N.T.S.

DRAWING LIST:

CS	Cover Sheet
SV	Survey
C1	Demolition Plan
C2	Site Plan
C3	Grading & Drainage Plan
C4	Utility Plan
C5	Planting & Lighting Plan
C6	Details Sheet
C7	Details Sheet
C8	Details Sheet
C9	Specifications

NOTES:
1. REFER TO LSI PLAN FOR LIGHTING PHOTOMETRICS.

CLIENT:

HOSPITALITY SYRACUSE, INC.
290 ELWOOD DAVIS ROAD - SUITE 320
LIVERPOOL, NY 13088
(315) 451-1957
CONTACT: MIKE MCCRACKEN

ENGINEER:

APD ENGINEERING & ARCHITECTURE
615 FISHERS RUN
VICTOR, NY 14564
(585) 742-0204
CONTACT: STEPHANIE ALBRIGHT, P.E.

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

AGENCY & MUNICIPALITY CONTACTS:

CITY OF WATERTOWN PLANNING AND ZONING

JEN VOSS
SENIOR PLANNER
245 WASHINGTON STREET
WATERTOWN, NY 13601
(315) 785-7724
JVOSS@WATERTOWN-NY.GOV

MIKE LUMBIS
PLANNING & COMMUNITY DEVELOPMENT DIRECTOR
245 WASHINGTON STREET
WATERTOWN, NY 13601
(315) 785-7741
MLUMBIS@WATERTOWN-NY.GOV

MIKE DELANEY
CITY ENGINEER
245 WASHINGTON STREET
WATERTOWN, NY 13601
(315) 785-7740
MDELANEY@WATERTOWN-NY.GOV

UTILITY CONTACTS:

ELECTRIC SERVICE: NATIONAL GRID
ADDRESS:
PHONE:
CONTACT: TBD

GAS SERVICE: NATIONAL GRID
ADDRESS:
PHONE:
CONTACT: TBD

WATER SERVICE: DPW
ADDRESS: 245 WASHINGTON STREET ROOM 202
WATERTOWN, NY 13601
PHONE: (315) 787-7757
CONTACT: VICKY MURPHY

SANITARY SEWER SERVICE: DPW
ADDRESS: 245 WASHINGTON STREET
WATERTOWN, NY 13601
PHONE: (315) 785-7842
CONTACT: TBD

Issued:		Date:
A	Issued to City	12/19/22
B		
C		
D		
E		
F		
G		
H		

Revisions:		Date:
1		
2		
3		
4		
5		
6		
7		
8		

STATE OF NEW YORK · STEPHANIE L. ALBRIGHT · 087051 · LICENSED PROFESSIONAL ENGINEER
Seal Seal

FOR APPROVAL ONLY/NOT FOR CONSTRUCTION

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

APD ENGINEERING ARCHITECTURE
615 Fishers Run Victor, NY 14564
585.742.2222 - www.apd.com

Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

Taco Bell - Watertown NY

State St

Watertown, NY 13601

Jefferson County, NY

Project Name & Location:

Cover Sheet

Drawing Name:

Date:	10/12/22	Project No. 22-0408
Type:	LG 50	
Drawn By:	SLA	CS
Scale:	N.T.S.	Drawing No.

CATCH BASINS:

Catch Basin #1
Rim Elevation = 491.74
(12") NE Invert Out = 487.80

Catch Basin #2
Rim Elevation = 491.01
(12") W Invert Out = 488.20

Catch Basin #3
Rim Elevation = 491.38
(12") NE Invert Out = 488.70

Catch Basin #4
Rim Elevation = 492.40
(12") SE Invert Out = 488.70

Catch Basin #5
Rim Elevation = 492.72
(12") NE Invert Out = 488.15

Catch Basin #6
Rim Elevation = 495.08
(6") Vert. Clay Pipe = 493.75

STORM MANHOLES:

Storm Manhole #1
Rim Elevation = 493.00
(12") S Invert In = 487.75
(15") N Invert Out = 485.15

Storm Manhole #2
Rim Elevation = 491.28
(12") SW Invert In = 487.05
(12") E Invert In = 485.90
(15") S Invert In = 484.85
(15") N Invert Out = 484.85

Storm Manhole #3
Rim Elevation = 491.03
(12") NW Invert In = 484.90
(15") S Invert In = 484.75
(24") SE Invert In = 484.80
(30") NW Invert Out = 483.75

Storm Manhole #4
Rim Elevation = 492.80
(12") NW Invert In = 488.50
(12") S Invert In = 488.30
(24") SE Invert In = 485.60
(24") NW Invert Out = 485.60

SANITARY MANHOLES:

Sanitary Manhole #1
Rim Elevation = 492.28
(8") S Invert In = 486.60
(8") N Invert Out = 484.80

Sanitary Manhole #2
Rim Elevation = 490.90
(8") S Invert In = 483.50
(12") E Invert In = 483.00
(12") W Invert Out = 482.10

Sanitary Manhole #3
Rim Elevation = 493.35
(12") SE Invert In = 484.75
(12") NW Invert Out = 484.75

LIGHT POLES:

Light Pole #1
Conc. Base = 494.34
Top Of Pole = 509.70

Utility/Light Pole #2
Base (Grade) = 495.65
Top Of Pole = 524.35

Light Pole #3 (Wood)
Base (Grade) = 495.23
Top Of Pole = 519.80

Light Pole #4
Base (Grade) = 492.97
Top Of Pole = 508.30

Light Pole #5
Base (Grade) = 493.80
Top Of Pole = 509.15

DEED REFERENCES:

D.R. #1
Aline C. J. Ellis Taylor
to
Jon Lennox
Warranty Deed - Dated: May 17, 1976
Liber 872 of Deeds / Page 861
Tax Parcel 12-03-126.000
(514 State Street)

D.R. #2
Calvin E. Lennox
to
Jon C. Lennox
Warranty Deed - Dated: December 29, 1975
Liber 870 of Deeds / Page 298
Tax Parcel 12-03-127.000
(528 State Street)

D.R. #3
Shell Oil Company
to
North Drive-In Theatre Corporation
Warranty Deed - Dated: March 18, 1970
Liber 821 of Deeds / Page 204
Tax Parcel 12-03-128.000
(540 State Street)

Subject to any easements, covenants, or restrictions of record.

MAP REFERENCES:

M.R. #1
"A Map Of Land Surveyed For Jon C. Lennox"
City of Watertown, County of Jefferson, State of New York
By Michael W. Battista, Licensed Land Surveyor, dated August 2, 9, & 16, 2014.

M.R. #2
"Location Survey On Part Of Farm Lot No. 8 - Known As No. 540 State Street"
City of Watertown, County of Jefferson, State of New York
By Lehr Land Surveyors, dated November 2, 2022 (uncertified).

SIGNS:

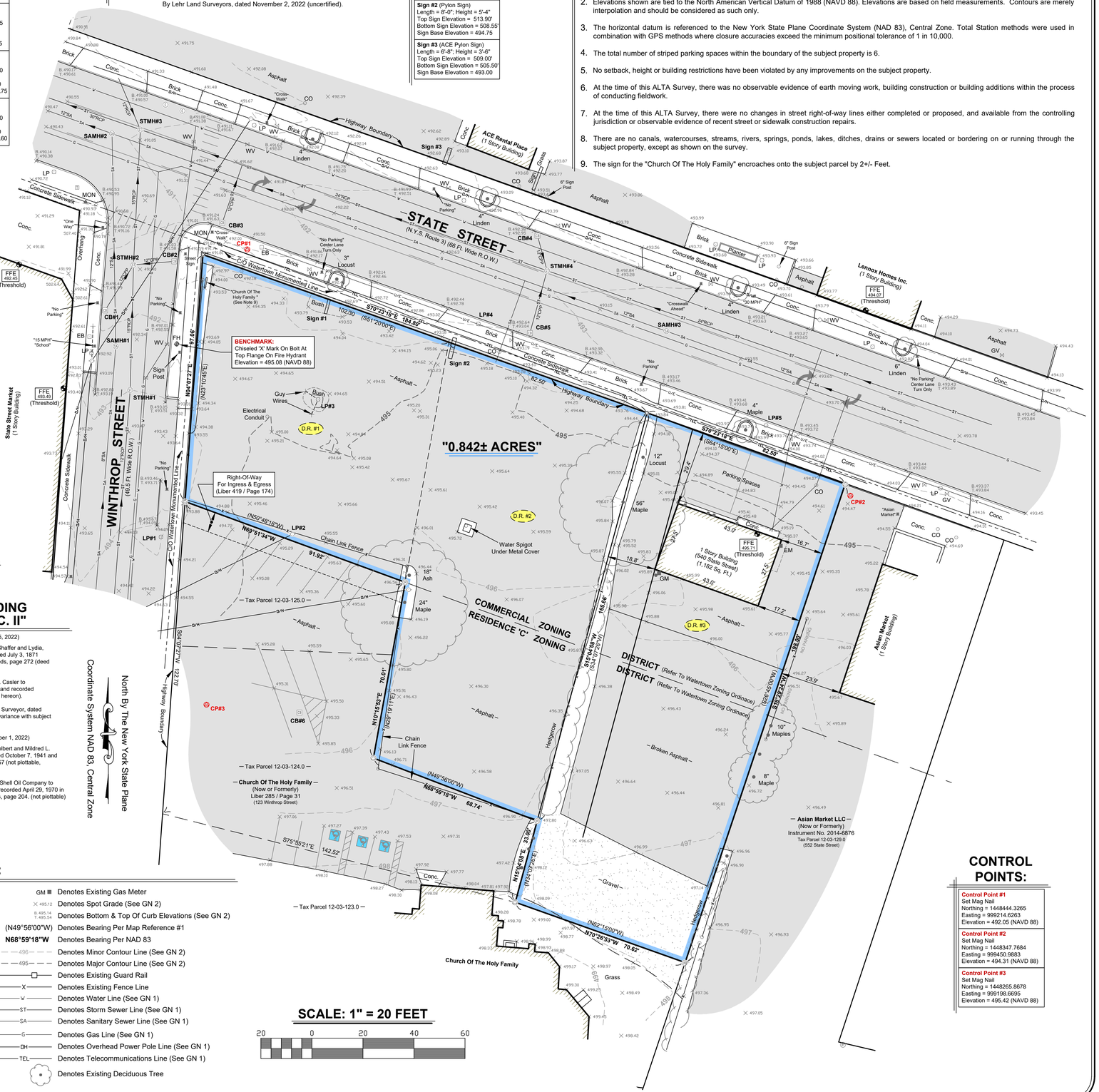
Sign #1 (Pylon Sign)
Length = 6'-0"; Height = 4'-0"
Top Sign Elevation = 510.50'
Bottom Sign Elevation = 506.50'
Sign Base Elevation = 493.75

Sign #2 (Pylon Sign)
Length = 8'-0"; Height = 5'-4"
Top Sign Elevation = 513.90'
Bottom Sign Elevation = 508.55'
Sign Base Elevation = 494.75

Sign #3 (ACE Pylon Sign)
Length = 6'-8"; Height = 3'-6"
Top Sign Elevation = 509.00'
Bottom Sign Elevation = 505.50'
Sign Base Elevation = 493.00

GENERAL NOTES:

1. The subsurface utilities are depicted at "Quality Level C" as defined in ASCE Standard 38-02. Quality Level C involves surveying visible above ground utility facilities and correlating this information with utility records provided to the undersigned. Therefore, locations should be considered approximate only. Utility laterals connecting to the building are shown per plan; size, martial & elevations are unknown. There may be other facilities or utilities, the existence of which are not known: for this reason, UFPO shall be contacted 72 hours prior to any underground excavation.
2. Elevations shown are tied to the North American Vertical Datum of 1988 (NAVD 88). Elevations are based on field measurements. Contours are merely interpolation and should be considered as such only.
3. The horizontal datum is referenced to the New York State Plane Coordinate System (NAD 83), Central Zone. Total Station methods were used in combination with GPS methods where closure accuracies exceed the minimum positional tolerance of 1 in 10,000.
4. The total number of striped parking spaces within the boundary of the subject property is 6.
5. No setback, height or building restrictions have been violated by any improvements on the subject property.
6. At the time of this ALTA Survey, there was no observable evidence of earth moving work, building construction or building additions within the process of conducting fieldwork.
7. At the time of this ALTA Survey, there were no changes in street right-of-way lines either completed or proposed, and available from the controlling jurisdiction or observable evidence of recent street or sidewalk construction repairs.
8. There are no canals, watercourses, streams, rivers, springs, ponds, lakes, ditches, drains or sewers located or bordering on or running through the subject property, except as shown on the survey.
9. The sign for the "Church Of The Holy Family" encroaches onto the subject parcel by 2+/- Feet.



LEGEND:

MON ▲	Denotes Existing Concrete Highway Monument
	Denotes Existing Iron Pipe
	Denotes Existing Iron Rod
	Denotes Existing Overhead Utility Pole
LP#2	Denotes Existing Light Pole
	Denotes Existing Sanitary Sewer Manhole
	Denotes Existing Storm Sewer Manhole
	Denotes Existing Square Catch Basin
EB	Denotes Existing Electric Box
	Denotes Existing Traffic Signal Box
FH	Denotes Existing Fire Hydrant
	Denotes Existing Bollard
	Denotes Existing Sign
FFE	Denotes Finish Floor Elevation
CP#1	Denotes Set Survey Control Point
	Denotes Set Bench Mark
CO	Denotes Existing Sewer Clean Out
EM	Denotes Existing Electric Meter
GM	Denotes Existing Gas Meter
495.12	Denotes Spot Grade (See GN 2)
B. 495.14 T. 495.54	Denotes Bottom & Top Of Curb Elevations (See GN 2)
(N49°56'00"W)	Denotes Bearing Per Map Reference #1
N68°59'18"W	Denotes Bearing Per NAD 83
496	Denotes Minor Contour Line (See GN 2)
495	Denotes Major Contour Line (See GN 2)
	Denotes Existing Guard Rail
X	Denotes Existing Fence Line
W	Denotes Water Line (See GN 1)
ST	Denotes Storm Sewer Line (See GN 1)
SA	Denotes Sanitary Sewer Line (See GN 1)
G	Denotes Gas Line (See GN 1)
OH	Denotes Overhead Power Pole Line (See GN 1)
TEL	Denotes Telecommunications Line (See GN 1)
	Denotes Existing Deciduous Tree

NOTES CORRESPONDING TO SCHEDULE B "SEC. II"

(Title Report No. 71222499) (Effective Date: July 25, 2022)

Item 11 — Easement contained in Warranty Deed made by Daniel Shaffer and Lydia, his wife to Henry Hareford dated July 1, 1871 and recorded July 3, 1871 in the Jefferson County Clerk's Office in Liber 189 of Deeds, page 272 (deed not found).

Item 12 — Easement contained in Warranty Deed made by Lydia G. Casler to Joseph Ellis and Rose E. Shapiro dated March 19, 1937 and recorded March 19, 1937 in Liber 419 of Deeds, page 174 (plotted hereon).

Item 13 — Survey map made by Michael W. Battista Licensed Land Surveyor, dated August 16, 2014, discloses: a. Vacant land; b. Fence at variance with subject property line.

(Title Report No. 71231443) (Effective Date: November 1, 2022)

Item 11 — Agreement made by Alfred M. Burdick and George M. Tolbert and Mildred L. Tolbert to and with Shell Oil Company, Incorporated dated October 7, 1941 and recorded October 29, 1941 in Liber 437 of Deeds, page 57 (not plottable, terminated per third paragraph in said deed).

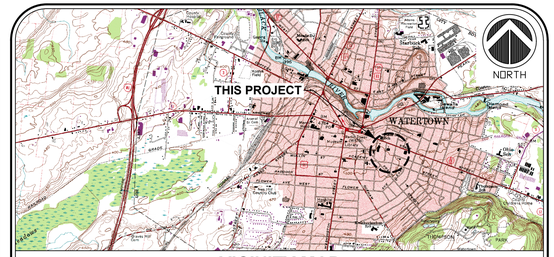
Item 12 — Easement contained in Limited Warranty Deed made by Shell Oil Company to North Drive-In Theatre Corp. dated March 18, 1970 and recorded April 29, 1970 in the Jefferson County Clerk's Office in Liber 821 of Deeds, page 204. (not plottable)

CONTROL POINTS:

Control Point #1
Set Mag Nail
Northing = 1448444.3265
Easting = 999214.6263
Elevation = 492.05 (NAVD 88)

Control Point #2
Set Mag Nail
Northing = 1448347.7684
Easting = 999450.9883
Elevation = 494.31 (NAVD 88)

Control Point #3
Set Mag Nail
Northing = 1448265.8678
Easting = 999198.6695
Elevation = 495.42 (NAVD 88)



VICINITY MAP

NOT TO SCALE

RECORD DESCRIPTIONS:

Tax Parcel 12-03-126.000
THAT TRACT OR PARCEL OF LAND situate in the City of Watertown, County of Jefferson and State of New York, and bounded as follows, viz: Commencing at a stake in the S. margin of State Street (3 rods in an easterly direction from the N.E. corner of the "Park") the N.W. corner of Winthrop Street; running thence S. 12 1/2° W, along the east margin of Winthrop Street 2 chs. 32 97/100 lks. to the N.W. corner of Henry Hareford lot; thence S. 76 1/4° E. along said Hareford north line 1 ch. 31 1/2 lks. to the land of the late Juda Lord; thence N.18 1/2° E. along said Lord's west line 1 ch, 90 2/3 lks. to the margin of State Street; thence N. 62 1/4° W. along the margin of State Street 1 ch, 55 lks, to the place of beginning. EXCEPTING and RESERVING from the foregoing premises all the land lying southerly of a line defined by the southerly margin of a concrete walk running easterly and westerly along the southerly side of a brick building known as the Winthrop Apartments; said line being further described as passing through a point in the easterly margin of the concrete sidewalk on the easterly side of Winthrop Street 98.2 ' feet southerly of the intersection of the inside edges of the sidewalk on State and Winthrop Streets and also being 95.65 feet from the southerly edge of the sidewalk on the southerly side of State Street; said 95.65 feet being measured along the westerly line of a lot formerlyowned by Judah Lord and located easterly of the premises herein described.

Tax Parcel 12-03-127.000
ALSO, ALL THAT TRACT OR PARCEL OF LAND situate in the City of Watertown, County of Jefferson and State of New York, bounded and described as follows: COMMENCING at a point in the south margin of State Street in said City of Water town, 1 chain 55 links **east** from the intersection of said margin with the east- margin of Winthrop Street; running THENCE S, 18½;0 W, 3 chains 3 links; THENCE S, 64½;0 E, 1 chain; THENCE N, 22½0 E. 3 chains 1 link to the south margin of said State Street; THENCE N, 62½0 W, along said margin I chain 25 links to the place of beginning, containing 34/100 of an acre of land be the same more or less. EXCEPTING AND RESERVING from the above described lands and premises so much thereof as was conveyed by said Judah Lord and wife to Henry Hareford by deed dated Sep ember 17, 1872, and recorded in the Jefferson County Clerk's- Office on September 18, 1872, in Book 193 of Deeds at Page 311, and which was also conveyed by Mary J, DeLong and others to said Henry Hereford by Quit Claim Deed, Said premises being known as No, 528 State Street

Tax Parcel 12-03-128.000
Beginning at a point in the south margin of the State Road two (2) chains twenty-eight (28) links westerly from the intersection of said south margin with the west margin of William Street and running thence south 26 3/4 degrees west three (3) chains; thence north 62¼ degrees west one (1) chain seven (7) links to the east margin of a lot once owned and occupied by Peter Snyder; thence north 22 degrees east three (3) chains one (1) link to the south margin of the State Road; thence south 64¼ degrees east along said south margin one (1) chain twenty-five links to the place of beginning, containing 35/100 of an acre of land, being the same more or less.

PHOTOS:

ALTA/NSPS LAND TITLE SURVEY

Lands Of
Jon C. Lennox
And Also Lands Of
North Drive-In Theatre Corporation
514, 528, & 540 State Street
City of Watertown, County of Jefferson
State of New York
Surveyor's Certification

TO: Fairlane Drive LLC
TO: Stewart Title Insurance Company, its successors and/or assigns
TO: Wells Fargo Bank NA., its successors and/or assigns

The survey shown and depicted hereon is an accurate survey of the real property legally described hereon and correctly and accurately indicates and locates all buildings, structures and other improvements situated on the subject property; and that the property described hereon is the same as the property described in Title Report No. 71222499, prepared by Stewart Title Insurance Company, having an effective date of July 25, 2022, and also Title Report No. 71231443, prepared by Stewart Title Insurance Company, having an effective date of November 1, 2022, and that all easements, rights-of-way, servitude's and covenants and restrictions referenced in said commitment have been plotted hereon or otherwise noted as to their effect on the subject property; that there are no encroachments or violations of zoning restriction lines on the subject property or upon adjacent land abutting said subject property unless shown and depicted hereon. This survey is subject to the findings of a current abstract of title.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 4, 5, 7(a), 7(b)(1), 8, 9, 11(a), 12-14, 16, 17, & 19 of Table A hereof. The field work was completed on September 30, 2022.

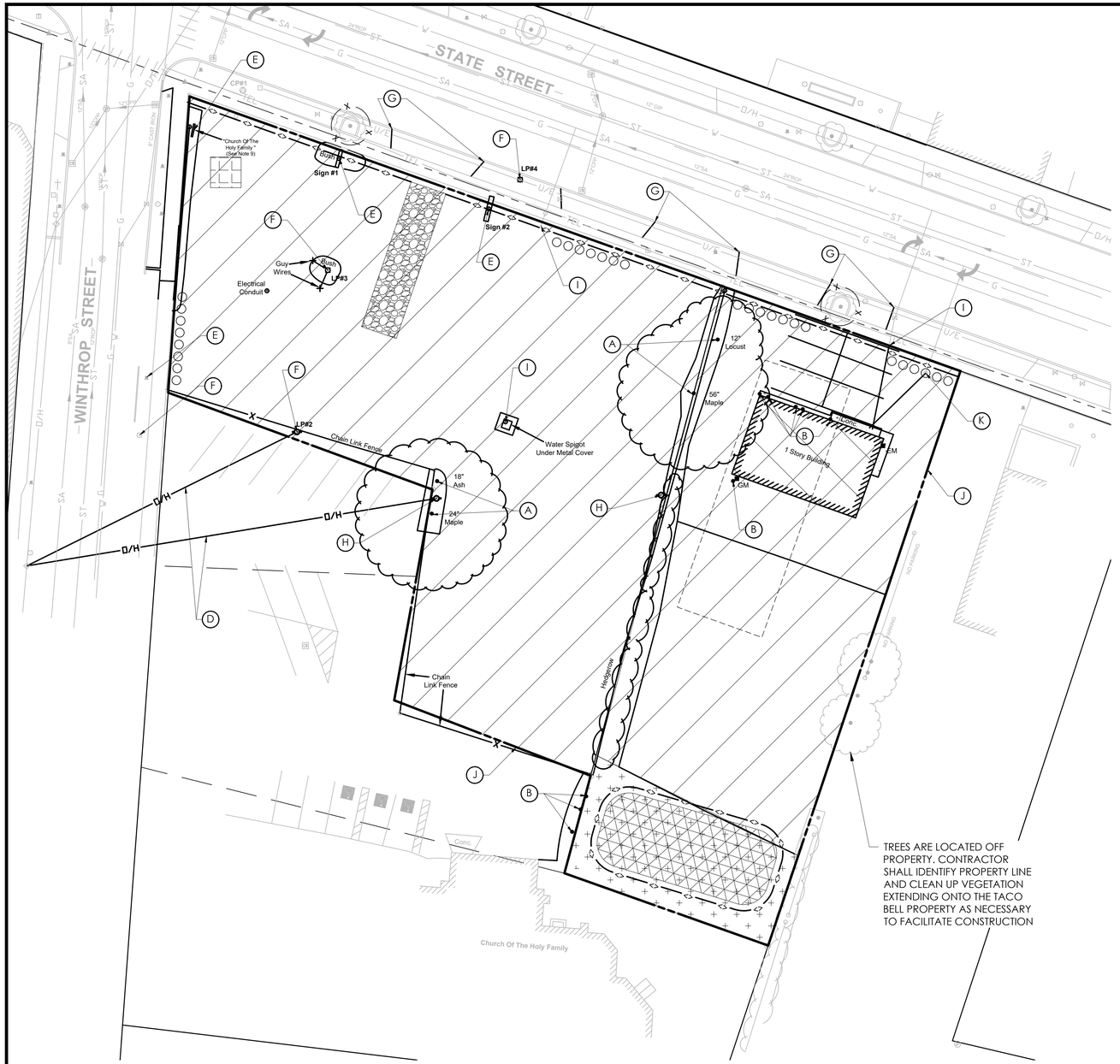
Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of section 7209, sub-division 2, of the New York State Education Law. The alteration of boundary survey maps by anyone other the the original preparer is misleading, confusing and not in the general welfare and benefit of the public.

Only boundary survey maps with the surveyor's embossed seal are genuine true and correct copies of the surveyor's original work and opinion.

Christopher E. Jacobs
Registered Land Surveyor No.050952
In The State Of New York
Date Of Survey: October 4, 2022
Date Of Last Revision:
Project Number: 2022.123.001

SHEET NO. SV, 1 of 1
FINAL SURVEY

JACOBS LAND SURVEYING
Address: 5553 West Road, Munnsville, NY
Tel/Fax: 315.495.7114
Website: www.jacobslandsurveying.com
Email: cjacobs@jacobslandsurveying.com



DEMOLITION LEGEND:

- (A) TREE TO BE REMOVED
- (B) BOLLARD TO BE REMOVED
- (C) CHAIN LINK FENCE TO BE REMOVED
- (D) OVERHEAD LINES TO BE REMOVED
- (E) SIGN TO BE REMOVED
- (F) LIGHTPOLE TO BE REMOVED/RELOCATED
- (G) CURB CUTS TO BE REMOVED AND REPLACE WITH CURB REVEAL TO MATCH EXISTING. REFER TO GRADING AND DRAINAGE PLAN FOR ADDITIONAL INFORMATION
- (H) UTILITY POLE TO BE REMOVED
- (I) ABANDON OR REMOVE UTILITY TO ROW LINE IN ACCORDANCE WITH CITY REQUIREMENTS
- (J) SAW-CUT PAVEMENT AT PROPERTY LINE
- (K) REMOVE SANITARY LATERAL TO CLEANOUT. CLEANOUT TO REMAIN

REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

NORTH

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- PROPOSED BUILDING
- SUBJECT PARCEL PROPERTY LINE
- EXISTING FEATURES/STRUCTURES TO REMAIN
- EXISTING FEATURES TO BE DEMOLISHED
- SILT DIKE
- PAVEMENT TO BE REMOVED
- BUILDING TO BE DEMOLISHED
- CONCRETE TO BE REMOVED
- GRAVEL TO BE REMOVED
- TEMPORARY CONSTRUCTION EXIT
- TEMPORARY STOCKPILE
- TRAFFIC BARRELS
- CONCRETE WASHOUT
- TREE PROTECTION

DEMOLITION NOTES:

1. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED. EROSION CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. REFER TO EROSION CONTROL PLANS FOR ADDITIONAL INFORMATION. ALL DEMOLITION WORK SHALL BE COORDINATED WITH EROSION CONTROL PLANS, INCLUDING LIMITS OF DISTURBANCE, PLACEMENT OF CONSTRUCTION FENCING, AND STABILIZED CONSTRUCTION EXIT.
2. ALL SIDEWALKS, SLABS, FOUNDATIONS, DEBRIS, AND MISCELLANEOUS DEMOLITION OF ALL ITEMS SHOWN IN CONSTRUCTION DOCUMENTS SHALL BE SPOILED OFF-SITE IN A LEGAL MANNER STUMPS AND BRUSH MAY NOT BE BURIED AND MUST BE REMOVED AND DISPOSED OF OFFSITE. PAVEMENT REMOVED WILL BE ALLOWED AS RECYCLED FILL ONLY AFTER REVIEW AND APPROVAL BY CLIENT AND GEOTECHNICAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION, TRANSPORTING, AND DISPOSAL. PROOF OF LEGAL DISPOSAL SHALL BE PROVIDED UPON CLIENT REQUEST.
3. ALL EXISTING ON-SITE UTILITIES SHALL REMAIN UNLESS DESIGNATED FOR REMOVAL OR ABANDONMENT. ALL UTILITIES EXISTING WITHIN THE PROPOSED BUILDING ENVELOPE SHALL BE REMOVED PROTECTED OR RELOCATED AS NECESSARY TO ALLOW FOR THE PROPOSED IMPROVEMENTS. PROTECT ALL EXISTING UTILITIES TO REMAIN.
4. CONTRACTOR TO REMOVE, RELOCATE AND/OR PROVIDE TEMPORARY UTILITY SERVICES, WHEN APPLICABLE. ALL EXISTING BUILDINGS, FOUNDATIONS, BASEMENTS, CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPES, POWER POLES AND GUY WIRES, WATER METERS AND WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, TANKS, VAULTS, STRUCTURES, ASPHALT, ETC., SHOWN AND NOT SHOWN, WITHIN THE CONSTRUCTION LIMITS AND WHERE NEEDED, SHALL BE REMOVED OR RELOCATED TO ALLOW FOR NEW CONSTRUCTION, AS SHOWN. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID. REFER TO THE SURVEY FOR ADDITIONAL INFORMATION. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIALS AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS. RECYCLED FILL SHALL NOT BE USED IN BUILDING PAD.
5. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES AND PROVIDE PROPER NOTIFICATION PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES, INCLUDING INSPECTION AND TESTING AND INCLUDE IN BASE BID. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, ETC. AS REQUIRED. SOME UTILITIES MAY BE CONSIDERED PRIVATE AND NOT LOCATED BY UTILITY COMPANIES. VERIFY THE LOCATIONS OF ALL LATERALS, SERVICE CONNECTIONS, LIGHTING CIRCUITS, SIGN CIRCUITS, AND OTHER UTILITIES AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
6. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED WITH LOW DENSITY CELLULAR CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 50 PSI. ALL ABANDONED PIPES WITHIN 2' OF THE FINISHED GRADE OR WITHIN THE PROPOSED BUILDING FOOTPRINT SHALL BE REMOVED. PIPES OUTSIDE OF THE PROPOSED BUILDING FOOTPRINT MAY BE REMOVED OR ABANDONED, AT CONTRACTORS DISCRETION. ALL STRUCTURES NOT BEING REUSED SHALL BE COMPLETELY REMOVED. AT MANHOLES AND STRUCTURES TO REMAIN, ABANDONED PIPES SHALL BE CUT AND PLUGGED AND THE REMAINING MANHOLE/STRUCTURE REPAIRED TO PROVIDE A SOLID, SOUND AND WATERPROOF STRUCTURE.
7. CAUTION: NOTICE TO CONTRACTOR: THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON THE LISTED REFERENCES, RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE AND THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. CONTRACTOR IS RESPONSIBLE TO VERIFY GRADES AND UTILITIES (INCLUDING INTEGRITY) SHOWN ON SURVEY PLAN PRIOR TO START OF ANY WORK. ANY AND ALL DISCREPANCIES ARE TO BE DOCUMENTED AND SUBMITTED TO THE OWNER AT THE TIME OF DISCOVERY. THIS WORK SHALL BE COMPLETED EARLY ENOUGH TO AVOID DELAYS AND ALLOW FOR REDESIGN IF REQUIRED. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS TO LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET EXISTING CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. SOME UTILITIES MAY BE CONSIDERED PRIVATE AND NOT LOCATED BY UTILITY COMPANIES. VERIFY THE LOCATIONS OF ALL LATERALS, SERVICE CONNECTIONS, LIGHTING CIRCUITS, SIGN CIRCUITS, AND OTHER UTILITIES AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. SANITARY AND STORM SEWERS SHALL BE TESTED PRIOR TO ABANDONING THEM TO VERIFY THEY ARE NO LONGER IN USE. TESTING SHALL INCLUDE FLOW TESTING, AIR TESTING, TELEVISING, AND OTHER TESTING NECESSARY TO VERIFY PIPES ARE PROPERLY DISCONNECTED. IF FLOW IS NOTED IN PIPES THE CONTRACTOR SHALL TRACK DOWN SOURCE AND VERIFY IT IS NOT AN ACTIVE UTILITY OR DRAINAGE CONNECTION.
9. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS OR AS MAY BE REQUIRED TO PROVIDE A SMOOTH, PROPERLY DRAINING, PAVEMENT SURFACE. IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR. EXISTING PAVEMENT AND CONCRETE SHALL BE SAW-CUT PRIOR TO REMOVAL.
10. MANHOLES, CATCH BASINS, CLEANOUTS, VALVE BOXES, FRAMES, COVERS AND GRATES TO REMAIN SHALL BE PROTECTED AND ADJUSTED TO FINAL GRADES, IF APPLICABLE.
11. ABANDON EXISTING UTILITIES ONLY AFTER CRITICAL NEW SYSTEMS ARE IN PLACE AND OPERATIONAL (I.E. STORM DRAINAGE, WATER, SANITARY SERVICES TO EXISTING STRUCTURES). IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR PROPER AND SAFE SEQUENCING OF ABANDONMENT OF UTILITIES.
12. FOR ALL UTILITY LINES DESIGNATED TO BE REMOVED, PLACE AND COMPACT STRUCTURAL BACKFILL WITHIN TRENCH AFTER REMOVAL. FOLLOW ANY LOCAL OR STATE REQUIREMENTS FOR ANY WORK WITHIN R.O.W.
13. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND IS RESPONSIBLE FOR ALL DEWATERING, IF REQUIRED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PERMITS AND EASEMENTS REQUIRED ABOVE AND BEYOND THOSE PREVIOUSLY OBTAINED AND PAY ANY ASSOCIATED FEES. THIS INCLUDES ANY TEMPORARY ACCESS PERMITS, CONSTRUCTION EASEMENTS, OR GRADING RELEASES.
15. REMOVE EXISTING PAVEMENT MARKINGS WHICH INTERFERE OR CONFLICT WITH THE PROPOSED STRIPING. CONDUCT GRINDING, SCRAPING, SANDBLASTING OR OTHER OPERATIONS IN SUCH A MANNER THAT THE FINISHED PAVEMENT SURFACE IS NOT DAMAGED OR LEFT IN A PATTERN THAT IS MISLEADING OR CONFUSING. USE DUST COLLECTION SYSTEM WHEN PAVEMENT PREPARATION INCLUDES GRINDING, SCRAPING OR SANDBLASTING OF EXISTING PAVEMENT MARKINGS.

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STATE OF NEW YORK · STEPHANIE L. ALBRIGHT · 087051 · LICENSED PROFESSIONAL ENGINEER

Seal

FOR APPROVAL ONLY/NOT FOR CONSTRUCTION

Seal

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

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315-451-9603

Taco Bell - Watertown NY

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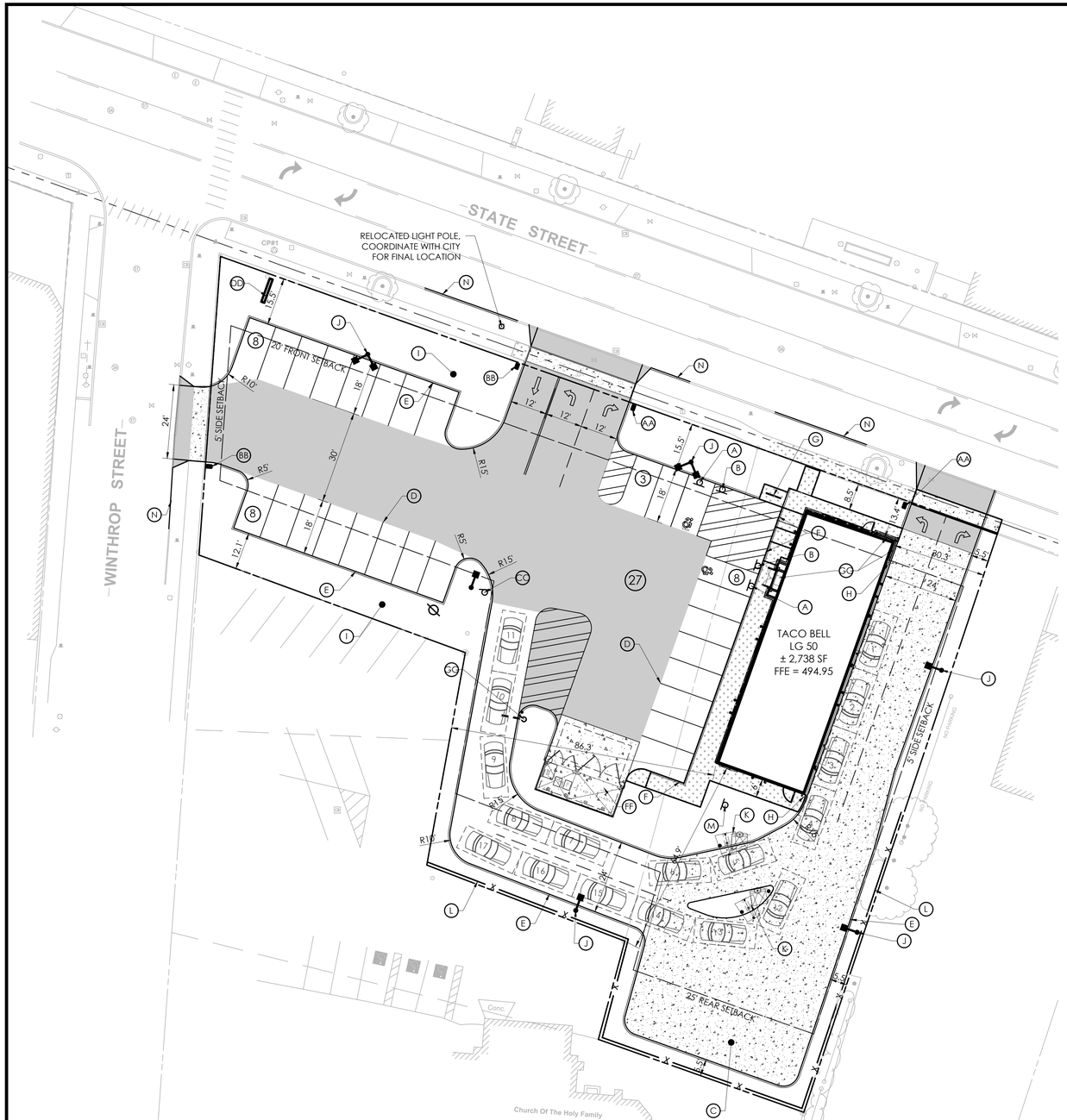
Jefferson County, NY

Project Name & Location:

Demolition Plan

Drawing Name:

		Project No.
Date:	10/12/22	22-0408
Type:	LG 50	
Drawn By:	SLA	C1
Scale:	1" = 20'	Drawing No.



SITE LEGEND:

- (A) ACCESSIBLE PARKING SIGN, POST & BOLLARD (REFER TO DETAIL)
- (B) "NO PARKING ANY TIME" SIGN, POST & BOLLARD (REFER TO DETAIL)
- (C) SNOW STORAGE AREA
- (D) SYSL/4" PARKING STALL STRIPING
- (E) CONCRETE CURB (REFER TO DETAIL)
- (F) NOT USED
- (G) BIKE RACK (REFER TO DETAIL)
- (H) BOLLARDS (REFER TO ARCH. PLAN DETAIL)
- (I) LAWN/MULCH AREA (REFER TO PLANTING PLAN FOR DELINEATION)
- (J) LIGHT POLE (REFER TO DETAIL)
- (K) MENU BOARD, CANOPY & SPEAKER BOX (REFER TO DETAIL)
- (L) 6' BOARD ON BOARD FENCE (REFER TO DETAIL)
- (M) GREASE INTERCEPTOR SIGN
- (N) HEADER CURB TO BE REPLACED WITH CURB REVEAL IN ACCORDANCE WITH CITY REQUIREMENTS, MATCH GRADE AND ALIGNMENT
- (AA) TACO BELL EXIT SIGN (PROVIDED BY SIGN VENDOR)
- (BB) TACO BELL ENTRANCE SIGN (PROVIDED BY SIGN VENDOR)
- (CC) TACO BELL DRIVE THRU SIGN (PROVIDED BY SIGN VENDOR)
- (DD) TACO BELL PYLON SIGN (PROVIDED BY SIGN VENDOR)
- (EE) CLEARANCE BAR (REFER TO DETAIL)
- (FF) CONCRETE DUMPSTER PAD AND ENCLOSURE (REFER TO ARCH. PLANS)
- (GG) TACO BELL BUILDING MOUNTED SIGNAGE (REFER TO ARCH. PLANS)

REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

NORTH

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- BACK OF CURB / FACE OF CURB — FACE OF CURB/BACK OF CURB
- SUBJECT PARCEL PROPERTY LINE
- SETBACK LINE
- PROPOSED BUILDING
- PROPOSED FENCE (REFER TO DETAIL)
- HEAVY DUTY CONCRETE (REFER TO DETAIL)
- CONCRETE SIDEWALK (REFER TO DETAIL)
- HEAVY DUTY PAVEMENT (REFER TO DETAIL)
- LIGHT POLES
- PAINTED VAN ACCESSIBLE PARKING SYMBOL (REFER TO DETAILS)
- PAINTED ACCESSIBLE PARKING SYMBOL (REFER TO DETAIL)
- PAINTED PARKING ISLAND AREA TO BE STRIPED WITH 4" SYSL @ 2' O.C. AND AT 45° TO PARKING SPACE
- PAINTED PARKING LOT DRIVE AISLE ARROWS (REFER TO DETAIL)

GENERAL NOTES:

1. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF THE CITY OF WATERTOWN AND/OR THE APPROPRIATE WATER, SEWER AND/OR DRAINAGE DISTRICTS, AND/OR OTHER AUTHORITIES HAVING JURISDICTION.
2. ALL EXISTING BUILDING(S), SITE, ROADWAY, UTILITY, BOUNDARY, AND TOPOGRAPHY INFORMATION SHOWN ON THIS PLAN IS REPRESENTED BASED ON USE OF THE LISTED REFERENCES. CONTRACTOR TO VERIFY LOCATION AND LIMITS OF WORK PRIOR TO STARTING. ANY CHANGES OR CONFLICTS DISCOVERED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVING, EXIT PORCHES, RAMPS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS. ALL PAVING, CURBING, FLATWORK, SIDEWALKS, FENCING, BOLLARDS, ETC., WHICH CONFLICT WITH NEW CONSTRUCTION ARE TO BE DEMOLISHED AND DISPOSED OF IN ACCORDANCE WITH ANY LOCAL, STATE, OR FEDERAL REGULATIONS.
4. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. CONTRACTOR SHALL MAINTAIN ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. OUTSIDE OF WORK LIMITS CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC TO AND FROM THE SITE.
5. REFER TO THE SURVEY FOR THE PROPERTY BOUNDARY INFORMATION (E.G. LOT AREA, BEARINGS, DISTANCES, ETC).
6. ANY DAMAGE TO EXISTING SIDEWALKS ON WINTHROP STREET AS A RESULT OF GENERAL CONSTRUCTION MUST BE REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER.

SITE NOTES:

1. ALL NEW PAINTED PAVEMENT MARKINGS SUCH AS DIRECTIONAL ARROWS AND LETTERING SHALL BE PAINTED USING TEMPLATES.
2. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. THE SETBACK LINES AND NOTES RELATED TO SETBACKS SHOWN HEREIN ARE INTENDED TO SHOW APPLICABLE ZONING REQUIREMENTS OF THE CITY OF WATERTOWN AS OF THE DATE OF THIS PLAN AND ARE NOT INTENDED TO IMPOSE ANY ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING REQUIREMENTS.
4. REFER TO LIGHTING PLAN, SHEET C5, FOR LIGHT POLE LOCATIONS, AND FIXTURE TYPE.
5. PYLON SIGNS SHALL BE CONSTRUCTED BY OTHERS, BUT ELECTRIC SERVICE TO THE PYLON SIGN SHALL BE INCLUDED IN THE CONTRACT.
6. EXISTING IMPERVIOUS AREA = 0.806 AC
   PROPOSED IMPERVIOUS AREA = 0.645 AC
   REDUCTION IN IMPERVIOUS AREA = 0.16 AC (20% REDUCTION)

SITE DATA:

LOCAL JURISDICTION:	**CITY OF WATERTOWN**
ZONING CLASSIFICATION:	**COMMERCIAL/RESIDENCE C - REZONED TO COMMERCIAL (NOTE 1)**
PERMITTED USES:	**RESTAURANT**
OWNER:	**3 PARCELS UNDER CONTRACT TO BE CONVEYED TO FAIRLANE DRIVE LLC**
PROPERTY ACREAGE:	**±0.84 AC (NOTE 2)**
12-03-126:	**0.21 AC**
12-03-127:	**0.28 AC**
12-03-128:	**0.35 AC**

NOTE 1: CITY PLANNING BOARD RECOMMENDED APPROVAL OF THE REZONING AT THEIR NOVEMBER 1, 2022 MEETING. CITY COUNCIL APPROVED THE REZONING AT THEIR 12/5 MEETING.

NOTE 2: THREE PARCELS WILL BE CONSOLIDATED INTO ONE PRIOR TO CONSRUCTION.

SIGNAGE

BULK REQUIREMENTS	ALLOWED	PROPOSED	VARIANCE
TOTAL SIGN SURFACE AREA	2 SF PER 1 LF OF BUILDING FRONTAGE, MAX SIGN SURFACE AREA IS 200 SF (87 LF +30 LF = 200 SF ALLOWED)	(2x27.26)+13.58 +105.6 + (5x4) = 193.7 SF	NO
DIRECTIONAL SIGN MAX AREA	4 SF	4 SF	NO
FREESTANDING SIGN AREA	NA	105.6 SF	NO
FREESTANDING SIGN MAX HEIGHT	50 FT	40 FT	NO
NUMBER OF FREESTANDING SIGNS	1	1	NO

BULK REQUIREMENTS	REQUIRED	PROPOSED	Variance Required
FRONT YARD	20 FT	13.4 FT	**YES**
REAR YARD	25 FT	64.9 FT	NO
SIDE YARD	5 FT	86.3 FT (WEST); 30.3 FT (EAST)	NO
MINIMUM LOT AREA	1,000 SF	36,700 SF	NO
FRONT YARD LANDSCAPE BUFFER	15 FT	8.5 FT	**YES**
SIDE/REAR YARD LANDSCAPE BUFFER	5 FT	5 FT MIN	NO
PARKING REQUIREMENT	5 PARKING SPACES FOR 1,000 SF 2,738 SF Proposed = 14 SPACES	25 SPACES	NO

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STATE OF NEW YORK — STEPHANIE L. ALBRIGHT — 087051 — LICENSED PROFESSIONAL ENGINEER

Seal Seal

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315-451-9603

Taco Bell - Watertown NY

State St
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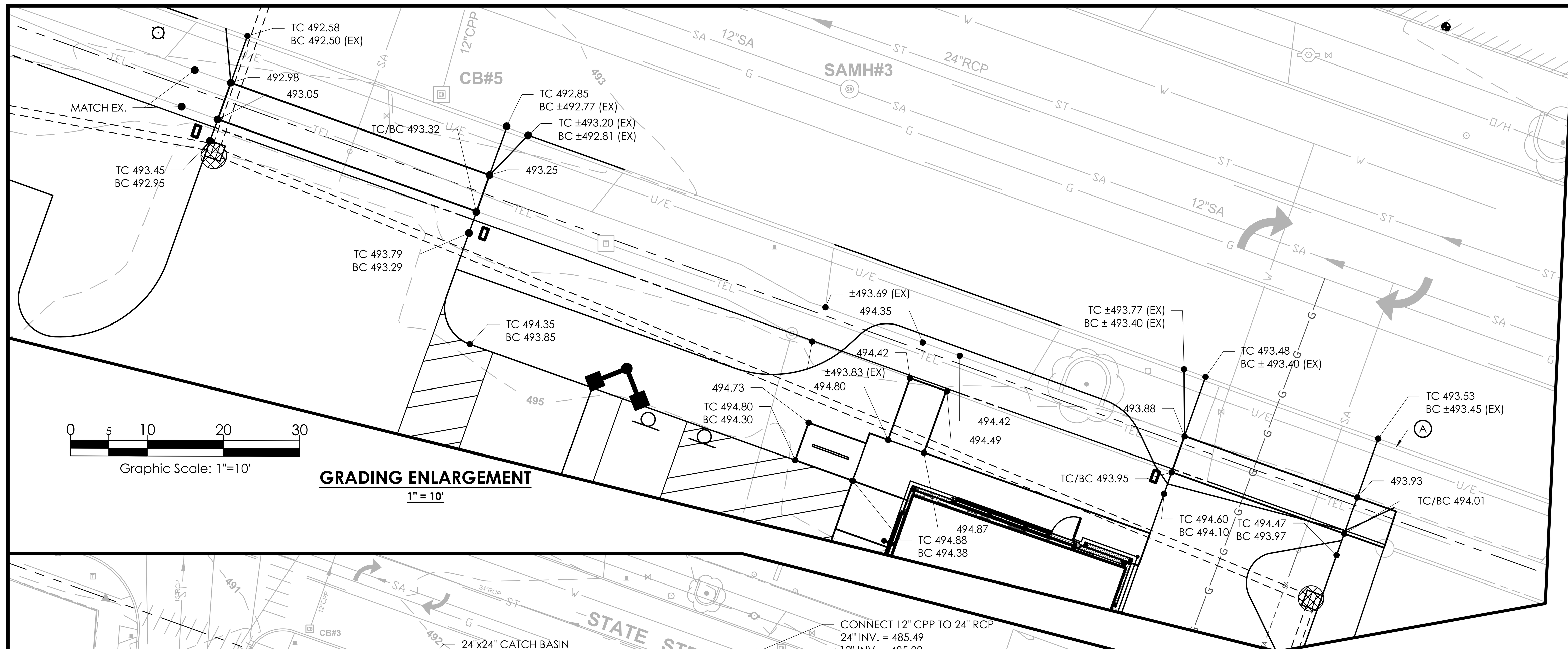
Jefferson County, NY

Project Name & Location:

Site Plan

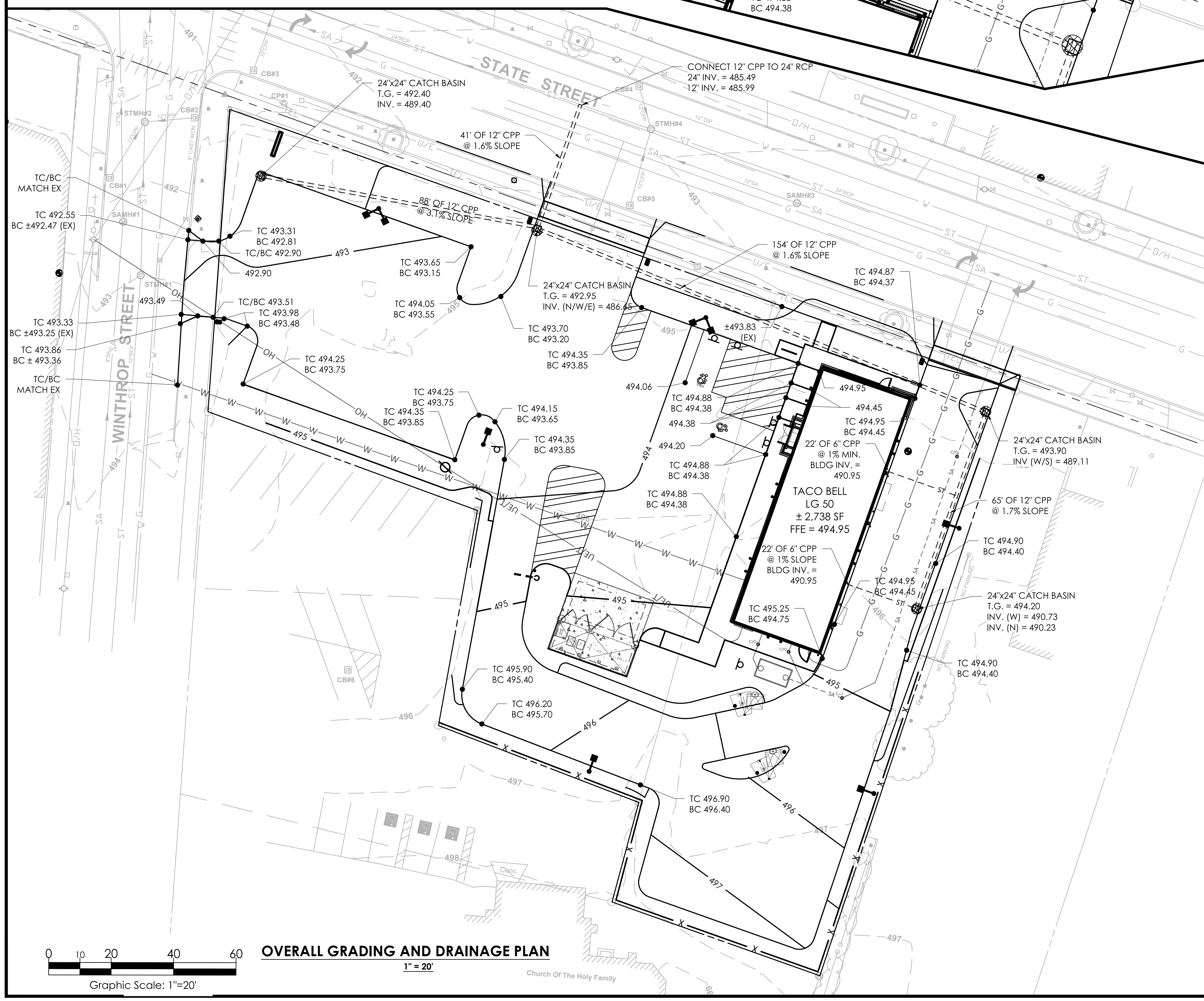
Drawing Name:

Date:	10/12/22	Project No. 22-0408
Type:	LG 50	
Drawn By:	SLA	C2
Scale:	1" = 20'	Drawing No.



GRADING ENLARGEMENT

1" = 10'



OVERALL GRADING AND DRAINAGE PLAN

1" = 20'

REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

GRADING AND DRAINAGE LEGEND:

(A) PROVIDE 3' LONG TRANSITION CURB TO TIE INTO EXISTING CURBING

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

NORTH

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- SUBJECT PARCEL PROPERTY LINE
- PROPOSED BUILDING
- —E—E— UNDERGROUND ELECTRIC
- —T—T— UNDERGROUND TELEPHONE
- —G—G— GAS SERVICE
- —W—W—W— WATER SERVICE
- C/O — SA — SANITARY SEWER LATERAL & CLEANOUT
- — ST — STORM LATERAL
- STORM SEWER & STRUCTURES
- LIGHT POLES
- TC 494.90 BC 494.40 — SPOT ELEVATION, TC/BC=TOP & BOTTOM OF CURB, TW=TOP OF WALL
- — 895 — CONTOUR
- INLET PROTECTION

GRADING AND DRAINAGE NOTES:

1. CONTRACTOR SHALL NOTE THAT THIS PROJECT WILL DISTURB LESS THAN 1 ACRE AND THEREFORE A SPDES PERMIT IS NOT REQUIRED. CONTRACTOR SHALL STRICTLY ADHERE TO THE LIMITS OF DISTURBANCE TO ENSURE THIS DISTURBANCE THRESHOLD IS NOT EXCEEDED. NO WORK SHALL COMMENCE UNTIL CONTRACTOR HAS INSTALLED ALL EROSION CONTROL DEVICES. ALL DEVICES ARE TO BE INSTALLED AND MAINTAINED THROUGHOUT THE PROJECT.
2. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS.
3. ALL EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS OF THE GEOTECHNICAL REPORT PREPARED BY TERRACON GEOTECHNICAL ON XX/XX/20XX.
4. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1' INTERVALS.
5. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS AT THE END OF CONSTRUCTION.
6. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ENSURE A SMOOTH FIT, CONTINUOUS GRADE, AND POSITIVE DRAINAGE (AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS). THE CONTRACTOR SHALL ADJUST TOPS OF CLEANOUTS, MANHOLES, VALVES, HANDHOLES, ETC. TO REMAIN TO PROPOSED FINISHED GRADE, AS NECESSARY.
7. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES, INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY, UNLESS OTHERWISE NOTED ON PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING, PUMPING, AND TREATMENT OF WATER. THE CONTRACTOR IS CAUTIONED THAT GROUNDWATER AND PERCHED GROUNDWATER MAY BE ENCOUNTERED. NO WATER FROM ANY CONSTRUCTION WORK, PROCESSOR AREA SHALL BE RELEASED DOWNSTREAM OR INTO STORM SYSTEMS, UNTIL PROPERLY TREATED AND ALL SEDIMENT REMOVED. REFER TO GEOTECHNICAL REPORT FOR MORE INFORMATION.
10. EARTHWORK SHOULD INCLUDE THE COMPLETE REMOVAL OF ALL VEGETATION, TOPSOIL, ORGANIC SUBSOIL, AND ANY SURFACE DEBRIS IN AREAS WHERE REGRADING IS REQUIRED.
11. CONTRACTOR SHALL PERFORM ENVIRONMENTAL DUE DILIGENCE AND DETERMINE THAT ALL IMPORTED AND EXPORTED FILL IS CERTIFIED AS CLEAN FILL. CONTRACTOR SHALL KEEP DOCUMENTATION OF OFF-SITE MATERIAL USED AS STRUCTURAL FILL.
12. THE STORM SEWER SHALL BE CPP, SMOOTH LINED CORRUGATED POLYETHYLENE PIPE, UNLESS OTHERWISE NOTED ON PLANS.
13. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND ELEVATION OF INTERNAL ROOF DRAINS AND UNDER SLAB DRAINS.
14. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
15. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED. ALL SLOPES MUST BE STABILIZED/PROTECTED FROM EROSION.
16. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISHED GRADE.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RIM ELEVATIONS IN RELATION TO PROPOSED GRADE PRIOR TO INSTALLATION.
18. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE TOPSOIL AT A DEPTH AS NOTED IN THE SPECIFICATIONS.

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STATE OF NEW YORK · STEPHANIE L ALBRIGHT · 087051 · LICENSED PROFESSIONAL ENGINEER

Seal

FOR APPROVAL ONLY/NOT FOR CONSTRUCTION

Seal

CIVIL ENGINEER OF RECORD
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Taco Bell - Watertown NY

State St
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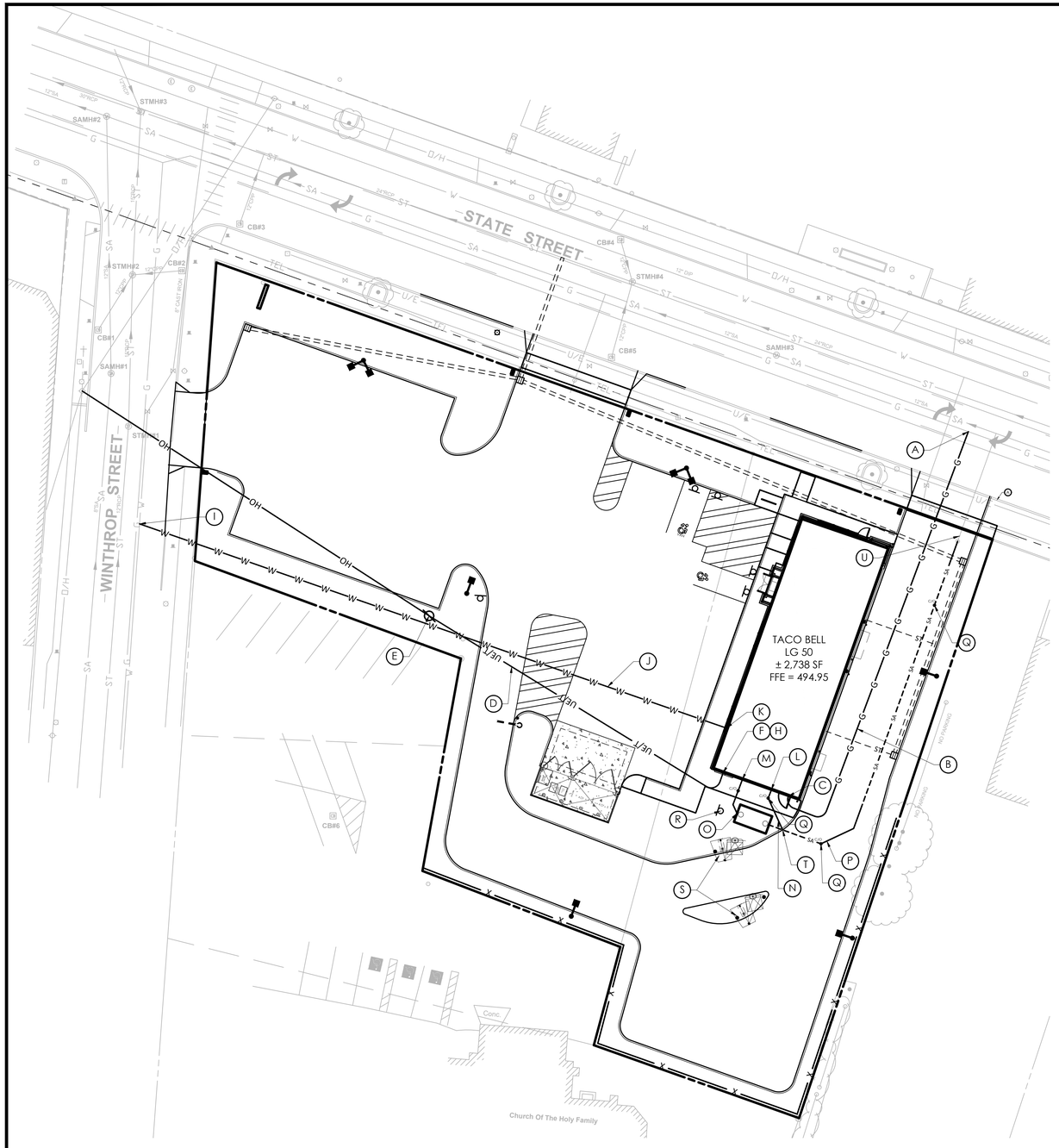
Jefferson County, NY
Project Name & Location:

Grading & Drainage Plan
Drawing Name:

Date:	10/12/22	Project No. 22-0408
Type:	LG 50	
Drawn By:	SLA	C3
Scale:	AS NOTED	Drawing No.



UTILITY LEGEND:

- (A) CONNECTION TO EXISTING GAS MAIN. CONTRACTOR TO COORDINATE WITH GAS COMPANY FOR INSTALLATION AND FINAL CONNECTION
- (B) UNDERGROUND GAS SERVICE
- (C) GAS METER AND SERVICE ENTRY
- (D) UNDERGROUND ELECTRIC AND TELEPHONE SERVICE. CONTRACTOR SHALL COORDINATE WITH ELECTRIC AND TELEPHONE COMPANIES FOR FINAL CONNECTION AND INSTALL CONDUIT AND REQUIRED PULL BOXES PER THEIR REQUIREMENTS.
- (E) POLE-MOUNTED ELECTRIC TRANSFORMER. CONTRACTOR SHALL COORDINATE EXACT LOCATION, SIZE, INSTALLATION, AND PROTECTION OF TRANSFORMER WITH ELECTRIC COMPANY.
- (F) ELECTRIC METER AND SERVICE ENTRY.
- (G) NOT USED
- (H) TELEPHONE SERVICE ENTRY
- (I) CONNECT TO EXISTING WATER SERVICE
- (J) 1.5" TYPE K DOMESTIC WATER SERVICE
- (K) DOMESTIC WATER SERVICE ENTRY
- (L) SANITARY SERVICE ENTRY, CONNECT TO TWO WAY BUILDING SEWER CLEANOUT, BLDG INV. = 489.45
- (M) GREASE INTERCEPTOR LATERAL CONNECT TO TWO WAY BUILDING SEWER CLEANOUT, BUILDING INV. = 489.45
- (N) 15' OF 4" PVC @ 2.0% MIN. SLOPE
- (O) 13' OF 6" PVC @ 1.0% SLOPE ; GREASE INTERCEPTOR INV. IN = 489.32
- (P) 129' OF 6" PVC @ 1.0% MIN. SLOPE GREASE INTERCEPTOR INV. OUT = 489.07
- (Q) CLEANOUT (SPACED AT 90' MAX)
- (R) GREASE INTERCEPTOR SIGN
- (S) REFER TO BUILDING PLANS FOR SITE ELECTRICAL COMPONENT (MENU BOARD, SPEAKER BOX, CLEARANCE BARS, SITE LIGHTING, ETC.)
- (T) CONNECT 4" & 6" WITH WYE FITTING
- (U) GENERAL CONTRACTOR TO VERIFY EARLY IN THE CONSTRUCTION PROCESS THAT THE EXISTING LATERAL IS 6" PVC AND THAT PROPOSED DESIGN CAN TIE INTO EXISTING INVERT. EXISTING CLEANOUT INVERT ASSUMED TO BE ± 485.80

REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

NORTH

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- SUBJECT PARCEL PROPERTY LINE
- PROPOSED BUILDING
- OVERHEAD ELECTRIC & TELEPHONE
- UNDERGROUND ELECTRIC & TELEPHONE
- GAS SERVICE
- WATER SERVICE
- SANITARY SEWER LATERAL & CLEANOUT
- STORM LATERAL
- STORM SEWER & STRUCTURES
- LIGHT POLES

UTILITY NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR NOTIFYING ANY UTILITY COMPANY WHICH MAINTAINS A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE START OF CONSTRUCTION. THE LOCATION AND/OR ELEVATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS IS BASED ON LISTED REFERENCES, RECORDS OR THE VARIOUS UTILITY COMPANIES. AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY FOR ANY DAMAGE TO EXISTING UTILITY LINES AS A RESULT OF HIS ACTIVITIES, WHETHER THESE LINES ARE SHOWN ON THE PLANS OR NOT. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES NECESSARY TO LOCATE AND PROTECT EXISTING UTILITIES, STRUCTURES, AND OTHER FACILITIES TO REMAIN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. CONTRACTOR TO VERIFY EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED IMPROVEMENTS. CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH, SIZE, MATERIAL, AND INTEGRITY OF EXISTING UTILITIES. ANY CONFLICTS WITH PROPOSED WORK SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IN SUFFICIENT TIME TO ALLOW FOR REDESIGN WITHOUT IMPACT TO PROJECT SCHEDULE.
3. SEE SPECIFICATIONS FOR BACKFILLING AND COMPACTION REQUIREMENTS ON UTILITY TRENCHES.
4. THE CONTRACTOR SHALL ADJUST TOPS OF CLEANOUTS, MANHOLES, VALVES, HANDHOLES, ETC. TO REMAIN TO PROPOSED FINISHED GRADE, AS NECESSARY.
5. CONTRACTOR TO COORDINATE AND APPLY FOR ALL SERVICE REQUESTS TO ALL NECESSARY UTILITY COMPANIES AS EARLY AS POSSIBLE IN THE CONSTRUCTION PROCESS IN ORDER TO AVOID DELAYS IN SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND COMPLYING WITH THE SPECIFICATIONS OF THE UTILITY COMPANIES AND LOCAL AUTHORITIES WITH REGARDS TO MATERIALS, INSTALLATION, INSPECTION, TESTING, CLEANING, CERTIFICATION, RECORD MAP, AND AS-BUILT REQUIREMENTS OF THE UTILITY COMPANIES AND AUTHORITIES HAVING JURISDICTION. UNDERGROUND UTILITIES SHALL BE INSTALLED, INSPECTED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION BEFORE BACKFILLING. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES AND THE OWNER'S INSPECTING AUTHORITIES.
7. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 48 HOURS BEFORE CONNECTING TO ANY EXISTING LINE. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
8. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION, SIZE, AND INVERT OF ALL UTILITY ENTRANCES. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES, IN SUCH A MANNER AS TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH UTILITY COMPANIES FOR REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
9. THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OR PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR, FIRE PROTECTION SPRINKLER CONTRACTOR, OR LICENSED PLUMBER IN ACCORDANCE WITH MUNICIPALITY REQUIREMENTS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONFIRM AND COMPLY WITH LOCAL CRITERIA AND PROVIDE ANY CERTIFICATES, INSPECTIONS, ETC. AS NECESSARY.
10. THE MINIMUM SEPARATION BETWEEN WATER AND SEWER LINES SHALL BE 18 INCHES VERTICALLY MEASURED FROM OUTSIDE TO OUTSIDE OF PIPE AT A CROSSING. EXCEPT AT CROSSINGS, A MINIMUM 10 FOOT HORIZONTAL SEPARATION MEASURED FROM OUTSIDE TO OUTSIDE OF PIPE SHALL BE MAINTAINED.
11. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO SURROUNDING PROPERTIES AT ALL TIMES. UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE PROPERTY OWNER, MUNICIPALITY, UTILITY COMPANIES, OR AUTHORITY HAVING JURISDICTION.
12. THE CONTRACTOR SHALL COORDINATE WATERMAIN WORK WITH THE WATER AUTHORITY. THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION AND TRENCHING FOR INSTALLATION OF THE PROPOSED WATER SERVICE AND ANY REQUIRED APPURTENANCES (E.G. VALVES). CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY FOR THE CONTRACTOR'S RESPONSIBILITIES AS WELL AS THE SCOPE OF WORK FOR THE CONTRACTOR AND WATER AUTHORITY. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH ANY REQUIRED WATERMAIN SHUT-OFFS, PERMITS, CONNECTIONS, TESTING, AND INSPECTIONS. NO EXTRA COMPENSATION WILL BE PROVIDED.
13. ALL STORM AND SANITARY SEWER CONNECTIONS TO EXISTING STRUCTURES SHALL BE PERFORMED IN ACCORDANCE WITH MUNICIPALITIES REQUIREMENTS.
14. ALL STORM AND SANITARY SEWERS ON THE SITE SHALL REMAIN PRIVATE. UNLESS DENOTED OTHERWISE.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHING AND BACKFILLING FOR THE PROPOSED UNDERGROUND ELECTRIC AND TELEPHONE SERVICES. CONTRACTOR SHALL PROVIDE CONDUIT PER THE ELECTRIC/TELEPHONE COMPANY REQUIREMENTS FROM THE UTILITY POLE TO THE BUILDING ENTRANCE LOCATION. THE ELECTRIC/TELEPHONE COMPANY WILL BE RESPONSIBLE FOR PULLING THE WIRES FROM THE EXISTING POLE TO THE BUILDING.
16. THE ELECTRIC TRANSFORMER WILL BE POLE MOUNTED IN THE LOCATION SHOWN ON THE PLAN AND WILL BE SUPPLIED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC COMPANY FOR INSTALLATION.
17. THE GAS COMPANY WILL BE RESPONSIBLE FOR CONNECTION TO EXISTING GAS MAIN AND INSTALLATION AND PLACEMENT OF NEW GAS METER. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF GAS SERVICE FROM THE METER TO THE BUILDING. CONTRACTOR IS RESPONSIBLE FOR TRENCHING AND BACKFILLING FOR THE PROPOSED UNDERGROUND GAS LINE. CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY AND PROVIDE ANY REQUIRED CONDUIT.
18. REFER TO SHEET C5 FOR LIGHTING DESIGN.

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STATE OF NEW YORK
STEPHANIE L. ALBRIGHT
087051
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315-451-9603

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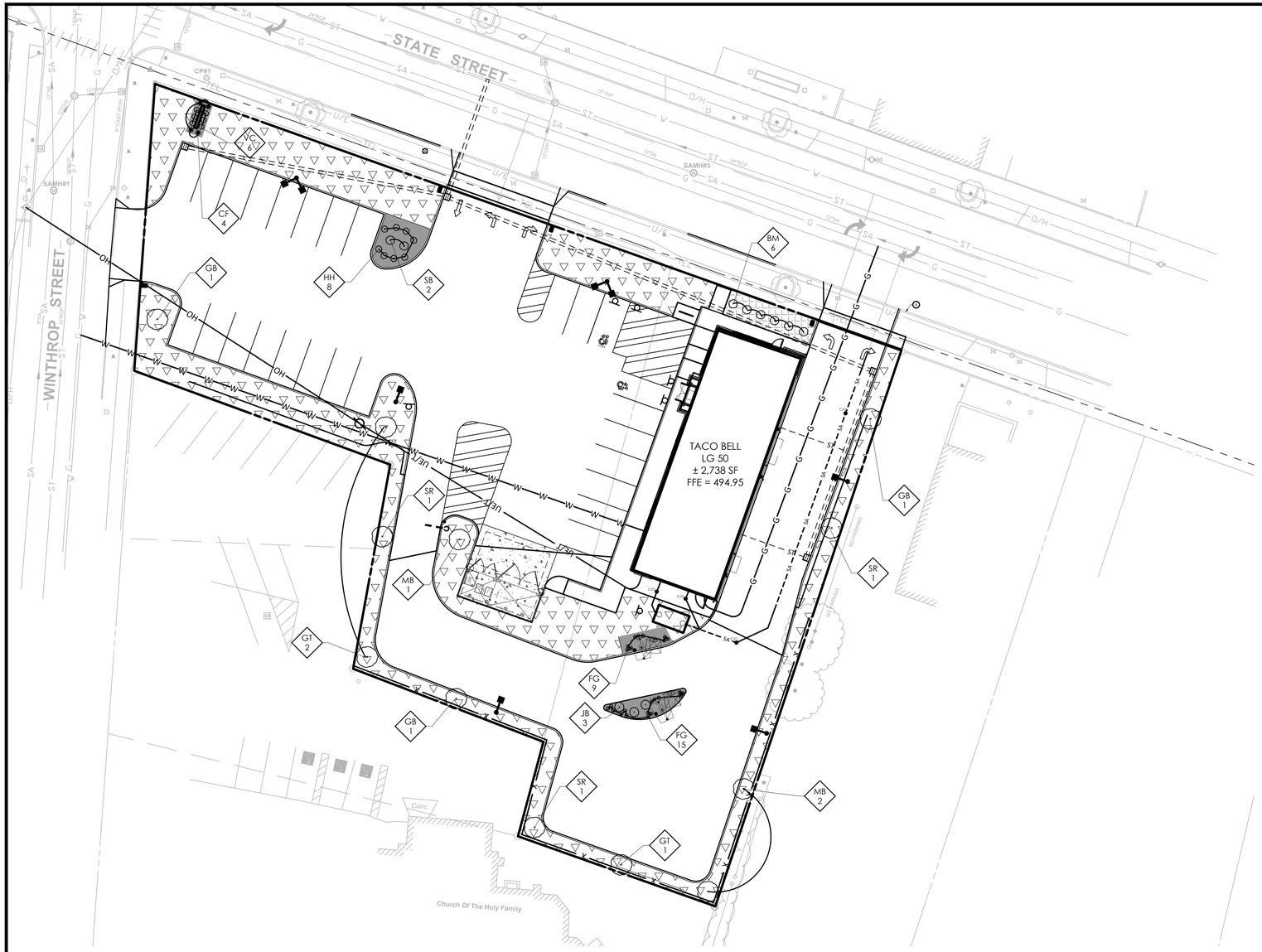
Project Name & Location:

Utility Plan

Drawing Name:

Date:	10/12/22	Project No. 22-0408
Type:	LG 50	
Drawn By:	SLA	C4
Scale:	1" = 20'	Drawing No.



REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

NORTH

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- SUBJECT PARCEL PROPERTY LINE
- PROPOSED BUILDING
- OVERHEAD ELECTRIC & TELEPHONE
- UNDERGROUND ELECTRIC & TELEPHONE
- GAS SERVICE
- WATER SERVICE
- SANITARY SEWER LATERAL & CLEANOUT
- STORM LATERAL
- STORM SEWER & STRUCTURES
- LIGHT POLES
- SHRUBS/BUSHES
- DECIDUOUS TREE
- LAWN SEED MIX
- BARK MULCH BED
- ROCK MULCH

PLANT LIST

QUANT.	KEY	LATIN NAME	COMMON NAME	CAL.	ROOTS	HT. OR. SP
3	MB	MALUS BACCATA	SNOW CRAB APPLE		B&B	20'-25' HT
4	CF	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS		#2 CONT.	24" HT, 4' O.C.
24	FG	FESTUCA GLAUCA	ELIJAH BLUE FESCUE		#2 CONT.	12" HT, 18" O.C.
6	VC	VIBURNUM CARLESII	KOREANSPICE VIBURNMUM		B&B	24" HT (AT PLANTING), 5' O.C.
6	BM	BUXUS MICROPHYLLA 'WINTERGREEN'	WINTERGREEN BOXWOOD		#2 CONT.	18" MIN, 3' O.C.
2	SB	SPIRAEA BUMALDA 'GOLD FLAME'	GOLD FLAME SPIREA		#2 CONT.	18" HT, 3' SP.
8	HH	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY		#2 CONT.	2' O.C.
3	JB	JUNIPERS CONFERTA 'BLUE PACIFIC'	BLUE PACIFIC JUNIPER (OR ANDORRA)		#2 CONT.	18" SP, 4' O.C.
3	SR	SYRINGA RETICULATA	IVORY PILLAR JAPANESE TREE LILAC	2"	B&B	20'-25' HT
3	GB	GINKGO BILOBA	AUTUMN GOLD GINKO	2"	B&B	30'-50' HT
3	GT	GLEDITSIA TRIACANTHOS	THORNLESS HONEYLOCUST	2"	B&B	35' HT

LANDSCAPE NOTES:

1. REFER TO SPECIFICATIONS FOR SEED MIXES AND ADDITIONAL INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY TAKEOFF.
3. THE CONTRACTOR SHALL PERFORM A ROUGH FIELD STAKE OUT OF ALL PLANT MATERIAL AND SHRUB BEDS. LOCATIONS SHOWN ON THE PLAN CONVEY DESIGN INTENT ONLY. ACTUAL LOCATIONS WILL BE AS DIRECTED BY THE OWNER AT THE TIME OF INSTALLATION.
4. THE CONTRACTOR IS HEREBY NOTIFIED THAT UNDERGROUND UTILITIES EXIST. CONTRACTOR SHOULD OBTAIN CURRENT UTILITY RECORD MAPS AND NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK.
5. STAKE PLANTS AS INDICATED OR AS APPROVED IN THE FIELD. IF OBSTRUCTIONS ARE ENCOUNTERED THAT ARE NOT SHOWN ON THE DRAWINGS, DO NOT PROCEED WITH PLANTING OPERATIONS UNTIL ALTERNATIVE PLANT LOCATIONS HAVE BEEN SELECTED. STAKES AND WRAPPING ARE TO BE REMOVED BY THE CONTRACTOR AT THE END OF THE GUARANTEE PERIOD.
6. SHRUBS SHALL NOT BE PLACED WITHIN TWO (2) FEET OF A CURB.
7. TREES SHALL BE A MINIMUM OF 5' FROM ROOT BALL TO UNDERGROUND UTILITIES AND 20' FROM OVERHEAD UTILITIES.
8. REFER TO EROSION CONTROL PLAN FOR LIMITS OF STEEP SLOPE SEED MIX. FOR ANY DISCREPANCIES BETWEEN LIMITS OF STEEP SLOPE SEED, LAWN SEED, AND/OR MULCH BETWEEN THE PLANTING PLAN AND THE EROSION CONTROL PLAN, THE PLANTING PLAN SHALL TAKE PRECEDENCE.

LIGHTING NOTES:

1. CONTRACTOR TO REFER TO DETAIL FOR LIGHT POLE BASES.
2. CONTRACTOR TO REFER TO ELECTRICAL PLANS FOR CONDUIT ROUTING OF LIGHT POLES AND PYLON SIGN AND FOR LIGHTING AND WIRING SCHEDULE.
3. LIGHT POLES PLACED BEHIND CURBING SHALL BE A MINIMUM OF 2' FROM THE FACE OF CURB TO THE OUTER EDGE OF THE LIGHT POLE BASE.
4. FIXTURES SHALL BE BRONZE. LIGHT POLES SHALL BE LSI INDUSTRIES 4SQB3-S11B-22-BRZ.

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CALCULATION POINTS @ GRADE	Illuminance	Fc	2.44	16.1	0.0	N.A.	N.A.
PARKING & DRIVING SUMMARY	Illuminance	Fc	5.17	16.0	1.0	5.17	16.00

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	LLD	LDD	LLF	Arr. Lum. Lumens	Arr. Watts
	2	A	3 @ 90°	MRM-LED-24L-SIL-FT-50-70CRI-T90-25' MH	1.000	1.000	1.000	77892	528
	1	B	2 @ 90°	MRM-LED-24L-SIL-FT-50-70CRI-D90-25' MH	1.000	1.000	1.000	51928	352
	2	D	SINGLE	MRM-LED-24L-SIL-FT-50-70CRI-IL-SINGLE-25' MH	1.000	1.000	1.000	16436	176

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State St
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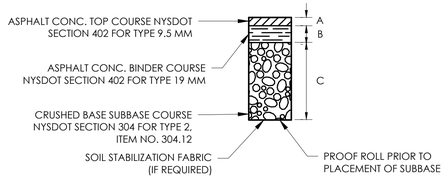
Project Name & Location:

Planting and Lighting Plan

Drawing Name:

Date: 10/12/22	Project No. 22-0408
Type: LG 50	
Drawn By: SLA	C5
Scale: 1" = 20'	Drawing No.



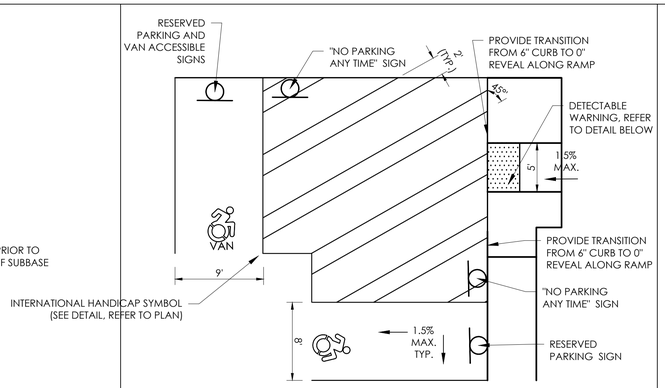
	REGULAR DUTY	HEAVY DUTY
A	1.5"	1.5"
B	2.5"	3.5"
C	12"	12"

NOTES:

1. PAVEMENT SECTIONS ARE PROVIDED BASED ON THE GEOTECHNICAL ENGINEERING REPORT PROVIDED BY TERRACON CONSULTANTS-NY, INC. ON 12/14/22.

PAVING SECTION DETAIL

N.T.S



NOTE: PREFABRICATED PANELS PER A.D.A. ACCESSIBILITY GUIDELINES SECTION 4.29.2 & A4.29.2 SHALL BE USED.

NOTE:

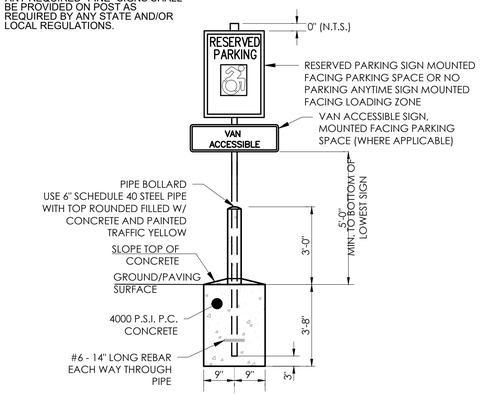
1. REFER TO SITE PLAN FOR ACCESSIBLE PARKING STRIPING LAYOUT.
2. ALL SIDEWALK, RAMPS, LANDING AREAS, DETECTABLE WARNING, ETC. ALONG THE ACCESSIBLE PATH SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA STANDARDS.
3. CONTRACTOR TO REFER TO THE GRADING AND DRAINAGE PLAN FOR SLOPES.
   - 3.A. CROSS SLOPES FOR SIDEWALKS AND RAMPS SHALL BE 1.5% AT A MAXIMUM
   - 3.B. RUNNING SLOPES FOR SIDEWALKS SHALL BE 4.5% AT A MAXIMUM
   - 3.C. RUNNING SLOPES FOR RAMPS SHALL BE AT 7.5% MAXIMUM
   - 3.D. SLOPES FOR ADA PARKING STALLS AND UNLOADING BAYS SHALL BE 1.5% AT A MAXIMUM
4. SIGNS TO BE PLACED IN CENTER OF PARKING STALL OR UNLOADING BAY (IF APPLICABLE) WHENEVER POSSIBLE. [NEW YORK] SHIFT "NO PARKING ANYTIME" SIGN SLIGHTLY OFF CENTER TO MAINTAIN THE MINIMUM OF 32" CLEAR SPACE REQUIRED IN ACCORDANCE WITH ADA REQUIREMENTS

ACCESSIBLE PARKING DETAIL

N.T.S

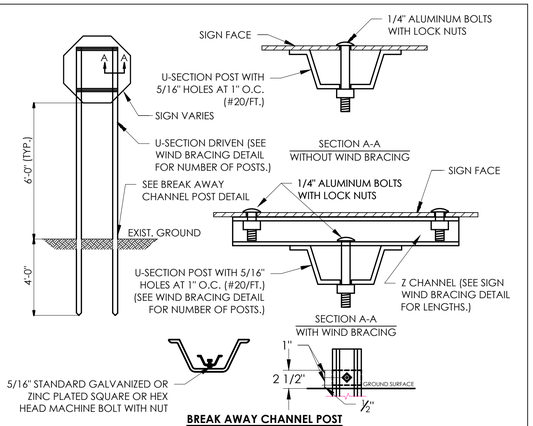
NOTES:

1. CONTRACTOR SHALL REVIEW ALL FEDERAL, STATE, AND LOCAL CODE AND PROVIDE SIGNAGE IN ACCORDANCE WITH ALL ADA REQUIREMENTS. THIS DETAIL IS PROVIDED FOR GENERAL GUIDANCE ONLY.
2. ANY REQUIRED "FINE" SIGNS SHALL BE PROVIDED ON POST AS REQUIRED BY ANY STATE AND/OR LOCAL REGULATIONS.



ACCESSIBLE SIGN POST INSTALLATION DETAIL

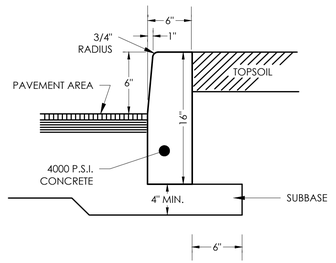
N.T.S



BREAK AWAY CHANNEL POST

TYPICAL POST MOUNTED SIGN INSTALLATION IN GRASS AREAS

N.T.S

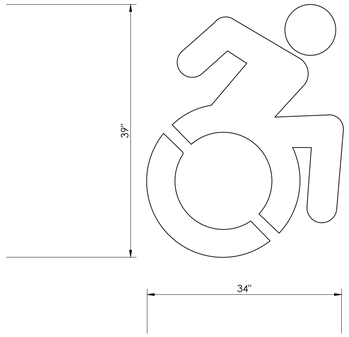


NOTES:

1. CONTROL JOINTS 10 FEET ON CENTER TO DEPTH OF $\frac{1}{3}$ THE CURB THICKNESS
2. EXPANSION JOINTS WITH PREMOLDED FILLER 50 FEET ON CENTER

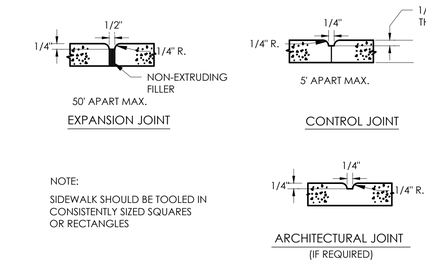
CONCRETE CURB DETAIL

N.T.S



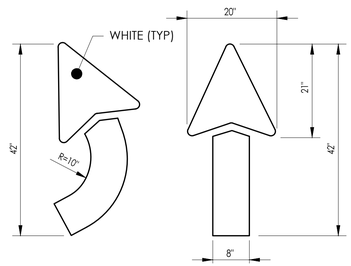
ACCESSIBLE PARKING STRIPING DETAIL (NYS)

N.T.S.



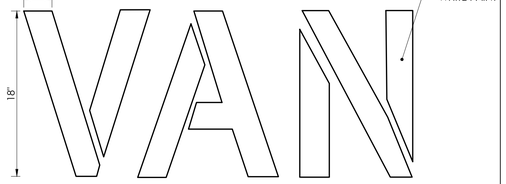
SIDEWALK JOINTS DETAIL

N.T.S.



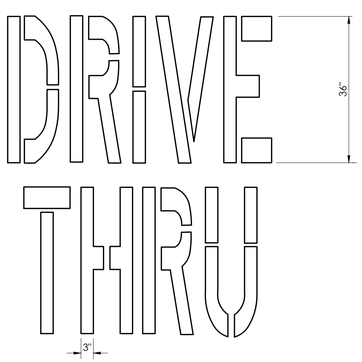
PARKING LOT DRIVE AISLE ARROW DETAIL

N.T.S.



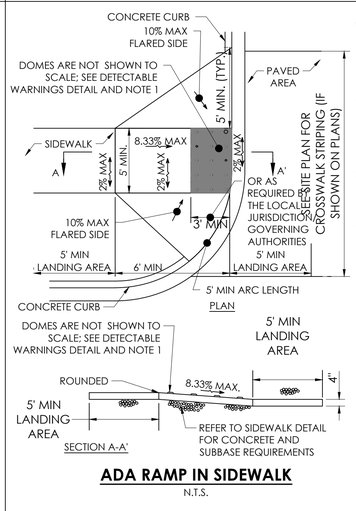
VAN ACCESSIBLE PARKING DETAIL

N.T.S.



PARKING LOT DRIVE AISLE DRIVE THRU LETTER DETAIL

N.T.S.

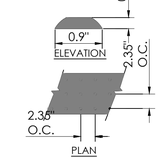


ADA RAMP IN SIDEWALK

N.T.S.

NOTES:

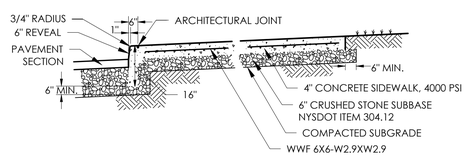
1. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
2. RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP.
3. CONSTRUCT PER A.D.A. STANDARDS.
4. REFER TO PLANS FOR ADJACENT SLOPES.
5. THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1:50.



NOTE: PREFABRICATED PANELS PER A.D.A. ACCESSIBILITY GUIDELINES SECTION 4.29.2 & A4.29.2 SHALL BE USED.

DETECTABLE WARNINGS DETAIL

N.T.S.



NOTES:
1. SEE SIDEWALK JOINTS DETAIL FOR JOINT SIZE AND SPACING
2. EXPOSED CONCRETE SURFACE TO HAVE LIGHT BROOM FINISH

CONCRETE SIDEWALK W/ INTEGRAL CURB DETAIL

N.T.S.

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Revisions:		Date:
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Seal

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
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Taco Bell - Watertown NY

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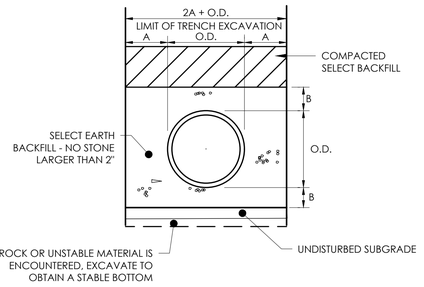
Watertown, NY 13601
Jefferson County, NY

Project Name & Location:

Details Sheet

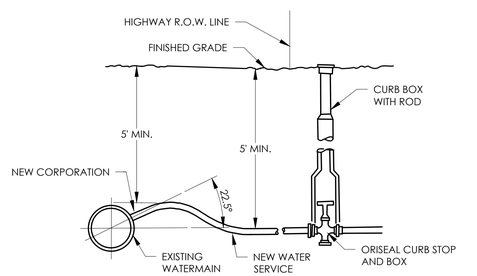
Drawing Name:

		Project No.
Date:	10/12/22	22-0408
Type:	LG 50	
Drawn By:	SLA	C6
Scale:	N.T.S.	Drawing No.



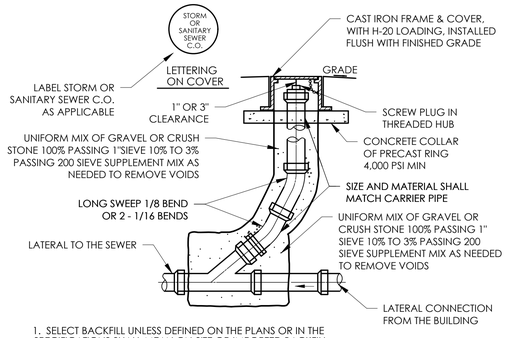
MIN. DIMENSIONS FOR PIPE BEDDING		
PIPE DIA. (INCHES)	A (INCHES)	B (INCHES)
UP TO 18	12	6
21 TO 36	12	9
OVER 36	18	12

WATER TRENCH DETAIL
N.T.S.



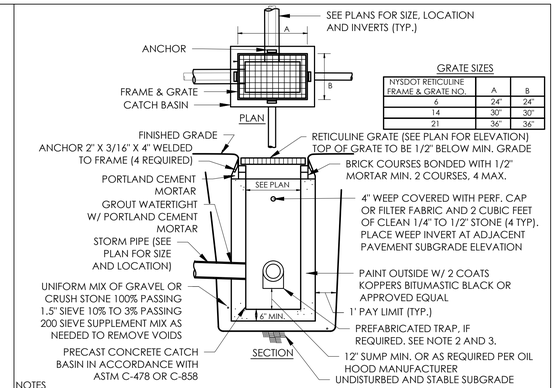
NOTES:
1. TYPE K VIRGIN COPPER-ASTM SPEC. B88 (LATEST REVISION) OR PE 3408 SDR-9-ASTM D2737 -200 PSI WITH #10 SOLID COPPPER TRACING WIRE.
2. NEW WATER SERVICE LATERAL TO BE A SIZE AND TYPE AS APPROVED BY THE LOCAL WATER SUPPLIER.
3. TRACING WIRE TO BE WRAPPED AROUND CURB STOP AND CORPORATION FOR POLYETHLENE SERVICE ONLY.
4. ALL WATER TAPS SHALL BE COORDINATED WITH OR PERFORMED BY THE LOCAL WATER AUTHORITY.

WATER SERVICE INSTALLATION DETAIL
N.T.S.



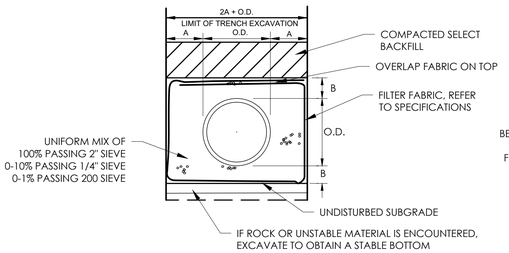
1. SELECT BACKFILL UNLESS DEFINED ON THE PLANS OR IN THE SPECIFICATIONS SHALL MEAN ON-SITE OR IMPORTED BACKFILL MEETING THE REQUIRED SPECIFICATIONS, ASTM 2321 WITH THE ADDED REQUIREMENT OF NO MATERIAL HAVING A DIMENSION EXCEEDING 4 INCHES.
2. IF CLEAN STONE BEDDING IS USED THE BEDDING SHALL BE ENCIRCLED WITH FILTER FABRIC TO PREVENT SOILS FROM ENTERING THE VOIDS OF THE STONE.
3. THIS DETAIL APPLIES TO BOTH SANITARY AND STORM.
4. CLEANOUTS SHALL BE SPACED NO MORE THAN 90' APART.

SEWER CLEANOUT DETAIL
N.T.S.

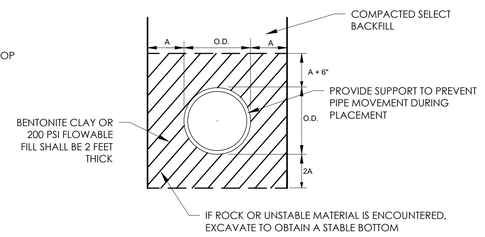


NOTES
1. SELECT BACKFILL UNLESS DEFINED ON THE PLANS OR IN THE SPECIFICATIONS SHALL MEAN ON-SITE OR IMPORTED BACKFILL MEETING THE REQUIRED SPECIFICATIONS, ASTM 2321 FOR WELLGRADED MATERIAL WITH THE ADDED REQUIREMENT OF NO MATERIAL HAVING A DIMENSION EXCEEDING 3 INCHES.
2. OIL HOODS TO BE PLACED ON ALL EXITING PIPES WITHIN CATCH BASINS AS LABELED ON THE PLAN.
3. OIL HOODS SHALL BE NEENAH FOUNDARY, SNOUT (WWW.BMPINC.COM), OR APPROVED EQUAL. CATCH BASIN DESIGN MUST BE MODIFIED AS NECESSARY TO MEET ALL MINIMUM REQUIREMENTS FROM THE OIL HOOD MANUFACTURER, INCLUDING BUT NOT LIMITED TO, CLEARANCE BETNEATH THE HOOD, SUMP DEPTH, INSTALLATION SPECIFICATIONS, ETC.
4. IF INVERTS ARE LESS THAN 3' BELOW SURFACE ELEVATION, FINGER DRAINS ARE TO MATCH THE LOWEST INVERT. SEE PLAN FOR PLACEMENT AND ORIENTATION.

CATCH BASIN DETAIL
N.T.S.

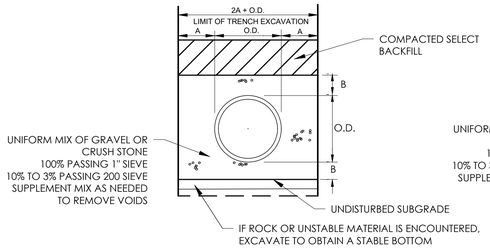


PERFORATED STORM ENCASEMENT

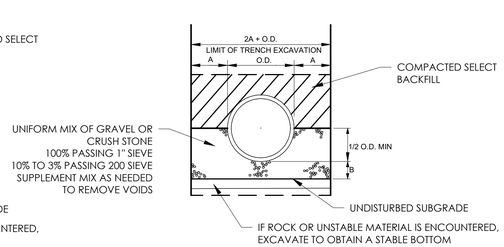


ANTI-SEEPAGE COLLAR

MUST BE PLACED WHEN HOLE IS CLEAN AND DRY AND ALLOWED TO CURE IN SINGLE PLACEMENT.



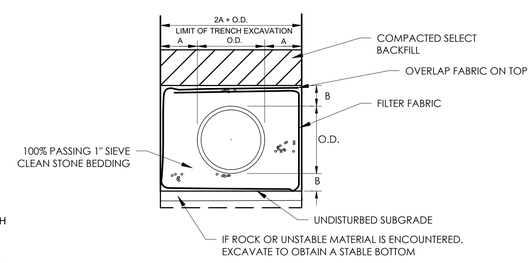
STORM ENCASEMENT



SANITARY BEDDING

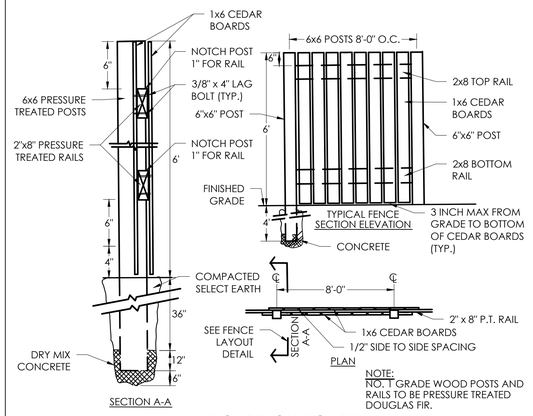
MIN.DIMENSIONS FOR PIPE BEDDING		
PIPE DIA. (INCHES)	A (INCHES)	B (INCHES)
Up to 18	12	6
21 to 36	12	9
Over 36	18	12

NOTES:
1. SELECT BACKFILL, UNLESS DEFINED ON THE PLANS OR IN THE SPECIFICATIONS, SHALL MEAN ON-SITE OR IMPORTED BACKFILL MEETING THE REQUIRED SPECIFICATIONS, ASTM 2321 FOR WELL GRADED MATERIAL WITH THE ADDED REQUIREMENT OF NO MATERIAL HAVING A DIMENSION EXCEEDING 3 INCHES.
2. IF CLEAN STONE BEDDING IS USED THE BEDDING SHALL BE ENCIRCLED WITH FILTER FABRIC TO PREVENT SOILS FROM ENTERING THE VOIDS OF THE STONE.
3. (REVIEW/UPDATE ON PROJECT SPECIFIC BASIS) ANTI-SEEPAGE COLLARS SHALL BE PROVIDED AT PROJECT LIMIT/PROPERTY LINE AND EVERY 1 FOOT ELEVATION DIFFERENCE ALONG SANITARY PIPE AND AT LEAST TWO ALONG STORM OUTLET PIPES THAT ARE PLACED IN DIKES OR BASIN RETAINMENT AREAS.

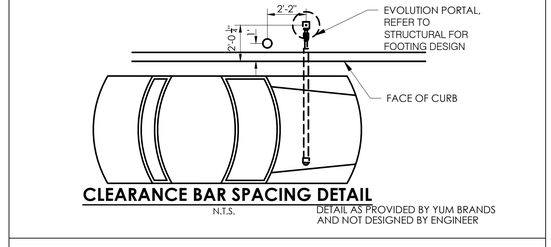


OPTIONAL STORM AND SANITARY ENCASEMENT WHEN USING CLEAN STONE

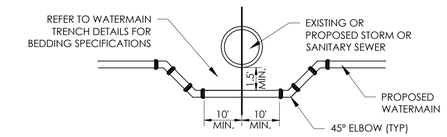
PIPE BEDDING DETAILS
N.T.S



BOARD ON BOARD FENCE DETAIL
N.T.S



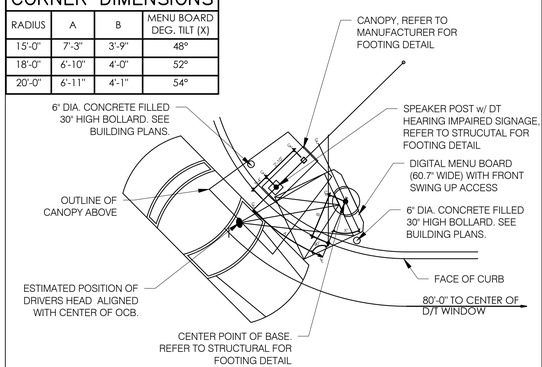
CLEARANCE BAR SPACING DETAIL
N.T.S. DETAIL AS PROVIDED BY YUM BRANDS AND NOT DESIGNED BY ENGINEER



1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

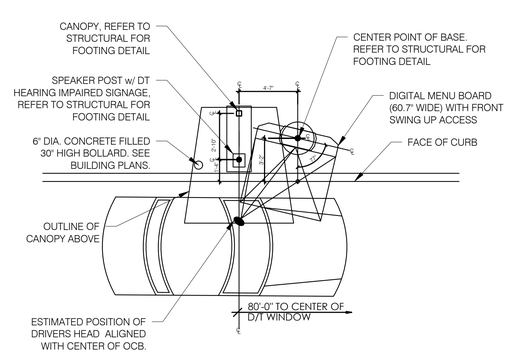
WATERMAIN CROSSING DETAIL
N.T.S.

CORNER DIMENSIONS			
RADIUS	A	B	MENU BOARD DEG. TILT (X)
15'-0"	7'-3"	3'-9"	48°
18'-0"	6'-10"	4'-0"	52°
20'-0"	6'-11"	4'-1"	54°



NOTES
1. ALL AREAS OF THE MB MUST BE VISIBLE TO DRIVER LOCATED AT SPEAKER POST. ASSUME DRIVERS LOCATION TO BE 24" FROM FACE OF CURB, CENTERED ON SPEAKER POST.
2. CENTER OF MB TO BE 5'-6" TO 9'-0" FROM DRIVERS POINT OF VIEW.

ENLARGED MENU BOARD DETAIL AT CURVED CURB
N.T.S. DETAIL AS PROVIDED BY YUM BRANDS WITH REVISIONS FROM HOSPITALITY SYRACUSE AND NOT DESIGNED BY ENGINEER



NOTES
1. ALL AREAS OF THE MB MUST BE VISIBLE TO DRIVER LOCATED AT SPEAKER POST. ASSUME DRIVERS LOCATION TO BE 24" FROM FACE OF CURB, CENTERED ON SPEAKER POST.
2. CENTER OF MB TO BE 5'-6" TO 9'-0" FROM DRIVERS POINT OF VIEW.

ENLARGED MENU BOARD DETAIL AT STRAIGHT CURB
DETAIL AS PROVIDED BY YUM BRANDS WITH REVISIONS FROM HOSPITALITY SYRACUSE AND NOT DESIGNED BY ENGINEER

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STATE OF NEW YORK · STEPHANIE L. ALBRIGHT · 087051 · LICENSED PROFESSIONAL ENGINEER
Seal Seal

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CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

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315-451-9603

Taco Bell - Watertown NY

State St
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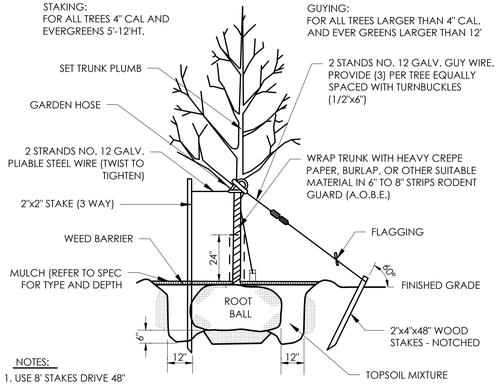
Project Name & Location:

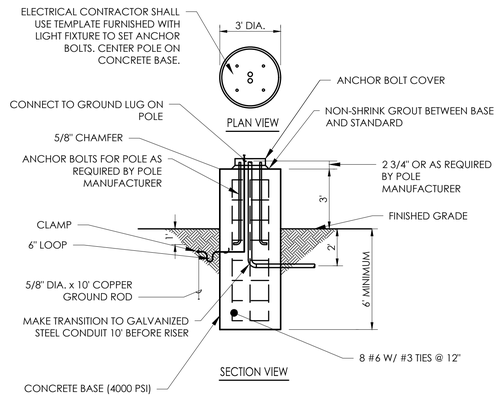
Details Sheet

Drawing Name:

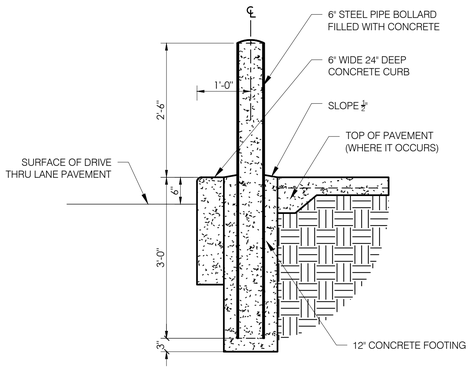
		Project No.
Date:	10/12/22	22-0408
Type:	LG 50	
Drawn By:	SLA	C7
Scale:	N.T.S.	Drawing No.



TREE PLANTING DETAIL
N.T.S

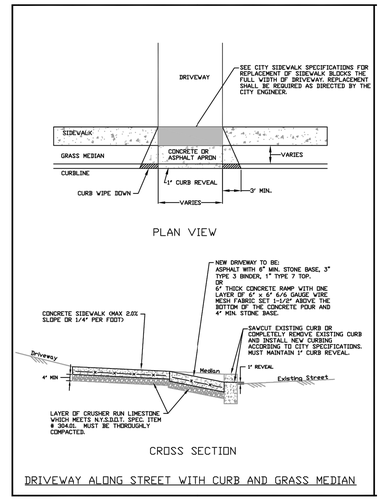


LIGHTING STANDARD DETAIL
N.T.S.

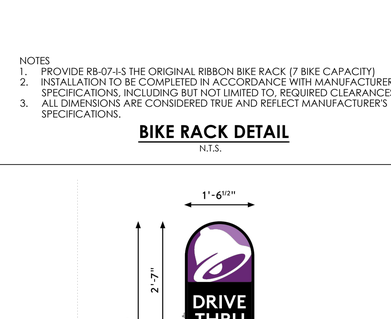


BOLLARD AT DRIVE-THRU
N.T.S.

DETAIL AS PROVIDED BY YUM BRANDS AND NOT DESIGNED BY ENGINEER



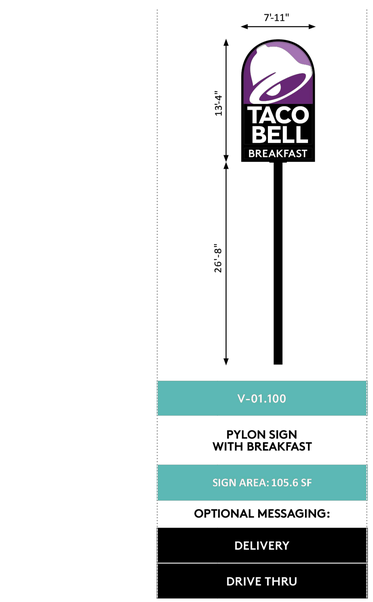
SHRUB PLANTING DETAIL
N.T.S



IN GROUND ANCHOR MOUNT

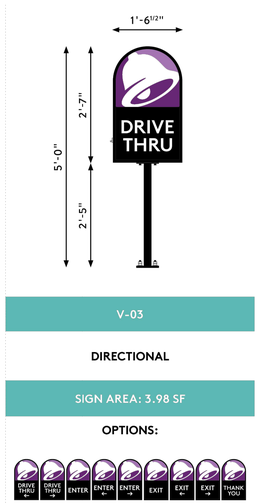
NOTES:
1. SIGN SHALL BE MADE OF A NON-FADING, RIGID, WEATHER-RESISTANT MATERIAL SUITABLE FOR THE INSTALLATION LOCATION. STICKERS AND LAMINATED PAPER SHALL NOT BE ALLOWED.
2. SIGN SHALL BE MOUNTED IN A CONSPICUOUS LOCATION IN THE VICINITY OF ANY COVER OR COVERS THAT PROVIDE ACCESS TO THE GREASE INTERCEPTOR.
3. SIGN SHALL BE PERMANENTLY AFFIXED TO ANY SUPPORTING DEVICES. AN ALL MOUNTING HARDWARE AND SUPPORTING DEVICES SHALL BE OF A STURDY, WEATHER-RESISTANT MATERIAL SUITABLE FOR THE INSTALLATION LOCATION.

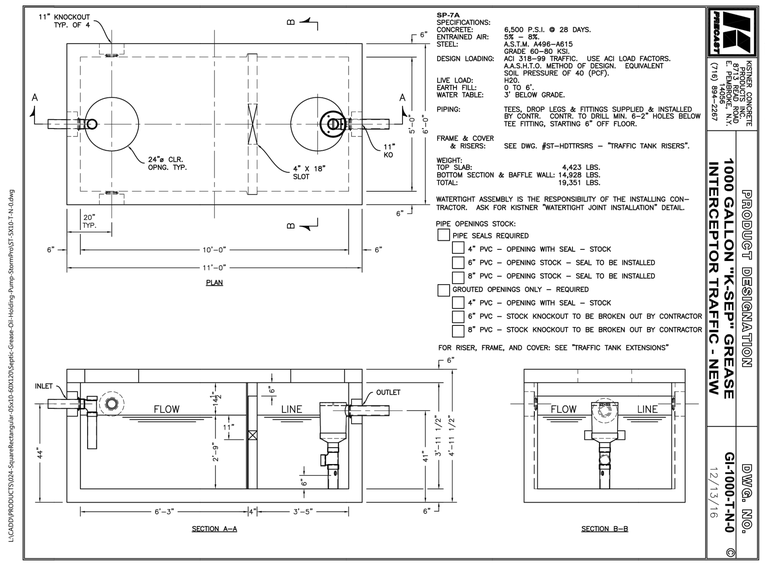
GREASE INTERCEPTOR WARNING SIGN
N.T.S



NOTES
1. PROVIDE RB-07-I-S THE ORIGINAL RIBBON BIKE RACK (7 BIKE CAPACITY)
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO, REQUIRED CLEARANCES.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.

BIKE RACK DETAIL
N.T.S.





GREASE INTERCEPTOR (TRAFFIC RATED)
N.T.S.

GREASE INTERCEPTOR DESIGN CALCULATIONS ARE AS FOLLOWS:
BASED ON THE NYSDEC FORMULA FOR GREASE TRAP SIZING
WHERE:

D = THE NUMBER OF SEATS IN THE DINING AREA
GL = GALLONS OF WASTEWATER PER MEAL
ST = STORAGE CAPACITY FACTOR (OFFSITE DISPOSAL = 1.7;
ONSITE DISPOSAL = 2.5)
HR = NUMBER OF HOURS FACILITY IS OPEN PER DAY
LF = LOADING FACTOR FOR RESTAURANTS
THEREFORE, GREASE INTERCEPTOR SIZE
= D x GL x ST x (HR/2) x LF
= 50 x 1.25 x 1.7 x (18/12) x 0.5
= 505 GALLON CAPACITY REQUIRED
(1,000 GALLON GREASE INTERCEPTOR PROVIDED)

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A	Issued to City	12/19/22
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Watertown, NY 13601
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Project Name & Location:

Details Sheet

Drawing Name:

		Project No.
Date:	10/12/22	22-0408
Type:	LG 50	
Drawn By:	SLA	C8
Scale:	N.T.S.	Drawing No.

THE SPECIFICATIONS ARE NOT PROVIDED AS AN INDICATION OF WORK, BUT PROVIDE REQUIREMENTS AND STANDARDS OF WORK REQUIRED, OR COULD BECOME REQUIRED, DUE TO UNFORESEEN CONDITIONS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. WHEN THESE SPECIFICATIONS ARE IN CONFLICT WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION THE MORE STRINGENT SHALL BE REQUIRED AS DETERMINED BY THE ENGINEER AND AUTHORITY HAVING JURISDICTION.

GENERAL CONSTRUCTION CONDITIONS

1. The term of Owner as used in these specifications and notes shall include the owner of the property, the company or party that hired the Contractor, the company or party that signed the contract for this work, and the agents of each. The Owner's representative shall be the individual or party assigned by the Owner to be the Owner's representative. Owners of adjacent properties shall include the property owner, lessee, legal occupier, and operator of any business on that property.
2. All work and materials shall comply with all local, state, and federal regulations, codes, and O.S.H.A. standards and be constructed to meet or exceed those codes.
3. The Contractor shall be responsible for all temporary permits, connection permits, fees, inspections and record keeping required by all municipal, utility, health, environmental, state, or federal agencies that may have jurisdiction. Furthermore, the Contractor shall be responsible to meet or exceed all requirements of the agencies or authorities having jurisdiction over his work. All conflicts in requirements of different agencies, authorities, and/or the design shall be brought to the attention of the owner' s representative before proceeding.
4. The Contractor shall be responsible to locate and maintain the property and project limits throughout the project. All conflicts between the design and the project/property limits shall be brought to the attention of the owner's representative before proceeding. Unless described in the contract documents or shown on the drawings the Owner has not secured any right of ways, easements or agreements with other property owners or property users. Therefore, it shall be the Contractor's responsibility to secure and maintain any temporary right of ways, easements, permits, or agreements he may need to perform his work. All such agreements shall hold the Owner, Engineer of Record, and his agents harmless and the responsibility of the Contractor to bear all costs. The Contractor shall copy the Owner on releases of all agreements prior to final payment by the Owner to the Contractor. The Contractor shall not interfere with operations of adjacent businesses and work shall be completed off-hours, as necessary. Coordinate with Municipality for any restrictions on allowable working hours.
5. Unless otherwise noted on the drawings or in the contract documents the Contractor shall be responsible for all construction survey, layout, and record drawings for this contract. Any conflicts in survey/layout and the design or agencies requirements shall be brought to the attention of the owner's representative prior to proceeding with the work. The Contractor shall protect and safeguard all existing survey corners, monuments, control and tie-downs. The Contractor shall pay all costs to repair or replace damaged survey monuments, control and tie-downs. Record drawings shall be provided in accordance with any requirements of the authorities having jurisdiction including the required information to be provided, and signatures, seals, and certifications that may be required.
6. No changes to the design or materials specified may be made without written authorization by the Engineer of Record or in the case of utilities or road work to be dedicated, the authority receiving dedication. At the end of the contract, the Contractor shall provide to the Owner a record set of drawings reflecting all changes made by the Contractor during construction.
7. Erosion control is necessary whenever sediment, dust, erosion, or contaminated run-off may occur. The Contractor shall be responsible to place and maintain whatever erosion control or run-off protection is required to protect his work, the work of others, the project, adjacent properties and the health and well being of the workers, public and surrounding natural resources. This shall include additional measures beyond the project ES plans, as necessary. They shall be familiar with all federal, state and local requirements regarding erosion and run-off control.
8. The Contractor shall be familiar with the project site and all adjacent pedestrian, traffic, and business uses. The Contractor shall take whatever precautions and steps necessary to maintain safety and operation of these uses in accordance with federal, state, county, and local requirements. The Contractor shall be responsible for costs and damages caused from his failure to take proper and adequate precautions. The Contractor shall be familiar with all federal, state, and local requirements regarding these uses.
9. The Contractor shall be responsible for costs and delays associated with weather, groundwater, and other occurrences that could be expected or are common with this type of work. The Contractor shall review all pertinent documents including soils reports, soils borings, and other soil or site data.
10. The Contractor shall be responsible to save and protect his work throughout the contract. Any damages requiring repairs or replacement shall be corrected by the Contractor at his expense.
11. When work is done within a road, utility or private easement, right of way, or other property agreement, the Contractor shall do all work within that area per the authority having jurisdiction.
12. When separate site and building contracts are performed, the site Contractor shall be responsible to bring utilities to within 5 feet of building face unless noted otherwise on drawings or contract documents.
13. All utilities are shown per surface surveys and/or record maps and may vary from actual in-field locations. The Contractor is responsible for all utility stake outs and locating utilities prior to commencing work. Any damage to utilities due to improper stake out, lack of stake out or the failure to verify differences between drawings and actual field conditions will be the responsibility of the Contractor to repair, replace, or pay damages at no expense to the contract.
14. Contractor shall comply to the fullest extent with the latest standards of OSHA directives or any other agency having jurisdiction for excavation and trenching procedures. The Contractor shall use support systems, sloping, benching, and other means of protection. This includes, but is not limited to, access and egress from all excavation and trenching. Contractor is responsible to comply with performance criteria for OSHA. Trench excavation requiring sheeting, shoring or other stabilizing devices shall be designed by a Professional Engineer and meet all O.S.H.A. requirements. All excavations shall maintain safe side slopes in accordance with local, state and O. S. H. A. requirements. No stocking of material close to an open cut or steep slope will be permitted in an effort to prevent cave-ins.
15. The contractor shall select the means and methods for providing support of excavations in accordance with safety requirements, plans, and project specifications. The contractor must evaluate soil conditions during excavations since variations in the soil can occur across the site. The excavations should be monitored continuously for signs of deterioration such as seepage of water or sloughing of soil into the excavation. The contractor is ultimately responsible for excavation safety.
16. The Contractor shall notify the Owner immediately and stop all work in areas where hazardous materials are discovered. When required, the Contractor shall notify the appropriate environmental and health agencies.
17. The Contractor shall coordinate with the Authority having jurisdiction for all required inspections and be responsible to hire any required third party inspectors.
18. For any testing, inspections, and/or certifications requiring a Professional Engineer, the Contractor shall be responsible to hire a third party engineer. A copy of all tests shall be provided to the Engineer of Record.
19. Any discrepancies between plans, details, and specifications shall be immediately brought to the attention of the Engineer of Record.
20. Stabilizing fabric (woven geotextiles), if required, shall meet the following requirements "modulus (load at 10% elongation) =115lb per ASTM D1682-64", "Grab tensile strength 200lb per ASTM D 1682-64", "mullen burst strength = 400psi per ASTM D 3786-87", "trapezoid tear strength when applicable = 115lb per ASTM D1117-80", "coefficient of permeability K CM/SEC = .015 per ASTM D 4491-85", "water flow rate GPM/SF= 60 per ASTM D 4491-85". When stabilization fabric is used it shall be pulled tight and all wrinkles removed. Overlaps shall be in accordance with manufacturer's recommendations. Refer to Geotechnical Engineers report, if available, for additional information.
21. Filter fabric (non-woven geotextile), if required, shall meet the following requirements "grab tensile elongation =50% per ASTM D1682-64", "Grab tensile strength 70lb per ASTM D 1682-64", "mullen burst strength = 200psi per ASTM D 3786-87", "trapezoid tear strength when applicable = 35lb per ASTM D1117- 80", "coefficient of permeability K CM/SEC = .2 per ASTM D 4491-85", "water flow rate GPM/SF= 180 per ASTM D 4491-85". When filter fabric is used it shall be pulled tight and all wrinkles removed. Overlaps shall be in accordance with manufacturer's recommendations.

DEMOLITION

1. The Contractor shall inspect all structures, facilities and areas slated for demolition to gain a full understanding of the work required. The Contractor shall take whatever measures necessary to protect the safety of the public, his employees and agents during the inspections and subsequent work. The Owner, Client, and Engineer of Record are not responsible for the condition of the buildings, facilities, or other areas slated for demolition.
2. All materials not slated for reuse must be disposed of off site in a legal manner. The Contractor may salvage any equipment or materials not designated by the Owner to be saved. All salvaged material or items shall be removed from the site immediately upon removal. No such materials shall be stored on the site. Absolutely no sales of salvaged materials will be allowed on the project site. All salvaged material must be removed, transported, and disposed of in a legal manner.
3. Upon approval by Owner, the Contractor shall be responsible to remove and store safely all materials slated to be saved or reused. The Contractor shall document existing conditions using photographs prior to start of work and notify Owner of any existing damage prior to construction start. The Contractor shall be responsible for all costs to repair or replace existing features to remain (including but not limited to fencing, lighting, curbing, pavement, utilities, storm structures, landscaping, etc.) that are damaged due to his work or failure to protect throughout the duration of his contract.
4. No burning, explosives, or other potentially dangerous methods of demotion will be allowed unless written permission is granted by the Owner and all appropriate permits are granted.
5. The Contractor will provide whatever safety equipment and devices are necessary to protect the adjacent properties, structures and other areas slated to remain. This will also include erosion control, dust control, and settlement.
6. All areas shall be brought back to their original grade or that of the surrounding area, which ever is closer to the final grades of the project for that area. All areas requiring fill shall be compacted to the requirements of the area but in no case less than 90% of modified proctor (ASTM D 1557).
7. All demolition within the proposed building footprint shall be coordinated with the building drawings.
8. Light pole removal shall include complete removal, backfill of concrete base, and capping of any conduit/wiring in to be abandoned in place.

CLEAR AND GRUB

1. Clearing and grubbing shall not commence until erosion control plans, including applicable BMP's, are in place.
2. The Contractor shall review plans and identify and safely mark all plants and trees to be saved. The Contractor shall protect all plants and trees to be saved throughout the contract. This shall include prohibiting any work within the drip line of the tree, except under the supervision of a licensed Landscape Architect.
3. All areas to be cleared and grubbed shall be surveyed in the field to establish the appropriate limits of work.
4. The Contractor shall take whatever measures necessary to locate and protect existing utilities, structures, wetlands, and other facilities to remain.
5. All trees, shrubs, stumps, roots, and other debris shall be removed from site and disposed of in a legal manner.
6. No burning will be allowed on site.

PAVEMENT AND STRUCTURAL SUBBASE

1. The type of subbase required for each use shall be called out on the drawings. If no reference is made on the drawings or details to the type of subbase required the following shall be used:
   - 1.a. The source of the material shall be one approved for use by the State Department of Transportation.
   - 1.b. The material shall be a crushed stone conforming to AASHTO M 147-65 (1980 or latest revision), grade A.
   - 1.c. Gravel or other materials can only be substituted for crushed stone when approved in writing by the Owner and Engineer of Record.
   - 1.d. Material supplied for use as subbase shall have 100% passing the 2 inch sieve, 30% to 65% passing the 3/8 inch sieve, 25% to 55% passing the No. 4 sieve, 15% to 40% passing the No. 40 sieve and 2% to 10% passing the No. 200 sieve.
2. Subbase shall be placed in lifts not to exceed 8 inches and compacted to the requirements stated in the soils report. If not stated, the compaction requirement shall be 95% of maximum dry density per ASTM D1557 (modified proctor).
3. The Contractor will be responsible for all costs in preparing the subgrade to receive subbase. This shall include fine grading and compacting as necessary to meet the requirements stated here and under Earthwork.
4. The amount of testing required to verify the compaction shall be the same as stated under Earthwork.
5. Refer to General Construction Conditions for filter fabric requirements, if applicable.

EARTHWORK

1. Earthwork shall not commence until erosion control plans, including applicable BMP's, are in place.
2. Refer to Project Geotechnical Report for full project recommendations. Where Geotechnical Report is not clear or does not give requirements, the following may be used.
3. Prior to starting any cuts or fills the Contractor shall strip and stockpile all topsoil. Stripping of topsoil can only commence after the clear and grub operations are complete and all erosion control devices are in place in that area. Topsoil shall be stockpiled in areas designated on the plans or approved by the owner's representative. The Contractor shall review the soils reports, boring logs, and, when necessary, his own field verification so as to be familiar with the depth of topsoil. The Contractor shall take all reasonable precautions to prevent over and under removal.
4. Unless otherwise noted, the grades shown on the plans are finished grades. Therefore, pavement, floors, subbase, and other improvements must be subtracted to calculate subgrade elevations.
5. The Contractor shall maintain a survey grid of not less than 100' x 100' or other means acceptable to the Owner's representative that will indicate location and amount of cut or fills remaining. At subgrade this grid shall be 50' x 50' with location and final grade marked clearly or survey shall be completed demonstrating that the subgrade is +/- 0.1 feet of required subgrade.
6. Unless otherwise noted on the drawings or in the contract documents, the Contractor shall retain and pay all cost for soil compaction testing to be performed by an independent testing laboratory. For each lift placed, compaction testing shall be done every 2000 sq. ft. In trenches, compaction testing shall be done every other lift with at least 1 test every 50 LF.
7. Structural fill placed 2 feet or deeper below the finished subgrade elevation or finished grade of graded areas shall have a maximum particle size of 6 inches. Structural fill placed within the upper 2 feet of proposed subgrade or finished grade of graded areas shall have a maximum particle size of 3 inches.
8. Compaction requirements shall be those outlined in the soils report, if provided. If the soils report is not clear or does not give requirements, the following will be used:
   - 8.a. Under and to 20 feet outside the building envelope the soils shall be compacted to a minimum of 95% maximum dry density per ASTM D 1557 (modified proctor).
   - 8.b. Under proposed or future pavement areas, including 10 feet outside such areas, the soil shall be compacted to a minimum of 93% maximum dry density per ASTM D 1557 (modified proctor).
   - 8.c. All landscape and lawn areas shall be compacted to 90% maximum dry density per ASTM D 1557 (modified proctor).
   - 8.d. The testing lab shall test soils in accordance with ASTM D 2922 (nuclear method) with proctors for each soil type.
   - 8.e. Constructed berms shall be compacted to 95% maximum dry density per ASTM D1557.
9. All material to be used for fill shall be free of organics, frozen material, contaminated material, debris, and any rocks larger than 4 inches. For fill placement within 1 foot of subgrade, no rock shall be greater than 2 inches in diameter. The Contractor shall bear all cost associated with drying, segregating, or required methods to treat soils to meet compaction and other requirements.
10. All fill placed within berms that detain/retain water shall be a minimum of 20 percent by weight of material passing the No. 200 sieve, and a maximum particle size of 6 inches. Any on-site cut areas could be utilized as fill material for the berm, as long as all construction requirements and specifications were met (placement, compaction, gradation, permeability, etc.). Inclusion of vegetation, organic material, or frozen soil in the embankment, as well as placing of embankment material on a frozen surface is prohibited. Bedding material for all pipes and conduits within berm area shall be placed in layers not thicker than 4 inches before compaction with particle size limited to 3 inches in the greatest dimension, and compacted to required density of fill material for berm. Anti-seep collars are required for all pipes/utilities within the berm area.
11. The Contractor shall take all necessary precautions to protect earthwork operations from weather and ground water including keeping positive drainage, divert drainage, dewatering, and sealing disturbed areas with a steel drum roller prior to inclement weather.
12. If imported material is required, the source and a random composite sample shall be reviewed by the testing laboratory prior to being brought to site. The testing laboratory shall test for percent passing the 200 sieve that does not exceed the existing on site material or in no case greater than 10%. They shall also verify consistency with existing on site materials and all other requirements. Waivers to these requirements can only be given jointly by Engineer of Record and the Geotechnical Engineer that prepared the soils report.
13. The testing lab may restrict some on site materials from being used as fill in building or pavement areas when it is their opinion that the material will not meet requirements stated here. If such conditions do exist and other material is not available on site, the owner's representative must authorize in writing the use of import material unless there will be no additional cost to the contract.
14. Fills shall be placed in lifts not to exceed 8 inches in mass fills and 6 inches in trench or restricted areas. All subgrades shall be thoroughly proofrolled using a smooth drum roller with a minimum static drum weight of 20 tons, operated in static mode. A minimum of 2 overlapping passes in one direction, followed by 2 overlapping passes in a direction perpendicular to the first 2 passes. Areas which are unsuitable and which cannot be stabilized with repeated compactive effort shall be overexcavated to a suitable subgrade. The undercut should be of adequate depth such that, after backfilling is complete the resulting subgrade surface is firm and stable under proofrolling. Onsite structural fill may be used to attain proposed subgrade elevation to replace the removed unsuitable material. If imported structural fill, base, or subbase course materials are used to backfill the undercuts within the building or pavement areas, a woven geotextile should be placed at the bottom of the undercut area prior to placement of the fill.
15. Contractor is to remove any debris or surficial organic soils (ie. topsoil, organic subsoil, reworked soil) which may be encountered within the proposed building footprint, floor slabs, and pavement areas prior to the placement of any fill.
16. All final subgrade under proposed pavement, building, or other structure shall be proof rolled as described above for the identifying of soft areas. Areas found to be unacceptable shall be scarified, dried, and re- compacted. Retest by proof roll as necessary.
17. All fill material is to be in place and compacted prior to installation of proposed utilities. Refer to pipe bedding details for trench dimensions. Additional width will only be allowed when compaction equipment limitations require and only after approval of the Engineer of Record. No more trench shall be open in one day than can be properly backfilled in that same day to minimize weather and safety concerns. When backfilling around pipes, provide uniform support at invert and proper compaction under, along, and over the pipe. Care shall be given while backfilling around pipes to prevent damage to the pipes including: placing backfill/bedding by hand, using hand operated plate tamps or jumping jacks, and other load restrictive techniques until fills are a minimum of 2 feet or manufactures recommend depth, which ever is greater, above the top of the pipe. Compaction requirements are not relieved in these areas and will remain as stated on the drawings or above. If clean stone is used as a bedding or encasement, filter fabric shall be placed between the natural soils and backfill and the stone to prevent migration of fines. Anti-seep collars shall be provided in accordance with the details. The Contractor is cautioned against the migration of fines from soils adjacent to voids. Where such conditions exist the Contractor shall install or wrap those areas with filter fabric to prevents fines from migrating into voids.
18. If rock is encountered that was not indicated on the plans or soils report, the area for removal should be measured and reviewed with the owner's representative prior to rock removal. Rock will be defined as the natural earth materials that can not be removed with conventional earth working equipment.
19. Where rock is adjacent to a structure or utility, the rock shall be removed to a minimum of 6 inches below and 1 times the diameter, but not less than 1 foot or greater than 3 feet on any side.
20. No explosives will be allowed until all permits are granted and the Owner has signed off. Pre and post blast reports must be kept and recorded. All structures within the area of the blast must receive a pre- blast survey. All blasting must be performed by a licensed blaster.
21. Unless otherwise noted on the drawings, the Contractor shall remove all excess topsoil, cut material, or waste material from site and dispose of in a legal manner.

TRAFFIC SIGNAGE AND PAVEMENT MARKINGS

1. Pavement markings shall be the type, color, size, and locations shown on the plans. Contractor shall provide two (2) coats of paint for all pavement markings. If the information on the plans and details is not complete and the authority having jurisdiction does not have requirements regarding this, use the following:
   - 1.a. Paint shall be supplied in accordance with AASHTO: M 248 latest addition.
   - 1.b. Colors shall be as follows:
     - 1.b.1. YELLOW- parking stalls, parking islands, and fire lanes
     - 1.b.2. WHITE - stop bars and lettering, pedestrian crossings, handicap parking symbol and characters, and traffic control lettering and characters
     - 1.b.3. BLUE - background of handicap parking symbol
2. The pavement shall be clean and free of dirt, dust, moisture, oils, and other foreign materials. Any old pavement markings shall be removed unless paints are compatible and overlay identically. The surface of the pavement prior to application shall be 45 degrees F and rising unless manufacturer's recommendations are greater. All painting shall be applied in appropriate weather conditions (e.g. temperature, wind, precipitation), and in accordance with manufacturer's recommendations.
3. The signage and pavement markings shall be the type and at the general location shown on the drawings. The signage and pavement markings shall be provided and located in accordance with the Local Highway, County Highway, and State Department of Transportation. If local, county or state codes do not exist use MUTCD.
4. Posts, brackets, and frames shall be steel per ASTM A-36, A-242, A-441, A-572, A588, Grade 50, and hot dip galvanized in accordance with ASTM A123. All cutting, drilling, or other pole modifications shall be painted with galvanizing paint. All bolts, nuts, and washers shall be stainless steel.
5. Post holes in pavement shall be a minimum of four feet deep and 12 inches in diameter unless poor soils or frost conditions require greater depth. Sign posts shall be kept plumb, 6 inches off bottom and centered as 4000 psi concrete is placed around the post. The overall sign and post system should be able to withstand 33 pounds per square foot.
6. Contractor can place signs on posts after concrete has cured for seven days or 3/4 strength is achieved.
7. All handicap striping and signage, including spaces, crosswalk, accessible path, and curb ramps, shall meet Americans with Disabilities Act (ADA) requirements. Fire lane striping and signage shall meet the requirements of the local building inspector and fire department.

SITE CONCRETE - INCLUDING CURB, SIDEWALKS AND GUTTERS

1. The dimensions shall be those shown on the drawings. The Concrete mix shall be 4000 psi at 28 days made with type I or type II cement per ASTM C 150 and aggregates meeting State Department of Transportation requirements, unless otherwise noted. Slump for slip forming shall be 1 inch +/- 1/2 inch and for formed concrete the slump shall be 3 inch +/- 1 inch. Air entraining mixture shall meet the requirements of ASTM C 260 4% +/- 1 1/2% for slip form work and 6% +/- 1 1/2% for formed and placed concrete. Water reducing agent shall conform to ASTM C 494, type A. Curing compounds shall conform with ASTM C309, type I, class A moisture loss of not more than .055 gr/sq cm when applied at 200 sq ft per gallon.
2. Sidewalks, gutters and curbs shall be placed on compacted subbase consistent with the pavement subbase as shown on the drawings. When subbase details are missing and no agency has jurisdiction use the following: sidewalks and gutters shall be placed on a minimum of 6 inches of compacted subbase and curbs shall be placed on a minimum of 4 inches of compacted subbase.
3. All forming, placement, materials and curing shall conform to the latest addition of ACI 318 "Building code requirements for reinforced concrete" and all similar State Department of Transportation requirements.
4. Reinforcing shall be in accordance with that specified on the drawings and the Concrete Reinforcing Steel Institute (CRSI) "manual of standard practices". Reinforcing steel shall be ASTM A 615, grade 60, deformed. Welded wire fabric shall be ASTM A 185, welded wire steel fabric.
5. Sidewalks, and gutters shall have a broom finish perpendicular to flow with a picture frame edge joint all the way around. Curbs shall have a smooth finish or light rub finish but consistent throughout the project.
6. Expansion joints shall be placed as per details and at adjoining structures such as walls, manholes and vaults. Expansion joint material shall be premolded, 1/2 inch material with 23/64 inch cap in accordance with ASTM D1751. After concrete has set the cap should be removed and void filled with waterproof joint filler. Curb and gutter shall be cut or tool jointed to 1/3 the depth every 10 feet. Sidewalks should have tooled or cut joints to 1/3 the depth in squares or as close to square as possible not exceeding 5ft x5ft.

WATER SYSTEMS AND SERVICES

1. The water systems and services shall be supplied and placed in accordance with all local, state and federal requirements. When the requirements of the authority having jurisdiction differ from those shown on this plan, Contractor shall adhere to the more stringent standards.
2. Refer to Pipe Bedding Detail for pipe bedding requirements.
3. All water piping, fittings and appurtenances shall be placed a minimum of 6 inches below frostline or with a minimum 5 feet of cover in lawn areas and 6 feet of cover in paved areas, whichever is greater. Pipe sizes 4 inches and up shall be ductile iron or polyvinyl chloride as indicated on the drawings (if not shown use ductile iron). Pipe sizes below 4 inches shall be copper or polyethylene as indicated on the drawings (if not shown use copper). All piping shall be extended vertically through building floor slab. Provide radius/bends in accordance with manufacturer's recommendations. Refer to building plans for additional information.
4. The minimum separation between water services and sewer lines shall be 18 inches measured vertically from outside to outside of pipe at the crossing. A standard length of water pipe shall be centered at the crossing to maximize the distance between the crossing and the nearest water service pipe joint. The sanitary line shall be ductile iron pipe with mechanical joints at least 10 feet on both sides of crossing, the waterline shall have mechanical joints with appropriate thrust blocking as required to provide a minimum of 18" clearance meeting requirements of ANSI A21.10 or ANSI 21.11 (AWWA C-151) (Class 50). Contractor shall adjust elevation of water as needed to maintain adequate separation and burial depth. When the water service runs under the sewer line, a gravel or crushed stone backfill meeting the requirements of subbase shall be placed and compacted around the water pipe up half the diameter of the sewer pipe to provide adequate support to the sewer line. Ductile iron pipe shall be provided in accordance with AWWA C151, (6 inch diameter and greater shall be Class 50 and 6 inches and smaller shall be Class 51). Ductile iron pipe shall be lined with a cement mortar and seal coated in accordance with AWWA C104. Gaskets shall be provided in accordance with AWWA C111. Fittings shall be ductile iron in accordance with AWWA C153 compact fittings with a pressure rating of 350 psi. Water services and sewer lines running parallel shall have a minimum separation of 10 feet measured from outside of pipe to outside of pipe.At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required.
5. All pipes shall be installed per manufacturer's recommendations. Ten gauge copper tracer wire shall be placed with all plastic pipe. Pipe material shall be as follows:
   - 5.a. PVC (Polyvinyl Chloride) pipe shall be furnished in accordance with AWWA C900 for pipe 4 inches or greater and ASTM D 1785, schedule 40, gaskets per ASTM F 477- elastomeric seal, solvent cement per ASTM D 2564 for pipes smaller than 4 inches.
   - 5.b. PE (Polyethylene) pipe shall be furnished in accordance with AWWA C901 and ASTM D2737. Ten gauge copper tracer wire will be placed with all plastic pipes.
   - 5.c. DIP (Ductile iron pipe) shall be provided and installed in accordance with AWWA C151 and C600 (6 inches and greater shall be Class 50, smaller than 6 inches shall be Class 51). Ductile iron pipe shall be lined with a cement mortar and seal coated in accordance with AWWA C104. Gaskets shall be provided in accordance with AWWA C111. Fittings shall be ductile iron in accordance with AWWA C153 compact fittings with a pressure rating of 350 psi. Standard ductile iron or cast iron fittings shall be supplied in accordance with AWWA C110 with a pressure rating of 250 psi. The lining and gaskets for the fitting shall meet the same requirements as the pipe. If recommended in the soils report, ductile iron pipes shall be encased in polyethylene in accordance with AWWA C105 and tar coat all fitting bolts whenever soils are primarily clay or not pH balanced.
   - 5.d. Copper water pipe shall be supplied in accordance with ASTM B 88- type K, seamless with fittings per AWWA C800.
6. Gate Valves shall be nonrising stem, double disc, bronze disc Resilient seated, cast iron or ductile iron body and bonnet in accordance with AWWA C509 and pressure rated for 250 psi. Ten gauge copper tracer wire will be placed with all pipes.
7. Valve box shall be cast iron with a base compatible with valve, 5 inches in diameter, screw type extension at top and a cover that reads "WATER".
8. All tap and/or connection material and work shall be done in accordance with and coordinated with the local Water Authority and Health Department. When the Authority so requires, the taps and/or connections shall be done by the Authority themselves and paid for by the Contractor.
9. Thrust restraints shall be used at all fittings, plugs and appurtenances that cause a change in direction, flow or are subject to thrust or hammering by water flow. Thrust restraints will include concrete thrust blocks (3000 psi), anchoring joints and tie rods. Concrete thrust blocks shall be used unless space, access or maintenance restraints prohibit their use.
10. Curb stops shall have a bronze body, ground key plug or ball with wide tee head. The curb stop shall be compatible with adjoining pipes. The service box shall have a telescoping top section with a length that will place the adjustment centered when buried to the appropriate depth. The service box shall be of a size and type that is compatible with the curb stop. The cover shall have the lettering "WATER".
11. All meters, vaults and backflow shall meet the requirements of the health department and other agencies having jurisdiction.
12. Fire hydrants shall conform to the requirements of the local water authority, fire department and AWWA C502. Drain stone shall have 100% passing the 1 1/2 inch sieve, 90 - 100% passing the 1 inch sieve, 35 - 95% passing the 1/2 inch sieve and 0 - 15% passing the 3/8 inch sieve. All hydrants will include a gate valve and box located at the hydrant branch to shut off the hydrant line.
13. All bedding and encasements shall be compacted with care to achieve proper compaction without damaging the pipe, fittings, or appurtenances.
14. If clean stone is required by the local authority having jusidiction and is approved by Owner and/or Engineer of Record, then the bedding material shall be wrapped in filter fabric and anti-seep collars shall be provided to prevent the migration of fines.
15. All water mains fittings and valves shall be tested for pressure and leakage in accordance with AWWA C600. Test water shall be potable. Test pressures shall not be less than 1.25 times the working pressure at the highest point and 1.5 times the working pressure at the testing point. The pressure may not drop more than 5 psi during the 2 hour test. Leakage will not exceed more than (L=SD(P)1/2 /133,200) where "L = allowable leakage, in gallons per hour" "S= length of pipe tested, in feet" " D= nominal diameter of pipe, in inches" "P= average test pressure during test, in pounds per square inch (gauge) during the same 2 hour duration.
16. Other fitting and appurtenances not part of the main line testing shall be tested by visual inspection for leakage under normal working pressures.
17. All main lines and appropriate appurtenances shall be flushed and disinfected in accordance with AWWA C651 and the requirements of the appropriate health department.
18. The Contractor will coordinate all testing and disinfecting with the water authority and health department.
19. Any testing failure shall require the Contractor to repair or replace the failed section at no additional expense to the contract.

STORM WATER SYSTEM

1. The storm water system shall be supplied and placed in accordance with all local, state and federal requirements.
2. Storm design includes many variables, such as pipe roughness coefficient, that can affect the actual final run-off. If no alternative materials are listed on the utility drawings, no substitutions may be made by the Contractor unless first reviewed and accepted by the Engineer of Record.
3. Refer to Pipe Bedding Detail for pipe bedding and anti-seep collar requirements.
4. Storm pipe material shall be as follows:
   - 4.a. 12 inches and up shall be corrugated polyethylene pipe (CPP) with smooth interior, in accordance with AASHTO M252 & M294 and ASTM F405 & F667, with a manning friction number (n) of 0.013 or less. Install in accordance with ASTM F449 and the manufacturer's recommendations.
   - 4.b. Smaller than 12 inches shall be CPP, as per requirements above, or Polyvinyl Chloride (PVC) per ASTM D 3034, SDR 35 with gaskets per ASTM D 3212, elastomeric seal.
5. End sections shall be the same material as the preceding pipe and appropriate collar.
6. Increase size of manhole if in the same horizontal plane there is two areas where the area between two pipes is less than 8 inches or ½ of the circumference is supported by less than ½ of the diameter of the manhole. Inverts shall be smooth cast in place concrete. Gaskets between risers shall be rubber per ASTM C 443. Adjustment rings shall be precast concrete 4000 psi and 5 to 8% air entrainment.
7. Inlets shall meet the same requirements as those listed for manholes, except sumps shall be provided as per details, rather than a smooth invert.
8. Grates shall be galvanized per ASTM A123. Minimum grate opening size will be 24 inches x 24 inches and design for a minimum of H-20 loading. Refer to details for additional information.
9. Dry wells shall meet the same requirements as those listed for manholes with the addition of openings of approximately 15% of the rings interior surface. The openings shall be 1 x 3 inch slots or 1 inch diameter on the inside surface. Dry wells shall be backfilled with a minimum of 1 foot of clean stone sized between 3 and 4 inches. Outside the stone, the entire structure shall be wrapped in filter fabric to prevent outside soils from entering the stone and dry well.
10. Unless otherwise noted, underdrains and trench drains shall be made with 4 inch perforated corrugated polyethylene pipe encased in clean stone sized between 2 inch and ¼ inch and then wrapped in filter fabric. Outside dimensions of the trench drain will not be less than 1 foot.
11. All storm pipe entering structures shall be grouted to ensure connection at structure is watertight and structurally sound. All storm sewer pipes entering and exiting structures shall be flush with the inside of the structure wall.
12. All pipe shall be placed in accordance with the manufacturer's recommendation and to the lines and grades shown on the drawings. Care shall be given during backfill operations not to move or damage pipe or appurtenances while achieving the appropriate compaction requirements.
13. All systems shall be visually inspected for alignment and workmanship. All debris, dirt or other foreign objects shall be removed from system by a method of than flushing and material removed shall be disposed of properly.
14. Any pipes found with diameter deflections greater than 5% of the specified pipe diameter will be repaired or replaced. Any alignment differentials greater than 5% of the diameter of the pipe will be corrected or replaced.
15. Any cleaning, repairs, or replacement required due to failure of testing or poor workmanship shall be done by the Contractor at no additional expense to the contract.

ASPHALT PAVEMENT

1. Asphalt shall be the type or types specified on the drawings. If no type is indicated the Contractor shall use a mix specified by the State Department of Transportation for top and binder. In New York State that would be type Asphalt Concrete Binder Course Type 19 and Asphalt Concrete Surface Course Type 12.5. All asphalt shall be produced in state approved plants with state approved products.
2. Asphalt will only be placed when the outside temperature is 45 degrees F and rising. Asphalt will never be placed on frozen material, during medium or heavy precipitation or when preceding precipitation has saturated the subbase and/or subgrade.
3. Surfaces that will abut the new asphalt shall be tack coated prior placement of asphalt including curbs, gutter, existing asphalt and structures. Tack coat shall be applied neatly to match the lines and grades of the proposed abutting asphalt at a rate of .05 to .15 gallons per square yard.
4. When binder is used as a working surface during construction, or there is a prolonged time period between binder and top placement, the surface must be power washed, not just swept, and a tack coat should be applied prior to installation of top course. In addition, any yielding area of pavement binder should be removed and replaced prior to application of the top course.
5. Asphalt shall be placed in layers equal to those specified on the plans. Thickness of each layer or the thickness of all layers combined shall not vary more than 1/4 inch for thickness of 0 to 4 inches and 1/2 inch for thickness of 4 inches or greater, from those specified on the drawings. The asphalt shall also be tested for smoothness by laying a 16 foot straight edge on the pavement and verifying that there are no gaps greater than 1/4" in any direction.
6. Placement and compaction requirements shall be the same as those specified by the State Department of Transportation of which the project is located. The rolling shall be done in such a manner that will match joints and leave a smooth uniform surface while providing the proper compaction which will be 95% of laboratory density.
7. When matching into existing pavement, all match joints shall be saw cut to provide a straight smooth joint. The asphalt depth at the match point shall be equal to that of the proposed or existing which ever is greater.
8. Paving equipment shall be of good condition and quality. Asphalt shall be placed by mechanical equipment except in small areas that are inaccessible to a paver. The binder joints and the top joints shall be offset. The top course shall be placed parallel to the direction of travel. Asphalt shall be transported in covered trucks and scheduled in such a manner that will maintain asphalt temperature. Asphalt shall be rejected when temperatures fall below 250 degrees F or the minimum temperatures specified by the State Department of Transportation.
9. All sub-base, asphalt, curb or other work performed in a State, County or Municipal right-of-way shall be furnished, installed, inspected and completed in accordance with their specifications, details and other requirements.

SEEDING AND LANDSCAPING

1. Topsoil shall be removed from stockpiles and spread in the areas shown on the plans. The depth of topsoil shall be a minimum of 4 inches in lawn areas and a minimum of 12 inches in landscape planting areas. If enough topsoil is not available onsite, the Contractor is required to import as necessary. All disturbed lawn areas are to receive topsoil, seed, mulching, and water until a healthy stand of grass is established.
2. Topsoil shall consist of fertile, natural agricultural soil substantially free of subsoil, stumps, roots, brush, stone, clay lumps, or similar objects larger than 2 inches in the greatest diameter. Topsoil for reuse shall be screened if required to meet size and debris removal. Topsoil shall be approved by the owner at its source prior to transporting. The topsoil shall be fine graded to the lines and grades shown on the plans. The Contractor is responsible for keeping topsoil, seed, fertilizer, etc. off structures, pavements, and other site amenities; and will clean up unwanted deposits, at his expense.
3. Mow all areas to be cleared & seeded to 6" height maximum prior to beginning any new lawn work.
4. Loosen and till subgrade of lawn areas to a minimum depth of four inches. remove stones measuring 1.5 inches in any dimension. remove sticks, sod, rubbish, and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.
5. Preparation of unchanged grades: where lawns are to be planted in areas that have not been altered of disturbed by excavating, grading, or stripping operations, prepare soil for lawn planting as follows: till to a depth of six inches. apply soil amendments and initial fertilizers as specified. till soil to a homogenous mixture and fine texture and complete fine grading.
6. Clean all new lawn areas to be seeded of all debris, branches, stumps, brush, logs, metal, sticks, stones, etc. larger than two inches in diameter.
7. Roll, rake, and/or drag lawn areas to remove ridges and fill depressions to meet finish grades and to create a smooth, mowable lawn surface.
8. Lime: natural dolomitic limestone containing at least 85% of total carbonates, and 30% magnesium carbonates; ground so that at least 90% passes a ten mesh sieve, and at least 50% passes a 100 mesh sieve.
9. The topsoil shall have a pH of 6.0 to 6.8 and an organic content of 3 to 20%. The gradation of the topsoil shall be 100% passing 2 inch sieve, 85 to 100% passing the 1 inch sieve, 65 to 100% passing the 1/4 inch sieve and 20 to 80% passing the No. 200 sieve.
10. Lawn fertilizer shall be 55% nitrogen, 10% phosphorus and 10% potash where 50% of the nitrogen is derived from ureaform source. Work into soil at a rate of 100 lbs per acre before seeding.
11. Lawn seed shall be "50% by weight, 85% purity, 85% germination of Pennfine Perennial Rye", "30% by weight, 97% purity, 85% germination of Pennlawn Red Fescue", "20% by weight, 85% purity, 80% germination of Common Kentucky Bluegrass" at a rate of 200 lbs per acre. Mulch all seeded areas with approved straw at rate of 4000 lbs per acre. Maintain mulch as necessary and clean up upon satisfactory germination.
12. Steep slope mix (Type B unmowed - 1V:3H or steeper) apply at a rate of 100 lbs. per acre using the following proportions by weight: 15% Creeping Red Fescue, 35% Chemung Crownvetch, 25% Kentucky 31 Tall Fescue, and 25% Empire Birdsfoot Trefoil.
13. Hydroseeding shall be applied in accordance with the following; fertilizer shall be placed at 80 pounds per acre, hydromulch at 1,200 pounds per acre, water at 500 gallons per acre, and seed at a minimum of 220 pounds per acre. Inoculate at 4x manufacturer's rate. A non-harmful color additive which colors the hydroseed mixture green shall be added to the mixture to allow visual metering of its application. The hydroseed mixture shall be sprayed upgrade and uniformly on the surface of the soil to form an absorbent cover, allowing percolation of water to the underlying soil.
14. The Contractor will be responsible to water, reseed, or any other means necessary to ensure the growth of the lawn until a complete and uniform stand of grass has grown and been cut at least three times. Water by approved means immediately after mulching and thereafter a minimum of two times each week, or more when weather conditions require to a depth of one inch soil saturation. Mow all seeded areas to two inch height until final acceptance. In the event grass becomes too long, resulting in excessive clippings that could damage the lawn, the contractor shall remove all clippings at his expense. Lawn shall be presented to Owner in a condition that it may be maintained with standard mowing equipment.
15. Where substantial lawn remains (but is thin), mow, rake, aerate (if compacted), fill low spots, remove bumps, and scarify soil, fertilize, and seed. Remove weeds before seeding, if extensive. Apply selective chemical weed killers as required. Apply mulch if required to maintain moist condition.
16. Plantings shall be supplied in accordance with the plans and ANSI 260.1 "American Standard for Nursery Stock" in good health, vigorous, and free of insects, larvae, eggs, defects and disease.
17. Plants shall be located per the plans. The holes shall be excavated per the details on the drawings with the center slightly higher to promote drainage. Use a topsoil backfill mix of 4 parts topsoil, 1 part peat moss, 1/2 part well rotted manure, 2 pounds 5-10-5 planting fertilizer properly mixed per cubic yard. Berm around plants to form a bowl shape.
18. Two layers of weed barrier made from fiberglass and ultraviolet light resistant shall be placed under all planting beds prior to mulching.
19. All trees and shrubs shall be staked as detailed on the drawings. Tree wrapping will be provided at the base of all trees as detailed.
20. Mulch all beds adjacent to building with 3 inch river rock graded gravel, 1" to 2" size range on fiber mat week barrier. Mulch all remaining areas with 50% shredded bark and 50% wood chips, 3/4 to 2 inch in size, uniformly mixed and free of elm wood. Mulch shall be placed uniformly over the planting bed allowing no weed barrier to be seen to a minimum depth of 3". Color to be chosen by Owner.
21. All landscaping shall be guaranteed for one year after final acceptance. Any plantings needing replacement will be guaranteed from the time of replacement if after final acceptance. Contractor shall maintain plants until completion and final acceptance of the entire project. Maintenance shall include pruning, cultivating, edging, remulching, fertilizing, weeding, watering as required for healthy growth, and application of appropriate insecticides and fungicides necessary to maintain plants free of insect and disease. Repair all washouts, gullies, and areas of unsatisfactory germination by replacing topsoil, restaking, and reseeding, as required. Reset settled plants to proper grade and position. Restore planting saucer and remove dead material. Tighten and repair guide wires and deficiencies within the first 24 hours of initial planting, and not less than twice per week until final acceptance. Contractor shall request an inspection by the Owner upon establishment of the uniformly germinated lawn. Following the final acceptance, the Owner shall be responsible for maintenance of all landscaping on the premises.
22. Antidesiccant: protective film emulsion, providing a protective film over plant surfaces, but permeable to permit transpiration. Mixed and applied in accordance with manufacturer's instructions. Apply to all broadleaf evergreen shrubs per manufacturer's recommendations.

SANITARY SEWER SYSTEMS

1. The sanitary sewer system shall be supplied and placed in accordance with all local, state and federal requirements.
2. Refer to pipe bedding detail for bedding and anti-seep collar requirements.
3. Unless otherwise noted, sanitary pipe and fittings shall be Polyvinyl Chloride (PVC) per ASTM D 3034, SDR 35, with gaskets per ASTM D 3212, elastomeric seal.
4. Forcemain pipe shall be Polyvinyl Chloride (PVC) per ASTM D 2241, SDR 21 (or lower if pressures are high in system) with gaskets per ASTM D 3139, and elastomeric seal. The pipe shall be encased in a run of crush stone or gravel material with 100% passing the 1.0" sieve and 10% to 3% passing the 200 sieve. The mix shall be supplemented as needed to remove voids. Incorporate filter fabric around bedding or cradle stone if ground water, silts, or sands are encountered.
5. All pipe shall be placed in accordance with the manufacturer's recommendation and to the lines and grades shown on the drawings. Care shall be given during backfill operations not to move or damage pipe or appurtenances while achieving the appropriate compaction requirements.
6. All systems shall be visually inspected for alignment and workmanship. All debris, dirt or other foreign objects shall be removed from the system.
7. All taps to main lines shall be made with saddles when the tap is 1/2 the diameter or less of the existing pipe, but made with a sleeve when the tap is greater than 1/2 the diameter or equal to the existing pipe. If connections are required to equal size pipes of 8 inches or greater, a manhole should be installed over the connection point and inverts formed. When connecting to an existing manhole, the connecting pipe hole shall be cored and a press wedge installed. The connection shall be mortared up with waterproof/plug mortar. Inside the existing manhole, the existing invert shall be broke out in a manner that protects from debris entering the live system, while a new invert is formed.
8. Sanitary manholes shall be visually lamped after backfill to verify alignment, cleanliness and there is no damage to the system. After the system has been backfilled for 30 days, the system shall be relamped and tested with a mandrel sized at 95% of the intended inside diameter.
9. Gravity systems shall be air tested between manholes to 3.5 psi for 5 minutes per ASTM F 1417 for plastic pipes.
10. Manholes shall be tested separately for leakage or infiltration using ASTM C 969. The allowed leakage = 0.1 gallons/(feet of diameter)(feet of head)(# of hours) and the test shall run for 24 hours.
11. The sanitary sewer system shall be tested for infiltration and exfiltration using ASTM C 969. The system shall be broken up into sections when necessary to consider groundwater depth, length and elevation differences. The allowable leakage shall be 100 gal/inch of pipe diameter/mile/day.
12. Any testing failure shall require the Contractor to repair or replace the failed section at no additional expense to the contract.
13. After all testing is complete, and before the system is turned over to the authority having jurisdiction, the system shall be checked to verify it is clean and free of dirt, debris and other foreign matter. The Contractor shall clean any sections required at no additional expense to the contract.
14. Grease traps, if required, shall have cast iron lids and shall be installed per manufacturer's requirements.
15. The pipe slope shall always meet the minimum, as listed in Section 33.4 of the Recommended Standards for Wastewater Facilities (Ten State Standards).
16. Increase size of manhole if in the same horizontal plane there is two areas where the area between two pipes is less than 8 inches or ½ of the circumference is supported by less than ½ of the diameter of the manhole. Inverts shall be smooth cast in place concrete. Gaskets between risers shall be rubber per ASTM C 443. Adjustment rings shall be precast concrete 4000 psi and 5 to 8% air entrainment. Inside and outside of structures shall receive bitumastic coating.

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Revisions:		Date:
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STATE OF NEW YORK · STEPHANIE L ALBRIGHT · 087051 · LICENSED PROFESSIONAL ENGINEER

Seal

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Seal

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

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585.742.2222 - www.apd.com

TACO BELL
Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

Taco Bell - Watertown NY

State St
Watertown, NY 13601
Jefferson County, NY
Project Name & Location:

Specifications

Drawing Name:

Date: 10/12/22

Type: LG 50

Drawn By: SLA

Scale: N.T.S.

Project No. 22-0408

C9
Drawing No.

REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

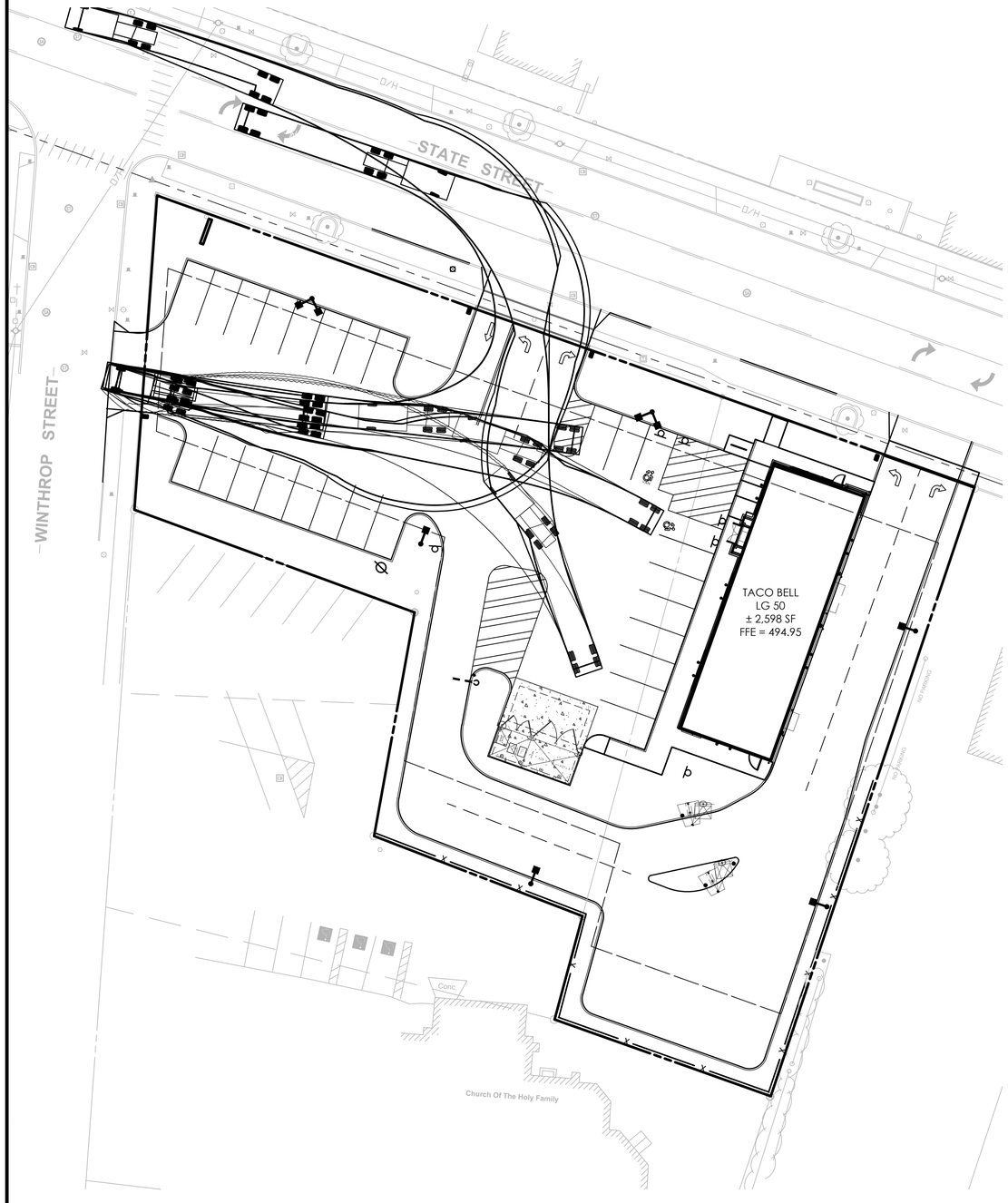
Graphic Scale: 1"=20'

NORTH

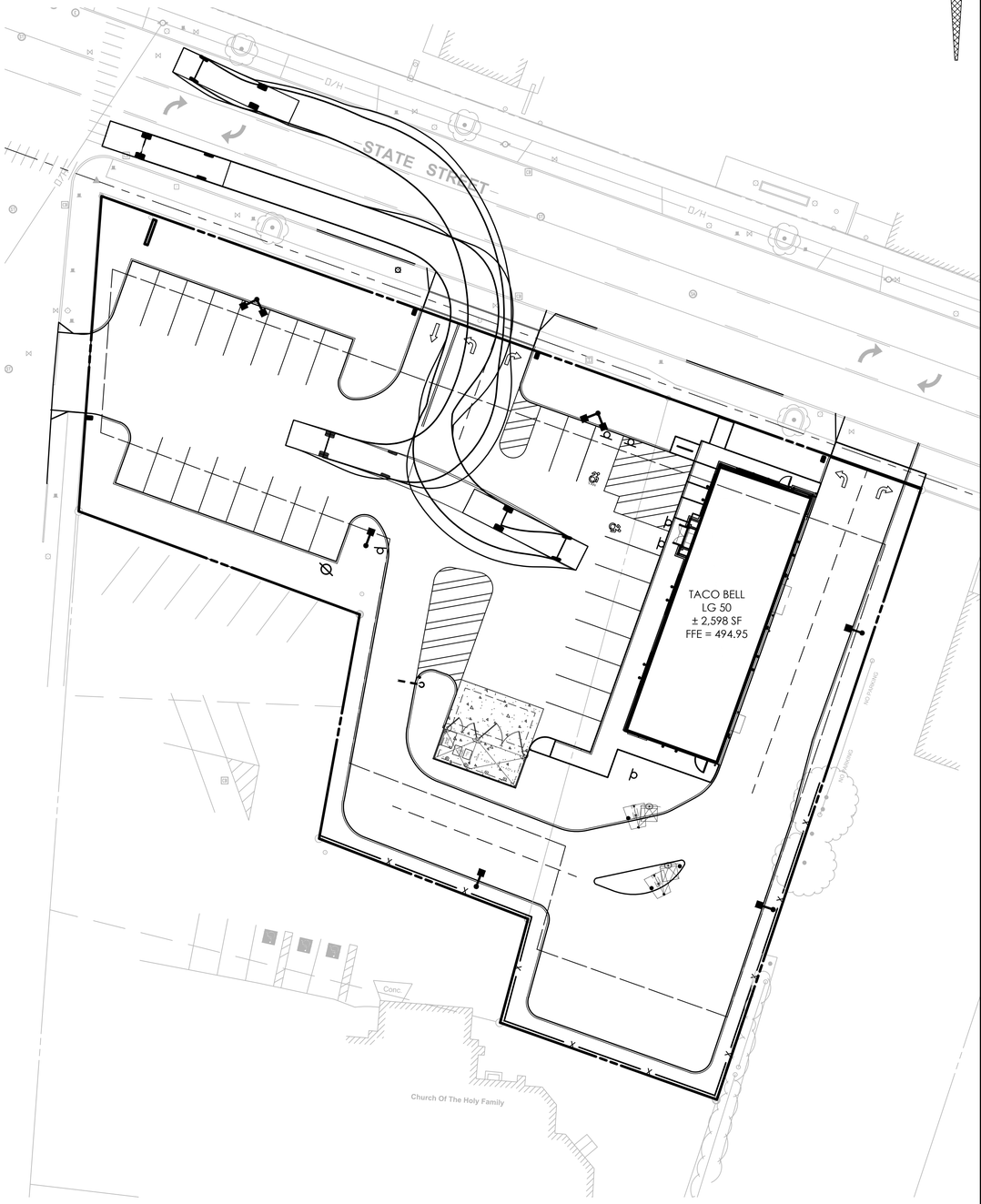
AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING



TRUCK TURNING MOVEMENT



FIRE TRUCK TURNING MOVEMENT

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Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

Taco Bell - Watertown NY

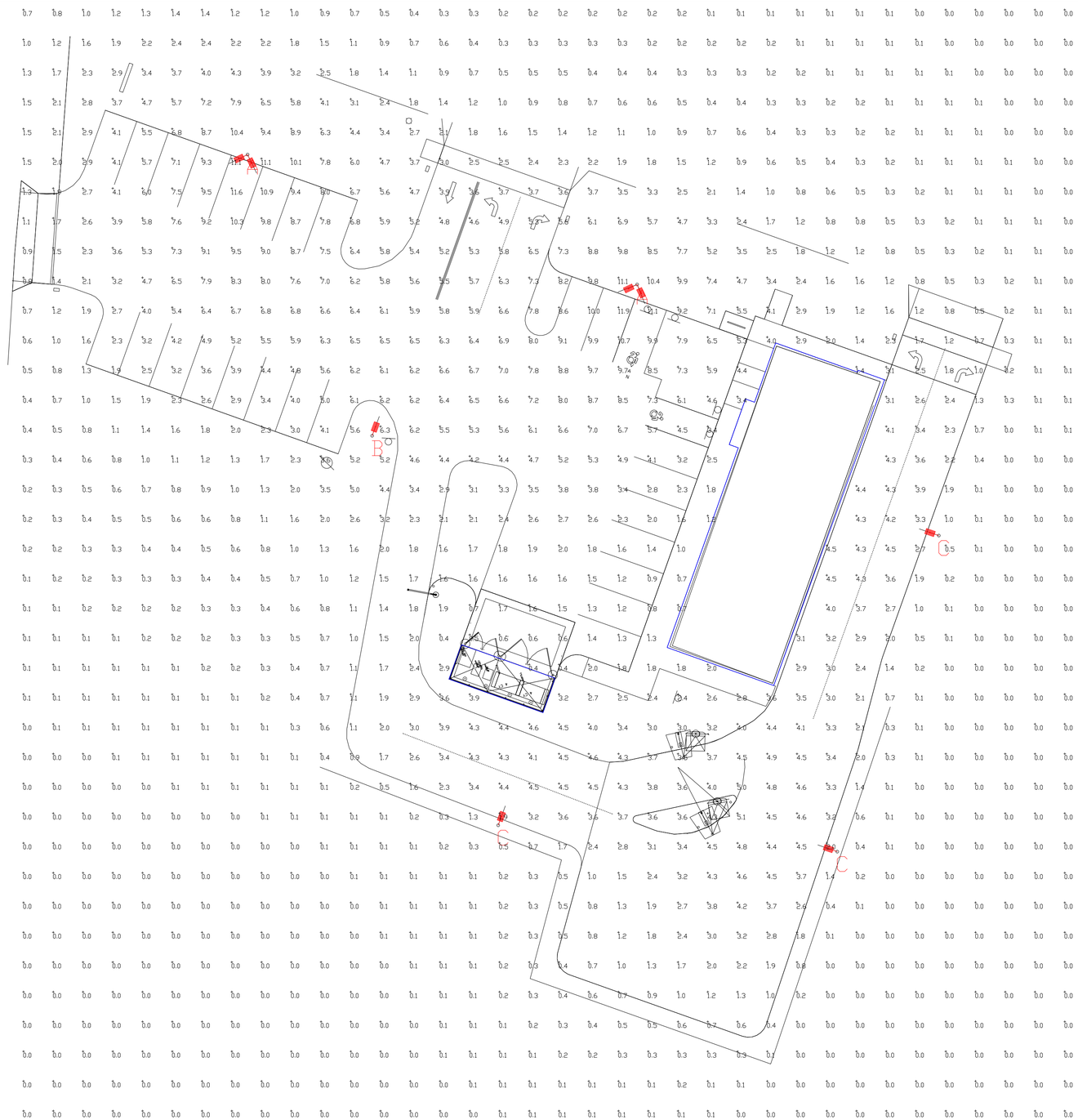
State St
Watertown, NY 13601
Jefferson County, NY

Project Name & Location:

Truck Turning Movements

Drawing Name:

		Project No.
Date:	10/12/22	22-0408
Type:	LG 50	
Drawn By:	SLA	TT1
Scale:	1" = 20'	Drawing No.



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CALCULATION POINTS @ GRADE	Illuminance	Fc	1.87	11.9	0.0	N.A.	N.A.
PARKING & DRIVING SUMMARY	Illuminance	Fc	4.30	11.9	0.4	10.75	29.75

PHOTOMETRIC EVALUATION
NOT FOR CONSTRUCTION

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	LLD	LDD	LLF	Arr. Lum. Lumens	Arr. Watts
	2	A	2 @ 90°	MRM-LED-24L-SIL-FT-50-70CRI-D90-25' MH	1.000	1.000	1.000	51928	352
	1	B	SINGLE	MRM-LED-24L-SIL-FT-50-70CRI-SINGLE-25' MH	1.000	1.000	1.000	25964	176
	3	C	SINGLE	MRM-LED-24L-SIL-FT-50-70CRI-IL-SINGLE-25' MH	1.000	1.000	1.000	16436	176

Total Project Watts
Total Watts = 1408

10000 ALLIANCE RD. CINCINNATI, OHIO 45242 USA
(513) 793-3355 • FAX (513) 793-4663

LIGHTING PROPOSAL LQ-157120-1

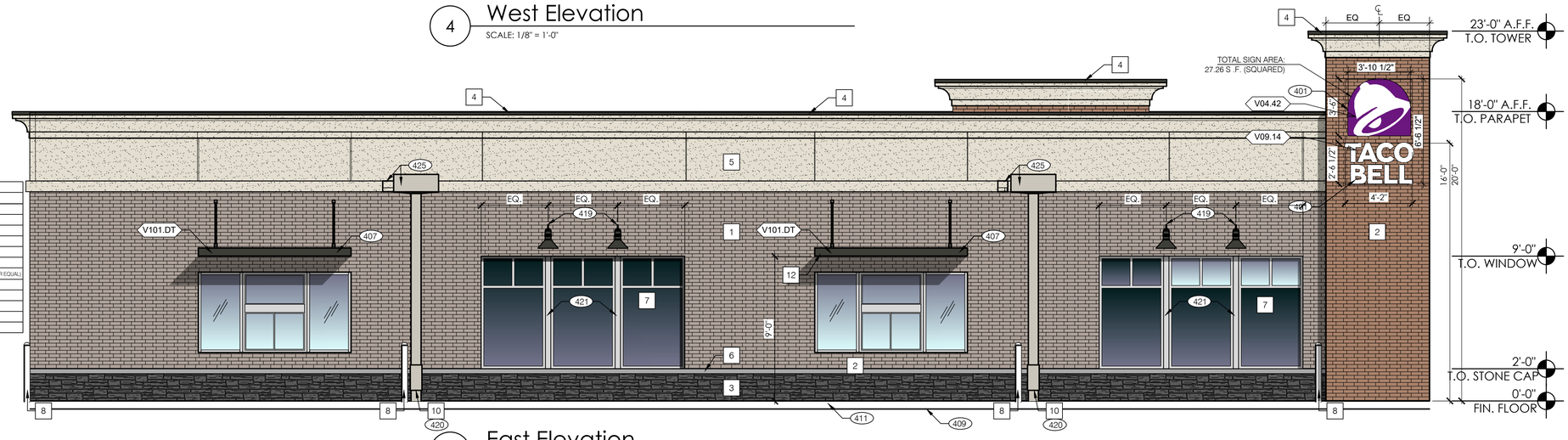
TACO BELL
STATE STREET
WATERTOWN,NY

BY:SAM	DATE:12/9/22	REV:12/19/22	SHEET 1 OF 1

SCALE: 1"=16' 0 16

4 West Elevation

SCALE: 1/8" = 1'-0"



3 East Elevation

SCALE: 1/8" = 1'-0"

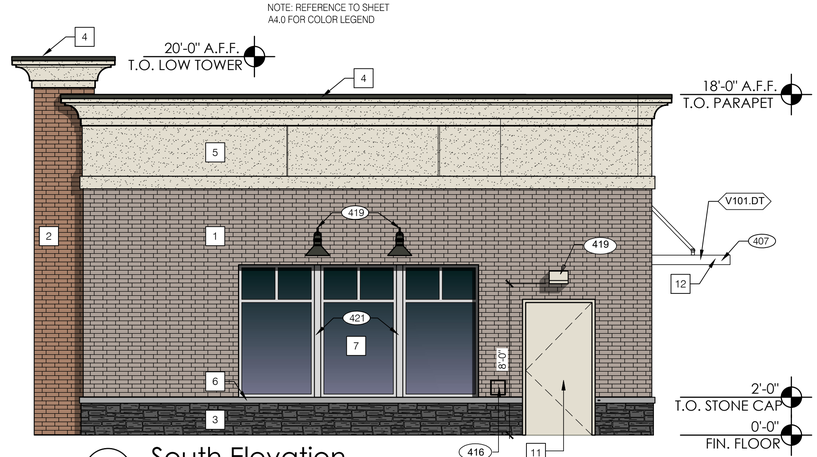
SYMBOL	ITEM/MATERIAL	MANUFACTURER	COLOR
1	FIELD BRICK VENEER	BELDEN	MODULAR BRICK '8530'
2	TOWER BRICK VENEER	BELDEN	MODULAR BRICK 'REGAL BLEND'
3	MANUFACTURED STONE VENEER	BORAL CULTURED STONE	COBBLE FIELD CUT, 'ECHO RIDGE'
4	PARAPET CAP	DUROLAST	IRON ORE (SW7069), SEMI-GLOSS, 24 GA GALVANIZED
5	E.I.F.S.	STO. CORP.	NATURAL CHOICE (SW7011), SEMI-GLOSS
6	CAST STONE WATERTABLE SILL	THE CAST STONE COMPANY	STANDARD WHITE
7	STOREFRONT WINDOWS	OLD CASTLE	CLEAR ANODIZED
8	PIPE BOLLARDS	STREET SMART	YELLOW - 1/4" THICK PLASTIC. COVER (USLPOSTMAN.COM OR EQUAL)
9	PARAPET BACK ROOFING	DUROLAST	FACTORY COLOR 'TAN'. EQUAL ALTERNATE ALLOWED
10	GUTTERS & DOWNSPOUTS		ROCK BOTTOM (SW7062)
11	HOLLOW METAL DOOR	BY OWNER	NATURAL CHOICE (SW7011), SEMI-GLOSS
12	AWNINGS	SIGNAGE VENDOR	BLACK
13	BACK OF TOWER BRICK	BELDEN	MODULAR THIN BRICK 'REGAL BLEND'

1 North Elevation

SCALE: 1/8" = 1'-0"

TYP.

NOTE: REFERENCE TO SHEET A4.0 FOR COLOR LEGEND



2 South Elevation

SCALE: 1/8" = 1'-0"

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Revisions:	Date:
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Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

PROJECT NUMBER:	22-0408
BUILDING TYPE:	END. LG50
PLAN VERSION:	DEC 2020
SITE NUMBER:	XXX
STORE NUMBER:	xxx

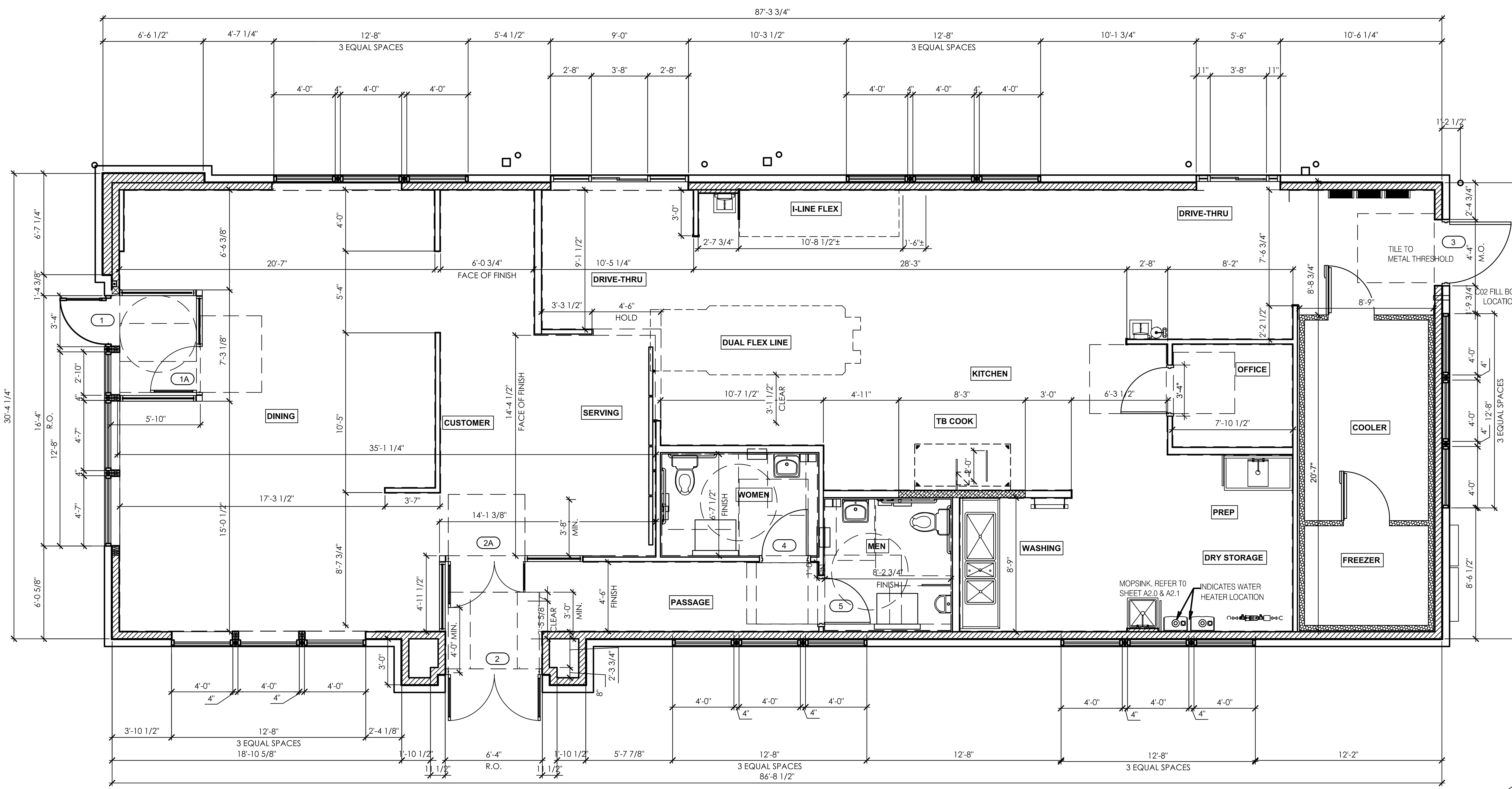
TACO BELL
STATE STREET
WATERTOWN, NY 13601
JEFFERSON COUNTY

ENDEAVOR 2.0

EXTERIOR ELEVATIONS

A4.0

DATE: 10-24-22



N

FLOOR PLAN 1/4" = 1'-0"

TYPICAL EXTERIOR WALL:
2X6 WD STUDS AT 16" O.C. W/ SHEATHING AS SCHEDULED (SEE STRUCT. DWGS.) AND R-19 KRAFT-FACED FIBERGLASS BATT INSULATION U.O.N. GC SHALL PROVIDE 2 LAYERS OF GRADE 'D' 60 lb BUILDING PAPER.

TYPICAL INTERIOR WALL:
WD STUDS AT 16" O.C. AS INDICATED
1 2X4 WOOD STUDS
2 2X6 WOOD STUDS

INTERIOR SOUND-RATED WALL:
TYPICAL INTERIOR WALL W/ 3-1/2" UNFACED FIBERGLASS BATT INSULATION.
3 2X4 WOOD STUDS
4 2X6 WOOD STUDS

HOODWALL:
INTERIOR NON-COMBUSTIBLE WALL WITH 20 GA. S.S. PANEL BEHIND HOOD. EXTEND MIN. 18" BEYOND END OF HOOD. M. STUD FRAMING. REFER TO DETAIL 2/M3.0 FOR EXTENT OF S.S. PANEL.
6 6" METAL STUD

DASHED LINE INDICATES INTERIOR SUBSTRATE LOCATION.

LOW WALL:
2X4 WD STUDS AT 16" O.C. AS SCHEDULED (SEE DETAIL 9/A6.4)
5 2X4 WOOD STUDS

WALL HEIGHTS:
ALL INTERIOR NON-BEARING WALLS GO TO BOTTOM OF TRUSS, U.O.N. REFER TO STRUCTURE.

WALL SUBSTRATES:
- DINING ROOM:
6" HIGH CEMENT BOARD AT BASE OF WALL, 1/2" GYPSUM WALLBOARD FROM 6" A.F.F. TO 6" ABOVE CEILING HEIGHT U.O.N. SEE 6 & 8/A6.3 (NOTE: THE CEMENT BOARD SPECIFICATION IS DESIGNED TO ALLOW THE G.C. FLEXIBILITY.) WALL BEHIND THE POS COUNTER AND AROUND DINING ROOM SODA MACHINE TO HAVE 1/2" CEMENT BOARD FULL HEIGHT
- KITCHEN WALLS AND DINING ROOM CLOSET:
1/2" CEMENT WALLBOARD FROM T.O. SLAB T.O. 12" A.F.F. AT 12" A.F.F., USE 1/2" CDX PLYWOOD W/FRP SURFACE FINISH TO 6" ABOVE CEILING HEIGHT U.O.N. IF DOUBLE SIDE SHEAR WALL PLYWD IS SPECIFIED THE PLYWOOD SHALL BE CONTINUOUS FROM SILL PLATE TO TOP PLATE. SEE 4/A6.3.
- RESTROOM WALLS:
1/2" CEMENT WALLBOARD FROM T.O. SLAB OR T.O CONCRETE CURB TO 6" ABOVE CEILING HEIGHT. FINISH AS SCHEDULED
- ALL OTHER FRAME WALL CONDITIONS:
1/2" CEMENT WALLBOARD FROM T.O. SLAB OR T.O. CONCRETE CURB TO HEIGHT OF TILE, WITH 1/2" GYPSUM WALLBOARD FROM T.O. CEMENT BOARD TO 6" ABOVE CEILING HEIGHT U.O.N. FINISH AS SCHEDULE

WALL LEGEND E

DIMENSIONS:
A. ALL DIMENSIONS NOTED ARE TO FACE OF STUD, U.N.O. REFER TO FOUNDATION PLAN FOR FACE OF CONC. DIMENSIONS
B. DIMENSIONS NOTED AS "CLEAR" OR "HOLD" ARE MIN. REQUIRED. NET CLEARANCE FROM FACE OF WALL / WAINSCOT FINISH. VERIFY FINAL EQUIPMENT SIZES W/ VENDOR PRIOR TO INT. WALL FRAMING.

WINDOWS / DOORS:
A. SEE SHEET A1.1 FOR WINDOW TYPES AND DOOR SCHEDULE.
B. ALL DOOR AND WINDOW OPENING DIMENSIONS ARE TO ROUGH OPENING.

FINISH SUBSTRATES:
A. PROVIDE 1/2" THICK CEMENTITOUS BD. FROM FLOOR SLAB TO 12" A.F.F. MIN. IN LIEU OF GYP. BD. AT ALL WALLS EXCEPT SHEARWALL SURFACES, U.O.N.
B. ALL JOINTS, GAPS OR SPACES LEADING TO ALL HOLLOW OR INACCESSIBLE SPACES SHALL BE SEALED WITH "NSF INTERNATIONAL" APPROVED SEALANTS.
C. ALL BACK OF HOUSE AND OFFICE WALLS SHALL HAVE 1/2" CDX PLYWOOD SUBSTRATE, U.O.N.

DECOR:
A. SEE A2.0 FOR SEATING PLAN AND DETAILS.
B. SEE A7.0 FOR FLOOR FINISHES.
C. SEE A8.0 - A8.3 FOR WALL FINISHES.
D. SEE A7.1 FOR CEILING FINISHES.

GENERAL:
A. PROVIDE THREE FIRE EXTINGUISHERS - (2) 10 lb. BC AND (1) 10 lb. ABC - TO COMPLY WITH LOCAL FIRE CODE. LOCATE PER DIRECTION OF FIRE MARSHALL OR LOCAL AUTHORIZING AGENT. FOR ADDITIONAL INFORMATION SEE SHEET A2.0
B. DRAWINGS ARE BASED UPON WOOD FRAMING. UTILIZATION OF METAL STUDS ON NON-BEARING INTERIOR PARTITONS, BULKHEADS AND SOFFITS IS ACCEPTABLE.

FLOOR PLAN NOTES D

202	NO FRP BEHIND W-059 WALK-IN COOLER/FREEZER.
203	PIPE BOLLARD. SEE DETAIL.
204	HOOD WALL, SEE WALL LEGEND.
208	KEEP CLEAR FOR UTILITIES & SYRUP LINES.
210	S.S. CORNER GUARD/WALL CAP [TM-2], TYP. ALL CORNERS IN BACK OF HOUSE FROM REAR WALL TO THE KITCHEN SIDE OF THE SERVICE COUNTER.
213	SYRUP LINE CHASE (ABOVE).
214	14"x14" HORIZONTAL OPENING FOR SYRUP TUBES. COORDINATE WALL PENETRATION WITH COUNTER INSTALLER. SEAL CHASE TO COUNTER.
215	ROOF LADDER.
216	ADD SECOND 2X4 WALL ON KITCHEN SIDE.
224	CASED OPENING, REFER TO DETAIL 5/A6.4. WRAP OPENING WITH STAINLESS STEEL
228	LOW WALL, BY G.C. COORDINATE WITH STRUCTURAL DRAWINGS
230	STAINLESS STEEL SPLASH GUARD.
231	CORNER GUARD TILE SCHLUTER.
235	CHASE WALL FOR I-LINE FLEX CIRCUIT BREAKER PANEL. COORDINATE LOCATION IN FIELD PER EQUIPMENT DIMENSIONS. REFER TO ELECTRICAL DRAWINGS
240	HOOD ANSUL CABINET
242	1/2" PLYWOOD ON WALLS SURROUNDING COOLER/FREEZER

KEY NOTES B

APD ENGINEERING ARCHITECTURE
615 Fishers Run Victor, NY 14564
585.742.2222 - www.apd.com

Issued:	Date:
A	
B	
C	
D	
E	
F	

Revisions:	Date:
1	
2	
3	
4	
5	
6	

Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

PROJECT NUMBER:	22-0408
BUILDING TYPE:	END. LG50
PLAN VERSION:	DEC 2020
SITE NUMBER:	XXX
STORE NUMBER:	xxx

TACO BELL
STATE STREET
WATERTOWN, NY 13601
JEFFERSON COUNTY

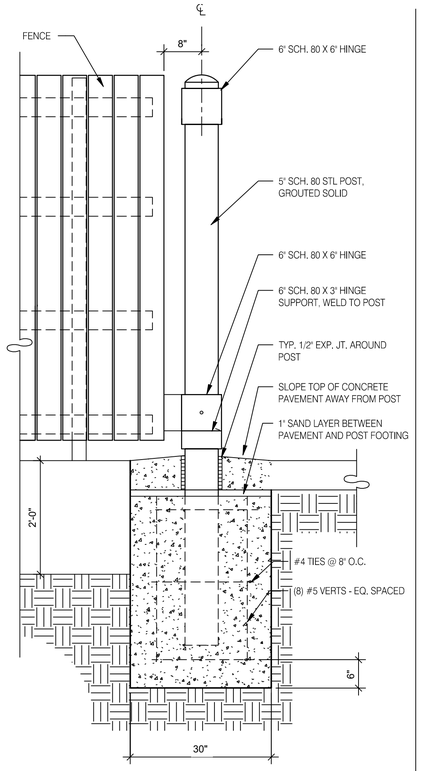
ENDEAVOR 2.0

FLOOR PLAN

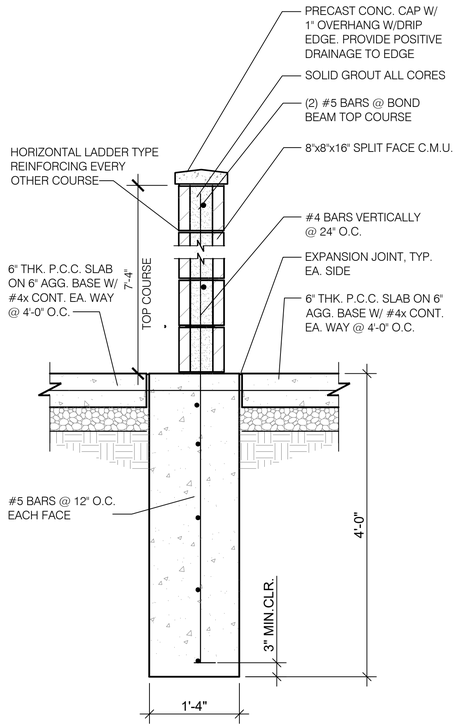
A1.0

DATE: 10-24-22

BIM 360://IRV19-0275-00_Taco Bell Endeavor 2.0/0275_ARCH_MED40.rvt



GATE POST FOOTING 3/4" = 1'-0" **H**



ENCLOSURE SECTION 1" = 1'-0" **F**

GATE HARDWARE: ALL HARDWARE AND ACCESSORIES SHALL BE HEAVY GALVANIZED.

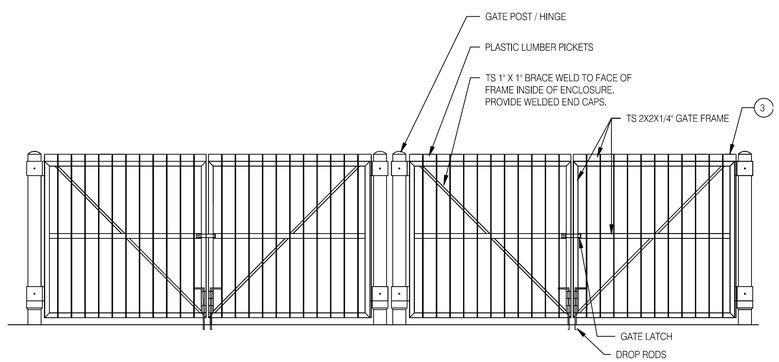
GATE STOP: MUSHROOM TYPE OR FLUSH PLATE WITH ANCHORS SET IN CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.

GATE NOTES: (4) EQUAL WIDE x 6-0' HIGH MTL. GATES, TYPE 'B' 1 1/2" DECKING, 22GA. W/ T.S. 1 X1 1875 BAR CROSS BRACING WELD AND GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT ALL STEEL COMPONENTS.

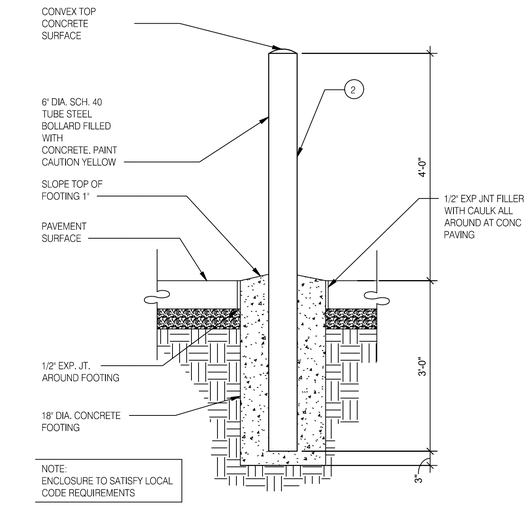
ENCLOSURE NOTES N.T.S. **G**

SYMBOL	AREA	MANUFACTURER	COLOR
1	GATE FRAME COLOR	SHERWIN WILLIAMS	SW 7055 ENDURING BRONZE
2	PIPE BOLLARDS	SHERWIN WILLIAMS	CAUTION YELLOW
3	HDPE LUMBER	MAX. R	GRAY

SCHEDULE N.T.S. **E**

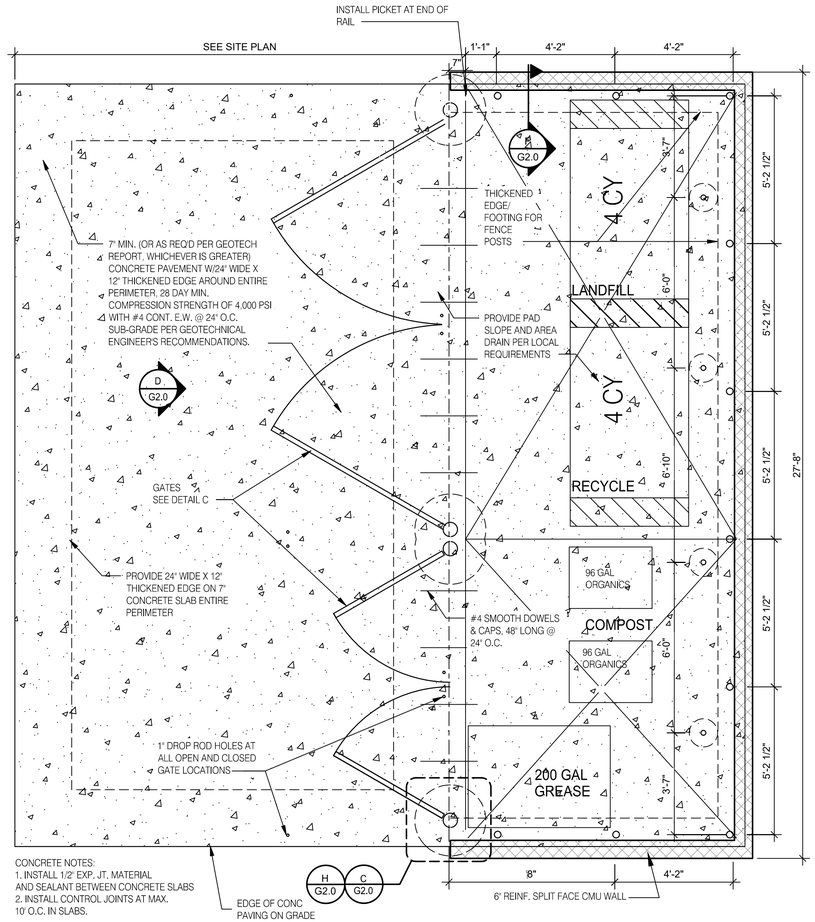


FRONT ELEVATION N.T.S. **D**



1 GUARDPOST BOLLARD DETAIL

BOLLARD DETAILS 3/4" = 1'-0" **B**



TRASH LAYOUT 3/8" = 1'-0" **A**

I

J

APD ENGINEERING ARCHITECTURE
615 Fishers Run Victor, NY 14564
585.742.2222 - www.apd.com

Issued:		Date:
A	Issued for Client Review	05/04/22
B	Issued for Bid/Permit	09/15/22
C		
D		
E		
F		

Revisions:		Date:
1		
2		
3		
4		
5		
6		

Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

PROJECT NUMBER:	20-0531
BUILDING TYPE:	END. LG50
PLAN VERSION:	DEC 2020
SITE NUMBER:	XXX
STORE NUMBER:	xxx

TACO BELL
1737 MT HOPE AVE
ROCHESTER, NY 14620
MONROE COUNTY

ENDEAVOR 2.0

TRASH ENCLOSURE DETAILS

G2.0

DATE: 11-02-21

ENGINEER'S REPORT
for the

TACO BELL – STATE ST

STATE ST
CITY OF WATERTOWN
JEFFERSON COUNTY, NY

Hospitality Syracuse
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088

Prepared by:

APD ENGINEERING & ARCHITECTURE
BRINGING YOUR DESIGN TO LIFE

615 Fishers Run, Victor, New York 14564
Phone: 585.742.2222 | Fax: 585.924.4914 | Website: www.apd.com | eMail: info@apd.com

Original Date: December 19, 2022

Project No.: 22-0408

Table of Contents

INTRODUCTION/SCOPE

The proposed Taco Bell will be located at the existing parcels of 514, 528, and 540 State St. The total property area is ±0.84 acres. These parcels are located on the south side of State St and on the east side of Winthrop St. The general area surrounding the site consists of commercial properties along State St with the church and residential properties approximately south of the site. The existing property consists of two vacant parking lots and the vacant Trailways building/parking lot. There are minimal pervious areas on the existing site. The proposed project will demolish the existing building and site features to construct the Taco Bell and associated parking lot, utilities, lighting, and landscaping.

STORE OPERATIONS

The proposed Taco Bell is ±2,700 SF. The restaurant will be open from 7am until 10pm with the drive thru being open until 1am on weekdays and 2am on Friday and Saturday nights. Alcohol will not be serviced at this location. There will be approximately 25 employees at this location with a maximum of 7 per shift. A WB-62 tractor trailer will provide as-grade deliveries to the restaurant a couple of times per week. Trash generated by the restaurant will be taken out to the enclosed dumpster area located on-site. A local trash company will empty the dumpsters a couple of times per week. The dumpsters will be located to the southwest of the building, behind the rear building line. They will be enclosed with a split face CMU wall (painted to match the building) and plastic lumber gates.

SITE INFORMATION

The site ranges a total of 6' across the site with the southeast corner being the highest at ±498 and the northwest corner about ±492. However, most of this grade is made up of steep asphalt right along State St. A majority of the remainder of the parking lot is generally 1-2% slopes. The proposed finish floor elevation is 494.95 and the proposed parking lot slopes will generally be 1-3% slopes.

There will be a sidewalk connection from the State St sidewalk to the Taco Bell sidewalk at the northwest corner of the building. A bike rack is also proposed on-site in this area.

According to the Web Soil Survey of Jefferson County, the soils encountered at the project site are listed as Ur (Urban land). Urban land consists of land so altered by earth moving or so obscured by buildings or other structures that the original soils cannot be identified. The Hydrologic Soil Group rating is assumed to be a D based on adjacent soil types and urban land use. The soil map is provided as an appendix within the full Post-Construction Stormwater Management Plan, provided under separate cover.

DOMESTIC WATER AND FIRE SERVICE

Domestic water will be provided to the site via a 1 ½" copper service connecting to the 8" cast iron main in the Winthrop St ROW. The Taco Bell demand will be 30 gpm. The building will not

be sprinklered. A backflow report and application will be prepared per DOH standards and submitted to the City/DOH for review and approval.

Fire services are provided via a hydrant on the east side of Winthrop St at the intersection with State St (corner of the proposed Taco Bell parcel).

SANITARY SEWER

The sanitary service to the existing Trailways building is provided via a 6" PVC sewer lateral with a cleanout near the northeast corner of the property. Taco Bell is proposing to connect their 6" sewer lateral into this existing cleanout.

There will be a proposed 1,000-gallon grease interceptor on the south side of the building and a separate sanitary lateral exiting the building. The two laterals will combine and connect to the existing Trailways cleanout on the east side of the property. The peak sanitary demand is 864 gpd.

STORMWATER MANAGEMENT

The existing parcels are comprised of mostly impervious surfaces. Runoff from the site sheet flow to either the State St or Winthrop St storm sewer systems. The proposed project will increase green space and will therefore improve water quality and reduce the peak rate runoff from the site. The impervious area will be reduced by approximately 20%. Runoff will be collected on-site in catch basins and discharge to the State St storm sewer system.

The table below summarizes the peak flow discharge rates from the site. Refer to the Post-Construction Stormwater Management Plan (provided to the City as a separate report) for full stormwater calculations.

Peak Discharge Rates at the Analysis Point

	Drainage Area 1		Drainage Area 2		Analysis Point	
Design Storm	Existing Condition Peak Discharge (cfs)	Proposed Condition Peak Discharge (cfs)	Existing Condition Peak Discharge (cfs)	Proposed Condition Peak Discharge (cfs)	Existing Condition Peak Discharge (cfs)	Proposed Condition Peak Discharge (cfs)
1-year Storm	2.44	2.41	0.27	0.0	2.71	2.41
10-year Storm	4.32	4.27	0.48	0.0	4.80	4.27
100-year Storm	6.50	6.42	0.72	0.0	7.22	6.42

TRAFFIC/SITE ACCESS

The site is located along State St which is a busy 3-lane road (one in each direction and a shared center turn lane). There are four existing curb cuts on State St and one existing curb cut on Winthrop St (all full access enter/exit). The Taco Bell project is proposing to reduce the total curb cuts and provide one full access on Winthrop St, one full access on State St (one lane entering, two lanes exiting).

The site has been designed to maximize drive thru queuing on-site. Cars will enter the drive thru lane at a single-entry point in the middle of the site. As the vehicles make their way south and then east the lane will widen and split to allow two rows of stacking. There will be two order points, a pre-pay window, and a pick-up window. The main exit lane on the east side of the building is 24' wide to allow for bypass vehicles as well as right and left turn stacking at the State St exit. There is sufficient space for a total of 17 cars to be stacked in the drive thru lanes before traffic would back up into the parking lot. This drive thru configuration also prevents vehicles from stacking along parking spaces. An additional 4 vehicles could stack toward State St before backing up in the ROW. An additional 5 vehicles could stack toward Winthrop St before backing up in the ROW (these vehicles would stack along parking spaces if this scenario occurred).

Delivery trucks (WB-62) will access the site via the main entrance on State St (west of the proposed building). The truck turn plan is provided to the City as part of the Site Plan submittal package to the Planning Board demonstrating delivery access as well as fire department access.

A traffic impact assessment has been completed by our subconsultant, GTS Consulting and the full report is available for review (provided to the City as a separate report). A Site visit was conducted in November and data collected to complete the report. This data included turning movement counts for the morning, mid-day, and evening peaks, pedestrian observations, gap analysis, traffic queuing, etc.

For a quick service restaurant, approximately 50% of the customers will come from pass-by traffic (vehicles that are already in this corridor). The remaining customers will create a minor increase in the traffic generated on State St. For this project, it is assumed there will be an increase of 20-40 cars during the peak hour. The capacity analysis indicates this will have a negligible impact to the traffic operations on State St. All traffic movements on State St are projected to operate at a Level of Service A, with the site driveways all operating at a Level of Service C or better during all three peak hours.

Based on the projected turning movements on State St at the site driveways, there are more than sufficient gaps available to accommodate the proposed development.

LIGHTING

The project is proposing to remove all existing site lighting and replace with new LED fixtures at a 25' mounting height, on 3' concrete bases. There is existing street lighting along the ROW for

both State St and Winthrop St. One of the State St lights will need to be relocated as it conflicts with the proposed site access. We will work with the City as required for this relocation.

There is an existing utility pole with a flood light attached that is located on the 514 State St parcel and directs light toward the church parking lot. This light pole will be removed as part of this project. If agreeable to the City, the applicant is willing to provide a new light pole in this area and direct the light toward the church parking lot. We will work with the City staff on a final photometric plan as necessary to address any lighting concerns.

The photometric plan is provided in the Site Plan submittal package for review. Note that this plan shows some additional spillage to the south. The full site plan set shows the anticipated light pole locations to minimize this spillage. We are working with the lighting vendor on an updated photometric plan and will provide this to the City upon completion. When the updated analysis comes back, we will provide to the City for review.

LANDSCAPING

The existing site is mostly lawn with a few trees and shrubs. All existing landscaping will be removed to facilitate construction of the proposed Taco Bell. The removal of 20% of the existing impervious area will create significant green space for this project.

Perimeter trees are provided on the southern and eastern property lines to the maximum extent practical. The proposed waterline will run in the island on the southwestern portion of the property line and therefore no trees have been shown in this area.

Interior curbed islands and trees are minimized due to the site configuration and required truck access to the site.

A total of 12 trees are proposed for the site in four different species. Landscaping along the State St ROW has been minimized due to utilities, existing street tree locations, proposed light poles, and site visibility.

The landscape plan is provided in the Site Plan submittal package for review.

POST CONSTRUCTION
STORMWATER MANAGEMENT PLAN
for
Taco Bell – Watertown, NY

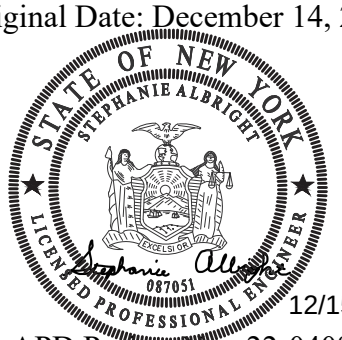
State St
City of Watertown, NY (Jefferson County)

Hospitality Syracuse
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088

Prepared by:

APD ENGINEERING & ARCHITECTURE PLLC
615 Fishers Run, Victor, New York 14564
Phone: 585.742.2222 | Fax: 585.924.4914 | Website: www.apd.com | eMail: info@apd.com

Original Date: December 14, 2022



12/15/22

APD Project No.: 22-0408

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Site Description

The Stormwater Management Plan for the proposed Taco Bell in the City of Watertown, NY (Jefferson County) is outlined in this report. The total property area is approximately ±0.84 acres. The project consists of three parcels located at 514, 528, 540 State St. These parcels are located on the south side of State St and on the east side of Winthrop St. The general area surrounding the site consists of commercial properties along State St with the church and residential properties approximately south of the site. The existing property consists of two vacant parking lots and the vacant Trailways building/parking lot. There are minimal pervious areas on the existing site. The proposed project will demolish the existing building and site features to construct the Taco Bell and associated parking lot, utilities, lighting, and landscaping.

For purposes of this study, only the three parcels under Taco Bell control are included in this analysis. The drainage paths for the church parcel to the south will remain unchanged and a portion of their parcel will flow onto the Taco Bell parcel and eventually into the State St storm sewer system. The impervious limits on the church parcel will not change and therefore have been excluded from the calculations.

Methodology

Stormwater runoff rates discharged from the site under existing conditions provide the basis on which to compare the impacts of the proposed site improvements. Points of analysis are established where runoff exits the site to provide a fixed location at which existing and proposed stormwater quantities can be compared. The areas draining to each analysis point are delineated using topographic survey maps, USGS maps, field verifications, and grading plans.

Peak runoff rates for the design storms are based on the Rational Method of modeling runoff. Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2020 computer model was used to analyze discharges from drainage areas and to the analysis point.

Soils Information

According to the Web Soil Survey of Jefferson County, the soils encountered at the project site are listed as Ur (Urban land). Urban land consists of land so altered by earth moving or so obscured by buildings or other structures that the original soils cannot be identified. The Hydrologic Soil Group rating is assumed to be a D based on adjacent soil types and urban land use. Refer to Appendix III for the site soil map.

Hydrology

Existing Conditions

The overall drainage area evaluated under existing conditions consists of ±0.84 acres. The existing conditions can be found on the Existing Drainage Map located in Appendix I.

Drainage Area 1 consists of a majority of the vacant parking lots and the Trailways building. This area sheet flows across the parking lot in a northerly direction where it flows into the State St storm sewer system.

Drainage Area 2 consists of a small part of the western lot that sheet flows to the west into the Winthrop St storm sewer, which ultimately discharges into the State St system.

Table I summarizes the hydrologic characteristics of the existing drainage areas described above.

Table I – Existing Conditions

Drainage Area	Description	Size (ac)	Composite CN	Composite c	Tc (min.)
Area 1	Sheet flow to the State St storm sewer	±0.76	97	0.85	5*
Area 2	Sheet flow to the Winthrop St storm sewer	±0.08	98	0.90	5*

* The actual computed Tc was less than 5 minutes, therefore a direct user input of 5 minutes was used in Hydraflow

Table III in the Summary of Results provides the existing and proposed peak discharge rates from the site at the analysis points.

Proposed Conditions

The overall drainage area for the proposed conditions consists of ±0.84 acres. The proposed conditions can be found on the Proposed Drainage Map located in Appendix I.

Drainage Area 1 is comprised of the entire Taco Bell parcel including the building, parking lot, and new landscape/lawn areas. A majority of the site will be collected via new on-site storm sewer and connected to the State St storm sewer system.

Table II summarizes the hydrologic characteristics of the proposed drainage areas described above.

Table II – Proposed Conditions

Drainage Area	Description	Size (ac)	Composite CN	Composite c	Tc (min.)
Area 1	Entire parcel to the State St storm sewer	±0.84	94	0.76	5*

* The actual computed Tc was less than 5 minutes, therefore a direct user input of 5 minutes was used in Hydraflow

Table III in the Summary of Results provides the existing and proposed peak discharge rates from the site at the analysis points.

SPDES Phase II Requirements

The overall project disturbance will be under 1-acre, thus a NYSDEC SPDES General Permit for Construction Activities is not needed. This project was designed to prevent overbank flooding and help control extreme floods.

Peak Rate Control

The drainage patterns for this project have generally been maintained. Under existing conditions, a portion of the site discharged to the Winthrop St storm sewer system and will not be directed to the State St storm sewer system. Both of these storm sewers combine at the Analysis Point as labeled on the Drainage Maps. Due to the increase in green space for the site, the peak flow rate for the storm events up to an including the 100-year, 24-hour storm have been decreased for both storm sewer systems. Refer to Table III and Appendix II for additional information.

Summary of Results

Table III depicts the existing and proposed peak discharge rates from the site at the analysis points. The rainfall rates used in Hydraflow were provided from NOAA's Precipitation Frequency Data Servers.

The table shows the comparison of the peak discharge for both Drainage Area 1 and Drainage Area 2, as well as the comparison for the site as a whole at the Analysis Point.

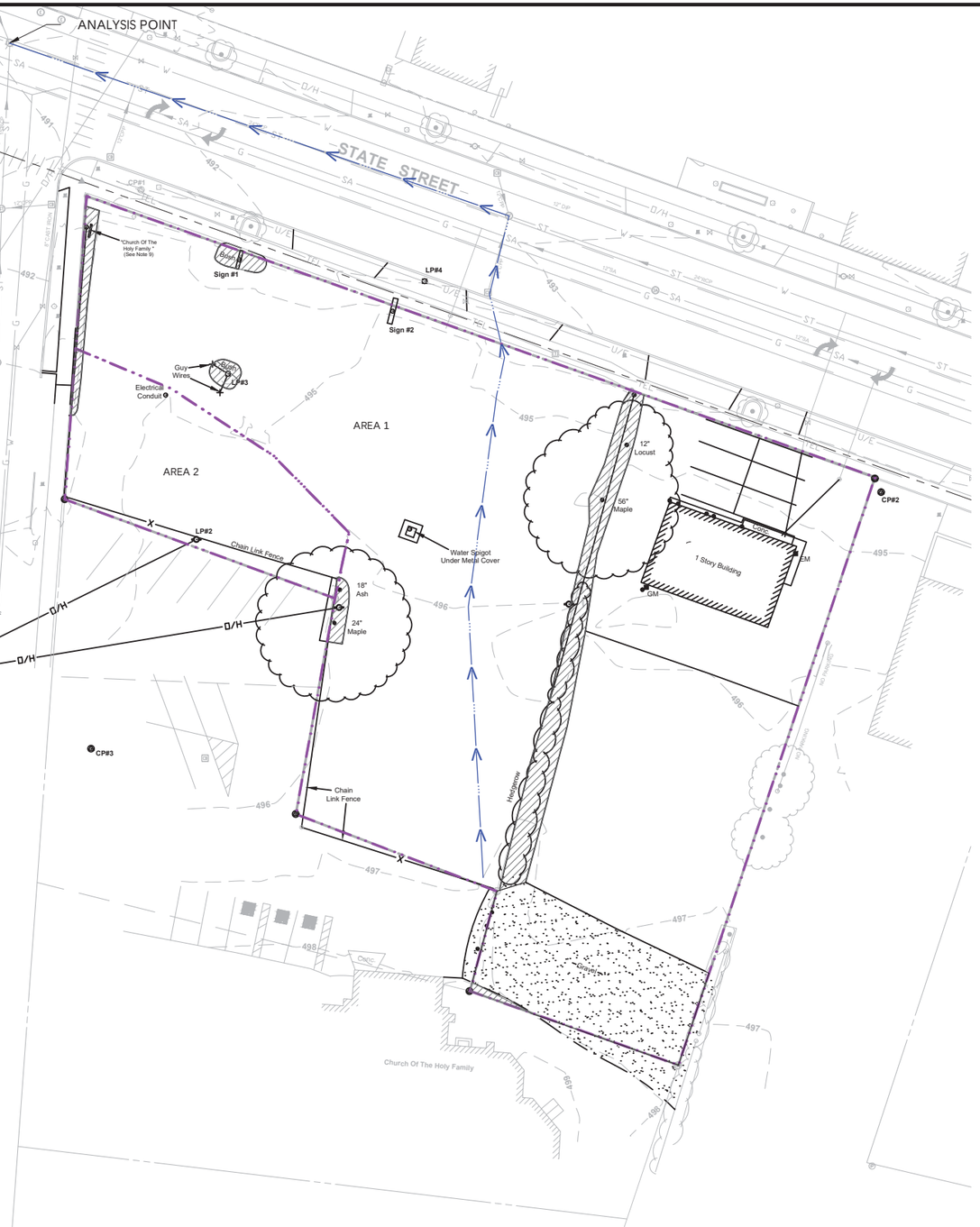
Table III - Peak Discharge Rates at the Analysis Point

	Drainage Area 1		Drainage Area 2		Analysis Point	
Design Storm	Existing Condition Peak Discharge (cfs)	Proposed Condition Peak Discharge (cfs)	Existing Condition Peak Discharge (cfs)	Proposed Condition Peak Discharge (cfs)	Existing Condition Peak Discharge (cfs)	Proposed Condition Peak Discharge (cfs)
1-year Storm	2.44	2.41	0.27	0.0	2.71	2.41
10-year Storm	4.32	4.27	0.48	0.0	4.80	4.27
100-year Storm	6.50	6.42	0.72	0.0	7.22	6.42

As can be seen from the tables above, the peak discharge from the site for each of the design storms will be reduced by 11% at the Analysis Point.

APPENDIX I

Existing Drainage Conditions Plan (DR 1) and Proposed Drainage Conditions Plan (DR 2)



REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

NORTH

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- DRAINAGE AREA
- TIME OF CONCENTRATION
- PERVIOUS AREA

EXISTING CONDITIONS

	IMPERVIOUS AREA (PAVED) (SF)	CN	IMPERVIOUS (GRAVEL) AREA (SF)	CN	PERVIOUS AREA (SF)	CN	TOTAL AREA (SF)	TOTAL AREA (AC)	COMPOSITE CN
AREA 1	29034	98	2459	91	1531	80	33023	0.76	97
AREA 2	3613	98	0	91	47	80	3660	0.08	98

Issued:		Date:
A	Issued to City	12/19/22
B		
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Revisions:		Date:
1		
2		
3		
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6		
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8		

Seal

FOR APPROVAL ONLY/NOT FOR CONSTRUCTION

Seal

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

APD ENGINEERING ARCHITECTURE
615 Fishers Run Victor, NY 14564
585.742.2222 - www.apd.com

Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

Taco Bell - Watertown NY

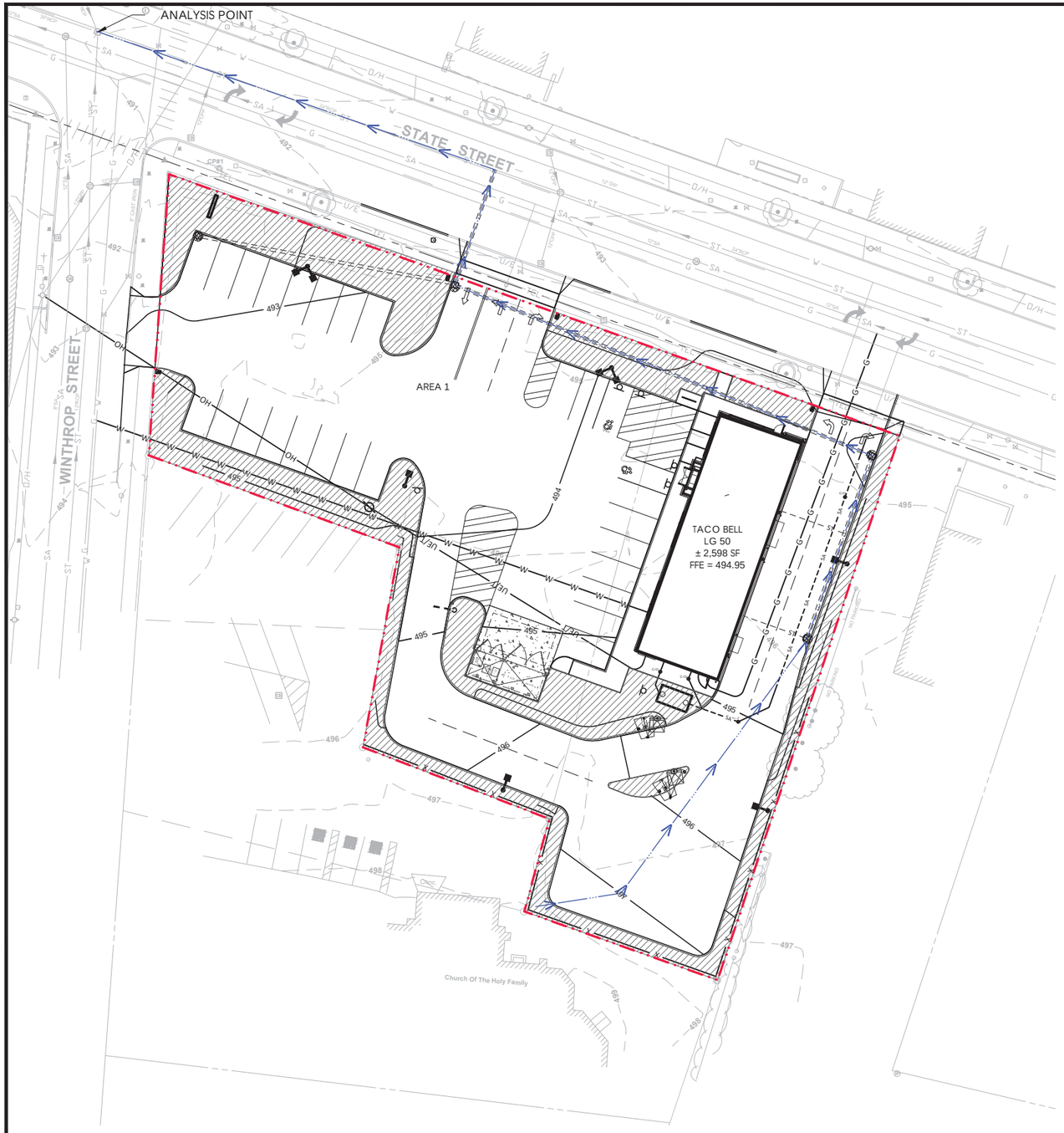
State St
Watertown, NY 13601
Jefferson County, NY

Project Name & Location:

Existing Drainage Map

Drawing Name:

Date: 10/12/22	Project No. 22-0408
Type: LG 50	
Drawn By: SLA	DR 1
Scale: 1" = 20'	Drawing No.



REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

NORTH

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

DRAINAGE AREA

TIME OF CONCENTRATION

PERVIOUS AREA

PROPOSED CONDITIONS

	IMPERVIOUS AREA (SF)	CN	PERVIOUS AREA (SF)	CN	TOTAL AREA (SF)	TOTAL AREA (AC)	COMPOSITE CN
AREA 1	28081	98	8545	80	36626	0.84	94

Issued:		Date:
A	Issued to City	12/19/22
B		
C		
D		
E		
F		
G		
H		

Revisions:	Date:
1	
2	
3	
4	
5	
6	
7	
8	

Seal

FOR APPROVAL ONLY/NOT FOR CONSTRUCTION

Seal

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

APD ENGINEERING ARCHITECTURE
615 Fishers Run Victor, NY 14564
585.742.2222 - www.apd.com

Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1957
315-451-9603

Taco Bell - Watertown NY

State St
Watertown, NY 13601
Jefferson County, NY

Project Name & Location:

Proposed Drainage Map

Drawing Name:

		Project No.
Date:	10/12/22	22-0408
Type:	LG 50	
Drawn By:	SLA	DR 2
Scale:	1" = 20'	Drawing No.

APPENDIX II

Hydraflow Hydrographs Output for Existing and Proposed Conditions

Hydraflow Table of Contents

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)							Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	------	2.439	-------	-------	-------	4.320	-------	-------	6.500	Existing Area 1
2	Rational	------	0.272	-------	-------	-------	0.481	-------	-------	0.724	Existing Area 2
3	Combine	1, 2	2.711	-------	-------	-------	4.801	-------	-------	7.224	Total Existing Dischage
5	Rational	------	2.411	-------	-------	-------	4.269	-------	-------	6.424	Proposed Area 1

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	2.439	1	5	732	------	------	------	Existing Area 1
2	Rational	0.272	1	5	82	------	------	------	Existing Area 2
3	Combine	2.711	1	5	813	1, 2	------	------	Total Existing Dischage
5	Rational	2.411	1	5	723	------	------	------	Proposed Area 1

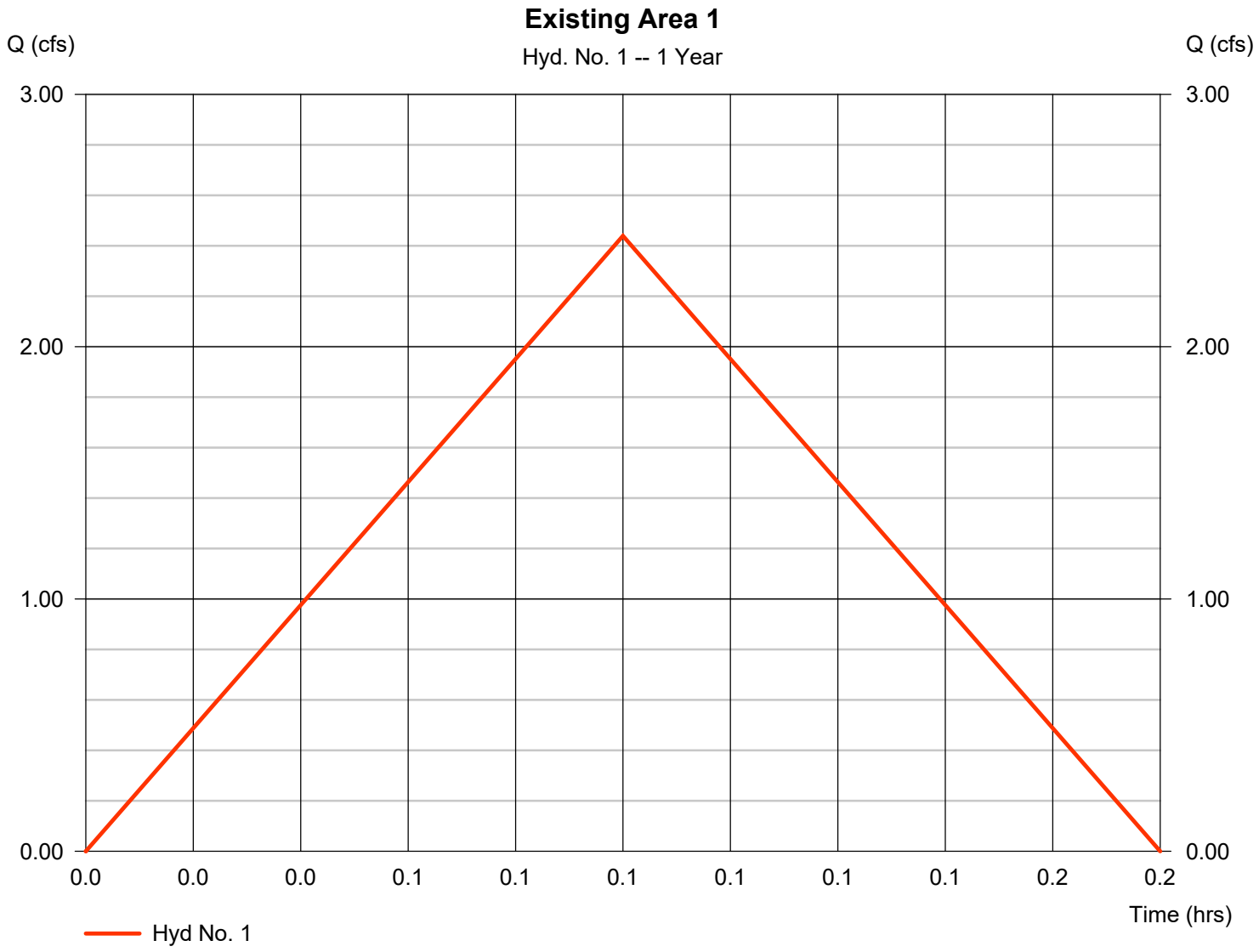
Hydrograph Report

Hyd. No. 1

Existing Area 1

Hydrograph type	=	Rational	Peak discharge	=	2.439 cfs
Storm frequency	=	1 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	732 cuft
Drainage area	=	0.760 ac	Runoff coeff.	=	0.85*
Intensity	=	3.776 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.060 x 0.55) + (0.670 x 0.90) + (0.030 x 0.30)] / 0.760



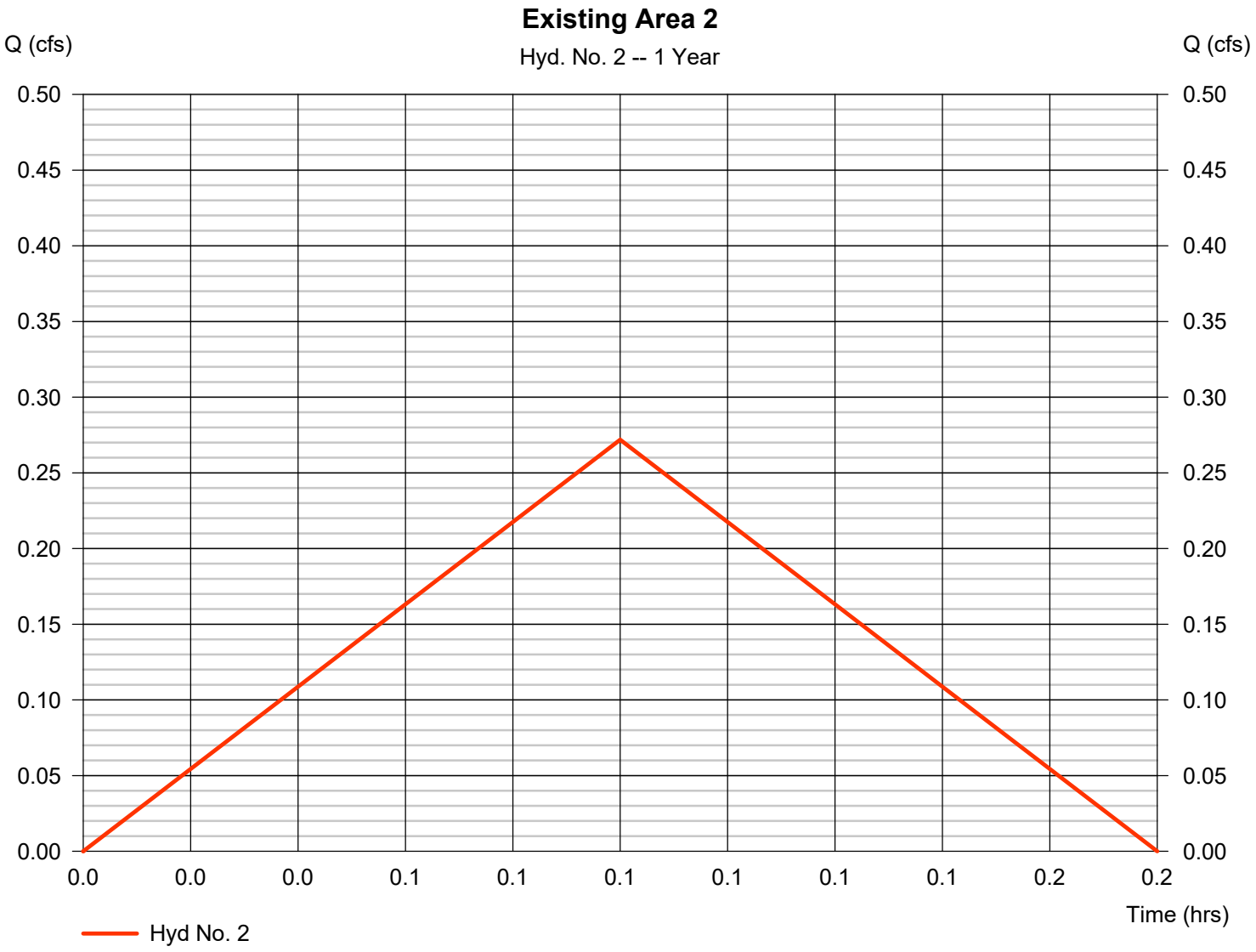
Hydrograph Report

Hyd. No. 2

Existing Area 2

Hydrograph type	=	Rational	Peak discharge	=	0.272 cfs
Storm frequency	=	1 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	82 cuft
Drainage area	=	0.080 ac	Runoff coeff.	=	0.9*
Intensity	=	3.776 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.080 x 0.90)] / 0.080

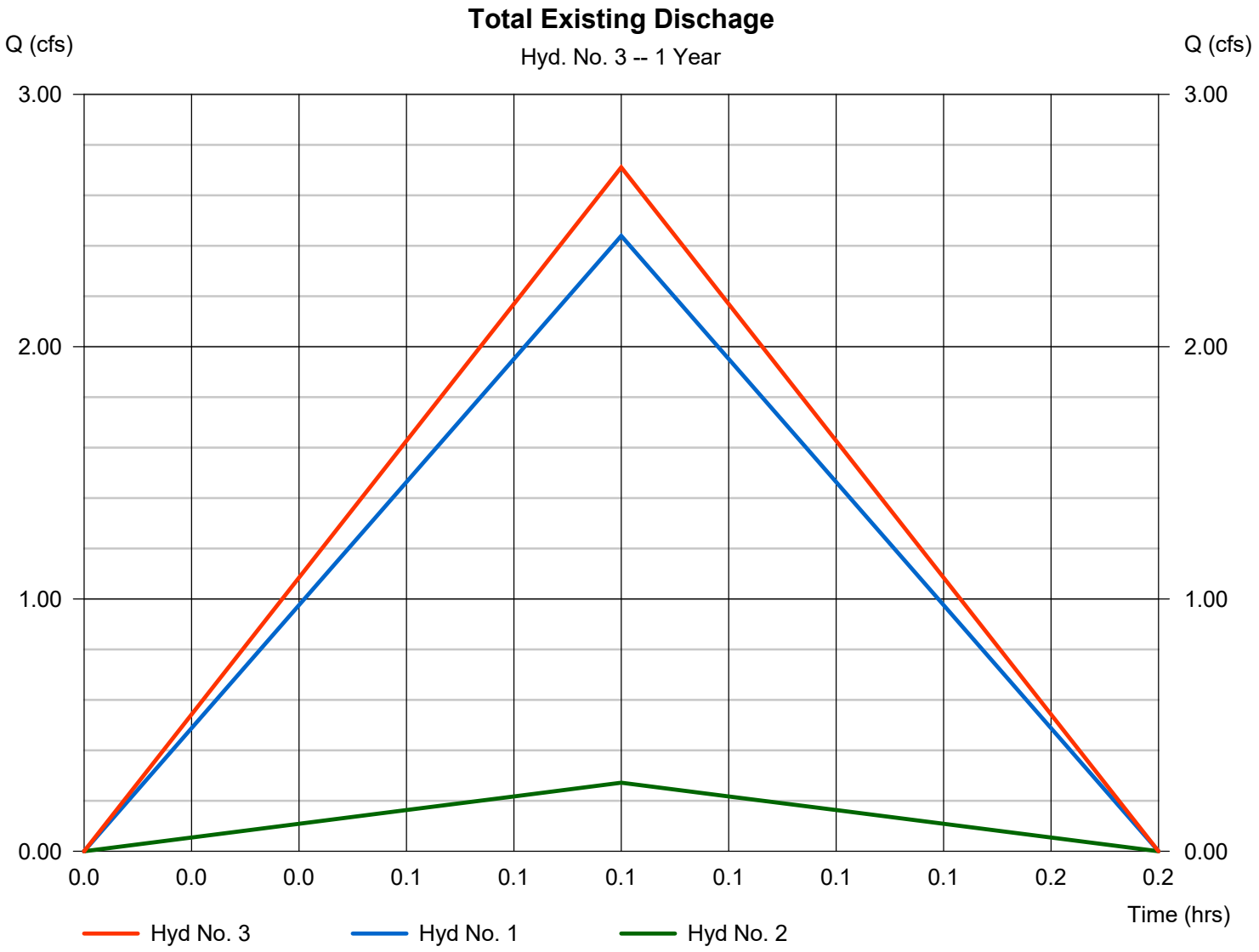


Hydrograph Report

Hyd. No. 3

Total Existing Dischage

Hydrograph type	= Combine	Peak discharge	= 2.711 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 813 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 0.840 ac



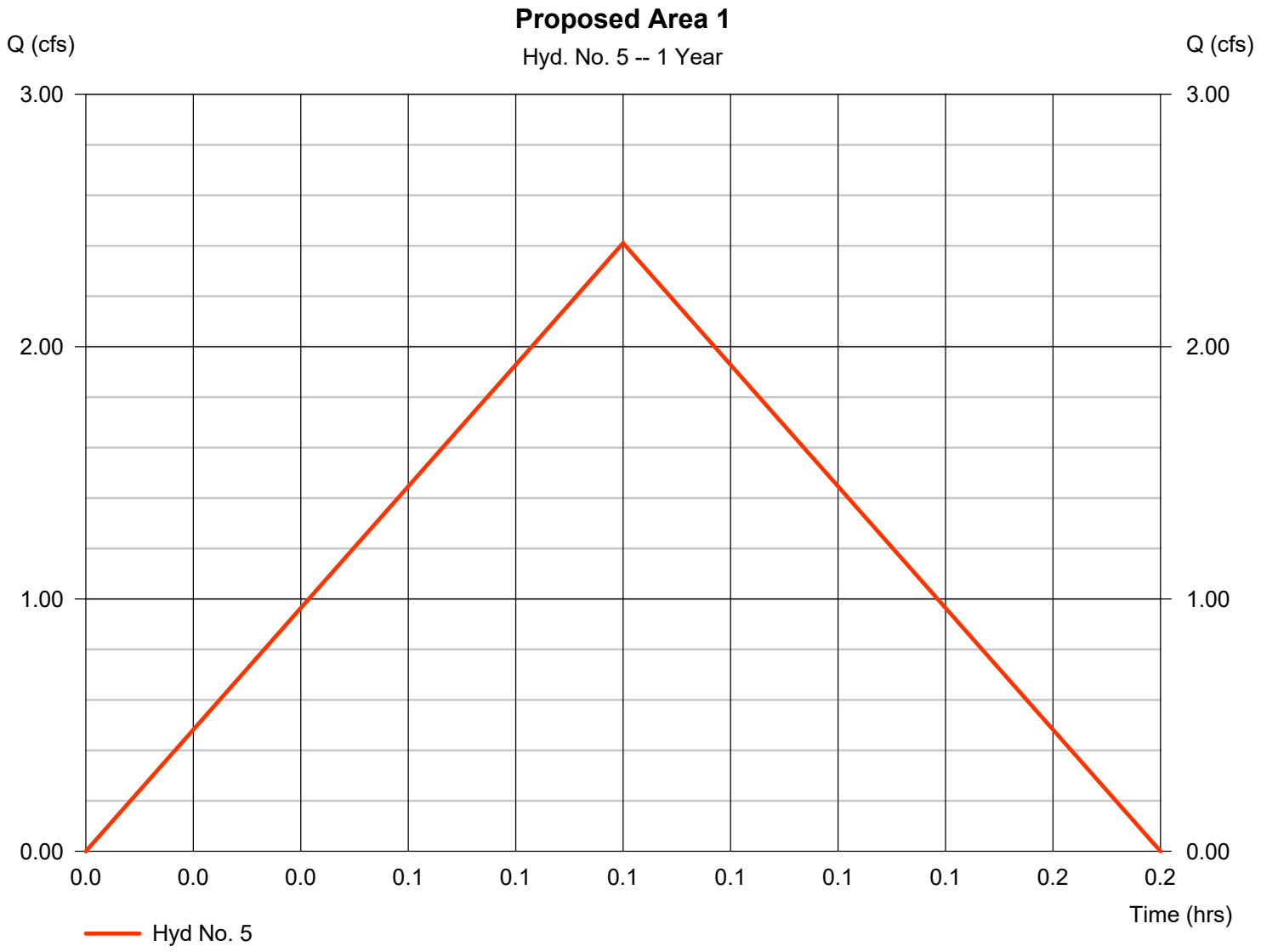
Hydrograph Report

Hyd. No. 5

Proposed Area 1

Hydrograph type	=	Rational	Peak discharge	=	2.411 cfs
Storm frequency	=	1 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	723 cuft
Drainage area	=	0.840 ac	Runoff coeff.	=	0.76*
Intensity	=	3.776 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.640 x 0.90) + (0.200 x 0.30)] / 0.840



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	4.320	1	5	1,296	------	------	------	Existing Area 1
2	Rational	0.481	1	5	144	------	------	------	Existing Area 2
3	Combine	4.801	1	5	1,440	1, 2	------	------	Total Existing Dischage
5	Rational	4.269	1	5	1,281	------	------	------	Proposed Area 1

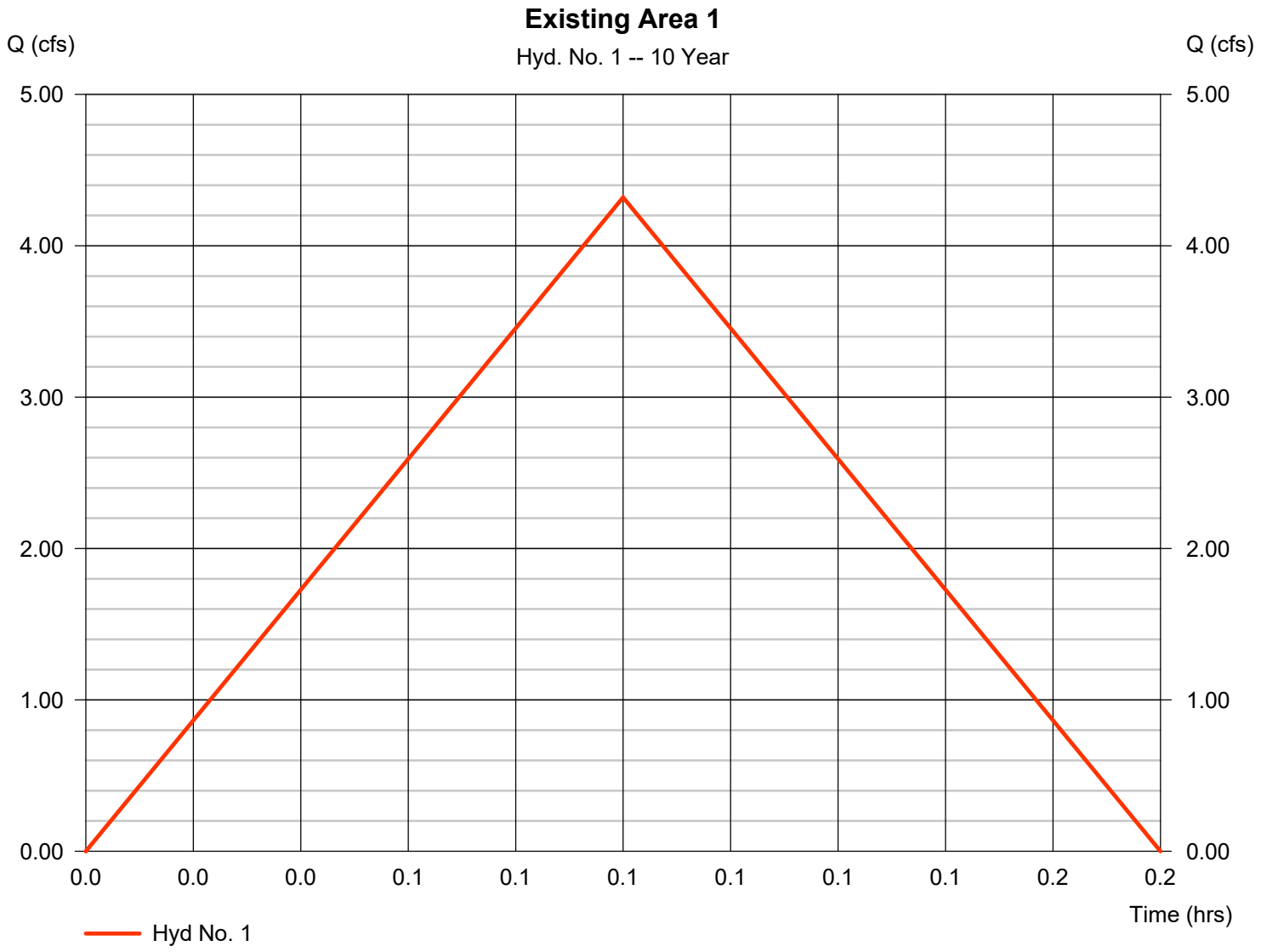
Hydrograph Report

Hyd. No. 1

Existing Area 1

Hydrograph type	=	Rational	Peak discharge	=	4.320 cfs
Storm frequency	=	10 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	1,296 cuft
Drainage area	=	0.760 ac	Runoff coeff.	=	0.85*
Intensity	=	6.687 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.060 x 0.55) + (0.670 x 0.90) + (0.030 x 0.30)] / 0.760



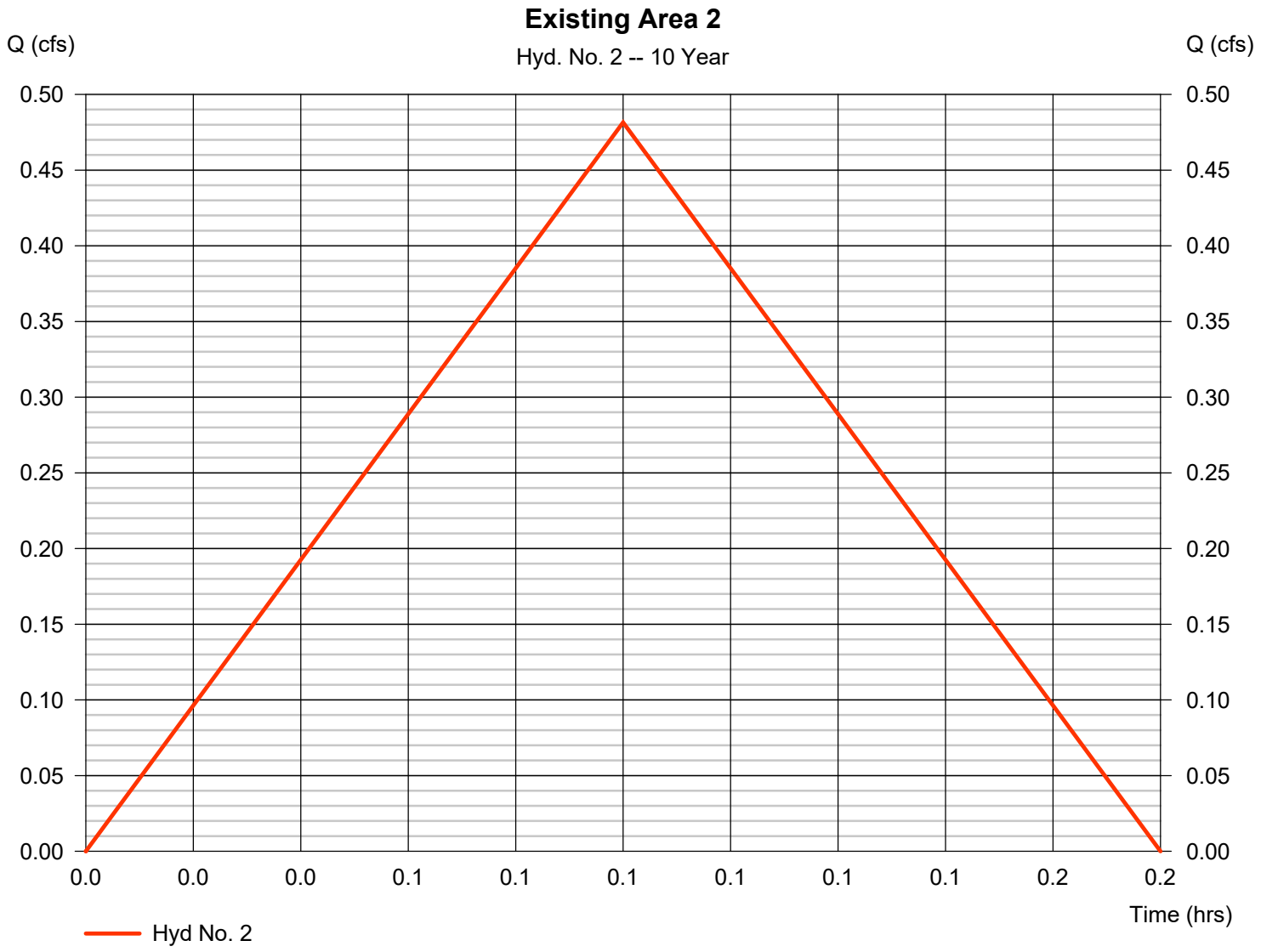
Hydrograph Report

Hyd. No. 2

Existing Area 2

Hydrograph type	= Rational	Peak discharge	= 0.481 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 144 cuft
Drainage area	= 0.080 ac	Runoff coeff.	= 0.9*
Intensity	= 6.687 in/hr	Tc by User	= 5.00 min
IDF Curve	= 22-0408 - IDF Curve.IDF	Asc/Rec limb fact	= 1/1

* Composite (Area/C) = [(0.080 x 0.90)] / 0.080

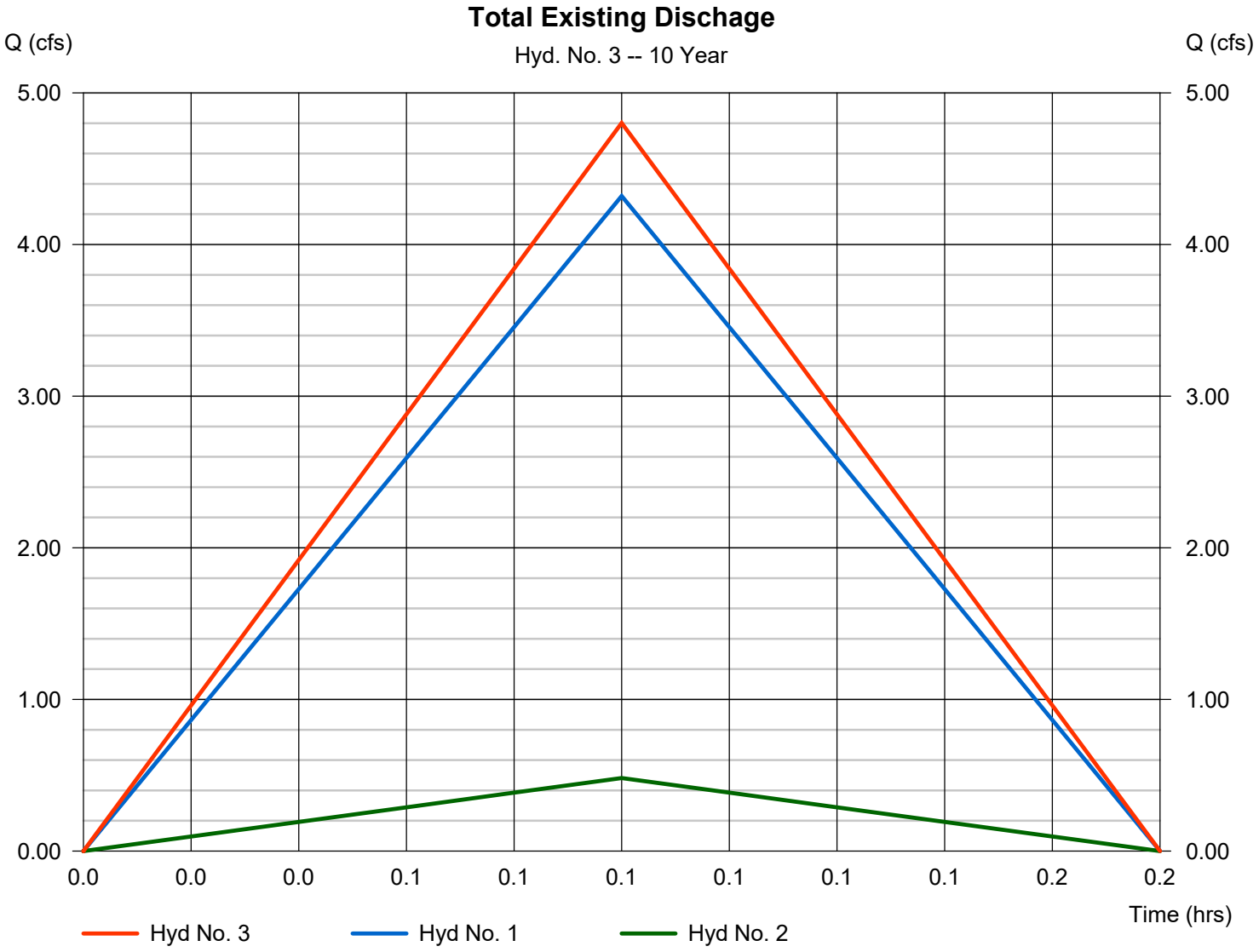


Hydrograph Report

Hyd. No. 3

Total Existing Dischage

Hydrograph type	= Combine	Peak discharge	= 4.801 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 1,440 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 0.840 ac



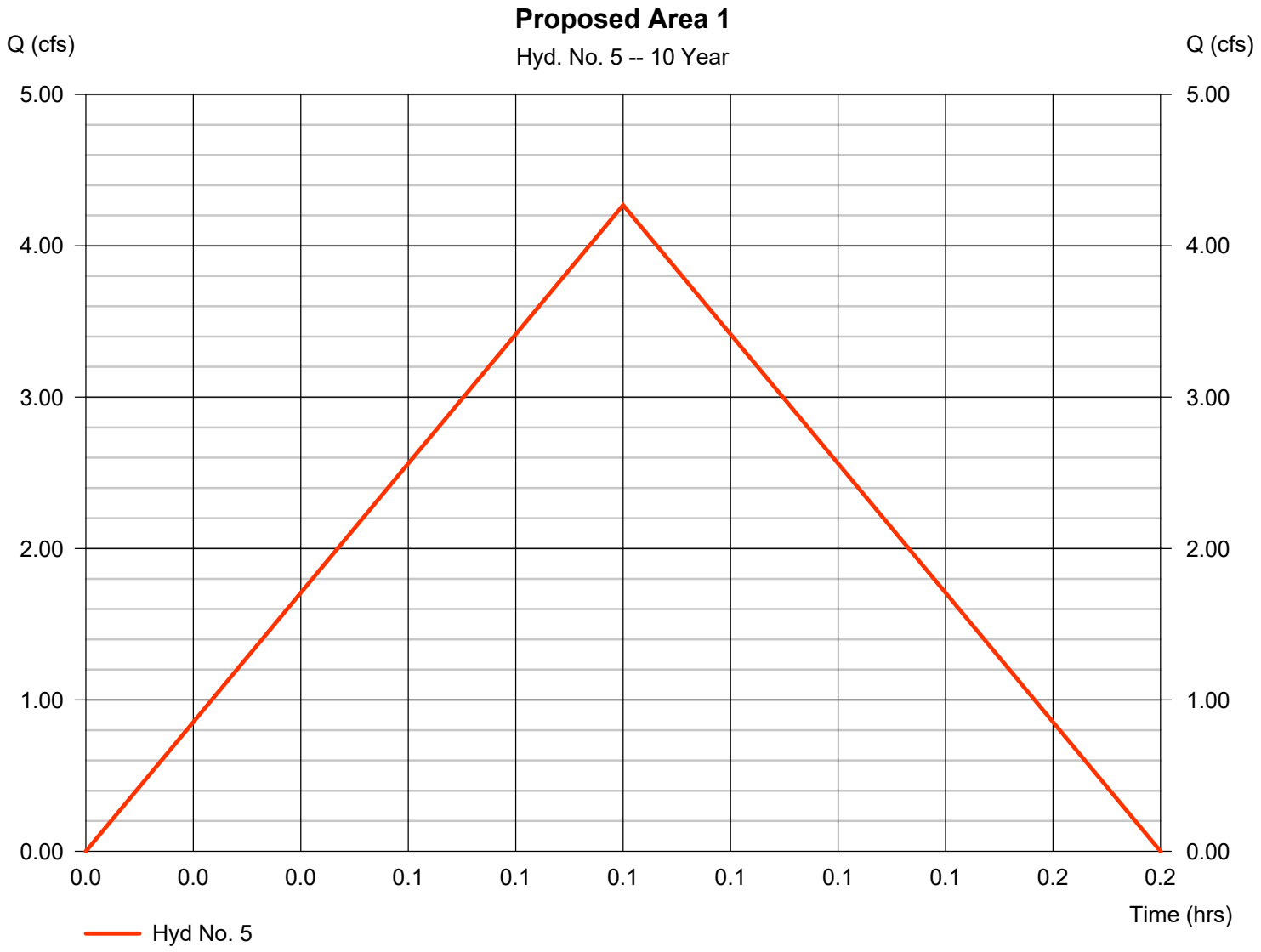
Hydrograph Report

Hyd. No. 5

Proposed Area 1

Hydrograph type	=	Rational	Peak discharge	=	4.269 cfs
Storm frequency	=	10 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	1,281 cuft
Drainage area	=	0.840 ac	Runoff coeff.	=	0.76*
Intensity	=	6.687 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.640 x 0.90) + (0.200 x 0.30)] / 0.840



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	6.500	1	5	1,950	------	------	------	Existing Area 1
2	Rational	0.724	1	5	217	------	------	------	Existing Area 2
3	Combine	7.224	1	5	2,167	1, 2	------	------	Total Existing Dischage
5	Rational	6.424	1	5	1,927	------	------	------	Proposed Area 1

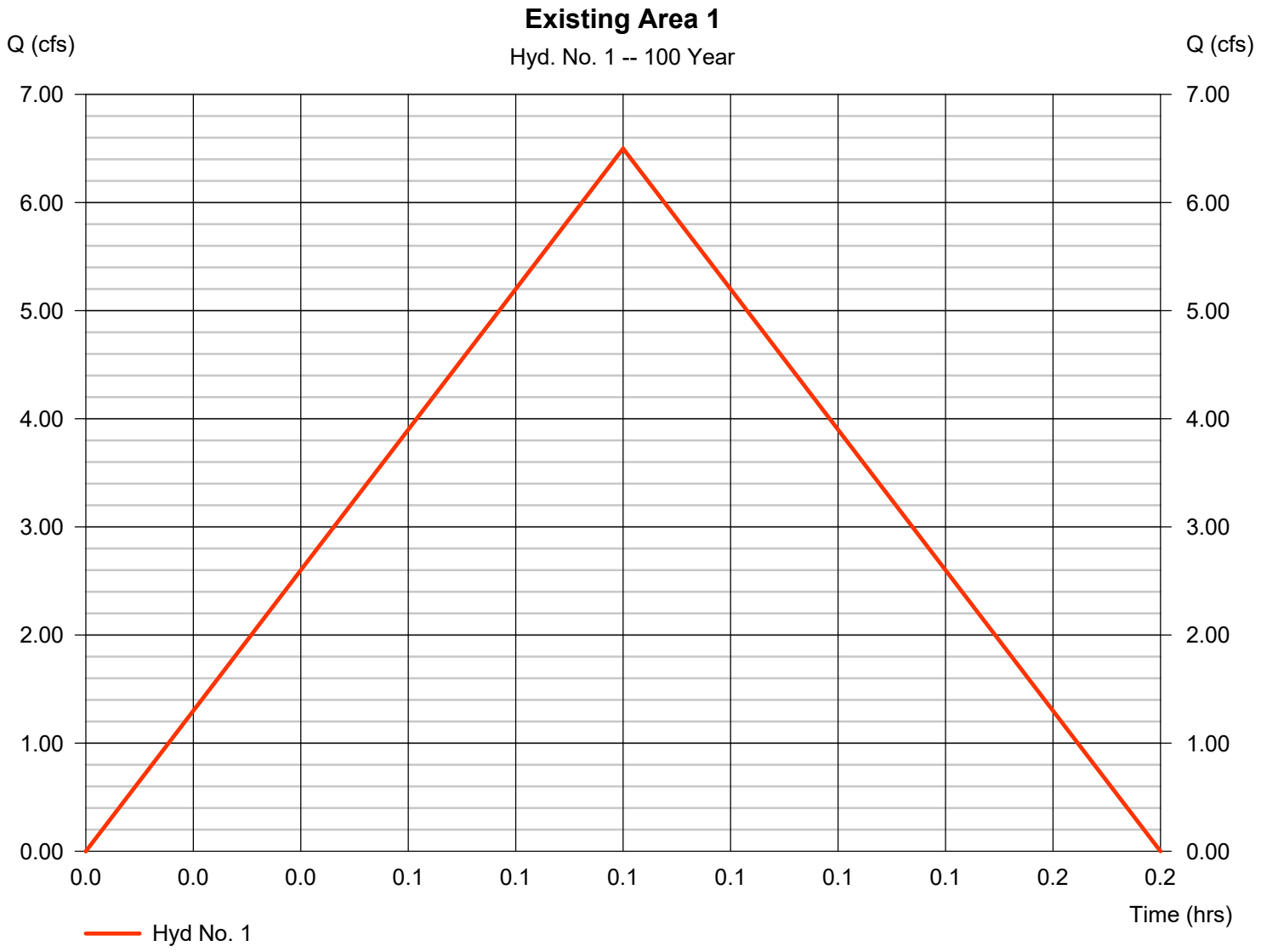
Hydrograph Report

Hyd. No. 1

Existing Area 1

Hydrograph type	=	Rational	Peak discharge	=	6.500 cfs
Storm frequency	=	100 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	1,950 cuft
Drainage area	=	0.760 ac	Runoff coeff.	=	0.85*
Intensity	=	10.062 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.060 x 0.55) + (0.670 x 0.90) + (0.030 x 0.30)] / 0.760



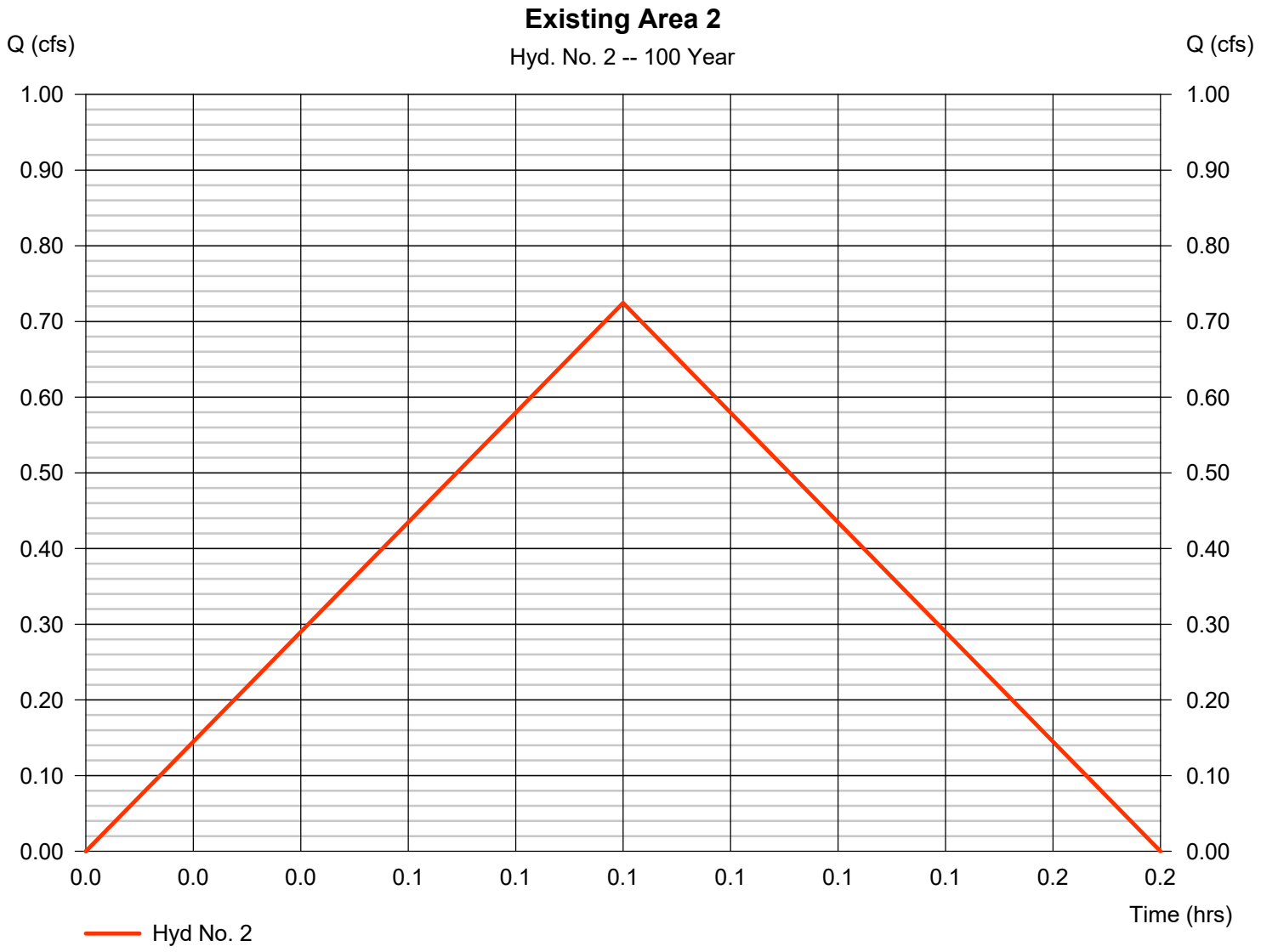
Hydrograph Report

Hyd. No. 2

Existing Area 2

Hydrograph type	= Rational	Peak discharge	= 0.724 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 217 cuft
Drainage area	= 0.080 ac	Runoff coeff.	= 0.9*
Intensity	= 10.062 in/hr	Tc by User	= 5.00 min
IDF Curve	= 22-0408 - IDF Curve.IDF	Asc/Rec limb fact	= 1/1

* Composite (Area/C) = [(0.080 x 0.90)] / 0.080

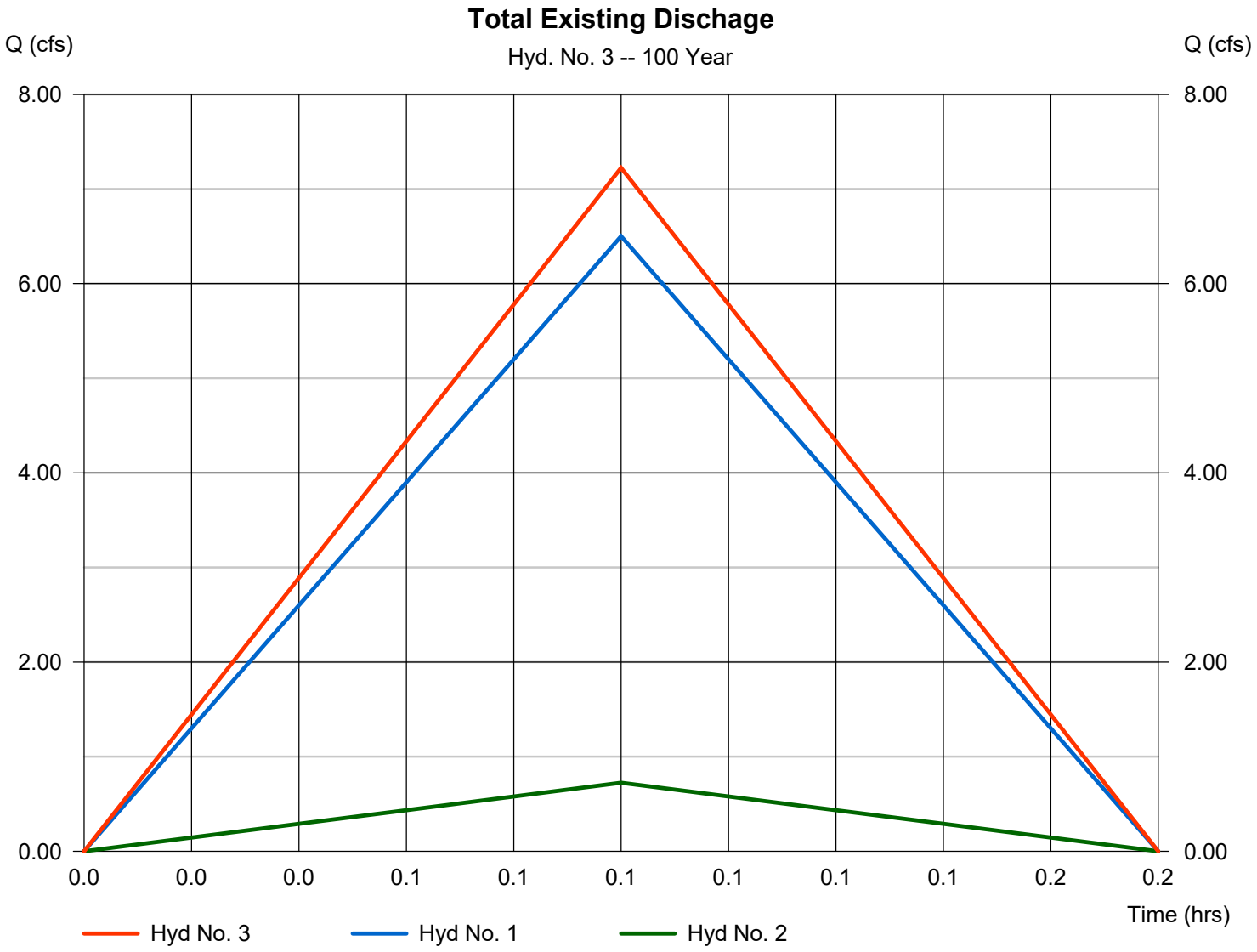


Hydrograph Report

Hyd. No. 3

Total Existing Dischage

Hydrograph type	= Combine	Peak discharge	= 7.224 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 2,167 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 0.840 ac



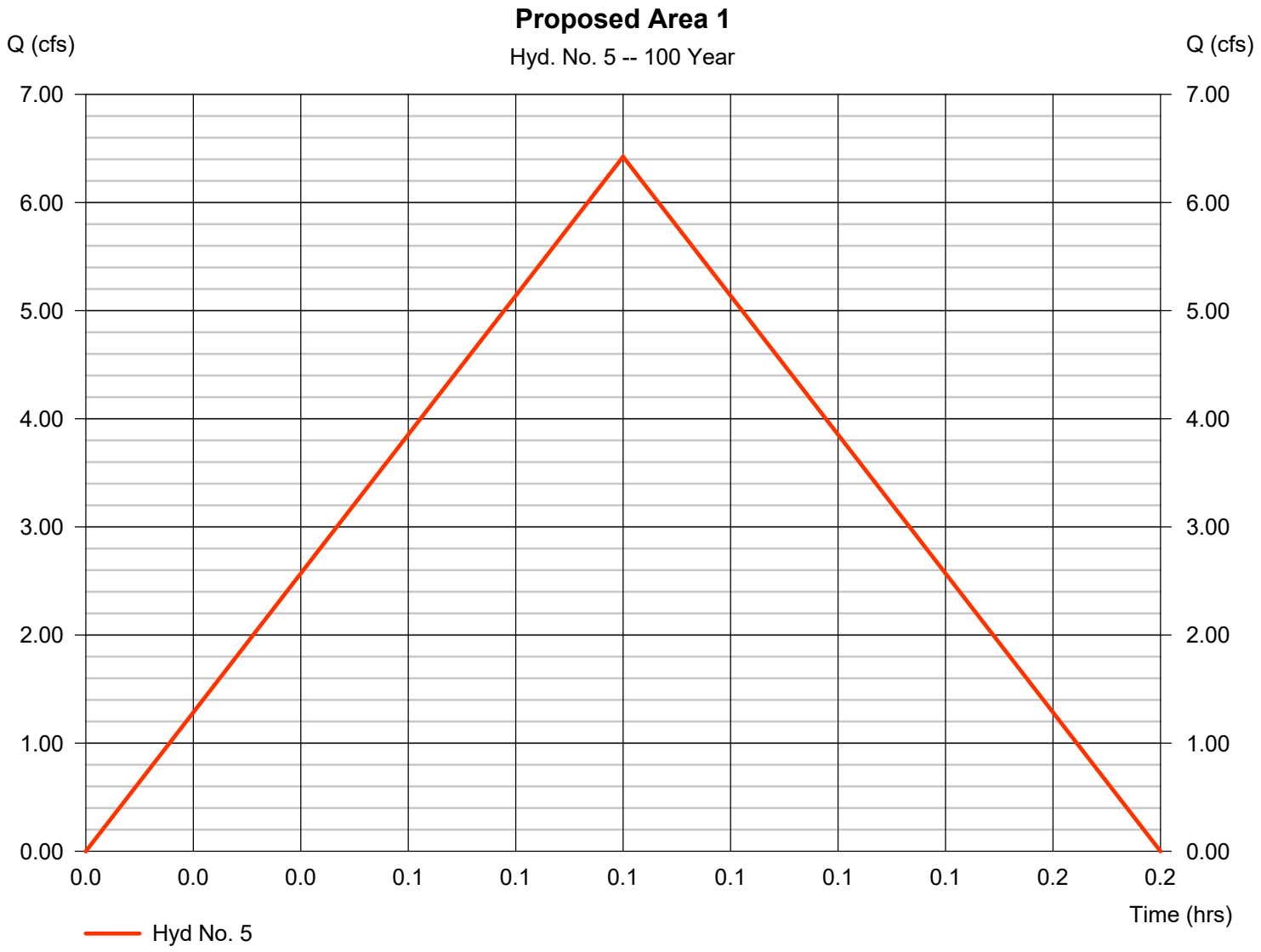
Hydrograph Report

Hyd. No. 5

Proposed Area 1

Hydrograph type	=	Rational	Peak discharge	=	6.424 cfs
Storm frequency	=	100 yrs	Time to peak	=	0.08 hrs
Time interval	=	1 min	Hyd. volume	=	1,927 cuft
Drainage area	=	0.840 ac	Runoff coeff.	=	0.76*
Intensity	=	10.062 in/hr	Tc by User	=	5.00 min
IDF Curve	=	22-0408 - IDF Curve.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.640 x 0.90) + (0.200 x 0.30)] / 0.840



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	20.5650	4.1000	0.7675	--------
2	25.2512	4.2000	0.7758	--------
3	0.0000	0.0000	0.0000	--------
5	0.0000	0.0000	0.0000	--------
10	36.8237	4.1000	0.7725	--------
25	0.0000	0.0000	0.0000	--------
50	0.0000	0.0000	0.0000	--------
100	56.9052	4.3000	0.7770	--------

File name: 22-0408 - IDF Curve.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	3.78	2.70	2.14	1.79	1.55	1.37	1.23	1.12	1.04	0.96	0.90	0.84
2	4.51	3.22	2.55	2.13	1.84	1.63	1.47	1.34	1.23	1.14	1.06	1.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	6.69	4.77	3.77	3.15	2.72	2.41	2.17	1.98	1.82	1.69	1.58	1.48
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	10.06	7.20	5.71	4.77	4.13	3.65	3.28	2.99	2.75	2.55	2.39	2.24

Tc = time in minutes. Values may exceed 60.

cip. file name: M:\2022 Jobs\408 - HRG - Taco Bell - Watertown - Winthrop and State St\Reports\Stormwater\blank.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX III

Soils Data

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Jefferson County, New York

December 12, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:2,140 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jefferson County, New York
Survey Area Data: Version 22, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 19, 2020—Nov 5, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CnB	Collamer silt loam, 3 to 8 percent slopes	2.6	12.6%
NoA	Niagara silt loam, 0 to 3 percent slopes	3.0	14.6%
Ur	Urban land	14.9	72.9%
Totals for Area of Interest		**20.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Jefferson County, New York

CnB—Collamer silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9smx
Elevation: 250 to 1,080 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Collamer and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Collamer

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Silty and clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 18 inches: silt loam
H3 - 18 to 32 inches: silty clay loam
H4 - 32 to 60 inches: stratified silt loam to very fine sand to clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F101XY009NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Unnamed soils, clayey surface texture and sandy areas

Percent of map unit: 10 percent

Hydric soil rating: No

Niagara

Percent of map unit: 8 percent
Hydric soil rating: No

Canandaigua

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

NoA—Niagara silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9sqx
Elevation: 250 to 930 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Niagara and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Niagara

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Silty and clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 13 inches: silt loam
H2 - 13 to 35 inches: silt loam
H3 - 35 to 75 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F142XB018VT - Moist Lake Plain
Hydric soil rating: No

Minor Components

Guffin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Collamer

Percent of map unit: 5 percent
Hydric soil rating: No

Canandaigua

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Ur—Urban land

Map Unit Setting

National map unit symbol: 9srz
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Udorthents, smoothed

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Map Scale: 1:2,140 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jefferson County, New York
Survey Area Data: Version 22, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 19, 2020—Nov 5, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CnB	Collamer silt loam, 3 to 8 percent slopes	C/D	2.6	12.6%
NoA	Niagara silt loam, 0 to 3 percent slopes	C/D	3.0	14.6%
Ur	Urban land		14.9	72.9%
Totals for Area of Interest			**20.5**	**100.0%**

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

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November 16, 2022

APD Engineering & Architecture, PLLC
615 Fishers Run
Victor, NY 14564

Attn: Ms. Stephanie Albright, P.E.

Re: Traffic Impact Assessment – Proposed Taco Bell Development
State Street – Watertown, NY

Dear Ms. Albright:

I have completed my review of traffic operations associated with the proposed Taco Bell development located on the southeast corner of the intersection of State Street with Winthrop Street in Watertown, NY. This letter summarizes the work completed in this review as well as my findings.

Project Understanding

The proposed development is located on the southeast corner of the intersection of State Street with Winthrop Street in the City of Watertown. The site is currently vacant with a small vacant Trailways building on the northeast corner which will be removed. The proposed development includes a 2,598 SF Taco Bell restaurant with drive through operations. Access to the development is proposed via one full access driveway to State Street located 150 feet to the east of Winthrop Street, a drive through exit only access driveway to State Street located approximately 280 feet to the east of Winthrop Street and a full access driveway to Winthrop Street located approximately 90 feet south of State Street.

A site plan developed by APD Engineering & Architecture, dated October 12th, 2022 has been attached.

Data Collection

Site visits were conducted on Wednesday – November 9th, 2022 to collect the following:

- Existing Traffic Volume Counts – Traffic turning movement counts were collected at the intersection of State Street with Winthrop Street during the weekday morning (7-9am), midday (11am-1pm), and evening (4-6pm) peak travel periods to ensure that actual peak hours of the adjacent streets were captured. Separate heavy vehicles counts were collected by approach. There were minor pedestrian volumes observed during the traffic count periods and all area schools were in session.

- State Street Gap Data – Gap data was collected to assess the ability for vehicles to turn in and out of the proposed site driveways on State Street. In order for a vehicle to turn right out of the site, or left into the site, the vehicle only requires a gap in the eastbound direction on State Street. A vehicle requires a gap in traffic in both directions at the same time to turn left out of

the site onto State Street. These gaps in traffic were observed and timed on State Street at the locations of the proposed full access driveway during the weekday morning, weekday midday, and weekday evening traffic count periods. The gaps were then converted to a number of vehicles that could turn left or right out of the proposed site during each gap and then totaled for the peak hour. For example, one vehicle can turn from the driveway with a 6-9 second gap in traffic, two can turn with a 10-13 second gap, 3 with a 14-17 second gap, 4 with an 18-19 second gap, etc.

- Traffic Queue Data – Traffic queues in the westbound direction on State Street at the Mechanic Street signalized intersection, and in the eastbound direction on State Street at the High Street/William Street signalized intersection, were observed and recorded at the beginning of each green phase throughout the traffic count periods in order to identify average and maximum traffic queues, and any impacts they may have on access to the site.

- Spot Speed Measurements – 50 speed measurements were collected in each direction on State Street to identify average and 85th percentile operating speeds in the area passing the site driveways. The data was collected for free flow traffic during off-peak times. The weather was clear and the roadway was dry.

- Sight Distance Measurements – Sight lines looking east/west along State Street from the proposed site driveways were collected for comparison to design standards in order to confirm that adequate sight lines are available for safe ingress and egress from the site.

- Operational Data - Other data needed to evaluate traffic operations, such as intersection geometry, control, and speeds limits were also collected.

Existing Operations

State Street has one through lane in each direction with a two way center left turn lane passing the site driveways. The center lane provides stopping space for westbound vehicles turning left on Winthrop Street or into the proposed site driveway, as well as stopping space for eastbound vehicles turning left onto High Street. Winthrop Street is a one lane southbound only roadway traveling away from State Street.

Based on the traffic counts collected, the peak hours were identified as follows:

Morning Peak Hour – 7:15am to 8:15am
Midday Peak Hour – 12:00pm-1:00pm
Evening Peak Hour – 4:30pm to 5:30pm

Re: Traffic Impact Assessment – Proposed Taco Bell Development
State Street – Watertown, NY

The 2022 existing traffic volumes collected in November are shown in the attached Figure 1 for the morning, midday, and evening peak hours.

The existing traffic counts were reviewed and compared to historical traffic volume data on State Street to identify any necessary adjustments to account for seasonal adjustments or lingering impacts from the Covid pandemic. Specifically, the 2019 AADT traffic count for State Street between Washington Street and Park Drive was taken from the NYSDOT Traffic Data Viewer website was reviewed. Based on the 2019 data, State Street has a design hour volume of 1,036 vehicles through the study area with a directional design hour volume of 557 vehicles. The 2022 traffic volumes collected in November have evening peak hour volume of 1,086 vehicles passing the site with a directional peak volume of 566 vehicles. Since the 2022 traffic counts are 5% higher than the overall historical traffic count and 2% higher in the peak direction, and since the seasonal adjustment factor for November (Factor Group 30 – 1.018) would actually decrease the volumes slightly, there were no adjustments made.

State Street carries approximately 297 vehicles eastbound/512 vehicles westbound passing the site during the morning peak hour, 493 vehicles eastbound/493 vehicles westbound passing the site during the midday peak hour and 566 vehicles eastbound/520 vehicles westbound passing the site during the evening peak hour.

Based on the gap data collected, there were sufficient gaps in traffic observed to accommodate approximately 471 vehicles turning right onto State Street from the site driveways during the morning peak hour, 368 vehicles turning right during the midday peak hour, and 294 vehicles turning right during the evening peak hour. These gaps would also be available for vehicles turning left into the site from State Street. There were sufficient gaps observed to accommodate approximately 272 vehicles turning left out of the site onto State Street during the morning peak hour, 241 vehicles turning left out during the midday peak hour, and 163 vehicles turning left out during the evening peak hour. There are no concerns with available gaps in traffic to accommodate traffic movements entering and exiting the site. The gap data is attached.

The average traffic queues in the eastbound left turn lane on State Street at High Street were less than 1 vehicle during all three peak hours, with maximum queues of 2-3 vehicles observed during each peak hour. These queues will not interfere with access at the site driveway. The eastbound through/right lane at High Street had average traffic queues of 2.6 vehicles during the morning peak hour, 4.5 vehicles during the midday peak hour, and 6.9 vehicles during the evening peak hour. The maximum queues observed in the eastbound through/right lanes were 9 vehicles during the morning peak hour, 14 vehicles during the midday peak hour and 17 vehicles during the evening peak hour. With 150 feet of storage space between the High Street signal and the exit driveway from the drive through, there is sufficient storage for up to 6-7 vehicles without impacting access from the site. The maximum queues observed temporarily blocked the driveway for 6 out 53 signal cycles during the morning peak hour and 15 out of 55 signal cycles during the midday peak hour, and 24 out of 52 cycle during the evening

peak hour. Any blockages quickly clear during the green phase of the signal. Any delays exiting the site would be internal to the site and will not impact traffic operations along State Street.

The average traffic queues on State Street westbound at Mechanic Street were 2-3 vehicles during each peak hour with maximum queues observed of 6-8 vehicles. The maximum queues did not reach Winthrop Street during any of the three peak hours.

The posted speed limit passing the site is 30 mph on State Street. The speed data collected indicates that the average speeds passing the site on State Street are 32 mph eastbound and 34 mph westbound. The 85th percentile speeds based on the data collected are 34.5 mph eastbound and 37.5 mph westbound on State Street. The speed data has been attached.

The following table provides a summary of the recommended sight distances along State Street from the AASHTO A Policy on Design of Highways and Streets as well as the available sight distances based on field measurements. The speed limit in the area is 30 mph on State Street, however the speed data collected indicates that the operating speed is closer to 35-40 mph in both directions. Therefore 40 mph was used for the sight distance review. The recommended sight distance for left turning vehicles was adjusted to account for the two center lane to be crossed when exiting the site

Sight Distance Summary

Location	Operating Speed	Direction	AASHTO Recommended Sight Distance	Available Sight Distance
West Full Access Site Driveway @ State Street – Turning Left	40 mph	Looking Left Looking Right	470 feet 470 feet	700+ feet 1,000+ feet
West Full Access Site Driveway @ State Street – Turning Right	40 mph	Looking Left	385 feet	700+ feet
East Exit Only Site Driveway @ State Street – Turning Left	40 mph	Looking Left Looking Right	470 feet 470 feet	800+ feet 1,000+ feet
East Exit Only Site Driveway @ State Street – Turning Right	40 mph	Looking Left	385 feet	800+ feet

There are more than adequate sight distances available looking in both directions along State Street from the proposed access locations based on the observed operating speeds of 35-40 mph. There are no concerns with sight distances and safety for ingress and egress from the proposed site driveways.

Capacity analysis of the existing traffic operations was completed using Synchro11, an industry accepted standard for the analysis of both signalized and unsignalized intersections that is based on methodologies developed in the Highway Capacity Manual. Intersection and individual movement operations are graded in terms of Level of Service ranging from A to F, as described in the HCM. For

example, an unsignalized intersection movement with an average delay of 5 seconds per vehicle is considered a Level of Service A while an average delay per vehicle of 20 seconds is considered a C. A Level of Service D or better is generally considered acceptable for a signalized intersection while a Level of Service E or better is generally considered acceptable for an unsignalized intersection.

It is noted that with Winthrop Street being a southbound only roadway away from State Street, Synchro does not provide a printable delay report since there is no side street traffic approaching the intersection. The program does however show projected delays for the westbound left turning traffic onto Winthrop Street under each scenario. These values were taken from the programs and included in the attached Level of Service summary.

The results of the Synchro capacity analysis indicates that the left turn movement from State Street onto Winthrop Street is operating at Level of Service A during all three peak hours with no delays on the free flow east-west through movements. The detailed Level of Service summary has been attached.

There are no noted concerns with existing traffic operations on State Street in the vicinity of the project site as there are ample gaps in traffic and adequate sight lines in both directions. There are acceptable delays at the adjacent Winthrop Street intersection with acceptable Level of Service A for all traffic movements and minimal queuing concerns with relation to the proposed driveway locations and the adjacent traffic signals to the east and west. These findings are consistent with observations made during the data collection.

Accident Analysis

An accident analysis was completed for State Street between Mechanic Street and High Street/William Street using history reports obtained for a three year period from June 2019 through May 2022. Over the three year period, there were 51 total accidents in the study area with 17 accidents at the signalized High Street/William Street intersection, 13 accidents at the signalized Mechanic Street intersection, 3 accidents at the Winthrop Street intersection, 12 accidents along State Street (not at the intersections), and 6 accidents in area parking lots.

Of the 17 accidents at the State Street / High Street / William Street intersection, 8 were rearend accidents, 7 were right angle accidents, 1 was an overtaking accident, and 1 was a pedestrian accident.

Of the 13 accidents at the State Street / Mechanic Street intersection, 10 were rearend accidents, 1 was a right angle accident, 1 was an overtaking accident, and 1 was a right turn accident.

All three accidents at the Winthrop Street intersection were rearend accidents on State Street.

Of the 12 midblock accents on State Street, 10 were rearend accidents, 1 was a right turn accident, and 1 was a pedestrian accident. The midblock accident rate is 5.01 accidents per million vehicle miles,

which is above the statewide average of 2.71 accidents per million vehicle miles for similar facilities. It is likely that a significant number of the rearend accidents report on the midblock are related to the traffic signals to the east and west of the site.

33 (73%) of the 45 accidents along State Street were either rearend or overtaking accidents, which are the most common type of accident at a signalized intersections. There are no other distinct patterns noted.

71% of the accidents were property damage only accidents with 29% including injuries. There was one fatality accident on September 25th, 2020 which involved a westbound motorist on State Street striking a pedestrian.

The detailed accident summary has been attached.

2023 Background Operations

The proposed Taco Bell development is assumed to be completed by 2023, therefore 2023 was used as the design year for this study. In order to fully understand the impacts of the development on the adjacent roadway system, analysis of the operations immediately before the project opening must first be completed. The existing traffic volumes were adjusted by a growth rate to account for any unknown development that may occur prior to completion of the project.

Historical traffic volumes along State Street between Washington Street and Park Drive were taken from the NYSDOT Traffic Data Viewer website and reviewed in order to identify an appropriate background growth rate. Long term growth rates in the area have been negative at -0.2% per year between 2003 and 2019. In order to maintain a conservative analysis, a positive +1.0% per year growth was chosen and used to grow the 2022 existing traffic volumes to the 2023 background condition. The 2023 background peak hour volumes for the study area with 1.0% growth are shown in Figure 1. The detailed growth calculations have been attached.

The Synchro capacity analysis of the 2023 background condition shows no increases in delay at the study area intersection during the peak hours. All movements continue to operate at Level of Service A during both peak hours.

The detailed Level of Service summary and capacity analysis printouts have been attached.

Trip Generation Estimate and Distribution

The proposed development includes a 2,598 SF Taco Bell restaurant with drive through operations. Trips generated by the proposed development were estimated using the ITE Trip Generation, 11th Edition, which is the industry accepted standard for estimating traffic generated by new developments.

Re: Traffic Impact Assessment – Proposed Taco Bell Development
State Street – Watertown, NY

Land Use 934 – Fast Food Restaurant with Drive-Through Window was used. The 11th Edition Trip Generation does not provide direct data for the weekday midday peak, however the 10th Edition does provide data on the percentage of total daily traffic generated for each peak hour. The 10th Edition, indicates that the evening peak hour is approximately 6.1% of the total daily traffic while the midday peak hour is approximately 11.8% of the total daily traffic generated. Therefore the evening peak hour trip generation rate was multiplied by a factor of 1.934 (11.8/6.1) to develop the trip generation estimate for the midday peak hour.

Additionally, the ITE Trip Generation, was used to estimate the percentage of trips for the proposed development that would be pass-by trips. Pass-by trips are vehicles that stop at the development on their way to another location, such as stopping on their way to work in the morning or on their way home in the evening. These vehicles are already traveling on the roadway and are diverted to the site. Based on data reviewed, the average pass-by percentage for a fast food restaurant is 49% during the morning peak hour and 50% during the evening peak hour. A 50% pass-by trip generation rate was assumed for all three peak hours.

The following table summarizes the trip generation estimate for the proposed Taco Bell development on State Street in Watertown, NY.

Trip Generation Summary

	Morning Peak		**Midday Peak**		**Evening Peak**	
	Entering	**Exiting**	**Entering**	**Entering**	**Entering**	**Entering**
Taco Bell– 2,598 SF	59	57	83	83	45	41
Pass-by Trips - 50%	*-29*	*-29*	*-41*	*-41*	*-21*	*-21*
New Trips Generated	**30**	**28**	**42**	**42**	**24**	**20**

The detailed trip generation calculations have been attached.

Overall the proposed development is minor traffic generator with less than 60 total trips entering and exiting during the morning peak hour, approximately 83 total trips entering and exiting during the midday peak hour, and less than 50 total trips entering and exiting during the evening peak hour. With half of the trips generated being drawn from traffic already in the area, the site is only expected to generate 20-40 new trips entering and exiting the area during peak hours.

Based on existing traffic patterns, 50% of the new trips generated are expected to arrive from the east on State Street and 50% are expected to arrive from the west on State Street. Exiting traffic is expected to primarily use State Street with 48% expected to exit to each direction, and 4% is expected to travel to the south on Winthrop Street. Traffic was distributed to the driveways assuming that approximately 70% of the traffic generated uses the drive through. Separate pass-by trip distributions were developed for each peak hour based on specific traffic patterns passing the site on State Street.

Re: Traffic Impact Assessment – Proposed Taco Bell Development
State Street – Watertown, NY

The anticipated arrival/departure distribution and resulting trips generated are shown in Figure 2 for the morning peak hour, Figure 3 for the midday peak hour, and Figure 4 for the evening peak hour. The resultant full build traffic volumes expected when the development is complete are shown in Figure 5.

Build Operations

Based on the projected turning movements on State Street at the site driveways, there are more than sufficient gaps available to accommodate the proposed development. The center left turn lane on State Street provides refuge for both vehicles turning left into the site as well as vehicles turning left out of the site.

Capacity analysis of the build condition with the proposed Taco Bell development indicates that the development will have negligible impacts on traffic operations on State Street. All traffic movements on State Street are projected to operate at Level of Service A with the site driveways all operating at Levels of Service C or better during all three peak hours.

The detailed Level of Service summary and capacity analysis printouts have been attached.

Conclusions

The additional traffic generated by the proposed Taco Bell development will have no notable or significant impact on traffic operations on State Street or at the adjacent Winthrop Street intersection. There are adequate gaps in traffic to accommodate turning movements into and out of the development, adequate sight lines in each direction, no significant queuing concerns from the adjacent signals, and no capacity concerns. There are no mitigation measures recommended.

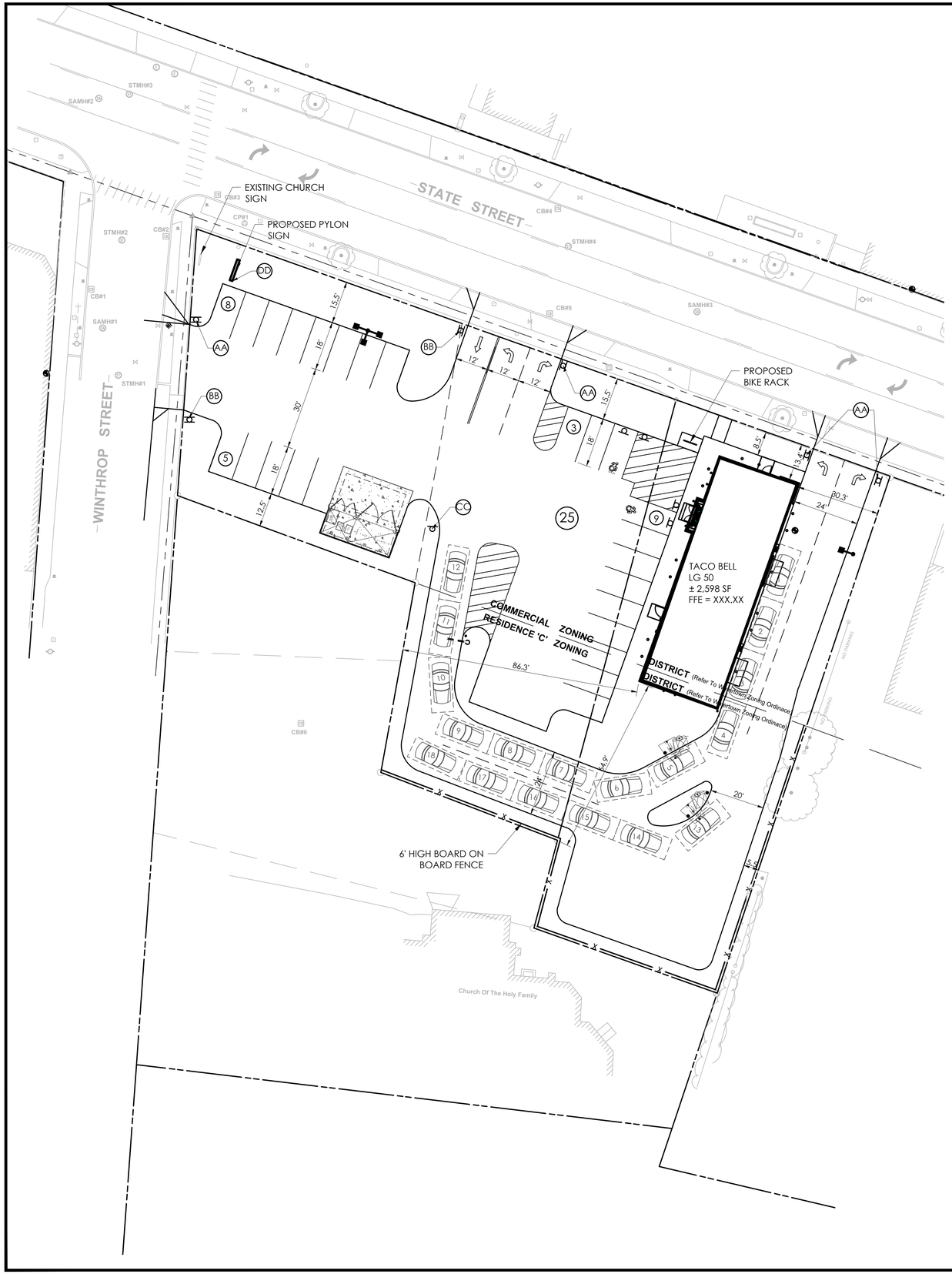
If you have any questions or need additional information, please call.

Sincerely,

Gordon T. Stansbury, P.E., P.T.O.E.
GTS Consulting

Attachments –

Site Plan	Level of Service Summary
Traffic Volume Figures 1-5	Gap Calculations
Spot Speed Data	Growth Rate Calculations
Trip Generation Estimate	Accident Data
Count Data	Synchro Capacity Printouts



SITE LEGEND:

- (A) ACCESSIBLE PARKING SIGN, POST & BOLLARD (REFER TO DETAIL)
- (B) "NO PARKING ANY TIME" SIGN, POST & BOLLARD (REFER TO DETAIL)
- (C) "VAN ACCESSIBLE" SIGN (REFER TO DETAIL)
- (D) SYSL/4" PARKING STALL STRIPING
- (E) CONCRETE CURB (REFER TO DETAIL)
- (F) TRANSITION CURB (REFER TO DETAIL)
- (G) ADA RAMP AND DETECTABLE WARNING (REFER TO DETAIL)
- (H) BOLLARDS (REFER TO ARCH. PLAN DETAIL)
- (I) LAWN/MULCH AREA (REFER TO PLANTING PLAN FOR DELINEATION)
- (J) LIGHT POLE (REFER TO DETAIL)
- (K) MENU BOARD, CANOPY & SPEAKER BOX (REFER TO DETAIL)
- (L) 4' HIGH OPEN METAL FENCE WITH BRICK COLUMNS (REFER TO DETAIL)
- (AA) TACO BELL EXIT SIGN (PROVIDED BY SIGN VENDOR)
- (BB) TACO BELL ENTRANCE SIGN (PROVIDED BY SIGN VENDOR)
- (CC) TACO BELL DRIVE THRU SIGN (PROVIDED BY SIGN VENDOR)
- (DD) TACO BELL PYLON SIGN (PROVIDED BY SIGN VENDOR)
- (EE) CLEARANCE BAR (REFER TO DETAIL)
- (FF) CONCRETE DUMPSTER PAD (REFER TO ARCH. PLANS)

REFERENCE:

1. SV 1 OF 1, PRELIMINARY SURVEY LAST REVISED ON OCTOBER 4, 2022, PREPARED BY JACOBS LAND SURVEYING

0 10 20 40 60

Graphic Scale: 1"=20'

NORTH

AS REQUIRED BY NEW YORK STATE LAW, CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK" (UFPO) @ 1-800-962-7962 FOR LOCATION STAKE-OUT OF ALL UTILITIES, AT LEAST 2 FULL WORKING DAYS PRIOR TO ANY EXCAVATION.

LEGEND OF EXISTING FEATURES

REFER TO THE SURVEY PREPARED BY JACOBS LAND SURVEYING

LEGEND OF IMPROVEMENTS

- BACK OF CURB / FACE OF CURB — FACE OF CURB/BACK OF CURB
- SUBJECT PARCEL PROPERTY LINE
- SETBACK LINE
- PROPOSED BUILDING
- PROPOSED FENCE
- TRANSFORMER PAD
- HEAVY DUTY CONCRETE (REFER TO DETAIL)
- CONCRETE SIDEWALK (REFER TO DETAIL)
- HEAVY DUTY PAVEMENT (REFER TO DETAIL)
- LIGHT POLES
- PAINTED VAN ACCESSIBLE PARKING SYMBOL (REFER TO DETAILS)
- PAINTED ACCESSIBLE PARKING SYMBOL (REFER TO DETAIL)
- PAINTED PARKING ISLAND AREA TO BE STRIPED WITH 4" SYSL @ 2' O.C. AND AT 45° TO PARKING SPACE
- PAINTED PARKING LOT DRIVE AISLE ARROWS (REFER TO DETAIL)
- YIELD — PEDESTRIAN CROSSWALK (REFER TO DETAIL)
- STOP — SITE SIGN, PAINTED STOP BAR & "STOP" LETTERING

GENERAL NOTES:

1. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF THE CITY OF WATERTOWN AND/OR THE APPROPRIATE WATER, SEWER AND/OR DRAINAGE DISTRICTS, AND/OR OTHER AUTHORITIES HAVING JURISDICTION.
2. ALL EXISTING BUILDING(S), SITE, ROADWAY, UTILITY, BOUNDARY, AND TOPOGRAPHY INFORMATION SHOWN ON THIS PLAN IS REPRESENTED BASED ON USE OF THE LISTED REFERENCES. CONTRACTOR TO VERIFY LOCATION AND LIMITS OF WORK PRIOR TO STARTING. ANY CHANGES OR CONFLICTS DISCOVERED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVING, EXIT PORCHES, RAMPS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS. ALL PAVING, CURBING, FLATWORK, SIDEWALKS, FENCING, BOLLARDS, ETC., WHICH CONFLICT WITH NEW CONSTRUCTION ARE TO BE DEMOLISHED AND DISPOSED OF IN ACCORDANCE WITH ANY LOCAL, STATE, OR FEDERAL REGULATIONS.
4. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. CONTRACTOR SHALL MAINTAIN ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. OUTSIDE OF WORK LIMITS CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC TO AND FROM THE SITE.
5. REFER TO THE SURVEY FOR THE PROPERTY BOUNDARY INFORMATION (E.G. LOT AREA, BEARINGS, DISTANCES, ETC).
6. ANY DAMAGE TO EXISTING SIDEWALKS ON WINTHROP STREET AS A RESULT OF GENERAL CONSTRUCTION MUST BE REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER.

SITE NOTES:

1. ALL NEW PAINTED PAVEMENT MARKINGS SUCH AS DIRECTIONAL ARROWS AND LETTERING SHALL BE PAINTED USING TEMPLATES.
2. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. THE SETBACK LINES AND NOTES RELATED TO SETBACKS SHOWN HEREIN ARE INTENDED TO SHOW APPLICABLE ZONING REQUIREMENTS OF THE CITY OF WATERTOWN AS OF THE DATE OF THIS PLAN AND ARE NOT INTENDED TO IMPOSE ANY ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING REQUIREMENTS.
4. REFER TO LIGHTING PLAN, SHEET XX, FOR LIGHT POLE AND BUILDING MOUNTED LIGHT LOCATIONS, AND FIXTURE TYPE.
5. PYLON SIGNS SHALL BE CONSTRUCTED BY OTHERS, BUT ELECTRIC SERVICE TO THE PYLON SIGN SHALL BE INCLUDED IN THE CONTRACT.

Issued:		Date:
A		
B		
C		
D		
E		
F		
G		
H		

Revisions:		Date:
1		
2		
3		
4		
5		
6		
7		
8		

Seal

FOR APPROVAL ONLY/NOT FOR CONSTRUCTION

Seal

CIVIL ENGINEER OF RECORD
Name: Stephanie L. Albright
New York License No.: 087051
Exp. Date. December 31, 2023
Firm Reg. No.: 0014815
Exp. Date: December 31, 2023

APD ENGINEERING ARCHITECTURE
615 Fishers Run Victor, NY 14564
585.742.2222 - www.apd.com

Hospitality Syracuse, Inc.
290 Elwood Davis Road
Suite 320
Liverpool, NY 13088
315-451-1952
315-451-9603

Taco Bell - Watertown NY

State St
City of Watertown
Jefferson County, NY

Project Name & Location:

Site Plan

Drawing Name:

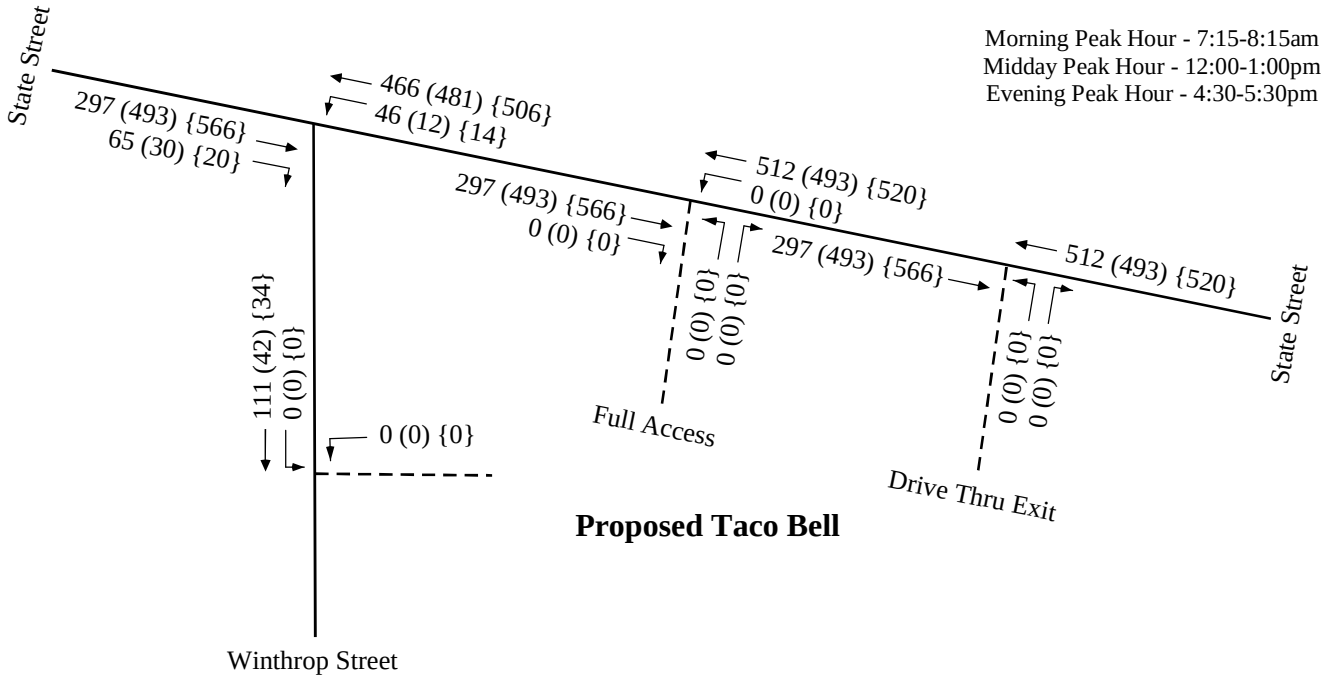
Date:	10/12/22	Project No. 22-0408
Type:	LG 50	
Drawn By:	SLA	C2
Scale:	1" = 20'	Drawing No.

Proposed TacoBell Development
1997 / 2003 / 2007 Ridge Road, Town of West Seneca, NY

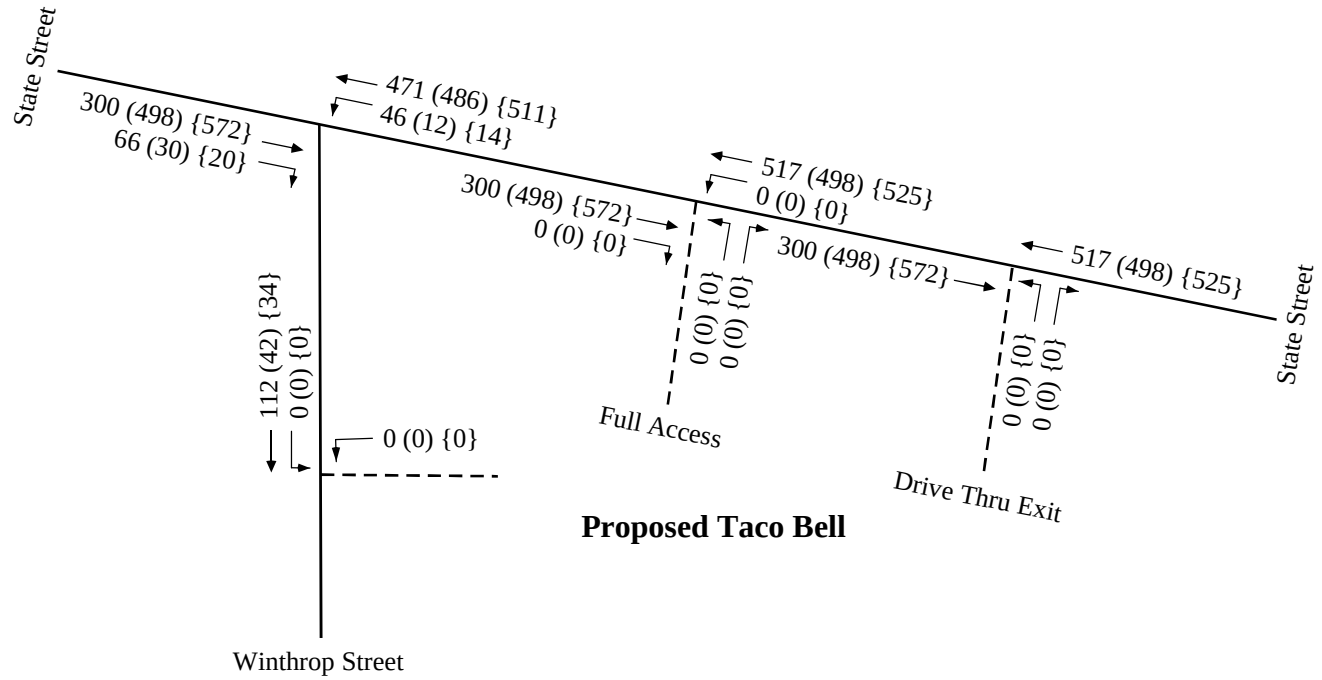
Intersection Level of Service Summary

Intersection	Morning Peak Hour			Midday Peak Hour			Evening Peak Hour		
	2022 Existing Condition	2023 Background Condition	2023 Build Condition	2022 Existing Condition	2023 Background Condition	2023 Build Condition	2022 Existing Condition	2023 Background Condition	2023 Build Condition
State Street @ Winthrop Street									
EB Through/Right	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)
WB Left	a(8)	a(8)	a(9)	a(9)	a(9)	a(9)	a(9)	a(9)	a(9)
WB Through	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)	a(0)
State Street @ Full Access Driveway									
EB Through/Right	-	-	a(0)	-	-	a(0)	-	-	a(0)
WB Left	-	-	a(8)	-	-	a(9)	-	-	a(9)
WB Through	-	-	a(0)	-	-	a(0)	-	-	a(0)
NB Left	-	-	c(16)	-	-	c(16)	-	-	c(17)
NB Right	-	-	b(11)	-	-	b(12)	-	-	b(13)
State Street @ Drive Thru Exit Driveway									
EB Through	-	-	a(0)	-	-	a(0)	-	-	a(0)
WB Through	-	-	a(0)	-	-	a(0)	-	-	a(0)
NB Left	-	-	c(15)	-	-	c(15)	-	-	c(16)
NB Right	-	-	b(11)	-	-	b(14)	-	-	b(13)
Winthrop Street @ Access Driveway									
SB Left/Through	-	-	a(0)	-	-	a(0)	-	-	a(0)
WB Left	-	-	a(9)	-	-	a(9)	-	-	a(9)

a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro



2022 Existing Traffic Volumes
Collected November 9th, 2022



2023 Background Traffic Volumes
With 1% Growth per Year (2% Total)

Proposed Taco Bell Development - State Street, Watertown, NY
2022 Existing and 2023 Background Traffic Volumes
Weekday Morning (Midday) {Evening} Peak Hour

Figure 1

Not To Scale

N
W E

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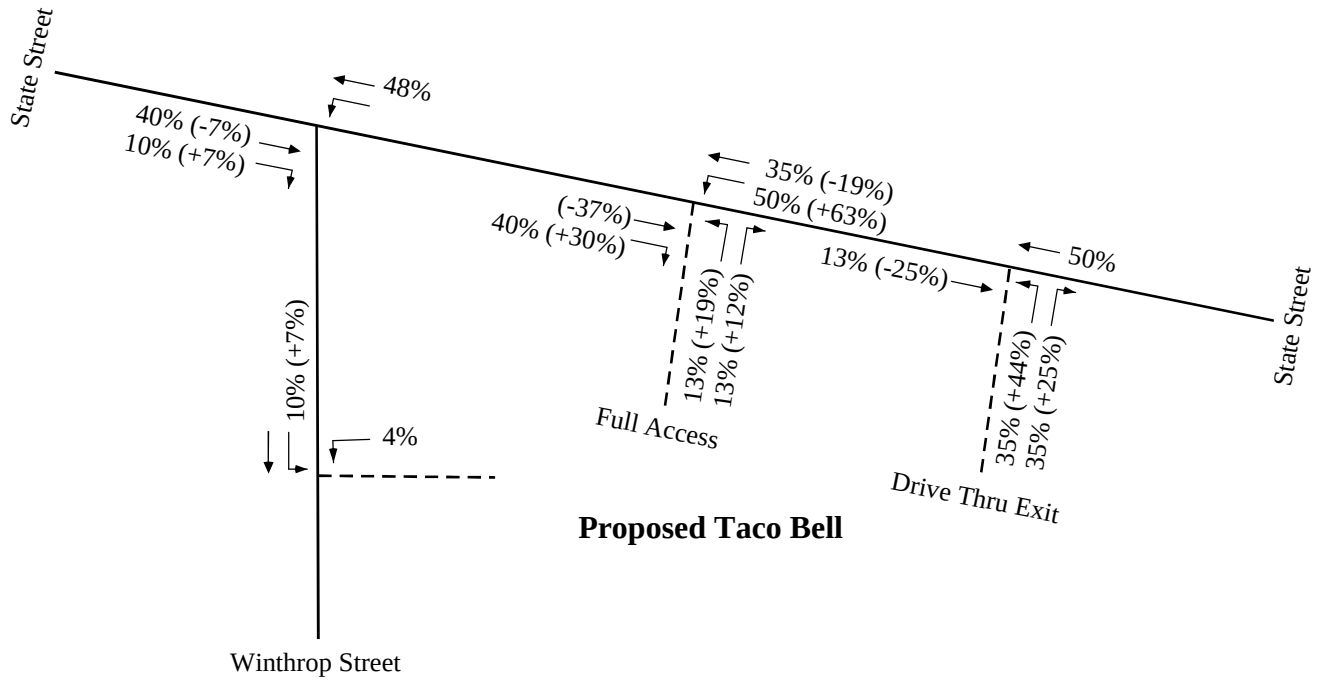
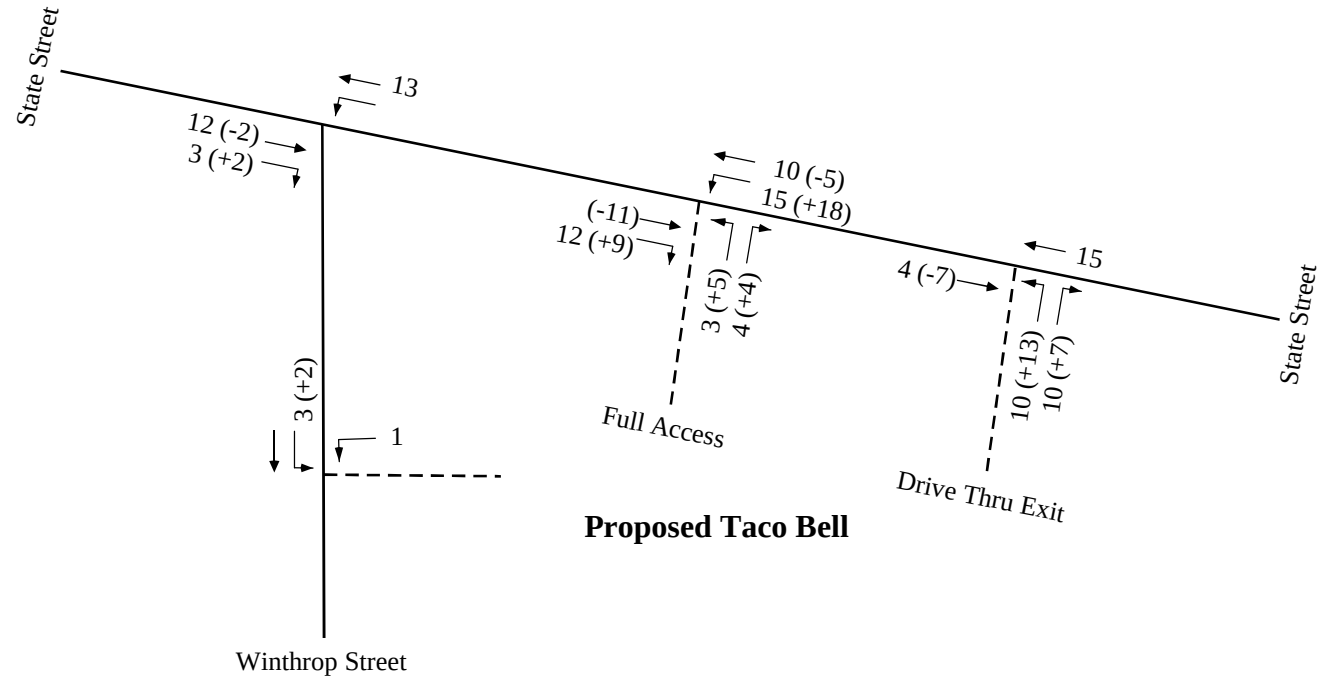


Arrival / Departure Trip Distribution
New (Pass-by) Trip Percentage



Trips Generated
New (Pass-by) Trips

Proposed Taco Bell Development - State Street, Watertown, NY

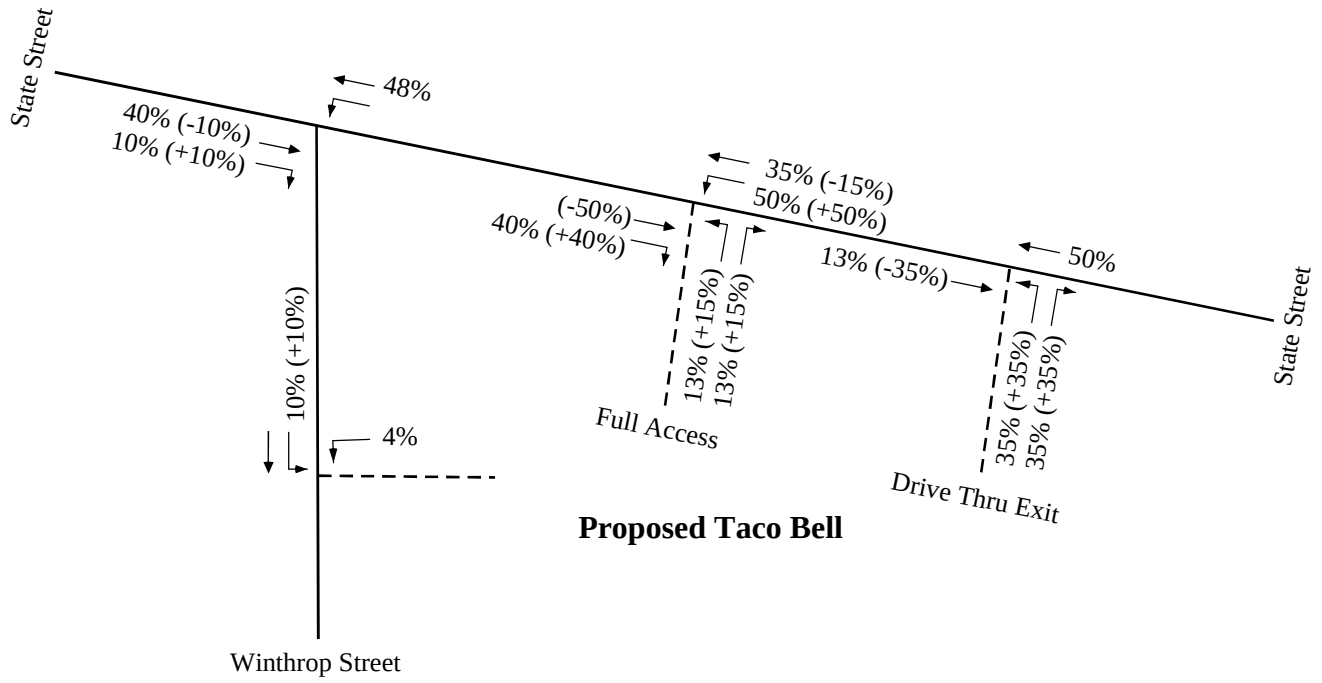
Arrival / Departure Trip Distribution & Trips Generated - Morning Peak Hour

Figure 2

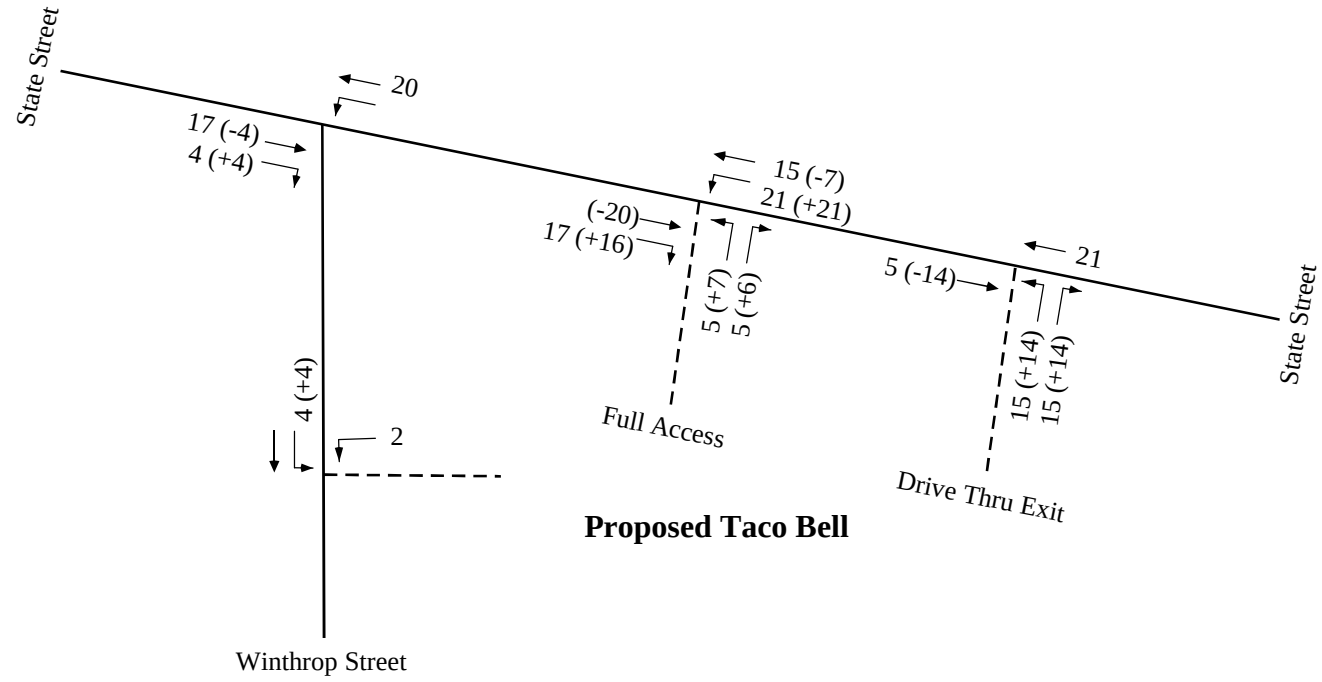
Not To Scale

N
W E

GTS Consulting



Arrival / Departure Trip Distribution
New (Pass-by) Trip Percentage



Trips Generated
New (Pass-by) Trips

Proposed Taco Bell Development - State Street, Watertown, NY

Arrival / Departure Trip Distribution & Trips Generated - Midday Peak Hour

Figure 3

Not To Scale

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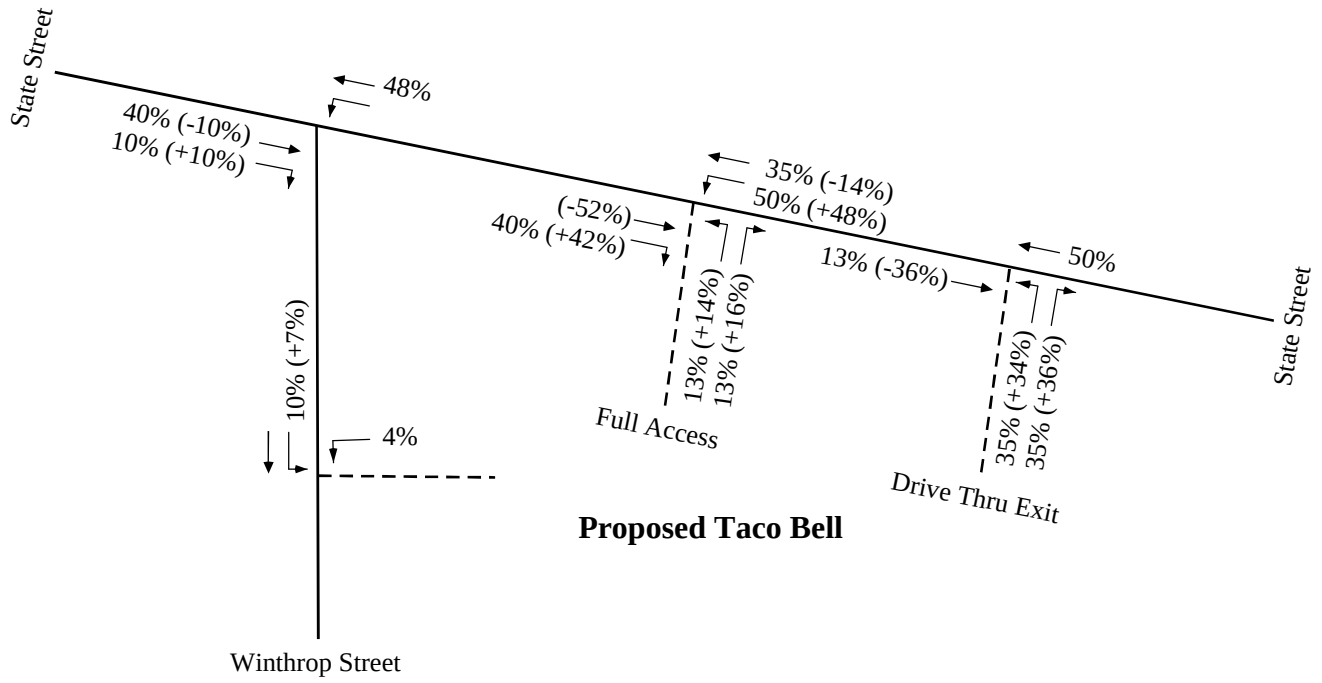
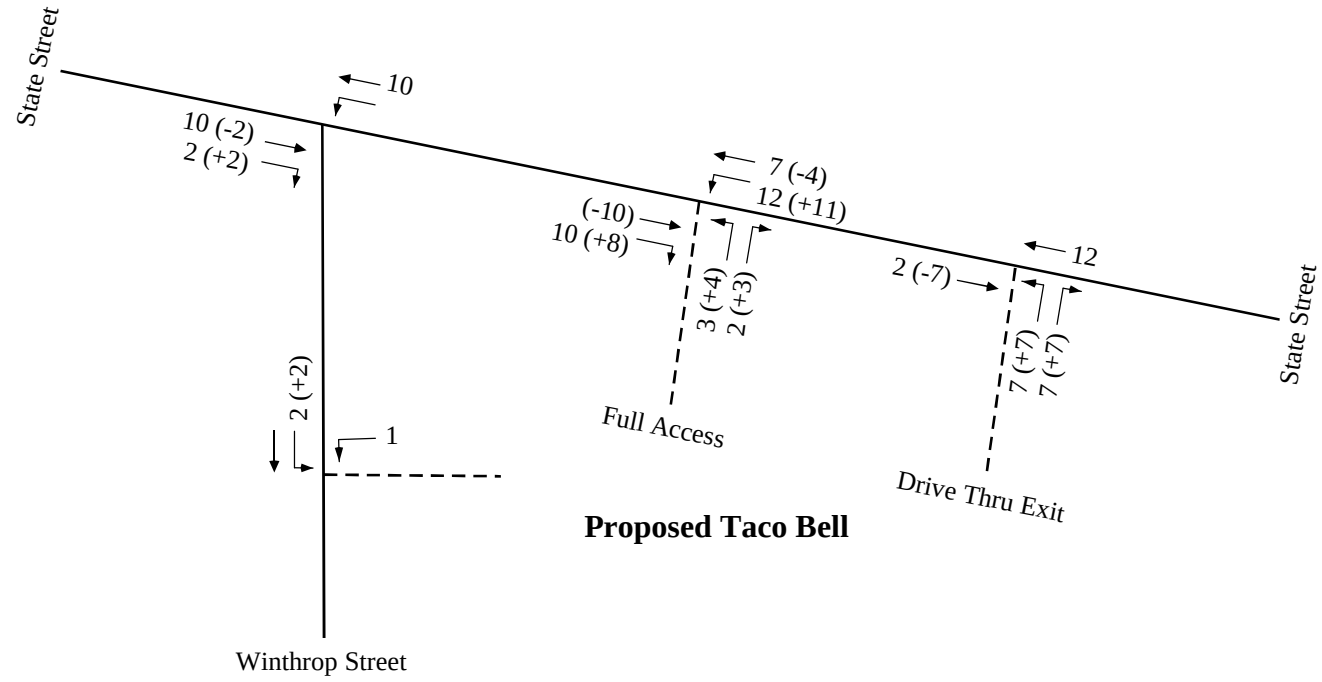
W E

GTS Consulting



Arrival / Departure Trip Distribution
New (Pass-by) Trip Percentage



Trips Generated
New (Pass-by) Trips

Proposed Taco Bell Development - State Street, Watertown, NY

Arrival / Departure Trip Distribution & Trips Generated - Evening Peak Hour

Figure 4

Not To Scale

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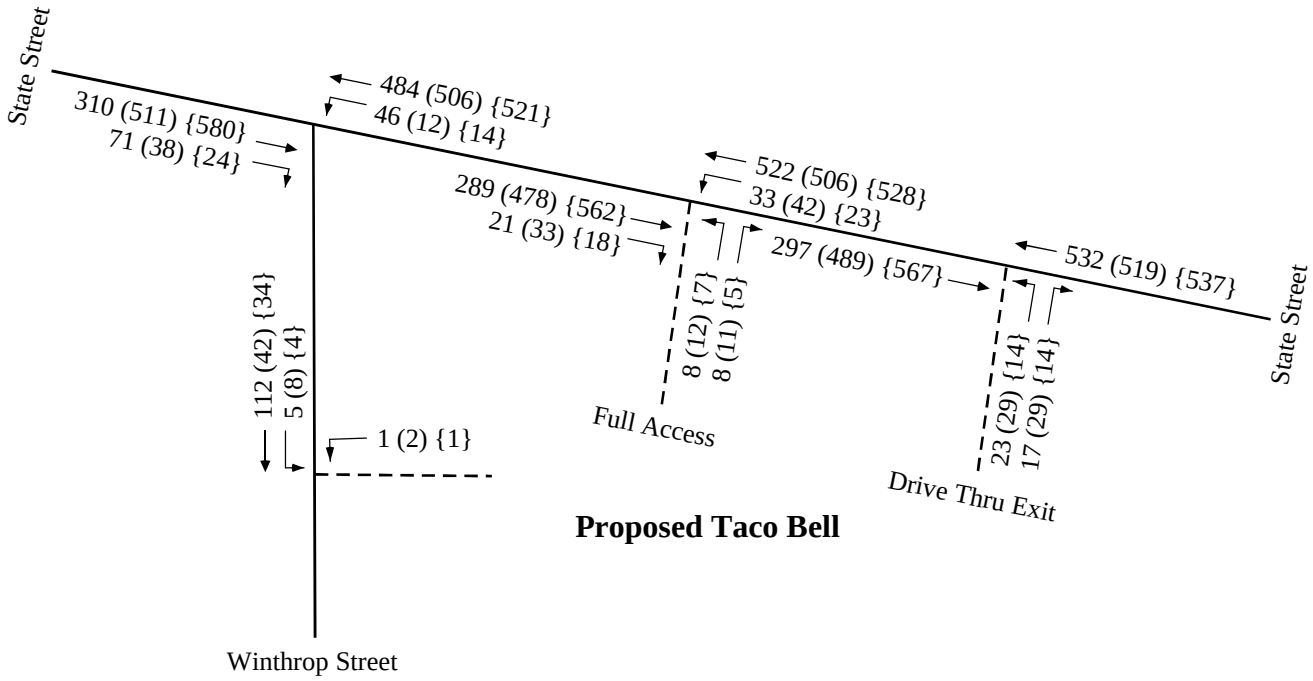
W E

GTS Consulting



Proposed Taco Bell Development - State Street, Watertown, NY

2023 Build Traffic Volumes

Weekday Morning (Midday) {Evening} Peak Hour

Figure 5

Not To Scale

N

W E

GTS Consulting

Intersection Gap Study

Project: Proposed Taco Bell Development - State Street - Watertown, NY
Date: 11/9/2022

Intersection: Proposed Site Access @ State Street
Movement: Right Turns Exiting / Left Turns Entering

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak Hour											
7:15-7:30am	# of Gaps	4	5	1	2	1	2	3	7		
	# of Vehicles	**4**	**10**	**3**	**8**	**5**	**12**	**21**	**56**	**119**	
7:30-7:45am	# of Gaps	9	7	8	3	2	2	1	4		
	# of Vehicles	**9**	**14**	**24**	**12**	**10**	**12**	**7**	**32**	**120**	
7:45-8:00am	# of Gaps	3	5	3	2	3	4	2	5		
	# of Vehicles	**3**	**10**	**9**	**8**	**15**	**24**	**14**	**40**	**123**	
8:00-8:15am	# of Gaps	9	6	8	1	1	0	1	6		
	# of Vehicles	**9**	**12**	**24**	**4**	**5**	**0**	**7**	**48**	**109**	**471**
Midday Peak Hour											
12:00-12:15pm	# of Gaps	14	7	4	2	4	1	2	1		
	# of Vehicles	**14**	**14**	**12**	**8**	**20**	**6**	**14**	**8**	**96**	
12:15-12:30pm	# of Gaps	11	2	7	1	3	2	2	1		
	# of Vehicles	**11**	**4**	**21**	**4**	**15**	**12**	**14**	**8**	**89**	
12:30-12:45pm	# of Gaps	9	6	2	5	2	2	1	2		
	# of Vehicles	**9**	**12**	**6**	**20**	**10**	**12**	**7**	**16**	**92**	
12:45-1:00pm	# of Gaps	12	6	6	1	2	2	1	2		
	# of Vehicles	**12**	**12**	**18**	**4**	**10**	**12**	**7**	**16**	**91**	**368**
Evening Peak Hour											
4:30-4:45pm	# of Gaps	12	3	4	0	5	0	1	3		
	# of Vehicles	**12**	**6**	**12**	**0**	**25**	**0**	**7**	**24**	**86**	
4:45-5:00pm	# of Gaps	20	9	6	1	1	0	2	1		
	# of Vehicles	**20**	**18**	**18**	**4**	**5**	**0**	**14**	**8**	**87**	
5:00-5:15pm	# of Gaps	8	2	3	0	3	0	2	1		
	# of Vehicles	**8**	**4**	**9**	**0**	**15**	**0**	**14**	**8**	**58**	
5:15-5:30pm	# of Gaps	17	8	3	0	0	1	1	1		
	# of Vehicles	**17**	**16**	**9**	**0**	**0**	**6**	**7**	**8**	**63**	**294**

Intersection Gap Study

Project: Proposed Taco Bell Development - State Street - Watertown, NY
Date: 11/9/2022

Intersection: Proposed Site Access @ State Street
Movement: Left Turns Exiting

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak Hour											
7:15-7:30am	# of Gaps	11	9	5	1	5	1	0	0		
	# of Vehicles	**11**	**18**	**15**	**4**	**25**	**6**	**0**	**0**	**79**	
7:30-7:45am	# of Gaps	13	11	6	1	2	1	0	0		
	# of Vehicles	**13**	**22**	**18**	**4**	**10**	**6**	**0**	**0**	**73**	
7:45-8:00am	# of Gaps	16	10	2	2	1	2	0	0		
	# of Vehicles	**16**	**20**	**6**	**8**	**5**	**12**	**0**	**0**	**67**	
8:00-8:15am	# of Gaps	9	10	1	1	1	2	0	0		
	# of Vehicles	**9**	**20**	**3**	**4**	**5**	**12**	**0**	**0**	**53**	**272**
Midday Peak Hour											
12:00-12:15pm	# of Gaps	17	11	1	0	0	1	1	0		
	# of Vehicles	**17**	**22**	**3**	**0**	**0**	**6**	**7**	**0**	**55**	
12:15-12:30pm	# of Gaps	11	4	4	0	3	1	1	0		
	# of Vehicles	**11**	**8**	**12**	**0**	**15**	**6**	**7**	**0**	**59**	
12:30-12:45pm	# of Gaps	13	5	5	1	2	2	0	0		
	# of Vehicles	**13**	**10**	**15**	**4**	**10**	**12**	**0**	**0**	**64**	
12:45-1:00pm	# of Gaps	11	5	3	1	2	2	1	0		
	# of Vehicles	**11**	**10**	**9**	**4**	**10**	**12**	**7**	**0**	**63**	**241**
Evening Peak Hour											
4:30-4:45pm	# of Gaps	12	3	2	2	0	0	0	2		
	# of Vehicles	**12**	**6**	**6**	**8**	**0**	**0**	**0**	**16**	**48**	
4:45-5:00pm	# of Gaps	17	3	3	0	0	1	0	1		
	# of Vehicles	**17**	**6**	**9**	**0**	**0**	**6**	**0**	**8**	**46**	
5:00-5:15pm	# of Gaps	10	0	4	0	1	1	0	0		
	# of Vehicles	**10**	**0**	**12**	**0**	**5**	**6**	**0**	**0**	**33**	
5:15-5:30pm	# of Gaps	15	5	1	0	0	0	0	1		
	# of Vehicles	**15**	**10**	**3**	**0**	**0**	**0**	**0**	**8**	**36**	**163**

Proposed Taco Bell Development - State Street - Watertown NY

Speed Study Measurements - State Street Passing Site

11//9/2022

Distance Travelled (ft) = 145 50 Speed Measurements per Direction Speed Limit 30 mph

EB Time Seconds	Calculated Speed	EB Time Seconds	Calculated Speed	WB Time Seconds	Calculated Speed	WB Time Seconds	Calculated Speed
3.63	27	3.10	32	3.38	29	2.9	34
3.6	27	3.09	32	3.35	30	2.9	34
3.58	28	3.09	32	3.31	30	2.88	34
3.46	29	3.06	32	3.28	30	2.87	34
3.42	29	3.05	32	3.28	30	2.87	34
3.4	29	3.04	33	3.27	30	2.87	34
3.39	29	3.04	33	3.12	32	2.85	35
3.37	29	3.03	33	3.1	32	2.81	35
3.32	30	3.03	33	3.1	32	2.78	36
3.28	30	3.03	33	3.1	32	2.78	36
3.28	30	3.03	33	3.04	33	2.75	36
3.28	30	3.01	33	3.02	33	2.72	36
3.28	30	3	33	3.01	33	2.72	36
3.27	30	2.97	33	3	33	2.72	36
3.23	31	2.97	33	3	33	2.66	37
3.22	31	2.95	34	3	33	2.66	37
3.22	31	2.87	34	3	33	2.65	37
3.22	31	2.85	35	2.87	34	2.62	38
3.22	31	2.84	35	2.94	34	2.61	38
3.15	31	2.75	36	2.94	34	2.57	38
3.15	31	2.74	36	2.94	34	2.54	39
3.13	32	2.72	36	2.94	34	2.52	39
3.12	32	2.72	36	2.93	34	2.51	39
3.12	32	2.59	38	2.91	34	2.5	40
3.1	32	2.44	41	2.9	34	2.5	40

Eastbound

Average Speed = 32 mph

85th Percentile Speed = 34.5 mph

Westbound

Average Speed = 34 mph

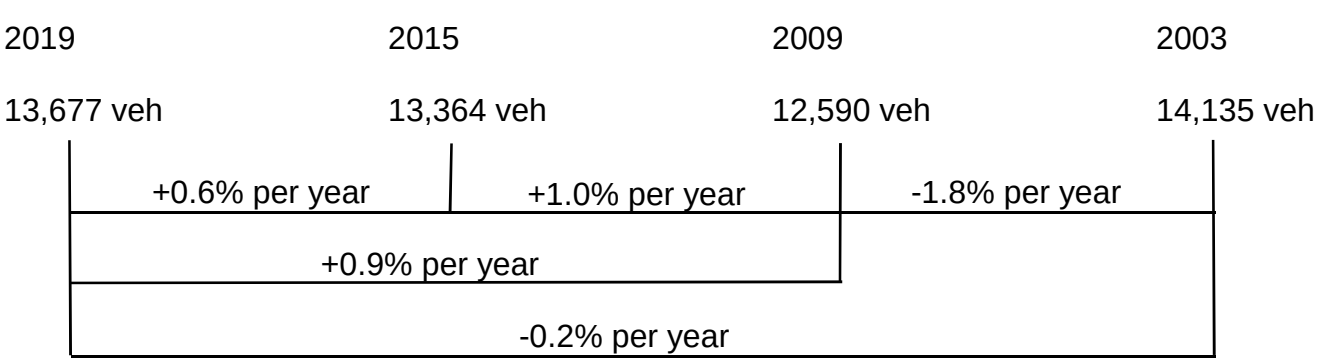
85th Percentile Speed = 37.5 mph

Background Traffic Growth Calculations

Proposed Taco Bell Development, State Street, Watertown, NY

NYSDOT Traffic Data Viewer

State Street (NYS Route 3) - Between Washington Street and Park Drive



Use +1.0% annual growth for conservative traffic projections

Proposed Taco Bell Development
State Street - Watertown, NY

Trip Generation Estimate

Proposed Development 2,598 SF - Taco Bell with Drive Through

ITE Trip Generation - 11th Edition

Land Use 934 - Fast-Food Restaurant with Drive-Through Window

AM Peak Hour	44.61 Trips/1,000 SF	51% Enter	49% Exit
Midday Peak Hour	63.89 Trips/1,000 SF	50% Enter	50% Exit
PM Peak Hour	33.03 Trips/1,000 SF	52% Enter	48% Exit

* - No Trip Generation Rates Availalble, Trip Generaiton 10th Edition - 4:30-5:30 = 6.1% of daily trafffic, 12-1pm = 11.8% of daily traffic, midday rate = 63.89 trip/1,000 SF

Pass-by Trip Percentages
Fast Food Restaurant - AM - 49%, PM - 50% - Use 50% for all three peak hours

Trip Generation Summary

		Morning Peak Hour			Evening Peak Hour			Saturday Peak Hour		
Development	**Size**	**Total Trips**	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**
Taco Bell	2,598 SF	116	59	57	166	83	83	86	45	41
Pass-by Trips - 50%		*-58*	*-29*	*-29*	*-82*	*-41*	*-41*	*-42*	*-21*	*-21*
New Trips Generated		**58**	**30**	**28**	**84**	**42**	**42**	**44**	**24**	**20**

Proposed Taco Bell Development - State Street, Watertown, NY
Accident History Summaries - June 1, 2019 Through May 31, 2022

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
1	6/17/2019	Winrthrop @ State	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
2	8/5/2019	Midblock State	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
3	8/16/2019	Midblock State	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
4	8/16/2019	Midblock State	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
5	10/19/2019	Parking Lot	Backing	2	PDO	WB / Backing	Dry	Backing Unsafely
6	10/21/2019	Mechanic @ State	Right Turn	2	PDO	WB Right / SB Stopped	Dry	Turning Improper
7	10/21/2019	High/William @ State	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
8	10/23/2019	Mechanic @ State	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
9	10/23/2019	High/William @ State	Rearend	3	INJ	EB / EB / EB	Dry	Following Too Closely
10	11/8/2019	Mechanic @ State	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
11	11/12/2019	Winrthrop @ State	Rearend	2	PDO	WB / WB	Icy	Pavement Slippery
12	11/19/2019	Parking Lot	Backing	2	PDO	Unknown / Backing	Dry	Backing Unsafely
13	12/18/2019	Mechanic @ State	Rearend	2	PDO	WB / WB	Icy	Driver Inattention
14	1/2/120	High/William @ State	Overtaking	2	PDO	WB / WB	Dry	Failure to Yield ROW
15	6/1/2020	Mechanic @ State	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
16	6/12/2020	Mechanic @ State	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
17	6/16/2020	High/William @ State	Right Angle	2	PDO	EB / Unknown	Dry	Failure to Yield ROW
18	7/1/2020	Mechanic @ State	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
19	8/7/2020	Mechanic @ State	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
20	9/11/2020	Midblock State	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
21	9/18/2020	Midblock State	Rearend	3	INJ	WB / WB / WB	Dry	Following Too Closely
22	9/25/2020	Midblock State	Pedestrian	1	FAT	WB / Pedestrian	Dry	View Obstructed
23	10/1/2020	High/William @ State	Rearend	2	PDO	EB / EB	Dry	Driver Inattention
24	10/18/2020	High/William @ State	Rearend	3	INJ	EB / EB / EB	Dry	Following Too Closely
25	2/6/2021	High/William @ State	Right Angle	2	PDO	EB / Unknown	Icy	Speed UnSafe
26	4/1/2021	High/William @ State	Right Angle	2	PDO	EB / Unknown	Dry	Runaway Vehicle
27	4/27/2021	Midblock State	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
28	4/30/2021	Parking Lot	Backing	2	PDO	EB / Backing	Icy	Backing Unsafely
29	5/1/2021	Parking Lot	Backing	2	PDO	EB / Backing	Dry	Backing Unsafely
30	5/22/2021	High/William @ State	Rearend	2	PDO	WB / WB	Dry	Alcohol Involvment
31	5/22/2021	High/William @ State	Right Angle	2	PDO	WB / Unknown	Dry	Alcohol Involvment
32	5/26/2021	Winrthrop @ State	Rearend	2	PDO	WB / WB	Dry	Following Too Closely
33	6/5/2021	High/William @ State	Rearend	2	PDO	EB / EB	Dry	Following Too Closely
34	6/25/2021	High/William @ State	Rearend	2	INJ	WB / WB	Dry	Reaction to Another Vehicle
35	6/25/2021	Midblock State	Rearend	3	PDO	WB / WB / WB	Dry	Not Entered
36	8/17/2021	Mechanic @ State	Rearend	2	PDO	EB / EB	Wet	Following Too Closely

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
37	9/5/2021	High/William @ State	Right Angle	2	PDO	WB / Unknown	Dry	Traffic Control Disregared
38	9/21/2021	Parking Lot	Fixed Object	1	PDO	Backing / Utility Pole	Dry	Backing Unsafely
39	9/12/2021	High/William @ State	Right Angle	2	INJ	EB / Unknown	Dry	Failure to Yield ROW
40	9/26/2021	Midblock State	Rearend	2	INJ	EB / EB	Dry	Following Too Closely
41	11/9/2021	High/William @ State	Pedestrian	1	INJ	EB . Pedestrain	Wet	Driver Inattention
42	11/12/2021	High/William @ State	Rearend	2	PDO	NB / NB	Wet	Following Too Closely
43	11/21/2021	Mechanic @ State	Right Angle	2	PDO	WB / SB	Dry	Driver Inattention
44	12/8/2021	Mechanic @ State	Rearend	2	PDO	WB / WB	Icy	Pavement Slippery
45	12/10/2021	Mechanic @ State	Overtaking	2	PDO	WB / WB	Dry	Speed UnSafe
46	2/11/2022	Mechanic @ State	Rearend	2	INJ	WB / WB	Dry	Following Too Closely
47	2/21/2021	Parking Lot	Sideswipe	2	PDO	Unknown / Backing	Icy	Backing Unsafely
48	2/26/2022	High/William @ State	Right Angle	2	PDO	EB / Unknown	Icy	Failure to Yield ROW
49	2/27/2022	Midblock State	Rearend	2	INJ	WB / WB	Wet	Speed UnSafe
50	3/7/2022	Midblock State	Rearend	2	PDO	WB / WB	Wet	Following Too Closely
51	4/7/2022	Midblock State	Right Turn	2	PDO	WB / WB	Dry	Turning Improper

State Street @ Mechanic Street - 13 Accidents
10 - Rearend Accidents
1 - Right Angle Accident
1 - Right Turn Accident
1 - Overtaking Accident

State Street @ High/William Street - 17 Accidents
8 - Rearend Accidents
7 - Right Angle Accidents
1 - Overtaking Accident
1 - Pedestrian Accident

State Street @ Winthrop Street - 3 Accidents
3 - Rearend Accidents

State Street Midblock - 12 Accidents
10 - Rearend Accidents
1- Right Turn Accident
1 - Pedestrian Accident

Parking Lots - 6 Accidents

State Street - AADT = 13,677 Vehicles

Link Accident Rates

$$\frac{\#\text{ Accidents X } 1{,}000{,}000}{\text{Link Length X AADT X \# Years X 365 Days}}$$

Time Period = 3 years
State Street Link Length = 0.16 Miles

State Street Midblock - 12 Accidents
Accident Rate = 5.01 accidents per million vehicle miles
Statewide average for similar facilities = 2.71 accidents per million vehicle miles Urban - Free Access - 3 Lanes - Undivided - Mainline Accidents Only)
Link Accident History is Above the Statewide Average

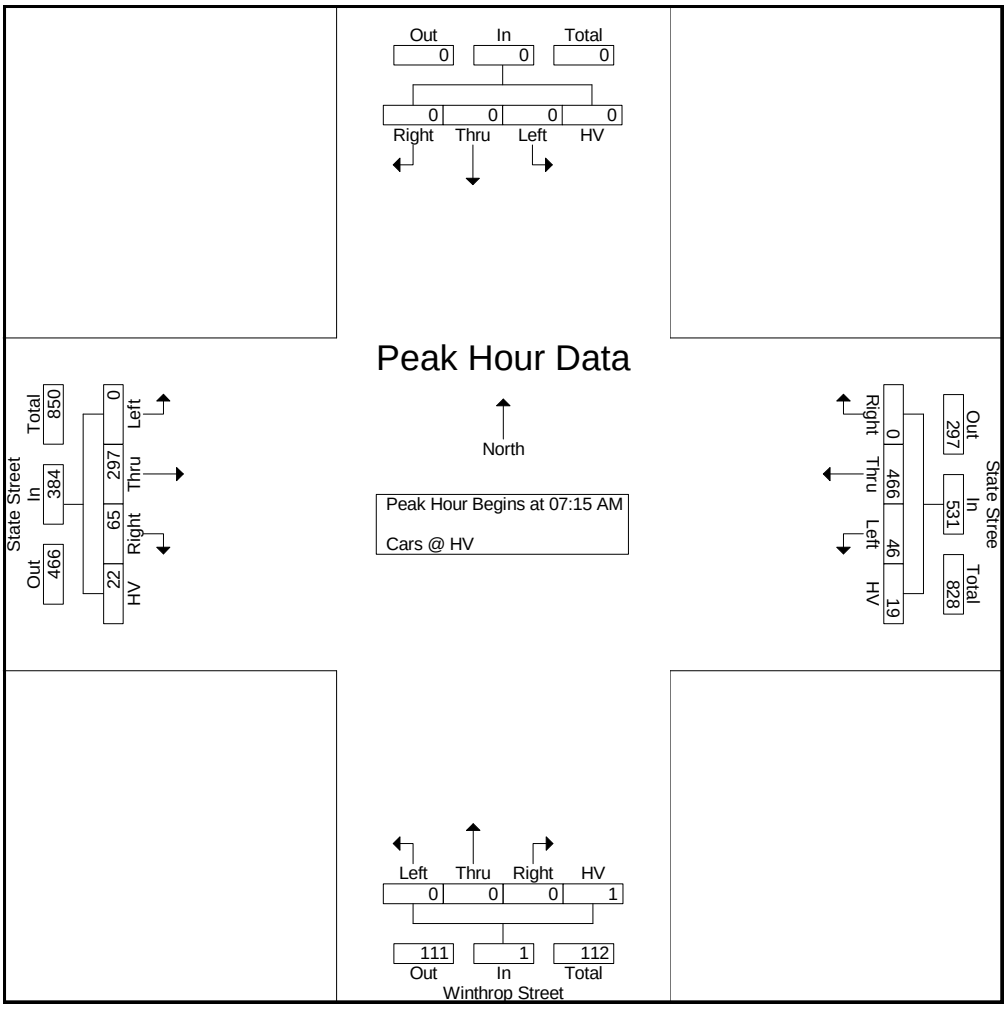
File Name : State Street @ Winthrop Street
Site Code : 00000001
Start Date : 11/9/2022
Page No : 1

Groups Printed- Cars @ HV

	Southbound				State Stree Westbound				Winthrop Street Northbound				State Street Eastbound				
Start Time	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Right	Thru	Left	HV	Int. Total
07:00 AM	0	0	0	0	0	70	2	3	0	0	0	0	4	52	0	6	137
07:15 AM	0	0	0	0	0	114	13	3	0	0	0	0	12	65	0	3	210
07:30 AM	0	0	0	0	0	124	11	5	0	0	0	1	17	73	0	6	237
07:45 AM	0	0	0	0	0	122	17	6	0	0	0	0	32	78	0	7	262
Total	0	0	0	0	0	430	43	17	0	0	0	1	65	268	0	22	846
08:00 AM	0	0	0	0	0	106	5	5	0	0	0	0	4	81	0	6	207
08:15 AM	0	0	0	0	0	124	1	4	0	0	0	0	3	69	0	2	203
08:30 AM	0	0	0	0	0	100	1	4	0	0	0	0	4	70	0	8	187
08:45 AM	0	0	0	0	0	107	4	2	0	0	0	0	2	78	0	9	202
Total	0	0	0	0	0	437	11	15	0	0	0	0	13	298	0	25	799
11:00 AM	0	0	0	0	0	127	2	9	0	0	0	0	5	103	0	4	250
11:15 AM	0	0	0	0	0	126	2	4	0	0	0	0	3	112	0	3	250
11:30 AM	0	0	0	0	0	109	3	6	0	0	0	0	3	113	0	5	239
11:45 AM	0	0	0	0	0	125	2	7	0	0	0	0	6	95	0	5	240
Total	0	0	0	0	0	487	9	26	0	0	0	0	17	423	0	17	979
12:00 PM	0	0	0	0	0	130	7	6	0	0	0	0	6	122	0	6	277
12:15 PM	0	0	0	0	0	129	1	3	0	0	0	0	5	126	0	1	265
12:30 PM	0	0	0	0	0	127	2	1	0	0	0	0	13	119	0	4	266
12:45 PM	0	0	0	0	0	95	2	6	0	0	0	0	6	126	0	6	241
Total	0	0	0	0	0	481	12	16	0	0	0	0	30	493	0	17	1049
04:00 PM	0	0	0	0	0	127	4	6	0	0	0	0	9	125	0	1	272
04:15 PM	0	0	0	0	0	117	2	2	0	0	0	0	12	137	0	3	273
04:30 PM	0	0	0	0	0	131	5	1	0	0	0	0	5	128	0	1	271
04:45 PM	0	0	0	0	0	136	4	4	0	0	1	0	2	128	0	2	277
Total	0	0	0	0	0	511	15	13	0	0	1	0	28	518	0	7	1093
05:00 PM	0	0	0	0	0	123	3	3	0	0	1	0	8	162	0	1	301
05:15 PM	0	0	0	0	0	116	2	2	0	0	0	0	5	148	0	1	274
05:30 PM	0	0	0	0	0	134	2	2	0	0	0	0	2	125	0	3	268
05:45 PM	0	0	0	0	0	103	1	0	0	0	1	0	0	134	0	2	241
Total	0	0	0	0	0	476	8	7	0	0	2	0	15	569	0	7	1084
Grand Total	0	0	0	0	0	2822	98	94	0	0	3	1	168	2569	0	95	5850
Apprch %	0	0	0	0	0	93.6	3.3	3.1	0	0	75	25	5.9	90.7	0	3.4	
Total %	0	0	0	0	0	48.2	1.7	1.6	0	0	0.1	0	2.9	43.9	0	1.6	

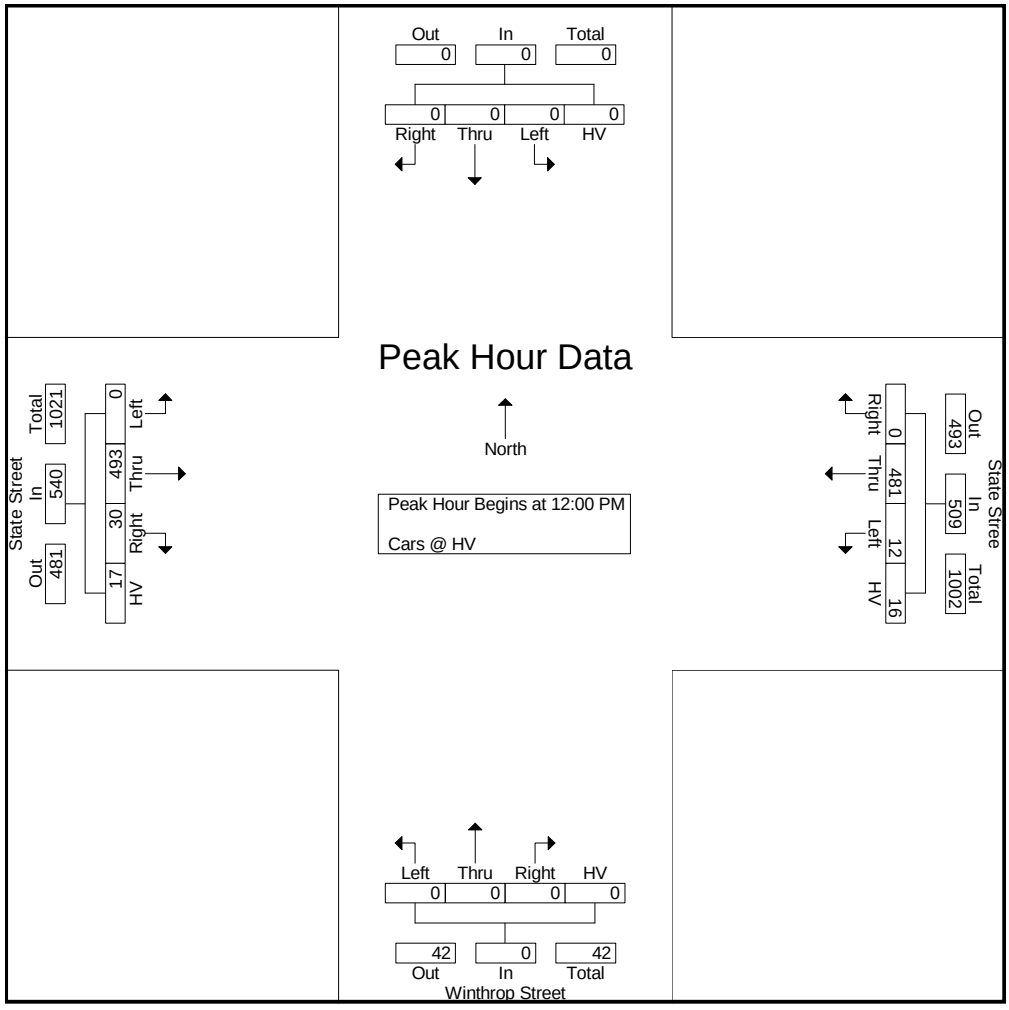
File Name : State Street @ Winthrop Street
Site Code : 00000001
Start Date : 11/9/2022
Page No : 2

	Southbound					State Stree Westbound					Winthrop Street Northbound					State Street Eastbound					
Start Time	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	114	13	3	130	0	0	0	0	0	12	65	0	3	80	210
07:30 AM	0	0	0	0	0	0	124	11	5	140	0	0	0	1	1	17	73	0	6	96	237
07:45 AM	0	0	0	0	0	0	122	17	6	145	0	0	0	0	0	32	78	0	7	117	262
08:00 AM	0	0	0	0	0	0	106	5	5	116	0	0	0	0	0	4	81	0	6	91	207
Total Volume	0	0	0	0	0	0	466	46	19	531	0	0	0	1	1	65	297	0	22	384	916
% App. Total	0	0	0	0		0	87.8	8.7	3.6		0	0	0	100		16.9	77.3	0	5.7		
PHF	.000	.000	.000	.000	.000	.000	.940	.676	.792	.916	.000	.000	.000	.250	.250	.508	.917	.000	.786	.821	.874



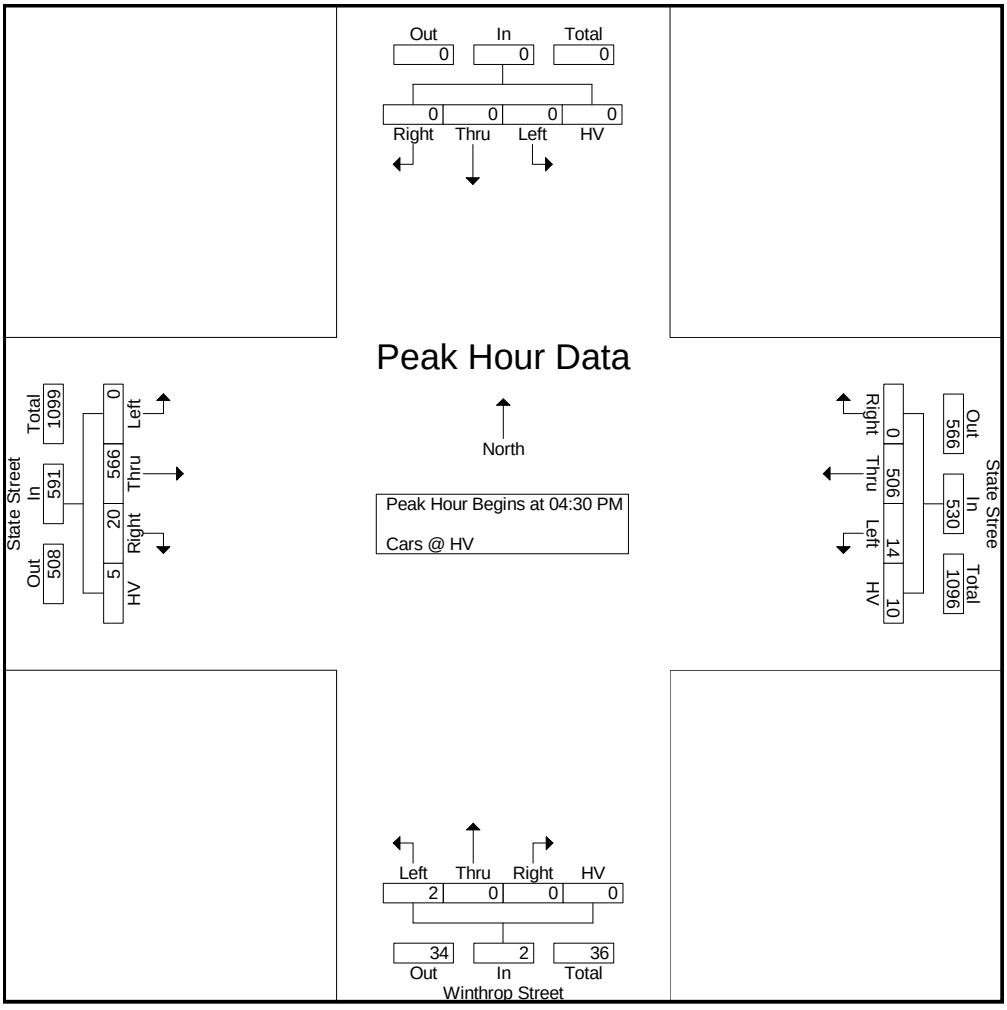
File Name : State Street @ Winthrop Street
Site Code : 00000001
Start Date : 11/9/2022
Page No : 3

Start Time	Southbound					State Stree Westbound					Winthrop Street Northbound					State Street Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	0	0	0	130	7	6	143	0	0	0	0	0	6	122	0	6	134	277
12:15 PM	0	0	0	0	0	0	129	1	3	133	0	0	0	0	0	5	126	0	1	132	265
12:30 PM	0	0	0	0	0	0	127	2	1	130	0	0	0	0	0	13	119	0	4	136	266
12:45 PM	0	0	0	0	0	0	95	2	6	103	0	0	0	0	0	6	126	0	6	138	241
Total Volume	0	0	0	0	0	0	481	12	16	509	0	0	0	0	0	30	493	0	17	540	1049
% App. Total	0	0	0	0		0	94.5	2.4	3.1		0	0	0	0		5.6	91.3	0	3.1		
PHF	.000	.000	.000	.000	.000	.000	.925	.429	.667	.890	.000	.000	.000	.000	.000	.577	.978	.000	.708	.978	.947



File Name : State Street @ Winthrop Street
Site Code : 00000001
Start Date : 11/9/2022
Page No : 4

Start Time	Southbound					State Stree Westbound					Winthrop Street Northbound					State Street Eastbound					Int. Total
	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	Right	Thru	Left	HV	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	131	5	1	137	0	0	0	0	0	5	128	0	1	134	271
04:45 PM	0	0	0	0	0	0	136	4	4	144	0	0	1	0	1	2	128	0	2	132	277
05:00 PM	0	0	0	0	0	0	123	3	3	129	0	0	1	0	1	8	162	0	1	171	301
05:15 PM	0	0	0	0	0	0	116	2	2	120	0	0	0	0	0	5	148	0	1	154	274
Total Volume	0	0	0	0	0	0	506	14	10	530	0	0	2	0	2	20	566	0	5	591	1123
% App. Total	0	0	0	0		0	95.5	2.6	1.9		0	0	100	0		3.4	95.8	0	0.8		
PHF	.000	.000	.000	.000	.000	.000	.930	.700	.625	.920	.000	.000	.500	.000	.500	.625	.873	.000	.625	.864	.933



File Name : State Street @ Winthrop Street
Site Code : 00000001
Start Date : 11/9/2022
Page No : 1

Groups Printed- Peds

	Southbound				State Stree Westbound				Winthrop Street Northbound				State Street Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	4
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	7
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	5
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	10	11
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	5
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	10
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	5
Grand Total	0	0	0	0	0	0	0	1	0	0	0	14	0	0	0	23	38
Apprch %	0	0	0	0	0	0	0	100	0	0	0	100	0	0	0	100	
Total %	0	0	0	0	0	0	0	2.6	0	0	0	36.8	0	0	0	60.5	

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	289	21	33	522	8	8
Future Vol, veh/h	289	21	33	522	8	8
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	79	79	90	90
Heavy Vehicles, %	4	1	1	4	1	1
Mvmt Flow	352	26	42	661	9	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	382	0	1114	369
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	745	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1182	-	231	679
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	471	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1177	-	222	676
Mov Cap-2 Maneuver	-	-	-	-	345	-
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	454	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	345	676	-	-	1177	-
HCM Lane V/C Ratio	0.026	0.013	-	-	0.035	-
HCM Control Delay (s)	15.7	10.4	-	-	8.2	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↰	↱
Traffic Vol, veh/h	297	0	0	532	23	17
Future Vol, veh/h	297	0	0	532	23	17
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	79	79	90	90
Heavy Vehicles, %	4	1	1	4	1	1
Mvmt Flow	362	0	0	673	26	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	1035	362
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	673	-
Critical Hdwy	-	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	-	0	0	-	258	685
Stage 1	-	0	0	-	707	-
Stage 2	-	0	0	-	509	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	258	685
Mov Cap-2 Maneuver	-	-	-	-	382	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	382	685	-	-
HCM Lane V/C Ratio	0.067	0.028	-	-
HCM Control Delay (s)	15.1	10.4	-	-
HCM Lane LOS	C	B	-	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	0	0	5	112
Future Vol, veh/h	1	0	0	0	5	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	92	92	80	80
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1	0	0	0	6	140

Major/Minor	Minor1		Major2	
Conflicting Flow All	152	-	0	0
Stage 1	0	-	-	-
Stage 2	152	-	-	-
Critical Hdwy	6.41	-	4.11	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-
Follow-up Hdwy	3.509	-	2.209	-
Pot Cap-1 Maneuver	842	0	-	-
Stage 1	-	0	-	-
Stage 2	878	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	842	-	-	-
Mov Cap-2 Maneuver	842	-	-	-
Stage 1	-	-	-	-
Stage 2	878	-	-	-

Approach	WB	SB
HCM Control Delay, s	9.3	
HCM LOS	A	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	842	-	-
HCM Lane V/C Ratio	0.001	-	-
HCM Control Delay (s)	9.3	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	478	33	42	506	12	11
Future Vol, veh/h	478	33	42	506	12	11
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	89	89	90	90
Heavy Vehicles, %	3	1	1	3	1	1
Mvmt Flow	488	34	47	569	13	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	523	0	1169	506
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	663	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1049	-	214	568
Stage 1	-	-	-	-	608	-
Stage 2	-	-	-	-	514	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1048	-	204	567
Mov Cap-2 Maneuver	-	-	-	-	339	-
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	491	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	339	567	-	-	1048	-
HCM Lane V/C Ratio	0.039	0.022	-	-	0.045	-
HCM Control Delay (s)	16.1	11.5	-	-	8.6	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↰	↱
Traffic Vol, veh/h	489	0	0	519	29	29
Future Vol, veh/h	489	0	0	519	29	29
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	89	89	90	90
Heavy Vehicles, %	3	1	1	3	1	1
Mvmt Flow	499	0	0	583	32	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	1082	499
Stage 1	-	-	-	-	499	-
Stage 2	-	-	-	-	583	-
Critical Hdwy	-	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	-	0	0	-	242	574
Stage 1	-	0	0	-	612	-
Stage 2	-	0	0	-	560	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	242	574
Mov Cap-2 Maneuver	-	-	-	-	377	-
Stage 1	-	-	-	-	612	-
Stage 2	-	-	-	-	560	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	377	574	-	-
HCM Lane V/C Ratio	0.085	0.056	-	-
HCM Control Delay (s)	15.4	11.6	-	-
HCM Lane LOS	C	B	-	-
HCM 95th %tile Q(veh)	0.3	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	0	0	8	42
Future Vol, veh/h	2	0	0	0	8	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	92	92	90	90
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	2	0	0	0	9	47

Major/Minor	Minor1		Major2	
Conflicting Flow All	65	-	0	0
Stage 1	0	-	-	-
Stage 2	65	-	-	-
Critical Hdwy	6.41	-	4.11	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-
Follow-up Hdwy	3.509	-	2.209	-
Pot Cap-1 Maneuver	943	0	-	-
Stage 1	-	0	-	-
Stage 2	960	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	943	-	-	-
Mov Cap-2 Maneuver	943	-	-	-
Stage 1	-	-	-	-
Stage 2	960	-	-	-

Approach	WB	SB
HCM Control Delay, s	8.8	
HCM LOS	A	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	943	-	-
HCM Lane V/C Ratio	0.002	-	-
HCM Control Delay (s)	8.8	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	562	18	23	528	7	5
Future Vol, veh/h	562	18	23	528	7	5
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	92	92	90	90
Heavy Vehicles, %	1	1	1	2	1	1
Mvmt Flow	653	21	25	574	8	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	678	0	1292	668
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	624	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	919	-	181	460
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	915	-	175	458
Mov Cap-2 Maneuver	-	-	-	-	315	-
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	15.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	315	458	-	-	915	-
HCM Lane V/C Ratio	0.025	0.012	-	-	0.027	-
HCM Control Delay (s)	16.7	13	-	-	9	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↰	↱
Traffic Vol, veh/h	567	0	0	537	14	14
Future Vol, veh/h	567	0	0	537	14	14
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	92	92	90	90
Heavy Vehicles, %	1	1	1	2	1	1
Mvmt Flow	659	0	0	584	16	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	1243	659
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	584	-
Critical Hdwy	-	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	-	0	0	-	194	465
Stage 1	-	0	0	-	516	-
Stage 2	-	0	0	-	559	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	194	465
Mov Cap-2 Maneuver	-	-	-	-	333	-
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	559	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	333	465	-	-
HCM Lane V/C Ratio	0.047	0.033	-	-
HCM Control Delay (s)	16.3	13	-	-
HCM Lane LOS	C	B	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	0	0	4	34
Future Vol, veh/h	1	0	0	0	4	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	92	92	88	88
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1	0	0	0	5	39

Major/Minor	Minor1		Major2	
Conflicting Flow All	49	-	0	0
Stage 1	0	-	-	-
Stage 2	49	-	-	-
Critical Hdwy	6.41	-	4.11	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-
Follow-up Hdwy	3.509	-	2.209	-
Pot Cap-1 Maneuver	963	0	-	-
Stage 1	-	0	-	-
Stage 2	976	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	963	-	-	-
Mov Cap-2 Maneuver	963	-	-	-
Stage 1	-	-	-	-
Stage 2	976	-	-	-

Approach	WB	SB
HCM Control Delay, s	8.7	
HCM LOS	A	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	963	-	-
HCM Lane V/C Ratio	0.001	-	-
HCM Control Delay (s)	8.7	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-