POLICE DEPARTMENT
Town of Trumbull
CONNECTICUT 06611

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

MICHAEL LOMBARDO
CHIEF OF POLICE

POLICE COMMISSION

RAYMOND G. BALDWIN, JR., CHAIRMAN
ANGELO MAGLIOCCO, VICE CHAIRMAN
JOHN VAZZANO, SECRETARY
ALBERT ZAMARY, COMMISSIONER
CHRIS TREFZ, COMMISSIONER

AGENDA

Trumbull Police Commission Meeting
Tuesday, September 8, 2020 at 6:00 PM

Join the meeting online:
https://zoom.us/j/92694974849?pwd=QVZqTlBPTTVuTldQVHZabjdDQnZ5UT09
Webinar ID: 926 9497 4849
Password: 565683

Join by telephone: (312) 626-6799 or (888) 475-4499 (Toll Free)
Webinar ID: 926 9497 4849

1. Call Meeting to Order

2. Pledge Allegiance and Moment of Silence

3. Public Comment

4. Approval of July 14, 2020 Police Commission Meeting Minutes

5. Correspondence

6. Chief's Report
   - Operation
   - Traffic
   - Personnel
   - Legal Update

7. Old Business
   - Trumbull Police Station Renovation Update
   - Discussion and Approval of Traffic Light at Route 111 and 41-57 Monroe Turnpike – William Maurer, Town Engineer, Fred Mascia and Craig Yannes, Tighe & Bond

- 7120 Main Street, Traffic Flow, Parking Lot and Loading Dock Proposal – Robert Librandi, Planning & Zoning and William Maurer, Engineering Department and BL Companies and Russo & Rizio, LLC

8. New Business
   - Discussion and Approval of Cooper Surgical – Stairs and Crosswalk at 50 1 Corporate Drive – Barry Unger, Barry Unger Associates Inc.

9. Discussion and Consideration of Chief Michael Lombardo's Compensation

10. Adjournment

Town of Trumbull

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POLICE COMMISSION

RAYMOND G. BALDWIN, JR., CHAIRMAN
ANGELO MAGLIOCCO, VICE CHAIRMAN
JOHN VAZZANO, SECRETARY
LISA LABELLA, COMMISSIONER
ALBERT ZAMARY, COMMISSIONER
CHRIS TREFZ, COMMISSIONER

Trumbull Police Commission Meeting
Trumbull Police Department
July 14, 2020

MINUTES

The Trumbull Police Commission meeting was called to order via virtual at 6:02 p.m.

Members present: Raymond G. Baldwin, Jr., Chairman
Angelo Magliocco, Vice Chairman
Lisa Labella
Chris Trefz
Albert Zamary

Also Present: Chief Michael Lombardo
Assistant Chief Glenn Byrnes
Deputy Chief Leonard Scinto
John Knuff, Hurwitz Sagarin Slossberg & Knuff, LLC
Michael Dion, BL Companies
Scott Loventhal, Garden Homes
John Schmitz, BL Companies

Absent: John Vazzano

Public Comment
Opened Public Comment at 6:03 pm.

Dawn Cantafio, 72 Tait Road. Ms. Cantafio said the following "I am Dawn Cantafio, I live at 72 Tait Road. I am a member of Town Council, but tonight I am speaking as a resident of Tait Road.

"I would like to thank, Chairman, Ray Baldwin and his commission for allowing me to speak this evening.

"I would also like to acknowledge First Selectman Tesoro, Chief Lombardo, Assistant Chief Byrnes, the Trumbull Police Department, the Traffic Division and the Traffic Authority for their help enforcing safety in our neighborhood. Not always an easy task, especially on nice weekends.

"Some of our concerns are keeping sight lines clear for everyone entering and exiting the Pequannock Trail and Tait Road. Some parents have had cars pull into driveways with checking for children.

"Parking was on both sides of the street at times and we would have to pullover to make room for a vehicle to pass. Parts of the road where some cars are parked are not wide enough for two-way traffic and emergency vehicles may not be able to pass.

"During the past few months, we have seen a decrease in the amount of traffic traveling up and down our street. For the first time in many years, children have had the freedom to safely ride bikes, walk up and down our road and they can play in their driveways.

"Please consider granting the parking restrictions for our street, so we will be able to keep our residents safe and the roadway clear for two-way traffic."

There were no further public comments. Public Comment was closed at 6:05 p.m.

Approval of the June 9, 2020 Police Commission Meeting Minutes
Motion made to accept the Police Commission Meeting Minutes of June 9, 2020 as presented. Motion made first by Trefz, seconded by Magliocco. There was no further discussion. Motion passed unanimously.

Chief's Report
Correspondence
Email from Anthony Krushinski a Fairfield Police Officer, commending Office Leos as he was patrolling the parks and rails to trail and assisted Mr. Krushinksi's grandson while he was having issues with his fishing equipment.

Letter from a resident of Easton whose brother unfortunately is paralyzed, and his brother and his wife were involved in a hit and run accident. Officer Fortunato was assigned to assist them and determined who hit their car. Officer Fortunato was kind and compassionate and she solved the case.

Card from Chuck and Leslie Pavel, thank you note to the officers for protecting, serving the community and appreciate the work the officers do and how professional they are and conduct themselves.

Card from Alison Cordia, thank you and appreciation note as she needed the assistance from police officer and EMS during the middle of the night when she was experiencing a medical problem. Ms. Cordia delivered LIFEsavers to the officers because they are LIFEsavers. The officer that assisted was Officer O'Connor.

Email from Roberta Bartek thanking the Police Department for making the Trumbull High School graduation parade a huge success.

Email from Mike Cetrangola thanking the police officers for the work they do and Mr. Cetrangola had lunch delivered.

Card thanking Officer Pysz as he assisted Trumbull resident as someone struck their mailbox. Officer Pysz within a short period of time was able to find the person responsible.

Card from a Fairfield resident, she came to the Department for assistance when was not able to get a hold of her friend. Officer Massa assisted and unfortunately, it was not a good ending but she was very appreciative for Officer Massa's kindness and compassion.

Thank you email to the Trumbull Police Officers and staff for protecting and serving the community each and every day.

Thank you email from a Trumbull resident thanking Chief Lombardo, First Selectman Tesoro, Town Council Chair Thornton and Chairman Baldwin for the joint statement regarding the George Floyd incident.

Correspondence from the Department of Justice regarding the recently awarded grant (COPS Hiring Program) that was awarded to the Trumbull Police Department for hiring an additional officer to the department. This officer will be work at the Westfield Trumbull Mall. The Department was awarded $125,000 to cover the cost of the officer and will begin July 1, 2021. AC Byrnes, Lt. Lopes, Rina Bakalar and the Finance Department all worked together on the grant.

Operations

Chief Lombardo reviewed the Calls-for-Service report for the month of June, which showed 1921 cases.

The Motor Vehicle Enforcement showed 83 cases for the month of June. Chief Lombardo indicated he could not stress enough to Trumbull resident to please lock their vehicles, do not leave valuables or leave their keys or key fobs inside their vehicles.

Chief Lombardo reviewed the Criminal Incidents report for the month of June, which showed 84 cases. There were 114 Alarms for the month of June.

Chief Lombardo reviewed the Incident Statistics Report for the month of June, which showed a total of 1919 alarms.

The Arrest Summary Report Adults showed there were 26 arrests for the month of June.

The K-9 Report showed the activity and training for the month of June.

Traffic Division

The Traffic Report showed 61 cases for the month of June that Officer Siljamaki handled.

Detective Division Report

Chief Lombardo reviewed the Detective Division Monthly Activity report for the month of June. The division opened 18 new cases; 11 cases were closed and have 27 open cases. The Detective Division has resumed fingerprinting for residents. For the months of March-May due to the pandemic there, fingerprinting was suspended due to an executive order from the Governor. Chief Lombardo also reviewed the Monthly Status Report for the month of June with the different type of investigations/call outs. Chief Lombardo brought to the attention to the Commission a couple investigations/calls out, one of them being a Community Policing incident. There was a video that was posted on social medial regarding a young resident playing basketball and stepping behind a parked vehicle as the Trumbull Police cruiser drove by. The Department has made multiple attempts to communicate with the family and officers have made contact with them. Lt. Weir has recently spoken with the family and some officers will be visiting the family and spend some time with the young resident and get to know the officers. Chief Lombardo also commented on a case that is listed as Swatting. A call came in with someone reporting a serious crime within the home to garner a large rapid response from the Police Department including the SWAT team if needed. Officers responded and it was determined that nothing had occurred within the home. The Detective Division is actively investigating this incident.

Chief Lombardo commented that during the month of June there were thirty-four (34) motor vehicles report to have been entered. There were also seven (7) vehicles stolen, six (6) of those vehicles were recovered.

Training

Chief Lombardo reviewed the Training Report for the month of June. The report showed the type of training and the officers who attended the training and some of the classes that were canceled due to COVID-19. The report also showed the type of community policing events the officers took part in; there were also Graduation Parades and Gratitude Parades.

Cadet Report
Chief Lombardo reviewed the Cadet Activity Report for the month of June, which included several Zoom meetings.

Sick/Injury Report
Chief Lombardo reviewed the sick/injury report for the department for June.

Budget
Chief Lombardo reviewed the Budget Report in which the Fiscal Year ended June 30, 2020. He was happy to report the Department ended the year under budget, he believes this would be the sixth year in a row. Chief Lombardo mentioned that the Overtime Budget was slightly over by $4,300. There were a good amount of officers that did not use their vacation time due to COVID for March, April and May. The officers still have vacation time and will probably begin using their vacation time. There might be a slight uptick in the Overtime Account in the new Fiscal Year budget. There was training that was also canceled so there will also be a slight uptick in the Training Account. Overall the 2019-2020 Budget was under by 2%. Chief Lombardo indicated that the credit for handling the budget goes to AC Byrnes and Lt. Lopes who monitor the budget for the Department.

Old Business
Discussion and Consideration of 5085 Main Street
Mr. John Knuff attorney for the applicants of the 5085 Main Street project. They appreciate the opportunity to present once again to the Commission. Mr. Knuff commented at last month's Police Commission meeting there were a number of concerns that were raised in Sgt. Coutinho memo that was submitted to the Commission. Mr. Knuff met again with DC Scinto and Sgt. Coutinho last week. They have also met with EMS, Fire, and John Schmitz who submitted a letter on July 8 2020. They met DC Scinto on July 9, 2020 with results of the changes they have made with the comments from the Police Department along with comments to EMS and Fire. Mr. Knuff believes the letter from Sgt. Coutinho was positive regarding the various concerns. Mr. Knuff extended his appreciation to DC Scinto and Sgt. Coutinho for taking the time to meet with them again as they took all the concerns from the all the Emergency Services to heart in particularly from the Police Department.

Chairman Baldwin asked if the report from Sgt. Coutinho was available to the Commission.

Mr. Knuff indicated that Commission has a copy in their packets, which is very detailed, and it concludes that the developers have made every attempt to rectify the concerns brought to them and that the adjustments will be adequate.

Chairman Baldwin asked the Commission to refer to the letter under Old Business in their packets. Chairman Baldwin indicated that there is an approval from the Traffic Division.

Chief Lombardo has reviewed the letter and recommendations from Sgt. Coutinho and feels comfortable with the updates.

Chairman Baldwin asked if there were any questions from the applicant or Deputy Chief.

There was none and no, there was no further discussion.

A motion was made by Chairman Baldwin to approve the modification of the plan for 5085 Main Street as described in the report from Sgt. Coutinho from the Traffic Division, seconded by Zamary. There was no further discussion. Motion passed unanimously.

Trumbull Police Station Renovation Update
AC Byrnes provided the Commission and indicated that everything with the project is going well. This week the dedication plaque is expected to be mounted in the front lobby of the Trumbull Police Department. The only item that is pending on the Town side is fencing around the ventilation unit for the Shooting Range. Overall, there is very minimal things that need to be completed.

Commissioner Labella did not have anything further to report.

Chief Lombardo asked AC Byrnes to expand further on what is being done to cover the HVAC System and the sound.

AC Byrnes reported that he has been working with Director of Public Works Mr. Estrada, who met with some of the neighbors and has come up with a plan to install evergreen plantings along the perimeter line and replacement of fencing along the property line that was damaged when some trees came down last year. The Town will replace the fencing between the properties; in addition, there will be separate section of fencing that will act, as an enclosure immediately surrounding the ventilation unit that is adjacent to the police building. With the planting and fencing, the Department hopes that it will help alleviate the concerns from the neighbors.

There were no further questions.

New Business
Discussion and Consideration of "No Parking" signs on Tait Road and Tait Mill Road

Chairman Baldwin asked if there was input/report for the Traffic Division pertaining to the "No Parking" signs.

DC Scinto indicated that in March of this year there was a Traffic Study done. There was recommendation of "No Parking" on one side of the road. A petition was received from the residents requesting "No Parking" signs in front of all the homes on both sides of the street. The only issue DC Scinto sees which might occur is an inconvenience for the residents, as there has already been several requests for consideration for work being done at their homes and residents having parties that they be exempt regarding the "No Parking". DC Scinto indicated the other consideration would be "No Parking, Dusk to Dawn", but he has the understanding of "No Parking" at all times.

Chairman Baldwin has spoken to several of the residents on Tait Road and Tait Mill Road and they understand that they are all subject to the same restrictions of "No Parking" and they are satisfied.

Commissioner Labella asked if the petition that was filed, was it for 24-hour "No Parking" signs.

DC Scinto indicated that it was suggested back in the March report for "No Parking, Dusk to Dawn", but the petition requested "No Parking" all time around.

Chairman Baldwin asked Ms. Cantafio to rejoin meeting to discuss further.

Ms. Cantafio joined meeting and Chairman Baldwin shared with her that the Traffic Division has suggested the ban of "No Parking" be from 6 a.m. to 8 p.m., and asked if that would that be something the residents would consider?

Ms. Cantafio indicated that it was discussed and she can bring back to the residents if they would like. The only concern she sees is the enforcement people are at the trail as early as 5 a.m. and if they stay at the trail later than 8 p.m. and then the residents would need to call the Department, as they would not be adhering the parking restrictions.

Commissioner Magliocco commented to Ms. Cantafio that with the "No Parking", if the residents have a party, will there be adequate space for parking? He would like to make sure that once the signs go up, it is for everyone.

Ms. Cantafio indicated that the residents are aware and they have all agreed they would share their driveways and they have opened up the space of where there are no houses for people to park there as well.

There were no other discussions or questions.

A motion was made by Chairman Baldwin to approve the "No Parking" signs installed on Tait Road and Tail Mill Road, seconded by Trefz. There was no further discussion. Motion passed unanimously.

Chairman Baldwin asked to say the following message prior to adjournment of meeting.

"It is with regret this evening that I announce that long time Police Commissioner Lisa Labella is stepping down after many years of service on this commission dating back to 2001.

"Lisa first became involved with the Trumbull police department while championing the installation of AEDs in all police cruisers following the tragic death of Trumbull resident, John Heher Sr., while he was refereeing a THS basketball game. Lisa was steadfast in her efforts to provide the proper first responder's equipment to our officers for the benefit of our community despite harsh criticism from some town officials. Over the past 20 years, countless lives have been saved not only by our police officers but also by individuals using the AEDs Lisa helped fundraise for which are now in all of our municipal buildings, schools and parks.

"Lisa has most recently served as Chairman of the building committee for the renovation of the police pistol range, locker rooms and cellblock and, as is typical with Lisa, she performed her duties professionally and with much attention to detail. Not surprisingly, the project came in on time and on/under budget.

"Lisa's service to this town however has not been limited to the police department. She also served on the Trumbull Board of Education where she assisted with the construction and renovation of several of our schools and helped champion improvements to our schools' curriculum.

"Lisa has been a champion for many causes in our community and always does the hard work necessary for them to be successful. She has been a valued friend and confidant and the town of Trumbull owes her debt of gratitude for the many contributions she has made.

"She and her husband Dan will be leaving Trumbull but Lisa's footprint will be with us for a very long time."

Commissioner Labella thanked Chairman Baldwin for the message. She thanked Chairman Baldwin and the rest of the Commission as it has been a pleasure to serve with Chairman Baldwin and honor. It has also been an honor to work with Chief Lombardo, his staff and exemplary department.

Commissioner Magliocco said he has served with Commissioner Labella on the Police Station Renovation Committee and the Police Commission Board and appreciates everything she done for the community and has learned a lot from her. Commissioner Magliocco wished her the best.

Chief Lombardo thanked Commissioner Labella for all her support with the Department and staff. Chief Lombardo wished her the best.

There being no further business, a motion was made by Labella and seconded by Magliocco to adjourn the meeting at 6:44 p.m. The motion passed unanimously.

Respectfully submitted,

Vivian Munoz
Clerk of the Commission

- CORRESPONDENCE

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Monday, August 31, 2020 10:15 AM
To: Keith Golding
Cc: Leonard Scinto; Glenn Byrnes; Vivian Munoz
Subject: RE: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Captain Golding:

I will place a copy of this email in each of the officers personnel files and also copy the Police Commission.

Thank you,

Michael Lombardo
Chief of Police
Trumbull Police Department

From: Keith Golding <kgolding@trumbull-ct.gov>
Sent: Monday, August 31, 2020 9:59 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>
Subject: FW: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Chief,
Attached is an email from a resident thanking us for our assistance when his son had a psychotic break over the weekend. He specifically mentioned the work of Officers Murphy and Bachiocchi. (Case 20-15074)
I've included my response to him.
I would like to request that a copy of the email be placed into each of their personnel files for future reference.

I am also forwarding a copy of the email to Chief Goodman at EMS for her review.

Captain Golding

From: Keith Golding
Sent: Monday, August 31, 2020 9:45 AM
To: 'Geoff Thomas' <geoffthomascti@gmail.com>
Subject: RE: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Mr. Thomas,
Thank you for your correspondence.
I will personally speak with each officer and your email will be forwarded to the Chief's office along with a request to place a copy into each officer's personnel file.
We take tremendous pride in being able to assist our residents in their time of need.
I hope for the best for you and your family.

I will be happy to forward this to Chief Leigh Goodman, head of Trumbull EMS, for her records.

Sincerely,
Captain Keith Golding
Trumbull Police Department

158 Edison Road
Trumbull, CT 06611
203-261-3665 Ext# 3251

From: Geoff Thomas <geoffthomascti@gmail.com>
Sent: Sunday, August 30, 2020 4:12 PM
To: Keith Golding <kgolding@trumbull-ct.gov>
Subject: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Dear Captain Keith Golding,

My wife Randye Kaye, and I would like to thank two of your officers for their stellar professionalism, patience, and empathy during an incident that occurred early Saturday morning, August 29, after 2:00 AM. My step son, who suffers from severe schizophrenia arrived at your station panicked as he was showing early signs of a psychotic break. Randye called the Trumbull police after he drove from our house concerned he was in no condition to drive after adamantly refusing to take his medication. Sparing the details of the incident, I would like to point out the incredible actions of your officers Caitlin Murphy and Edward "EJ" Bachiocchi.

Officer Murphy arrived at our home minutes after our call. She treated us with kindness the entire time while assessing the situation. Her questions and responses to our answers allowed us to maintain our composure and gave us the confidence in her ability to help us deal with this situation.

Officer Bachiocchi managed to keep my step-son as calm and collected as anyone could hope for in his condition. He managed to gain my step-son's trust and confidence and kept him from making choices which would have resulted in his arrest. The decision was made to transport my step-son to St. Vincent's Behavioral Health ER. He arrived safely thanks to both of your officers and the EMS team.

Finally, I would also like to thank the EMS team that was there. Unfortunately, I did not get their names, but they too showed the same level of proficiency and professionalism. If possible, please forward this to them and their supervisor.

Randye and I have always been impressed with the Trumbull Police, especially when it comes to the level of training and experience they possess in handling this type of crisis. To paraphrase an Air Force citation, Officer Murphy's and Bachiocchi's performance of duty bring distinct credit to themselves and the Trumbull Police Department. We are truly grateful!

Thank you.

Sincerely,

Geoff Thomas

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Sunday, August 30, 2020 10:11 AM
To: Lainie McHugh; gburns@trumbull-ct.gov
Cc: Vivian Munoz
Subject: RE: appreciation

Good Morning Lainie:

Let me begin by thanking you for sending such a kind e-mail about the officers, especially during the busy time you and your daughter are having trying to manage the logistics of her internship. It was very thoughtful of you to take the time and contact me.

I am always grateful to hear such wonderful things about the manner in which the officers conduct themselves. You are correct, I don't think any of them probably recognized your position in town either.

I will make sure that a copy of your e-mail is placed in each of their personnel files and a copy forwarded to the Police Commission as well.

Once again, thank you.

Chief Lombardo

From: lainiemchugh@gmail.com <lainiemchugh@gmail.com>
Sent: Sunday, August 30, 2020 12:26 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>; gburns@trumbull-ct.gov
Subject: appreciation

Chief Lombardo and Asst. Chief Burns,

My daughter and I had an unfortunate experience this past Tuesday, 8/25/2020 which required some help from your department... and I wanted to send you a quick note of thanks and recognition for the professionalism and compassion of your officers.

Rachel is starting her graduate year at UCONN and moving into a new apartment this week end. It's been a whirlwind of unsettled craziness as the girls waited to make sure that the semester was actually going to happen on campus before signing a lease and the lack of communication from the East Hartford school district to the interns had her scrambling to be in East Hartford for professional development and orientation a week earlier than expected. It made for quite the challenge in trying to establish all the necessities, including wifi service with Frontier. As she was stuck in her professional development and unable to make phone calls, I got the frantic "mom" texts when Frontier denied her service stating she had a past due account. Not possible as she has never had to establish service before.

Turns out someone had opened an account with another name and address, but using Rachel's SSN#.

Fortunate to have little experience in such matters, I called the department and spoke with Officer Gisvold. She was very helpful in explaining what forms Rachel would need to fill out, what I should help Rachel do as far as other notifications to SS and the credit agencies, etc.

I stopped at the station to pick up the forms to have them for Rachel to complete when she was home for the day, I spoke with another officer (and I didn't think to write his name down). He went over exactly what to fill out and offered to have an officer come to the house later in the day to take the report if it were easier. We chose to stop back and make the report and he happened to be leaving at the end of shift, already in his street clothes, but, recognizing me from earlier, he made a point to note that we were waiting and to make sure that we were being taken care of.

We met with Officer Frazier who took Rachel's report. She explained that she would follow up with the investigation and get back in touch. Officer Frazier told us to follow up with the fraud claim with Frontier Communications, when and if they got around to sending the packet which they had told us would take 10 business days, and she made sure that Rachel had already taken care of the appropriate alerts with the credit agencies, etc.

I figured that complaints like this are a dime a dozen and didn't really think that there would be much that could or would be done.

The following day, however, I received a call from Officer Frazier. She had already followed through on the information we had provided her and is hopeful that it may have been a simple mistake / data entry issue on Frontier's part. However, Officer Frazier made sure to call Rachel and leave a message, and knowing that she was in professional development, took the extra time to call me, as well, to make sure we know what steps to follow next.

I did not at any time indicate my involvement in town, and I don't think any of the officers knew me. I know that each of these officers was simply doing their job and they are supposed to be courteous and professional. But, sometimes it is just nice to be recognized for doing so genuinely... especially given the crazy times in which we find ourselves where the angry and disgruntled speak the loudest and type the fastest. Please offer my thanks and, if possible, I would ask to place a copy of this email in their personnel files.

Wishing you a quiet week,
Lainie McHugh

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Commission

TRUMBULL POLICE DEPARTMENT
Town of Trumbull
CONNECTICUT 06611

MICHAEL LOMBARDO
CHIEF OF POLICE

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

August 25, 2020

Charles DeBenedetto
20 Firehouse Road
Trumbull, CT 06611

RE: Special Police Certification

Dear Charles:

On August 18, 2020, your position as a Trumbull Special Police officer was suspended. The nature of this suspension was the result of your failure to comply with my January 23, 2018, letter to you, detailing requirements to maintain your Special Police Officer Certification. I must reiterate the necessity for these requirements were needed to protect you, the town and community members. Our insurance carrier made it very clear that we institute these requirements for all police officers and special police officers.

More than two years have passed since my January 23, 2018 letter and your non-compliance with these requirements, after being referred to training locations and personnel to help you meet the new mandates are unacceptable.

Regrettably, your position as a Special Police Officer with the Trumbull Police Department is revoked effective immediately. I ask that you arrange with Sergeant Barton to turn in all of your Trumbull Police uniforms, articles and property no later August 31, 2020 that have been issued to you throughout your tenure with the Trumbull Special Police officers.

I want to thank you for your years of service to the Town of Trumbull, however, I am not permitted or in the position to risk your remaining a member of the Special Police officers.

Sincerely,

Chief Michael Lombardo
Chief of Police

ML/vsm

Vivian Munoz

From:	Michael Lombardo
Sent:	Friday, August 21, 2020 12:19 PM
To:	Faiella, Denise
Cc:	Timpanelli, Lucinda; Ralph Iassogna; Vivian Munoz
Subject:	RE: Letter from the Board Chairman Lucinda Timpanelli

Dear Denise:

This is wonderful! Naturally, I am completely against removing any SRO from our schools and in fact would love to expand the program in the future. Lucinda, I can't say enough. Your support of the police department is superb and I am grateful to you for all that you have done for us, before and since I became Trumbull's chief.

Thank you again!

Michael Lombardo
Chief of Police
Trumbull Police Department

-----Original Message-----
From: Faiella, Denise <DFaiella@trumbullps.org>
Sent: Friday, August 21, 2020 11:25 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>
Cc: Timpanelli, Lucinda <LTimpane@trumbullps.org>; Ralph Iassogna <riassogn@trumbullps.org>
Subject: Letter from the Board Chairman Lucinda Timpanelli

Dear Chief,

Board Chairman Lucinda Timpanelli wanted you to have a copy of her letter to Senator Chris Murphy. This letter was sent to 2 Hartford addresses and one in Washington.

Thank you,

Denise M. Faiella
Executive Assistant to the Superintendent Trumbull Public Schools
6254 Main Street
Trumbull, CT 06611
(203) 452-4301

TOWN OF TRUMBULL
BOARD OF EDUCATION

6254 MAIN STREET
TRUMBULL, CONNECTICUT 06611

203-452-4301

FAX # (203) 452-4305

August 21, 2020

Senator Chris Murphy
One Constitution Plaza, 7th Floor
Hartford, CT 06103

Dear Senator Murphy,

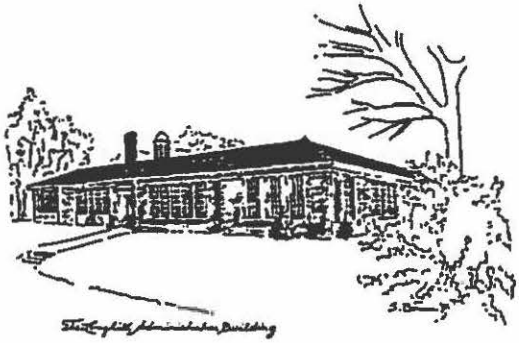
This letter comes in support of the SRO's assigned to schools. Let me explain and inform you how they are true partners with school administration to maintain a positive culture in the schools.

They are trained officers via a national SRO program with established objectives which are the foundation the program encompasses, The TRIAD: Teacher, Counselor, and Law Enforcement, are the elements on which the program was founded. They are trained to be the liaison between the school and police community. They teach classes including the harmful effect of tobacco, alcohol, vaping and drug use and their ramifications. They also teach violence prevention as it exists in the home and in relationships. They are truly role models for our students.

Please do not let emotions enter into your decision. It appears, a jump to action to eradicate this is based on issues that do not relate to public schools.

As a former school administrator and present Chairman of the Board of Education of Trumbull Public Schools who supports their presence, I can attest to the validity of their work. They are positive, proactive, sincere and caring individuals.

They do care about our community, they provide protection from visitors entering our schools. Their vigilance and attention foster a protective climate keeping all safe. Their presence provides an added level of security which has proven to lessen the anxiety level of students, staff, and the parent community.



They teach, they allow students to dialogue in a non-judgmental and inviting environment. Ideas and opinions given by students are respected and heard. They investigate when necessary and resolve issues in a calm appropriate manner. I am asking you to investigate their work rather than respond to an emotional outcry that has no basis or relation to the actual job the SROs are trained to do.

I tried to call your office but received no response, hence this letter. Please do not arbitrarily remove them from our environment. We need them. I personally have worked with SROs for many years and found them to be respectful, diligent, genuine and eager to promote a positive school climate. It should be our decision to employ them or not. With all due respect, you are not present in schools on a daily basis. We know what we need. Please respect that. Remember, not all police are bad. Generalizing is a mistake.

I can be reached at the number on the first page which is my school number, if and when there is an actual need/desire to investigate their work.

Respectfully,

Lucinda A. Timpanelli, Board Chairman
Trumbull Public Schools

Thank You

DEAR CHIEF LOMBARDO,

WORDS CAN'T EXPRESS
JUST HOW DEEPLY
YOUR LOVE AND SUPPORT
HAS BEEN APPRECIATED.

THANK YOU TO YOU AND THE OFFICERS INVOLVED FOR THE MOTORCYCLE ESCORT FOR MY HUSBAND'S FUNERAL. WE ALSO APPRECIATE THE FRUIT BASKET SENT TO OUR FAMILY. IT WAS VERY KIND OF YOU AND THE DEPARTMENT.

SINCERELY,
ALICE TARGOWSKI + FAMILY

Vivian Munoz

From: Michael Lombardo
Sent: Friday, August 7, 2020 1:44 PM
To: +Police Department
Cc: Vicki A. Tesoro; Raymond Baldwin
Subject: Tropical Storm Isaias

All Personnel:

Since Tuesday afternoon, when tropical storm Isaias arrived the Department has been dealing with the aftermath of road closures, power outages, house fires and continuous calls for services. I want to begin by thanking the many supervisors, officers and dispatchers who worked the afternoon and night during the height of the storm. Multiple officers were needed to answer the constant calls for wires down, trees down and a variety of other service calls. Closing roads fully or partially was required at more than 100 locations throughout town and we have returned to many of them since.

Now that we are several days from the storm the impact is still being felt in the community and well beyond as many of you who live in other communities can attest to.

I have heard nothing but positive feedback about the manner in which each of you responded and how helpful you were to those in need.

Your level of professionalism and high level of performance is clearly a testament to your dedication to serve and protect.

I thank all of you for your continuing efforts during this difficult time, aiding many residents while each of you may have the same issues at your own homes.

Once again, thank you.

Michael Lombardo
Chief of Police
Trumbull Police Department

Pam's
COOKIES
COOKIES
FOR COPS
Buy one cookie, we
donate one cookie to
Trumbull Police
@Trumbull Farmers Market
June 25 or July 2nd

Apple-Peanut Butter
DOG COOKIES
Apple-Peanut Butter
DOG COOKIES
Pam's
COOKIES
COOKIES
FOR COPS
Buy one cookie, we
donate one cookie to
Trumbull Police
@Trumbull Farmers Market
June 25 or July 2nd

Apple-Peanut Butter
DOG COOKIES
Ingredients: Whole Grain Rolled Oats, Unsweetened Applesauce (Apples, Water, Vitamin C), Natural Peanut Butter (Roasted Peanuts, Sugar, Palm Oil, Salt), Egg, Cinnamon
CONTAINS: Rolled Oats, Peanuts, Palm Oil
KEEP REFRIGERATED TO STAY FRESH LONGER
Made in a Cottage Food Operation that is not subject to Routine Government Food Safety
NET WT: 6.9 oz (195.6 g)
Pam's Cookies, 31 W Orland, Milford, CT
203.767.0178, pamscookies4u@gmail.com

COMMISSION

From the Morello family
Trumbull Residents
For 25 years!
Thank You

To the officers & team
at TRUMBULL P.D.

Thank you so much for
all you do! Please, let
us know if we can do anything
for you. Your dedication and
service during this challenging
time hasn't gone unnoticed.
Sincerely Lisa Morello

Commission

Amazon Music Unlimited | (8) Trumbull Police Department | (8) Trumbull Police Department

facebook.com/trumbullpolice/notifications/?section=activity_feed&subsection=mention&ref=notif&target_story=S%3A_I1466617530271623%3A2675582246041806

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Look-up CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Not

Trumbull Police Department | Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | **Notifications** | More | Edit Page Info | Settings 6 | Help

Activity

Reviews and Recommendations

Check-ins

Mentions

Shares (28)

Requests

Promote Page

Invite Friends

Share Page

Get Started With Automated Ads

Get personalized ads that adjust over time to help you get better results

Get Started

Reach More People Nearby

Set your location and reach potential customers in your area

Bridges by EPOCH at Trumbull

3 hrs

#BridgesByEPOCHAtTrumbull delivered freshly made lunch to the men and women of the Trumbull Police Department. 😄 Our very own talented #Dining Services Director, Gary Seri, prepared it. On the menu? Mouthwatering pasta and meatballs and lemon chicken! 😄 It was such a wonderful moment - Gary couldn't help but pull down his mask for a quick smile and snap!

Chat

Bridges.jpg

The reason why I baked these cookies for you guys is because you have done everything good around our town and I really appreciate you guys keeping us safe. You guys are the heroes.

- Michael Buchta

Commission

Amazon Music Unlimited · S | (8) Trumbull Police Department

facebook.com/trumbullpolice/inbox/?mailbox_id=144395192273996&selected_item_id=1624592576

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Look-up CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Notary Public Li

Trumbull Police Department | Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | Notifications 7 | More | Edit Page Info | Settings 6 | Help

Messages | Main

All Messages
Messenger
Instagram Direct
Comments & More
Facebook
Instagram
Automated Responses

Colonese Greene — Thu
You: This account is NOT monitor

Glonanne Lagnese — Mon
You: Thank you for your message

Kim Wuebber Schneider — Mon

Debra J Coz — Mon
You: Thank you for your kind

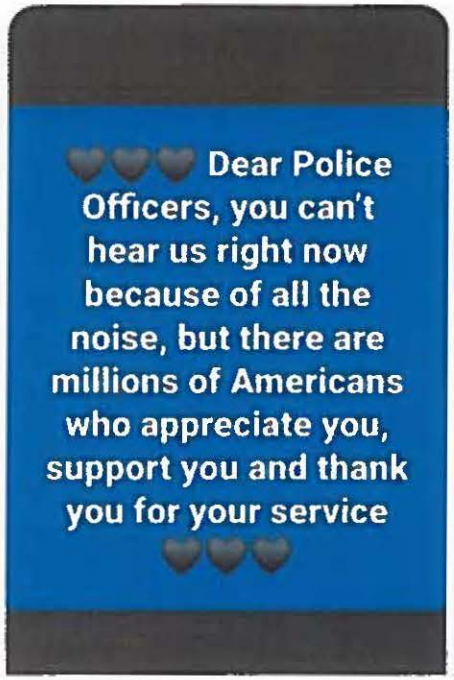
Jenny Hodny Duffy — Jul 2
You: This account is NOT monitor

LeeAnn Anita — Jul 1
LeeAnn sent a video.

Melissa Svindland — Jul 1
You: You are welcome

Colonese Greene
Assign Conversation | Move to Done

THU 3 05 PM



Write a reply...

Colonese Gre

About
Add details about people, b information. Only people w Page can see added detail
Add Details

Facebook
No public information avail

Labels
Add Label
Suggested Labels
New Customer
Important
Today's Date (7/1

Activity
Keep track of important cus

Commission

(1) Trumbull Police Department

facebook.com/trumbullpolice/inbox/?mailbox_id=1443951922739968selected_item_id=2690461

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Lookup CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Notary Public Licen...

Trumbull Police Department

Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | Notifications | More | Edit Page Info | Settings | Help

Messages | Main

All Messages

Messenger

Instagram Direct

Comments & More

Facebook

Instagram

Automated Responses

Check Unread Messages

2 unread messages are waiting for you. Take a moment to review or reply

View Messages

Colonese Greene and are waiting for a response

Gina Donnarumma — Sat
Gina sent a photo

Colonese Greene — Fri

Glonanne Lagnese — Jul 6
You: Thank you for your message

Kim Wuebber Schneider — Jul 6

Gina Donnarumma
Assign Conversation

Move to Done

SAT 7:04 PM

I just wanted to take a moment to thank the police officers who have been at the 111 crossing by the trail. This is such a dangerous spot and I felt safe today crossing twice.

This account is NOT monitored 24/7. If this is an emergency, call 911. If you wish to make a report please call 203 261-3665

Compiaints/investigations will not be processed through this message

We will respond to your message as quickly as possible. Thank you.

Gina Donnarumma

About

Add details about people like (o information. Only people who ma Page can see added details.

Add Details

Facebook

Liked since Jul 11, 2020

Works at Immaculate High Sc

Labels | Man

Add Label

Suggested Labels

New Customer

Important

Today's Date (7/13)

Activity

10:26
7/13/2

(1) Trumbull Police Department

facebook.com/trumbullpolice/inbox/?mailbox_id=1443951922739968selected_item_id=26904611

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Look-up CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Notary Public Lice

Trumbull Police Department

Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | Notifications | More | Edit Page Info | Settings | Help

Messages | Main

- All Messages
- Messenger
- Instagram Direct
- Comments & More
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- Automated Responses

Check Unread Messages
2 unread messages are waiting for you. Take a moment to review or reply

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Gionanne Lagnese — Jul 6
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Kim Wuebber Schneider — Jul 6

Gina Donnarumma
Assign Conversation

Move to Done

261-3665

Complaints/investigations will not be processed through this message

We will respond to your message as quickly as possible. Thank you

Gina Donnarum

About

Add details about people, like information. Only people who Page can see added details

Add Details

Facebook

Liked since Jul 11, 2020

Works at Immaculate Hig

Labels

Add Label

Suggested Labels

- New Customer
- Important
- Today's Date (7/13)

Activity

_0mmS8ton

just a little note

July 20

Dear Trumbull Police Department,
We wanted to take a moment to thank all of you for your service and sacrifice. We pray for you daily. Many blessings. May God + Sarah Since

Commission

City of Milford, Connecticut

(Founded 1639)

POLICE DEPARTMENT

430 Boston Post Road - Milford, CT 06460-2570
Telephone (203) 878-6551

Keith L. Mello
Chief of Police

July 8, 2020

RECEIVED
JUL 13 2020
BY:

Chief Michael Lombardo
Trumbull Police Department
158 Edison Rd
Trumbull CT 06611

Dear Chief Lombardo,

On June 18, 2020, the Connecticut Police Officers Standards and Training Council (POST) voted to establish a committee to create a comprehensive Use of Force Policy for all CT Municipal Law Enforcement Officers. This revised policy will protect our communities and provide critical guidance to our police officers.

We are honored and grateful that you have agreed to serve on this important committee. I look forward to working with you on this project and I thank you in advance for your contributions.

Sincerely,

Keith L. Mello
Chief of Police, City of Milford
Chairman, Police Officers Standards and Training Council

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Wednesday, July 15, 2020 1:25 PM
To: Leigh Goodman
Cc: Vivian Munoz
Subject: RE: Commendation

Dear Leigh:

Thank you for once again contacting me with this type of news. I will see who the officer was and add your email to his or her personnel file.

Thanks again.

Michael Lombardo
Chief of Police
Trumbull Police Department

From: Leigh Goodman <lgoodman@trumbull-ct.gov>
Sent: Tuesday, July 14, 2020 5:35 PM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>; Timothy Fedor <tfedor@trumbull-ct.gov>
Subject: Commendation

Chief,

I am writing to commend the Officers involved in working the cardiac arrest on 7/12 at Hampton Road. The EMT on the call came to see me to tell me they were so helpful and professional with very appropriate use of HEPA filter, PPE etc. Please extend our thanks to them for their professionalism on this call and for all their support in general.

We truly appreciate their efforts. Good job by all.

Thanks you,
Leigh

Leigh Goodman
Town of Trumbull
Director of Emergency Medical Services
Paramedic, EMS-I

lgoodman@trumbull-ct.gov

Office: 203 452 5079
Mobile: 203 690 2427

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copies in any form immediately. Receipt by anyone other than the named recipient(s) is not a waiver of any attorney-client, work product, or other applicable privilege.

Commission

Driscoll
Silljamaki

WAKELEE MEMORIAL
FUNERAL HOME, LLC

July 13, 2020

Michael Lombardo
Chief of Police
Trumbull Police Department
158 Edison Road
Trumbull, CT 06611

Dear Chief Lombardo:

I am writing to you with sincere gratitude for the exemplary traffic control provided for the funeral service of Atty. Thomas J. Monks, Trumbull Fire Commissioner, on July 9, 2020.

At age 59, Atty. Monks passed unexpectedly in his sleep on July 3, 2020. Needless to say his wife, his 5 children and the entire community were devastated.

In addition to processing this tremendous loss, the family was burdened with Covid-19 protocol and the logistics of traveling from the funeral home in Ansonia, to the church in Bridgeport and then to Derby for interment.

The Trumbull Motor Officers, assisted by the Bridgeport Police, provided invaluable assistance to the funeral cortege by stopping traffic at every intersection in the city, as well as every exit and entrance ramp of Rte. 8/25, allowing the procession to respectfully pass safely and uninterrupted.

Driving the lead vehicle, I'd look in the rear view mirror to see nearly 100 cars escorted by fire and police vehicles with strobes ablaze – a scene almost surreal and out of the movies! In 34 years of funeral service, I have never experienced greater assistance.

On behalf of myself and the Monks Family, kindly extended our sincere appreciation to your entire department for their time, effort and respect extended to Atty. Monks and his family in their time of grief.

Respectfully,

John Stanley Zaleski
Licensed Funeral Director

167 WAKELEE AVENUE, ANSONIA, CT 06401-1143 P • 203-734-1490 F • 203-735-4467
WWW.WAKELEEMEMORIAL.COM

Commission

14th July '20

From: Amelia Rogers
560 Yale Avenue
Unit 293
Meriden, CT 06450

To: Chief Michael Lombardo & Trumbull Police
158 Edison Road
Trumbull, CT 06611

Dear Chief Lombardo & T.P.D.,

Thank you so much for all you do on a daily basis and for everything you are doing throughout the COVID-19 pandemic!

Your service, dedication, and sacrifices should never go unnoticed! I am truly grateful for everything you all do!

Please give ear scratches and belly rubs to your K9's. They are truly appreciated by me as well!

I am a proud supporter of all LEO's with 2 feet and 4 paws! I got your six!

God bless you all! Stay safe! Be well!

With appreciation & gratitude,

Amelia Rogers

Commission

7-23-20

Dear Police Chief Michael Lombardo,

Please extend my sincere gratitude to all the officers who responded to my call on July 21, 2020. I especially appreciate Officer Robert Lee and Officer Matthew Corbit. Their compassion, help and professionalism during an extremely difficult and stressful time for me was amazing.

Having Officers that take the time to make people in need feel they are cared about is an asset to the Trumbull Police Dept.

With sincere thanks & appreciation,

Mrs. Barbara Begg

RECEIVED
JUL 28 2020
BY:

Commission

Vivian Munoz

From: Andrea Kern <amkern416@gmail.com>
Sent: Thursday, July 23, 2020 1:42 PM
To: Vivian Munoz
Subject: Compliment - please read and circulate

For the Trumbull Chief of Police and appropriate others:

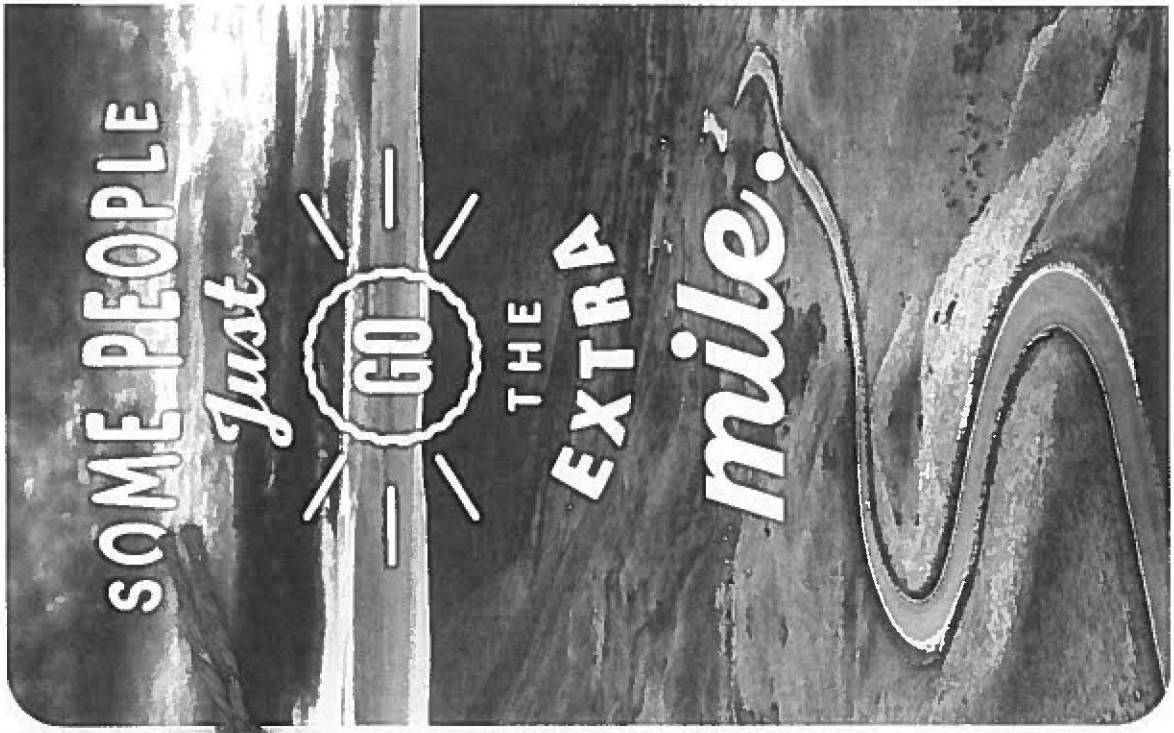
On Saturday, May 30, 2020 I called upon the Trumbull Police to assist me in locating my dearest friend who was not responding to my text or phone messages. Officer Teresa _____ and her partner discovered that Barbara Abraham (48 Craig Lane, Trumbull) had died in her sleep.

I did write down Teresa's last name and badge number but cannot locate it. With all the distress that followed and now the time that has elapsed, I do not want to wait any longer to compliment and acknowledge Teresa for being so professional and compassionate in a delicate and difficult situation. I hope that by sending this email it will find it's way to both proper channels for appropriate, official praise and also to Teresa. I believe I thanked her but I could never thank her enough!

Should you have additional questions, please do not hesitate to contact me via either return email or phone:203.259.3477.

Thank You,
Andrea M. Kern
947 Galloping Hill Road
Fairfield, CT 06824

Commission



TO: Brian Weir + Tim Fedor

Dear officer Fedor + SGT Weir,
I just wanted to give you a little something to you both to show you still mean so much. You both are amazing influencers + I look up to both of you to this day still. You both showed me how to be a better person + adapt and overcome any situation. Even though I havent visited in a while I never forgot about you both. Thank you for everything you do for the community + how you both impacted my life in such a better way.

BTW: sorry my handwritting sucks. I wrote this in the car!

- From Dobbs

— THANKS —
FOR BEING
ONE
OF THEM.

Lt Weir
Off. Fedor

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Wednesday, July 22, 2020 10:28 AM
To: Vivian Munoz
Subject: RE: Thank You Message

Very nice. Please post along with the other remarkable comments about our officers. Thank you

Michael Lombardo
Chief of Police
Trumbull Police Department

From: Vivian Munoz <vmunoz@trumbull-ct.gov>
Sent: Wednesday, July 22, 2020 10:24 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>
Subject: Thank You Message

Chief-

I received a call from Trumbull resident June Irolla, 203-459-2823. She wanted to let the Trumbull Police officers know that they are all doing a great job and is very proud of them all. With everything that is occurring she finds it sad and again she's proud of the Trumbull Police officers and would like them all to know.

Thank you.

Vivian

Vivian S. Munoz
Executive Assistant to Chief of Police
Trumbull Police Department
158 Edison Road
Trumbull, CT 06611
Tel: 203.261.3665 ext. 3240
Fax: 203.452.5162
vmunoz@trumbull-ct.gov

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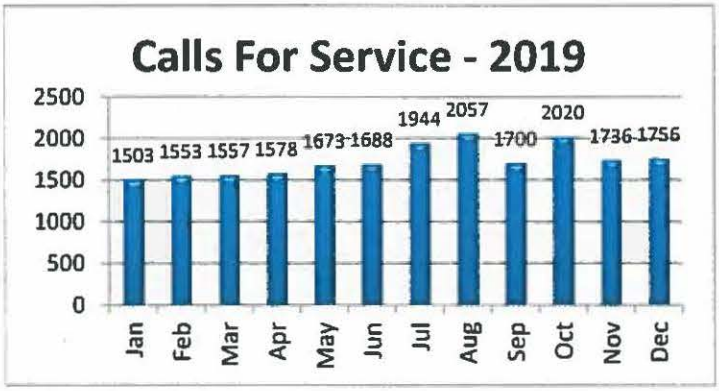
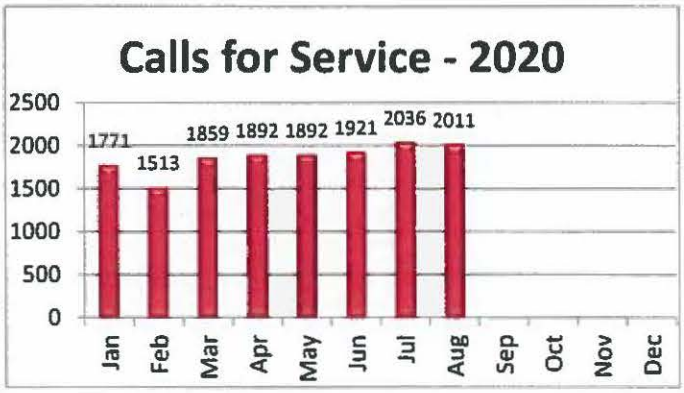
Trumbull Police Department
2020 Calls-For-Service

TOTAL CALLS FOR SERVICE

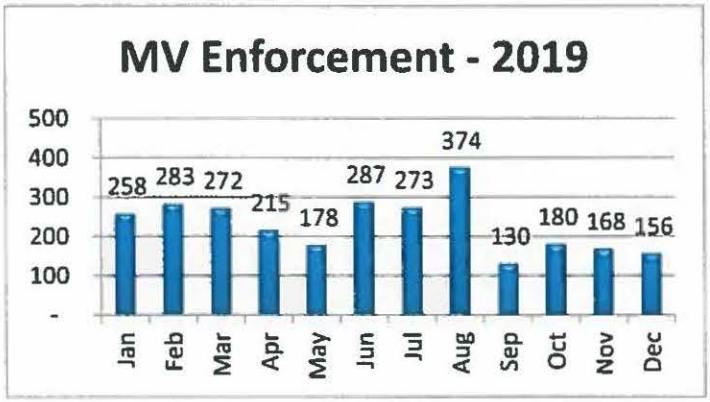
Calls for Service	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2019	1503	1553	1557	1578	1673	1688	1944	2057	1700	2020	1736	1756	20,765
2020	1771	1513	1859	1892	1892	1921	2036	2011					14,895

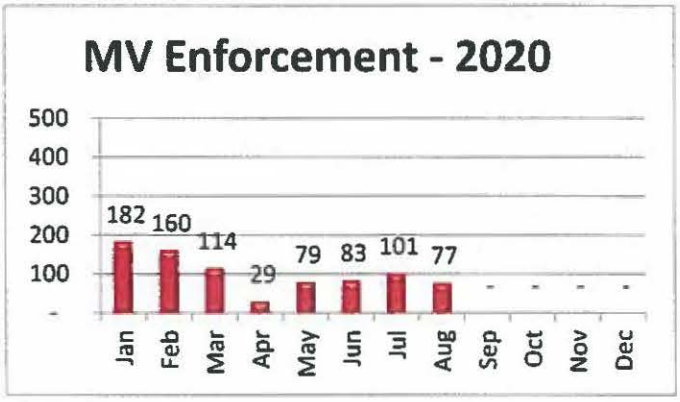




Motor Vehicle Enforcement

MV Enforcement	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
MV Warnings - 2019	99	137	137	78	85	137	135	125	50	110	98	67	1,258
2020	89	68	58	4	41	47	68	41					416
DUI Arrests - 2019	3	2	6	2	2	2	1	1	1	0	5	3	28
2020	1	0	1	3	0	1	2	1					9
MV Complaints - 2019	13	22	20	21	29	40	29	37	31	24	25	18	309
2020	24	18	19	20	31	32	27	32					203
MV Arrests - 2019	143	122	109	114	62	108	108	211	48	46	40	68	1,179
2020	68	74	36	2	7	3	4	3					197
MV Totals -2019	258	283	272	215	178	287	273	374	130	180	168	156	2,774
2020	182	160	114	29	79	83	101	77	-	-	-	-	825

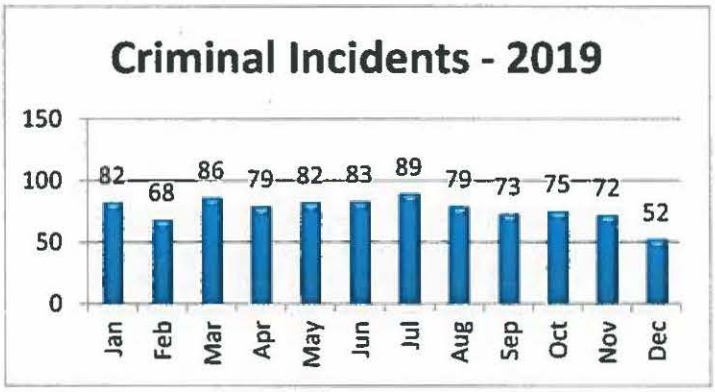




CRIMINAL INCIDENTS

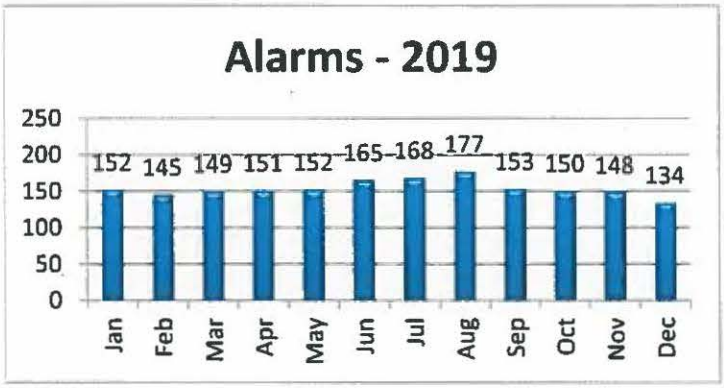
Trumbull Police Department
2020 Calls-For-Service

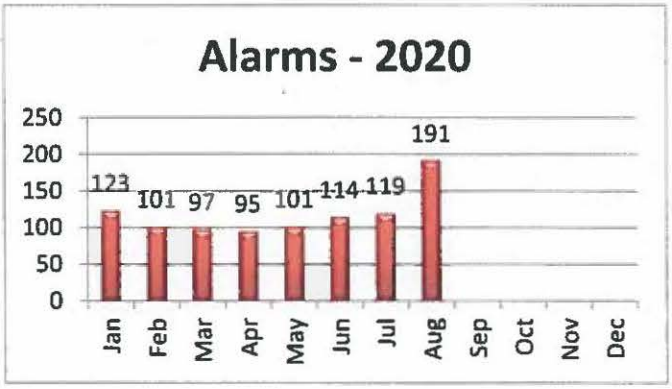
Criminal Activity: Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Larceny / Shoplifting - 2019	68	56	68	64	69	61	67	61	55	62	59	35	725
2020	60	59	50	24	56	52	68	73					442
MV Theft / Attempt - 2019	0	1	3	1	3	4	3	1	3	0	3	1	23
2020	1	0	3	4	3	5	7	8					31
Burglary / Attempt - 2019	3	2	1	7	5	3	4	8	6	2	3	3	47
2020	1	2	1	1	2	3	3	4					17
Theft From MV - 2019	11	9	14	7	5	15	15	9	9	11	7	13	125
2020	14	6	18	17	45	24	46	31					201
Criminal Totals - 2019	82	68	86	79	82	83	89	79	73	75	72	52	920
2020	76	67	72	46	106	84	124	116	0	0	0	0	691



ALARM RESPONSE SUMMARY

Total Alarms	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2019	152	145	149	151	152	165	168	177	153	150	148	134	1,844
2020	123	101	97	95	101	114	119	191					941





Trumbull Police Department

Incident Statistics Report

08/01/2020 00:00 Thru 08/31/2020 23:59

Call Type Description	Total for Period
911 HANG UP	14
ACCIDENT - EVADING	12
ACCIDENT - MV INJ	7
ACCIDENT - MV PROP DAM	42
ACCIDENT - MV VS PEDESTRIAN	1
ACCIDENT - NO INV	2
ACCIDENT PRIVATE PROPERTY	15
ALARM - BURGLARY	39
ALARM - FALSE	127
ALARM - FIRE	41
ALARM - HOLD UP	2
ALARM - MEDICAL	9
ALARM - MV	1
ALARM - OTHER	1
ALARM - TOWN	28
ANIMAL BITE	5
ANIMAL COMPLAINT	15
ASSAULT - HANDS	3
ASSIST FD	36
ASSIST MOTORIST	12
ASSIST MOTORIST - LOCKOUT	9
ASSIST NON-RESIDENT	4
ASSIST OTHER AGENCY	18
ASSIST OTHER AGENCY (WITH K-9)	2
ASSIST RESIDENT	13
Attempted Suicide	1
BREACH OF PEACE	6
BUILDING/LOCATION CHECK	380
BURGLARY - RESIDENTIAL	3
CAR SEAT INST	3
CELL BLOCK CHECK	31
CIVIL MATTER - NO INVESTIGATION	2
COMMUNICATION ABUSE	1
COMMUNITY POLICING	11
DEATH - NOT SUSP	1
DISPUTE - NEIGHBOR	5
DISPUTE - VERBAL	9
DOMESTIC - VERBAL	5
DOMESTIC - VIOL OF COURT ORD	1

Trumbull Police Department

Incident Statistics Report

08/01/2020 00:00 Thru 08/31/2020 23:59

Call Type Description	Total for Period
DOMESTIC - VIOLENT	7
DUI ARREST	1
DUMPING / LITTERING COMPLAINT	5
ESCORT - FUNERAL	7
ESCORT - MONEY	16
FIGHT - NO WEAPONS	1
FINGERPRINTED	19
FIRE - BRUSH FIRE	1
FIRE - CO ALARM	8
FIRE - HAZMAT	2
FIRE - SMOKE INV	1
FIRE - STRUCTURE FIRE	3
FIREWORKS	9
HARASSMENT	8
IDENTITY THEFT	1
INCIDENT UNFOUNDED	2
INTERFERING WITH POLICE	1
LANDLORD TENNANT DISPUTE	1
LARCENY	16
LARCENY - BAD CHECK	1
LARCENY - FRAUD	8
LARCENY FROM MV	31
LOITERING	1
MEDICAL CALL	140
MISSING PERSON - FOUND	2
MV ARREST	3
MV COMPLAINT	31
MV DAMAGE	7
MV RECOVERED STOLEN MV	2
MV THEFT	8
MV VERBAL WARNING	40
MV WARNING	1
NOISE COMP	35
OPEN DOOR/WINDOW	5
OUT OF TOWN JURISDICTION	2
OVERDOSE	1
PARKING VIOLATIONS	63
PHONE HARASSMENT	1
PISTOL PERMIT	48

Trumbull Police Department

Incident Statistics Report

08/01/2020 00:00 Thru 08/31/2020 23:59

Call Type Description	Total for Period
POLICE ADMIN / INFORMATION	9
PRESCRIPTION DRUG BIN	2
PROPERTY - LOST / FOUND	17
PUBLIC HAZARD	56
PURSE THEFT	1
PURSUIT	1
RADAR DETAIL	1
RISK OF INJURY TO MINOR	1
ROAD JOB CAR ASSIGNMENT	23
ROAD/TRAFFIC HAZARD	73
SCUBA - TRAINING	2
SELECTIVE ENFORCEMENT	30
SEXUAL ASSAULT	2
SHOPLIFTING	17
SOLICITING COMP	2
SPEED TRAILER	4
STRAY DOG	7
SUSPICIOUS ITEM	10
SUSPICIOUS MV	47
SUSPICIOUS NOISE	9
SUSPICIOUS PERSON	46
TAMPERING WITH M/V	3
THEFT OF PLATES	1
THREATENING	4
TIPSOFT	1
TPAUD	2
TRAFFIC CONTROL	1
TRESPASSING	1
UNWANTED PERSONS	6
VANDALISM - ACTIVE	3
VANDALISM - MAILBOX	1
VANDALISM TO MV	4
VENDOR PERMIT/BACKGROUND CHECK	2
WEAPONS - SAFE KEEPING	1
WELFARE CHECK	26
WIRES DOWN/BURNING	129
WPOT - WANTED PERSON OTHER TOWN	1
Total:	2002

Trumbull Police Department

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 29 Anderson, Steven C.

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/16/2020	23:00	92422	00158 Edison Road		430	Pinzon , Eimar	0690
			53a-125b	LARCENY 6TH DEG			

1 Arrest(s) for Officer 29 StevenC Anderson

Officer: 96 Bachiocchi, Edward

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/02/2020	06:30	92406	Bridgeport		520	Iucci , Joseph Victor	
			53a-61(a)(1)	ASSAULT 3RD DEG-PHYSICL INJURY			
		92406					
			53a-64cc	STRANGULTN/SUFFOCATE-3RD DEGRE			
		92406					
			53a-62	THREATENING 2ND DEG			
		92406					
			53a-182	DISORDERLY CONDUCT			

1 Arrest(s) for Officer 96 Edward Bachiocchi

Officer: 59 Ball, Sara

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/16/2020	20:24	92423	00845 DANIELS FARM RD		120	Ball , Sara	
			53a-182	DISORDERLY CONDUCT			

1 Arrest(s) for Officer 59 Sara Ball

Officer: 40 Bardos, Samantha

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	14:02	92413	00888 White Plains RD		420	Bardos , Samantha	
			53a-181	BREACH OF PEACE 2ND DEG			
08/07/2020	15:10	92412	00888 White Plains RD		420	McEnaney , Timothy J	
			53a-181	BREACH OF PEACE 2ND DEG			
		92412					
			53a-61	ASSAULT 3RD DEG			
08/16/2020	12:21	92420	05065 MAIN ST		310	Bardos , Samantha	
			53a-125a	LARCENY 5TH DEG			

3 Arrest(s) for Officer 40 Samantha Bardos

Officer: 71 Brown, Kelly

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/15/2020	23:30	91138	00003 BURTON AVE		420	Brown , Kelly	
			53a-181	BREACH OF PEACE 2ND DEG			

1 Arrest(s) for Officer 71 Kelly Brown

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 55 Corbit, Matthew

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/10/2020	19:04	92362	05065 MAIN ST		310	Corbit , Matthew	
			53a-223a	VIO STDING CRIM PROTECTIVE ORD			
		92362					
			53a-181	BREACH OF PEACE 2ND DEG			
08/17/2020	15:05	91550	05065 MAIN ST		310	Corbit , Matthew	
			53a-125a	LARCENY 5TH DEG			
08/19/2020	10:20	92426	GA2 Courthouse		220	Corbit , Matthew	
			53a-124	LARCENY 3RD DEG			
08/31/2020	15:36	92435	Bridgeport Hospital		430	Corbit , Matthew	
			14-213b	ILL OPN MV WO MINIMUM INSURNCE			

4 Arrest(s) for Officer 55 Matthew Corbit

Officer: 210 Dellabianca, Lynn

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/25/2020	16:15	92434			310	Dellabianca , Lynn	
			53-247(a)	CRUELTY TO ANIMALS			

1 Arrest(s) for Officer 210 Lynn Dellabianca

Officer: 90 Dzurenda, Thomas

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/18/2020	11:15	91641	Trumbull PD		110	Silva , Daniel	2600
			14-12(a)*	OPERATE/PARKS UNREGISTRD MV			
		91641					
			14-147(c)	IMPROPER USE-MARKER/LIC/RGSTR			
		91641					
			38a-371	FLR TO INSURE PRIVATE MTR VEH			
		91641					
			14-215	ILL OPN MV UNDER SUSPENSION			

1 Arrest(s) for Officer 90 Thomas Dzurenda

Officer: 65 Federowicz, Brian

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	03:00	92409	Rt 108/Penney AVE		530	Van Fleet , Nicholas	
			14-12(a)*	OPERATE/PARKS UNREGISTRD MV			
		92409					
			14-227a	ILL OPN MV UNDER INFL ALC/DRUG			

1 Arrest(s) for Officer 65 Brian Federowicz

Officer: 91 Fortunato, Samantha

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/03/2020	22:14	86069	6 Cambridge Drive		420		
			29-357	ILL SALE FIREWORKS WO PERMIT			

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 91 Fortunato, Samantha

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/03/2020	22:14	87570	6 Cambridge Drive		420	Fortunato , Samantha	
			29-357	ILL SALE FIREWORKS WO PERMIT			

2 Arrest(s) for Officer 91 Samantha Fortunato

Officer: 28 Frazier, Abigail

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/01/2020	14:45	92405	Fairfield Avenue/Alfred Avenue		310	Rampino , Christopher	
			53a-125b	LARCENY 6TH DEG			

1 Arrest(s) for Officer 28 Abigail Frazier

Officer: 75 Laaser, Derek

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/10/2020	19:00	92416	05065 Main ST		310	Laaser , Derek	
			53a-181	BREACH OF PEACE 2ND DEG			
08/10/2020	21:00	92415	05065 Main ST		310	Laaser , Derek	
			53a-181	BREACH OF PEACE 2ND DEG			
08/14/2020	17:00	92418	05065 MAIN ST		310	Laaser , Derek	
			53a-181	BREACH OF PEACE 2ND DEG			
08/16/2020	17:35	89150	05065 MAIN ST		310	Laaser , Derek	
			53a-167a	INTERFERE WITH OFFCR/RESISTING			

4 Arrest(s) for Officer 75 Derek Laaser

Officer: 35 Leos, James G

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/29/2020	15:50	92431	Partridge LN		510	Leos , James G	
			53-21(a)(1)	RISK OF INJURY TO CHILD			
08/30/2020	10:00	92432	00158 EDISON RD		420	Leos , James G	
			53a-60	ASSAULT 2ND DEG			
		92432					
			53a-62	THREATENING 2ND DEG			
		92432					
			53a-182	DISORDERLY CONDUCT			
08/30/2020	14:45	92433	05065 MAIN ST		310	Leos , James G	
			53a-125a	LARCENY 5TH DEG			

3 Arrest(s) for Officer 35 James G Leos

Officer: 47 Massa, Theresa

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	14:04	92411	05065 main street		310	Massa , Theresa	
			53a-61	ASSAULT 3RD DEG			
		92411					
			53a-117	CRIMINAL MISCHIEF 3RD DEG			
08/07/2020	15:00	92410	5065 main street		310	Massa , Theresa	
			53a-117	CRIMINAL MISCHIEF 3RD DEG			

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 47 Massa, Theresa

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	15:00	92410	5065 main street		310	Massa , Theresa	
			53a-61	ASSAULT 3RD DEG			

2 Arrest(s) for Officer 47 Theresa Massa

Officer: 92 McEnaney, Timothy J.

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/05/2020	08:30	92305	00120 CORPORATE DR		110	McEnaney , Timothy J	
			14-215	ILL OPN MV UNDER SUSPENSION			

1 Arrest(s) for Officer 92 TimothyJ McEnaney

Officer: 79 Pinzon, Eimar

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/01/2020	14:45	92405	Fairfield Avenue/Alfred Avenue		310	Bardos , Samantha	
			53a-125b	LARCENY 6TH DEG			
08/24/2020	21:00	90993	158 Edison Road		310	Pinzon , Eimar	
			53a-125a	LARCENY 5TH DEG			

2 Arrest(s) for Officer 79 Eimar Pinzon

Officer: 88 Pysz, Robert

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/18/2020	13:55	92364	Trumbull Police Department		310	Pysz , Robert	
			53a-125b	LARCENY 6TH DEG			

1 Arrest(s) for Officer 88 Robert Pysz

Officer: 60 Rampino, Christopher

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/15/2020	14:50	92419	00158 Edison Road		110	Rampino , Christopher	
			42-135a	NOTICES IN SALES AGREEMENT			
		92419					
			20-427(b)	VIO HOME IMPROVE CONTRACT REQS			

1 Arrest(s) for Officer 60 Christopher Rampino

Officer: 77 Ruiz, Jean

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/03/2020	10:45	87135	00158 Edison Road		220	Ruiz , Jean	
			53a-32	VIOLATION OF PROBATION			
08/03/2020	15:31	92408	05065 Main Street		320	Ruiz , Jean	
			53a-181	BREACH OF PEACE 2ND DEG			
08/04/2020	11:00	87162	00158 EDISON RD		320	Ruiz , Jean	
			53a-32	VIOLATION OF PROBATION			
		87162			220	Ruiz , Jean	
			53a-32	VIOLATION OF PROBATION			

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 77 Ruiz, Jean

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/04/2020	11:00	87162	158 edison road			Ruiz , Jean	
			53a-32	VIOLATION OF PROBATION			

5 Arrest(s) for Officer 77 Jean Ruiz

Officer: 89 Tantimonico, Ryan

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/16/2020	21:00	92421	00845 Daniels Farms Road		120	Dos Santos , Helder	
			53a-182	DISORDERLY CONDUCT			
		92421					
			53a-61	ASSAULT 3RD DEG			

1 Arrest(s) for Officer 89 Ryan Tantimonico

Officer: 97 Van Fleet, Nicholas

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/22/2020	01:15	92427	00439 Church Hill Road		420	Iucci , Joseph Victor	
			53a-182	DISORDERLY CONDUCT			
		92427					
			53a-115	CRIMINAL MISCHIEF 1ST DEG			

1 Arrest(s) for Officer 97 Nicholas Van Fleet

Total Number of Arrests 38

POLICE DEPARTMENT
TOWN OF TRUMBULL
CONNECTICUT

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

RICHARD CARLSON

Trumbull K-9 Activity Report
(07/01/20 to 08/13/20)

K-9 Activity:

K-9 Rico

Case #20-13672 Assist other Agency K-9 Track.

K-9 Bane

Case #20-12163 K-9 Track
Case #20-12949 Building Search

July, Aug and Sept Training Schedule:

K-9 Rico

07/02/20 Training (Newtown)
07/28/20 Training (Newtown)
08/12/20 Training (Newtown)
08/27/20 Training (Newtown)
09/18/20 Training (TBD)
09/29/20 Training (TBD)

K-9 Bane

07/18/20 Training
07/26/20 Training
08/11/20 Training

POLICE DEPARTMENT
TOWN OF TRUMBULL
CONNECTICUT

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

KYLE SILJAMAKI
TRAFFIC UNIT

TRAFFIC COMPLAINTS / ISSUES
August 2020

Supplemental Information

There were 61 cases assigned to the Traffic Division during the month of August. These include but are not limited to:

2 MV Collisions Investigated
6 MV Complaints
30 MV Stops
3 Funeral Escorts
5 Car Seat Installations
2 Speed Trailer Locations
2 Speed Sign Locations

Submitted by: Ofc. Kyle Siljamaki
Date: September 1, 2020

POLICE DEPARTMENT
Town of Trumbull
158 Edison Road
Trumbull, CT 06611
(203) 261-3665 Fax (203) 452-5162

Kyle Siljamaki
Traffic Unit

To: Patrol Supervisors – ***Please Read at Line Up***
From: Ofc. K. Siljamaki
Auth: DC Scinto
Re: Traffic Issues/Complaints
Date: August 3, 2020

Sector 1
Speeding Vehicles – Main @ Regency Cir.
Stop Sign Violations – Plumb Creek Rd. @ Aspen Ln.

Sector 2
Speeding Vehicles – Lake Ave.

Sector 3
Speeding Vehicles – Chestnut Hill Rd.
Speeding Vehicles – Edison Rd.
Speeding Vehicles – Main St. @ Plymouth Ave.

Sector 4
Stop Sign Violations – Cobblers Hill Rd.

Sector 5
Speeding Vehicles – Huntington Rd.
Stop Sign Violations – Shelton Rd. / Huntington Tpke.

Check Town Parks for crowds (Social Distancing)
Check areas that have detours running through them

See 38 or 74 for handheld laser unit

Please have the Officer assigned to an enforcement detail log a case and forward a copy of the case to Traffic Division mailbox. Thank you.

Vivian Munoz

From: Leonard Scinto
Sent: Tuesday, September 1, 2020 10:16 AM
To: Vivian Munoz
Subject: FW: DUI Grant/Distracted Driving Grant - August

D.C. L. Scinto

Leonard Scinto
Deputy Chief of Police
Trumbull Police Department
158 Edison Road
Trumbull, CT 06611
Tel: 203.261.3665 ext. 3846
Fax: 203.452.5162
lscinto@trumbull-ct.gov

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From: Coleen Fitch <cfitch@trumbull-ct.gov>
Sent: Tuesday, September 1, 2020 8:29 AM
To: Leonard Scinto <lscinto@trumbull-ct.gov>
Subject: DUI Grant/Distracted Driving Grant - August

Good morning,

There is no grant activity for August.

We ARE restarting the DUI grant activity for September, in case anyone wanted to know that.

C

Coleen Fitch, Clerk
Traffic Division
Trumbull Police Department
203-452-3854 (direct line)

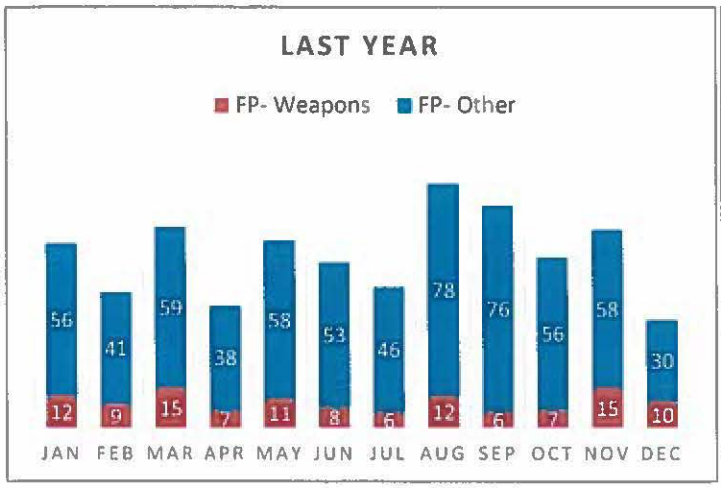
Trumbull Police Department
Detective Division Monthly Activity
August 2020

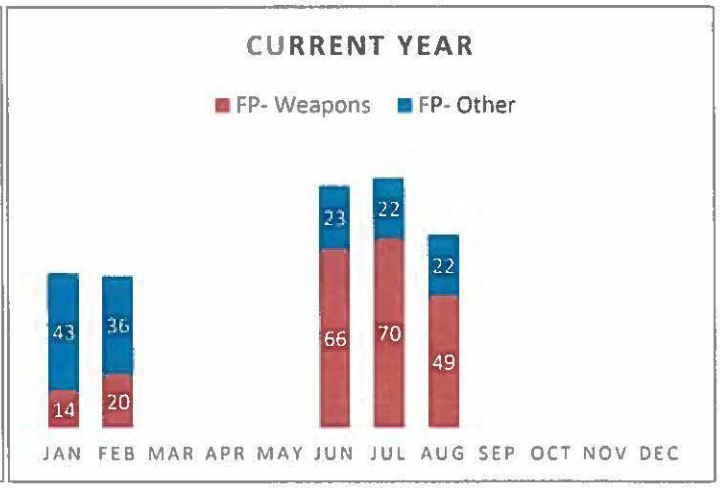
Investigations	New Cases Current Month	Cases Closed Current Month	All Open Cases
Arson			1
Assault			0
Auto Theft	2		3
Bias Crimes			0
Burglary: Residential			2
Burglary: Commercial			0
Counterfeiting			0
Criminal Mischief			1
Drug Investigation	1		3
Homicide/Suicide/DOA			3
Identity Thefts			0
Larceny			1
Larceny - Fraud	6	2	6
Larceny from MV			6
Missing Person			0
Robbery			0
Sexual Assault/Offenses	1		3
Threatening/Harassment			0
Other			1
Totals	10	2	30

WARRANT ACTIVITY

Arrest Warrant Applications	1
Arrest Warrants Served	2
Search Warrant Applications	1

FINGERPRINT CASES





TRUMBULL POLICE DEPARTMENT

DETECTIVE DIVISION
158 EDISON ROAD, TRUMBULL, CT 06611
(203) 261-3665 FAX (203) 452-3857

Brian Weir
Lieutenant

MONTHLY STATUS REPORT
(August 2020)

DB HIGHLIGHTS

*** Note: During the month of August 2020:

THIRTY-TWO (32) motor vehicles reported to have been entered.
SEVEN (7) vehicles were stolen.
SIX (6) of the 7 stolen vehicles were recovered.
ONE (1) juvenile **ARREST** and was in possession of several key fobs.
ALL OF THESE VEHICLES WERE LEFT UNLOCKED

Even though detectives have been working on these cases, many have not been officially assigned to a specific detective. These factors account for the low number of related cases shown below. ***

Investigations / Call Outs

Date	*Time*	*Location*	*Case*	*Incident Type*
5/26	18:23	Old Town Rd.	20-8664	Suspicious Activity

Complainant reported possible drug activity in the area. DB investigating. Case ACTIVE.

6/14	12:18	211 Fernwood Rd.	20-9879	Larceny from MV

Complainant/victim's unlocked car was entered where items and credit cards were stolen then used. DB investigated. Video surveillance showed the suspects wearing hoods and masks concealing their identity. No further leads. Case CLOSED on 8/17/20.

6/25	18:14	117 Meadowview Dr.	20-10590	Extortion

Complainant reported becoming in contact with someone over the internet (discord), and shared information/photos with this unknown person. The unknown person stated that they would share the information with others if money was not given to the unknown person. DB investigated, and served search warrants, however, no information was provided to further this case. Case CLOSED on 8/17/20.

Investigations / Call Outs

7/22 18:53 341 Shelton Rd. 20-12469 Larceny

TPD Patrol investigated a theft by a known party who was working at the residence. DB checked the items through a pawn shop database, and recovered one of the stolen items. Information was passed along to the investigating Patrol officer to apply for the arrest warrant.

7/31 7:46 38 Twitchgrass Rd. 20-13056 Larceny/Fraud

Complainant reported receiving a check to deposit into his account, to cash the check, and was told to purchase gift cards. The checks did not clear and the complainant suffered a loss from the fraudulent checks. DB investigating. Case ACTIVE.

7/31 7:57 27 Coventry Ln. 20-13057 MV Theft

Complaint reported their unlocked MV stolen overnight where the keys were left inside. Credit cards were later used. MV was later located and recovered on 8/11/20. Case ACTIVE.

8/4 11:47 TPD 20-13344 Assist Resident

Complaint reported their juvenile daughter received an inappropriate photo, via Snapchat, from an unknown individual. DB initiated this case, and is currently working on it. Case ACTIVE.

8/7 22:42 14 Frank St. 20-13821 Larceny – Fraud

Complainant reported several fraudulent transactions made to their account. DB investigating. Case ACTIVE.

8/9 10:01 427 Erwin St. 20-13918 MV Theft

Complainant's unlocked vehicle was stolen over night with the keys left inside. The victim's credit cards were illegally used. DB investigating. Case ACTIVE.

8/10 11:03 5065 Main St. 20-13970 Recovered Stolen MV

TPD DB located a stolen motor vehicle located at the Trumbull Mall. The vehicle was a 2020 Ford Explorer SUV white that was reported stolen out of NY. The vehicle was towed back to the TPD where New Castle (NY) Police Department detectives arrived and processed the vehicle. Case CLOSED on 8/10/20.

8/11 5:47 12 Old Farm Rd. 20-14018 MV Theft

Complainant parked their unlocked vehicle on the street and did not know if they left the keys inside. The complainant had CCTV footage that captured a light colored SUV drive up around 1:30 AM. The vehicle and had two individuals get out and look at the stolen vehicle. Bridgeport police later reported locating this vehicle. TPD detectives were notified by Bridgeport PD's Auto Theft Unit of a juvenile male in custody who was operating a stolen Mercedes out of Greenwich. The male had several sets of keys in his possession. TPD issued the 17 year old suspect a JV Summons to appear in court for the theft. Case CLOSED on 8/12/20.

Investigations / Call Outs

8/24 07:01 54 Plumtree Ln. 20-14736 Fraud-Checks
Complainant reported receiving a bad check for work that he had done. DB investigating. Case ACTIVE.

8/24 13:02 449 Booth Hill Rd. 20-14759 Larceny-Fraud
Complainant reported making a wire transfer from their banking account in response to a Craigslist ad, which turned to be fraudulent. Complainant was not able to obtain much information as to who received her money. DB investigating. Case ACTIVE.

Arrest Warrants Served

8/18 – Arrest Warrant Served - Op Unreg. MV, No Insurance, Suspended License, Misuse of Reg. – Gingell, Ian (DOB 04/10/1991), Released on PTA (Accident – MV INJURY – TPD case #19-5140).

8/19 – Habeas Corpus Arrest –Larc. 3rd. – Alamandy, Marc, (DOB 10/28/78) $500 bond. (Larceny– TPD case #19-10788).

Arrest Warrants Cleared by Detectives

8/18 – Arrest Warrant Served – No Insurance, Suspended License, Misuse of Registration, Operating Unregistered MV – Gingell, Ian, PTA. (Accident – MV INJ – TPD case #19-5140).

DB Investigations cleared by Arrest

8/12 - JV Summons - Larceny 2nd 53a-123. 20-14018 – 17 year old JV male, released to parent on PTA. (MV Theft – TPD case #20-14018).

8/15 – Arrest Warrant Served – Violation Home Improvement Contract, Notice in Sales Agreement – Guevara, Adrian Camilo (DOB 9/27/1980), $25,000 bond. (Larceny-Fraud – TPD case #20-1679).

Search Warrants Served

N/A

DB Arrest / PRAWN Warrant Detail

N/A

TRUMBULL POLICE DEPARTMENT

TRAINING DIVISION
158 EDISON ROAD, TRUMBULL, CT 06611
(203) 261-3665 X243 FAX (203) 452-3857

Timothy Fedor
Training Officer

August 2020 Training Report

TRAINING

Training Course	Location	Date	Officer Assigned
SRO; One Day Training Program	New Britain PD	8/3/20	Off. Duva Off. Bartosik Off. Federowicz Off. Jimenez
Emergency Medical Responder Training Program	New Haven PD Academy	8/10/20 – 8/21/20	Off. Fedor Instructor
SRO Basic 2.0	Bloomfield PD	8/10/20 – 8/14/20	Off. Federowicz
ERT Training (Try-Outs)	Trumbull	8/12/20	All ERT Officers
ERT Training	Trumbull	8/26/20	All ERT Officers
Training Officer Liability	Darien PD	8/28/20	Off. Fedor
Dive Team Training	Trumbull	8/27/20 – 8/28/20	All Dive Officers

Community Police

Event	Location	Date	Officer
Cookies for Cops	Nichols (NIA) Farmers Market	8/6/20	Off. Fedor
Cops & Cones	Sunny Daes (Trumbull)	8/15/20	Off. Fedor Off. Brown

TRUMBULL POLICE DEPARTMENT

POLICE CADET POST # 659

158 EDISON ROAD, TRUMBULL, CT 06611

(203) 452-3849 FAX (203) 452-3857

August 2020

Event	Location	Date	Advisor
No Meetings or Events			

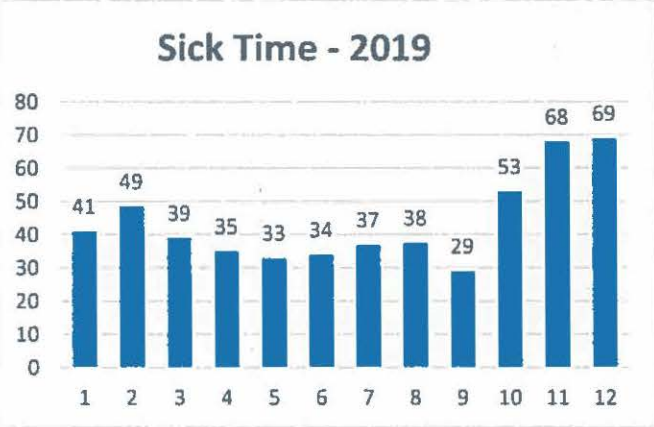
Trumbull Police Department
Monthly Sick Report
August 2020

Personnel Sick Time

2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Sick	41	49	39	35	33	34	37	38	29	53	68	69	524
Job Injury	0	0	0	0	0	0	0	1	0	0	0	0	1
Light Duty	11	0	0	0	0	0	0	3	2	3	0	0	19
Total	52	49	39	35	33	34	37	42	31	56	68	69	544

2020	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Sick	32	33	92	39	25	28	30	56					335
Job Injury	0	0	0	0	0	0	0	0					0
Light Duty	0	0	0	0	0	0	0	0					0
Total	32	33	92	39	25	28	30	56	0	0	0	0	335

Sick Time Totals	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2019	41	49	39	35	33	34	37	38	29	53	68	69	524
2020	32	33	92	39	25	28	30	56	0	0	0	0	335
Average Per Officer - 2020	*0.4*	*0.4*	*1.2*	*0.5*	*0.3*	*0.4*	*0.4*	*0.7*	*0.0*	*0.0*	*0.0*	*0.0*	*4.5*



Police Department
FY 2021, Budget Status YTD

Account	Description	Approved	*Rev	Paid YTD		Avail YTD	
501101	Salaries- Full time	7,326,746		1,309,570	18%	6,017,176	82%
501102	Salaries- Part time	54,888		2,828	5%	52,060	95%
501103	Salaries- Seasonal / Temp	0		0			
501104	Salaries- Weekend	53,082		5,829	11%	47,253	89%
501105	Salaries- Overtime	830,000		92,131	11%	737,869	89%
501106	Longevity	17,325		0	0%	17,325	100%
501109	College Incentive	25,000		0	0%	25,000	100%
501112	Shift Differential	59,650		1,410	2%	58,240	98%
501113	Holiday	349,700		28,290	8%	321,410	92%
501114	Training	165,000		11,865	7%	153,135	93%
501887	Uniform Cleaning	18,500		2,700	15%	15,800	85%
501888	Uniform Allowance	59,750		14,296	24%	45,454	76%
522202	Services & Fees, Professional	0		0			
522203	Ancillary	20,000		40	0%	19,960	100%
534401	Office Supplies	14,400		5,299	37%	9,101	63%
534402	Program Supplies	37,000		2,967	8%	34,033	92%
534403	Materials and Supplies, Cleaning	6,000		1,138	19%	4,862	81%
545503	Public Relations	2,500		0	0%	2,500	100%
556601	Professional Development, Tuition Reimb	7,000		0	0%	7,000	100%
556602	Professional Development, Organizations	3,000		1,360	45%	1,640	55%
556603	Professional Development, In-Service	45,000		4,729	11%	40,271	89%
556604	Professional Development, Publications	300		82	27%	218	73%
567702	Vehicle Repair	40,000		12,719	32%	27,281	68%
567704	Transportation, Expense Account	13,250		2,133	16%	11,117	84%
578801	Service Contracts	224,010		65,201	29%	158,809	71%
578802	Equipment, Building	0		0			
578803	Maintenance, Program Related	6,000		1,010	17%	4,990	83%
578804	Maintenance, Refuse Removal	2,379		2,508	105%	-129	-5%
581888	Capitol Outlay	146,283		0	0%	146,283	100%
589901	Rentals	30,100		17,461	58%	12,639	42%
590011	Utility, Heat	9,000		0	0%	9,000	100%
590012	Utility, Electricity	66,000		9,570	15%	56,430	86%
590013	Utility, Water	3,200		446	14%	2,754	86%
590014	Utility, Telephones	15,000		2,565	17%	12,435	83%
590015	Utility, Traffic Lights	11,792		978	8%	10,814	92%
	Total	9,661,855		1,599,125	17%	8,062,730	83%
As of:	9/3/2020	Week Number = 9		Progress Perc. =	17%		
		Weeks Remain = 43				Remain Perc =	83%

POLICE DEPARTMENT
Town of Trumbull
CONNECTICUT 06611

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

MICHAEL LOMBARDO
CHIEF OF POLICE

POLICE COMMISSION

RAYMOND G. BALDWIN, JR., CHAIRMAN
ANGELO MAGLIOCCO, VICE CHAIRMAN
JOHN VAZZANO, SECRETARY
ALBERT ZAMARY, COMMISSIONER
CHRIS TREFZ, COMMISSIONER

AGENDA

Trumbull Police Commission Meeting
Tuesday, September 8, 2020 at 6:00 PM

Join the meeting online:
https://zoom.us/j/92694974849?pwd=QVZqTlBPTTVuTldQVHZabjdDQnZ5UT09
Webinar ID: 926 9497 4849
Password: 565683

Join by telephone: (312) 626-6799 or (888) 475-4499 (Toll Free)
Webinar ID: 926 9497 4849

1. Call Meeting to Order

2. Pledge Allegiance and Moment of Silence

3. Public Comment

4. Approval of July 14, 2020 Police Commission Meeting Minutes

5. Correspondence

6. Chief's Report
   - Operation
   - Traffic
   - Personnel
   - Legal Update

7. Old Business
   - Trumbull Police Station Renovation Update
   - Discussion and Approval of Traffic Light at Route 111 and 41-57 Monroe Turnpike – William Maurer, Town Engineer, Fred Mascia and Craig Yannes, Tighe & Bond

- 7120 Main Street, Traffic Flow, Parking Lot and Loading Dock Proposal – Robert Librandi, Planning & Zoning and William Maurer, Engineering Department and BL Companies and Russo & Rizio, LLC

8. New Business
   - Discussion and Approval of Cooper Surgical – Stairs and Crosswalk at 50 1 Corporate Drive – Barry Unger, Barry Unger Associates Inc.

9. Discussion and Consideration of Chief Michael Lombardo's Compensation

10. Adjournment

Town of Trumbull

TRUMBULL POLICE COMMISSION

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POLICE COMMISSION

RAYMOND G. BALDWIN, JR., CHAIRMAN
ANGELO MAGLIOCCO, VICE CHAIRMAN
JOHN VAZZANO, SECRETARY
LISA LABELLA, COMMISSIONER
ALBERT ZAMARY, COMMISSIONER
CHRIS TREFZ, COMMISSIONER

Trumbull Police Commission Meeting
Trumbull Police Department
July 14, 2020

MINUTES

The Trumbull Police Commission meeting was called to order via virtual at 6:02 p.m.

Members present: Raymond G. Baldwin, Jr., Chairman
Angelo Magliocco, Vice Chairman
Lisa Labella
Chris Trefz
Albert Zamary

Also Present: Chief Michael Lombardo
Assistant Chief Glenn Byrnes
Deputy Chief Leonard Scinto
John Knuff, Hurwitz Sagarin Slossberg & Knuff, LLC
Michael Dion, BL Companies
Scott Loventhal, Garden Homes
John Schmitz, BL Companies

Absent: John Vazzano

Public Comment
Opened Public Comment at 6:03 pm.

Dawn Cantafio, 72 Tait Road. Ms. Cantafio said the following "I am Dawn Cantafio, I live at 72 Tait Road. I am a member of Town Council, but tonight I am speaking as a resident of Tait Road.

"I would like to thank, Chairman, Ray Baldwin and his commission for allowing me to speak this evening.

"I would also like to acknowledge First Selectman Tesoro, Chief Lombardo, Assistant Chief Byrnes, the Trumbull Police Department, the Traffic Division and the Traffic Authority for their help enforcing safety in our neighborhood. Not always an easy task, especially on nice weekends.

"Some of our concerns are keeping sight lines clear for everyone entering and exiting the Pequannock Trail and Tait Road. Some parents have had cars pull into driveways with checking for children.

"Parking was on both sides of the street at times and we would have to pullover to make room for a vehicle to pass. Parts of the road where some cars are parked are not wide enough for two-way traffic and emergency vehicles may not be able to pass.

"During the past few months, we have seen a decrease in the amount of traffic traveling up and down our street. For the first time in many years, children have had the freedom to safely ride bikes, walk up and down our road and they can play in their driveways.

"Please consider granting the parking restrictions for our street, so we will be able to keep our residents safe and the roadway clear for two-way traffic."

There were no further public comments. Public Comment was closed at 6:05 p.m.

Approval of the June 9, 2020 Police Commission Meeting Minutes
Motion made to accept the Police Commission Meeting Minutes of June 9, 2020 as presented. Motion made first by Trefz, seconded by Magliocco. There was no further discussion. Motion passed unanimously.

Chief's Report
Correspondence
Email from Anthony Krushinski a Fairfield Police Officer, commending Office Leos as he was patrolling the parks and rails to trail and assisted Mr. Krushinksi's grandson while he was having issues with his fishing equipment.

Letter from a resident of Easton whose brother unfortunately is paralyzed, and his brother and his wife were involved in a hit and run accident. Officer Fortunato was assigned to assist them and determined who hit their car. Officer Fortunato was kind and compassionate and she solved the case.

Card from Chuck and Leslie Pavel, thank you note to the officers for protecting, serving the community and appreciate the work the officers do and how professional they are and conduct themselves.

Card from Alison Cordia, thank you and appreciation note as she needed the assistance from police officer and EMS during the middle of the night when she was experiencing a medical problem. Ms. Cordia delivered LIFEsavers to the officers because they are LIFEsavers. The officer that assisted was Officer O'Connor.

Email from Roberta Bartek thanking the Police Department for making the Trumbull High School graduation parade a huge success.

Email from Mike Cetrangola thanking the police officers for the work they do and Mr. Cetrangola had lunch delivered.

Card thanking Officer Pysz as he assisted Trumbull resident as someone struck their mailbox. Officer Pysz within a short period of time was able to find the person responsible.

Card from a Fairfield resident, she came to the Department for assistance when was not able to get a hold of her friend. Officer Massa assisted and unfortunately, it was not a good ending but she was very appreciative for Officer Massa's kindness and compassion.

Thank you email to the Trumbull Police Officers and staff for protecting and serving the community each and every day.

Thank you email from a Trumbull resident thanking Chief Lombardo, First Selectman Tesoro, Town Council Chair Thornton and Chairman Baldwin for the joint statement regarding the George Floyd incident.

Correspondence from the Department of Justice regarding the recently awarded grant (COPS Hiring Program) that was awarded to the Trumbull Police Department for hiring an additional officer to the department. This officer will be work at the Westfield Trumbull Mall. The Department was awarded $125,000 to cover the cost of the officer and will begin July 1, 2021. AC Byrnes, Lt. Lopes, Rina Bakalar and the Finance Department all worked together on the grant.

Operations

Chief Lombardo reviewed the Calls-for-Service report for the month of June, which showed 1921 cases.

The Motor Vehicle Enforcement showed 83 cases for the month of June. Chief Lombardo indicated he could not stress enough to Trumbull resident to please lock their vehicles, do not leave valuables or leave their keys or key fobs inside their vehicles.

Chief Lombardo reviewed the Criminal Incidents report for the month of June, which showed 84 cases. There were 114 Alarms for the month of June.

Chief Lombardo reviewed the Incident Statistics Report for the month of June, which showed a total of 1919 alarms.

The Arrest Summary Report Adults showed there were 26 arrests for the month of June.

The K-9 Report showed the activity and training for the month of June.

Traffic Division

The Traffic Report showed 61 cases for the month of June that Officer Siljamaki handled.

Detective Division Report

Chief Lombardo reviewed the Detective Division Monthly Activity report for the month of June. The division opened 18 new cases; 11 cases were closed and have 27 open cases. The Detective Division has resumed fingerprinting for residents. For the months of March-May due to the pandemic there, fingerprinting was suspended due to an executive order from the Governor. Chief Lombardo also reviewed the Monthly Status Report for the month of June with the different type of investigations/call outs. Chief Lombardo brought to the attention to the Commission a couple investigations/calls out, one of them being a Community Policing incident. There was a video that was posted on social medial regarding a young resident playing basketball and stepping behind a parked vehicle as the Trumbull Police cruiser drove by. The Department has made multiple attempts to communicate with the family and officers have made contact with them. Lt. Weir has recently spoken with the family and some officers will be visiting the family and spend some time with the young resident and get to know the officers. Chief Lombardo also commented on a case that is listed as Swatting. A call came in with someone reporting a serious crime within the home to garner a large rapid response from the Police Department including the SWAT team if needed. Officers responded and it was determined that nothing had occurred within the home. The Detective Division is actively investigating this incident.

Chief Lombardo commented that during the month of June there were thirty-four (34) motor vehicles report to have been entered. There were also seven (7) vehicles stolen, six (6) of those vehicles were recovered.

Training

Chief Lombardo reviewed the Training Report for the month of June. The report showed the type of training and the officers who attended the training and some of the classes that were canceled due to COVID-19. The report also showed the type of community policing events the officers took part in; there were also Graduation Parades and Gratitude Parades.

Cadet Report
Chief Lombardo reviewed the Cadet Activity Report for the month of June, which included several Zoom meetings.

Sick/Injury Report
Chief Lombardo reviewed the sick/injury report for the department for June.

Budget
Chief Lombardo reviewed the Budget Report in which the Fiscal Year ended June 30, 2020. He was happy to report the Department ended the year under budget, he believes this would be the sixth year in a row. Chief Lombardo mentioned that the Overtime Budget was slightly over by $4,300. There were a good amount of officers that did not use their vacation time due to COVID for March, April and May. The officers still have vacation time and will probably begin using their vacation time. There might be a slight uptick in the Overtime Account in the new Fiscal Year budget. There was training that was also canceled so there will also be a slight uptick in the Training Account. Overall the 2019-2020 Budget was under by 2%. Chief Lombardo indicated that the credit for handling the budget goes to AC Byrnes and Lt. Lopes who monitor the budget for the Department.

Old Business
Discussion and Consideration of 5085 Main Street
Mr. John Knuff attorney for the applicants of the 5085 Main Street project. They appreciate the opportunity to present once again to the Commission. Mr. Knuff commented at last month's Police Commission meeting there were a number of concerns that were raised in Sgt. Coutinho memo that was submitted to the Commission. Mr. Knuff met again with DC Scinto and Sgt. Coutinho last week. They have also met with EMS, Fire, and John Schmitz who submitted a letter on July 8 2020. They met DC Scinto on July 9, 2020 with results of the changes they have made with the comments from the Police Department along with comments to EMS and Fire. Mr. Knuff believes the letter from Sgt. Coutinho was positive regarding the various concerns. Mr. Knuff extended his appreciation to DC Scinto and Sgt. Coutinho for taking the time to meet with them again as they took all the concerns from the all the Emergency Services to heart in particularly from the Police Department.

Chairman Baldwin asked if the report from Sgt. Coutinho was available to the Commission.

Mr. Knuff indicated that Commission has a copy in their packets, which is very detailed, and it concludes that the developers have made every attempt to rectify the concerns brought to them and that the adjustments will be adequate.

Chairman Baldwin asked the Commission to refer to the letter under Old Business in their packets. Chairman Baldwin indicated that there is an approval from the Traffic Division.

Chief Lombardo has reviewed the letter and recommendations from Sgt. Coutinho and feels comfortable with the updates.

Chairman Baldwin asked if there were any questions from the applicant or Deputy Chief.

There was none and no, there was no further discussion.

A motion was made by Chairman Baldwin to approve the modification of the plan for 5085 Main Street as described in the report from Sgt. Coutinho from the Traffic Division, seconded by Zamary. There was no further discussion. Motion passed unanimously.

Trumbull Police Station Renovation Update
AC Byrnes provided the Commission and indicated that everything with the project is going well. This week the dedication plaque is expected to be mounted in the front lobby of the Trumbull Police Department. The only item that is pending on the Town side is fencing around the ventilation unit for the Shooting Range. Overall, there is very minimal things that need to be completed.

Commissioner Labella did not have anything further to report.

Chief Lombardo asked AC Byrnes to expand further on what is being done to cover the HVAC System and the sound.

AC Byrnes reported that he has been working with Director of Public Works Mr. Estrada, who met with some of the neighbors and has come up with a plan to install evergreen plantings along the perimeter line and replacement of fencing along the property line that was damaged when some trees came down last year. The Town will replace the fencing between the properties; in addition, there will be separate section of fencing that will act, as an enclosure immediately surrounding the ventilation unit that is adjacent to the police building. With the planting and fencing, the Department hopes that it will help alleviate the concerns from the neighbors.

There were no further questions.

New Business
Discussion and Consideration of "No Parking" signs on Tait Road and Tait Mill Road

Chairman Baldwin asked if there was input/report for the Traffic Division pertaining to the "No Parking" signs.

DC Scinto indicated that in March of this year there was a Traffic Study done. There was recommendation of "No Parking" on one side of the road. A petition was received from the residents requesting "No Parking" signs in front of all the homes on both sides of the street. The only issue DC Scinto sees which might occur is an inconvenience for the residents, as there has already been several requests for consideration for work being done at their homes and residents having parties that they be exempt regarding the "No Parking". DC Scinto indicated the other consideration would be "No Parking, Dusk to Dawn", but he has the understanding of "No Parking" at all times.

Chairman Baldwin has spoken to several of the residents on Tait Road and Tait Mill Road and they understand that they are all subject to the same restrictions of "No Parking" and they are satisfied.

Commissioner Labella asked if the petition that was filed, was it for 24-hour "No Parking" signs.

DC Scinto indicated that it was suggested back in the March report for "No Parking, Dusk to Dawn", but the petition requested "No Parking" all time around.

Chairman Baldwin asked Ms. Cantafio to rejoin meeting to discuss further.

Ms. Cantafio joined meeting and Chairman Baldwin shared with her that the Traffic Division has suggested the ban of "No Parking" be from 6 a.m. to 8 p.m., and asked if that would that be something the residents would consider?

Ms. Cantafio indicated that it was discussed and she can bring back to the residents if they would like. The only concern she sees is the enforcement people are at the trail as early as 5 a.m. and if they stay at the trail later than 8 p.m. and then the residents would need to call the Department, as they would not be adhering the parking restrictions.

Commissioner Magliocco commented to Ms. Cantafio that with the "No Parking", if the residents have a party, will there be adequate space for parking? He would like to make sure that once the signs go up, it is for everyone.

Ms. Cantafio indicated that the residents are aware and they have all agreed they would share their driveways and they have opened up the space of where there are no houses for people to park there as well.

There were no other discussions or questions.

A motion was made by Chairman Baldwin to approve the "No Parking" signs installed on Tait Road and Tail Mill Road, seconded by Trefz. There was no further discussion. Motion passed unanimously.

Chairman Baldwin asked to say the following message prior to adjournment of meeting.

"It is with regret this evening that I announce that long time Police Commissioner Lisa Labella is stepping down after many years of service on this commission dating back to 2001.

"Lisa first became involved with the Trumbull police department while championing the installation of AEDs in all police cruisers following the tragic death of Trumbull resident, John Heher Sr., while he was refereeing a THS basketball game. Lisa was steadfast in her efforts to provide the proper first responder's equipment to our officers for the benefit of our community despite harsh criticism from some town officials. Over the past 20 years, countless lives have been saved not only by our police officers but also by individuals using the AEDs Lisa helped fundraise for which are now in all of our municipal buildings, schools and parks.

"Lisa has most recently served as Chairman of the building committee for the renovation of the police pistol range, locker rooms and cellblock and, as is typical with Lisa, she performed her duties professionally and with much attention to detail. Not surprisingly, the project came in on time and on/under budget.

"Lisa's service to this town however has not been limited to the police department. She also served on the Trumbull Board of Education where she assisted with the construction and renovation of several of our schools and helped champion improvements to our schools' curriculum.

"Lisa has been a champion for many causes in our community and always does the hard work necessary for them to be successful. She has been a valued friend and confidant and the town of Trumbull owes her debt of gratitude for the many contributions she has made.

"She and her husband Dan will be leaving Trumbull but Lisa's footprint will be with us for a very long time."

Commissioner Labella thanked Chairman Baldwin for the message. She thanked Chairman Baldwin and the rest of the Commission as it has been a pleasure to serve with Chairman Baldwin and honor. It has also been an honor to work with Chief Lombardo, his staff and exemplary department.

Commissioner Magliocco said he has served with Commissioner Labella on the Police Station Renovation Committee and the Police Commission Board and appreciates everything she done for the community and has learned a lot from her. Commissioner Magliocco wished her the best.

Chief Lombardo thanked Commissioner Labella for all her support with the Department and staff. Chief Lombardo wished her the best.

There being no further business, a motion was made by Labella and seconded by Magliocco to adjourn the meeting at 6:44 p.m. The motion passed unanimously.

Respectfully submitted,

Vivian Munoz
Clerk of the Commission

- CORRESPONDENCE

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Monday, August 31, 2020 10:15 AM
To: Keith Golding
Cc: Leonard Scinto; Glenn Byrnes; Vivian Munoz
Subject: RE: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Captain Golding:

I will place a copy of this email in each of the officers personnel files and also copy the Police Commission.

Thank you,

Michael Lombardo
Chief of Police
Trumbull Police Department

From: Keith Golding <kgolding@trumbull-ct.gov>
Sent: Monday, August 31, 2020 9:59 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>
Subject: FW: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Chief,
Attached is an email from a resident thanking us for our assistance when his son had a psychotic break over the weekend. He specifically mentioned the work of Officers Murphy and Bachiocchi. (Case 20-15074)
I've included my response to him.
I would like to request that a copy of the email be placed into each of their personnel files for future reference.

I am also forwarding a copy of the email to Chief Goodman at EMS for her review.

Captain Golding

From: Keith Golding
Sent: Monday, August 31, 2020 9:45 AM
To: 'Geoff Thomas' <geoffthomascti@gmail.com>
Subject: RE: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Mr. Thomas,
Thank you for your correspondence.
I will personally speak with each officer and your email will be forwarded to the Chief's office along with a request to place a copy into each officer's personnel file.
We take tremendous pride in being able to assist our residents in their time of need.
I hope for the best for you and your family.

I will be happy to forward this to Chief Leigh Goodman, head of Trumbull EMS, for her records.

Sincerely,
Captain Keith Golding
Trumbull Police Department

158 Edison Road
Trumbull, CT 06611
203-261-3665 Ext# 3251

From: Geoff Thomas <geoffthomascti@gmail.com>
Sent: Sunday, August 30, 2020 4:12 PM
To: Keith Golding <kgolding@trumbull-ct.gov>
Subject: cmurphy@trumbull-ct.gov; ebachiocchi@trumbull-ct.gov

Dear Captain Keith Golding,

My wife Randye Kaye, and I would like to thank two of your officers for their stellar professionalism, patience, and empathy during an incident that occurred early Saturday morning, August 29, after 2:00 AM. My step son, who suffers from severe schizophrenia arrived at your station panicked as he was showing early signs of a psychotic break. Randye called the Trumbull police after he drove from our house concerned he was in no condition to drive after adamantly refusing to take his medication. Sparing the details of the incident, I would like to point out the incredible actions of your officers Caitlin Murphy and Edward "EJ" Bachiocchi.

Officer Murphy arrived at our home minutes after our call. She treated us with kindness the entire time while assessing the situation. Her questions and responses to our answers allowed us to maintain our composure and gave us the confidence in her ability to help us deal with this situation.

Officer Bachiocchi managed to keep my step-son as calm and collected as anyone could hope for in his condition. He managed to gain my step-son's trust and confidence and kept him from making choices which would have resulted in his arrest. The decision was made to transport my step-son to St. Vincent's Behavioral Health ER. He arrived safely thanks to both of your officers and the EMS team.

Finally, I would also like to thank the EMS team that was there. Unfortunately, I did not get their names, but they too showed the same level of proficiency and professionalism. If possible, please forward this to them and their supervisor.

Randye and I have always been impressed with the Trumbull Police, especially when it comes to the level of training and experience they possess in handling this type of crisis. To paraphrase an Air Force citation, Officer Murphy's and Bachiocchi's performance of duty bring distinct credit to themselves and the Trumbull Police Department. We are truly grateful!

Thank you.

Sincerely,

Geoff Thomas

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Sunday, August 30, 2020 10:11 AM
To: Lainie McHugh; gburns@trumbull-ct.gov
Cc: Vivian Munoz
Subject: RE: appreciation

Good Morning Lainie:

Let me begin by thanking you for sending such a kind e-mail about the officers, especially during the busy time you and your daughter are having trying to manage the logistics of her internship. It was very thoughtful of you to take the time and contact me.

I am always grateful to hear such wonderful things about the manner in which the officers conduct themselves. You are correct, I don't think any of them probably recognized your position in town either.

I will make sure that a copy of your e-mail is placed in each of their personnel files and a copy forwarded to the Police Commission as well.

Once again, thank you.

Chief Lombardo

From: lainiemchugh@gmail.com <lainiemchugh@gmail.com>
Sent: Sunday, August 30, 2020 12:26 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>; gburns@trumbull-ct.gov
Subject: appreciation

Chief Lombardo and Asst. Chief Burns,

My daughter and I had an unfortunate experience this past Tuesday, 8/25/2020 which required some help from your department... and I wanted to send you a quick note of thanks and recognition for the professionalism and compassion of your officers.

Rachel is starting her graduate year at UCONN and moving into a new apartment this week end. It's been a whirlwind of unsettled craziness as the girls waited to make sure that the semester was actually going to happen on campus before signing a lease and the lack of communication from the East Hartford school district to the interns had her scrambling to be in East Hartford for professional development and orientation a week earlier than expected. It made for quite the challenge in trying to establish all the necessities, including wifi service with Frontier. As she was stuck in her professional development and unable to make phone calls, I got the frantic "mom" texts when Frontier denied her service stating she had a past due account. Not possible as she has never had to establish service before.

Turns out someone had opened an account with another name and address, but using Rachel's SSN#.

Fortunate to have little experience in such matters, I called the department and spoke with Officer Gisvold. She was very helpful in explaining what forms Rachel would need to fill out, what I should help Rachel do as far as other notifications to SS and the credit agencies, etc.

I stopped at the station to pick up the forms to have them for Rachel to complete when she was home for the day, I spoke with another officer (and I didn't think to write his name down). He went over exactly what to fill out and offered to have an officer come to the house later in the day to take the report if it were easier. We chose to stop back and make the report and he happened to be leaving at the end of shift, already in his street clothes, but, recognizing me from earlier, he made a point to note that we were waiting and to make sure that we were being taken care of.

We met with Officer Frazier who took Rachel's report. She explained that she would follow up with the investigation and get back in touch. Officer Frazier told us to follow up with the fraud claim with Frontier Communications, when and if they got around to sending the packet which they had told us would take 10 business days, and she made sure that Rachel had already taken care of the appropriate alerts with the credit agencies, etc.

I figured that complaints like this are a dime a dozen and didn't really think that there would be much that could or would be done.

The following day, however, I received a call from Officer Frazier. She had already followed through on the information we had provided her and is hopeful that it may have been a simple mistake / data entry issue on Frontier's part. However, Officer Frazier made sure to call Rachel and leave a message, and knowing that she was in professional development, took the extra time to call me, as well, to make sure we know what steps to follow next.

I did not at any time indicate my involvement in town, and I don't think any of the officers knew me. I know that each of these officers was simply doing their job and they are supposed to be courteous and professional. But, sometimes it is just nice to be recognized for doing so genuinely... especially given the crazy times in which we find ourselves where the angry and disgruntled speak the loudest and type the fastest. Please offer my thanks and, if possible, I would ask to place a copy of this email in their personnel files.

Wishing you a quiet week,
Lainie McHugh

Virus-free. www.avg.com

Commission

TRUMBULL POLICE DEPARTMENT
Town of Trumbull
CONNECTICUT 06611

MICHAEL LOMBARDO
CHIEF OF POLICE

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

August 25, 2020

Charles DeBenedetto
20 Firehouse Road
Trumbull, CT 06611

RE: Special Police Certification

Dear Charles:

On August 18, 2020, your position as a Trumbull Special Police officer was suspended. The nature of this suspension was the result of your failure to comply with my January 23, 2018, letter to you, detailing requirements to maintain your Special Police Officer Certification. I must reiterate the necessity for these requirements were needed to protect you, the town and community members. Our insurance carrier made it very clear that we institute these requirements for all police officers and special police officers.

More than two years have passed since my January 23, 2018 letter and your non-compliance with these requirements, after being referred to training locations and personnel to help you meet the new mandates are unacceptable.

Regrettably, your position as a Special Police Officer with the Trumbull Police Department is revoked effective immediately. I ask that you arrange with Sergeant Barton to turn in all of your Trumbull Police uniforms, articles and property no later August 31, 2020 that have been issued to you throughout your tenure with the Trumbull Special Police officers.

I want to thank you for your years of service to the Town of Trumbull, however, I am not permitted or in the position to risk your remaining a member of the Special Police officers.

Sincerely,

Chief Michael Lombardo
Chief of Police

ML/vsm

Vivian Munoz

From: Michael Lombardo
Sent: Friday, August 21, 2020 12:19 PM
To: Faiella, Denise
Cc: Timpanelli, Lucinda; Ralph Iassogna; Vivian Munoz
Subject: RE: Letter from the Board Chairman Lucinda Timpanelli

Dear Denise:

This is wonderful! Naturally, I am completely against removing any SRO from our schools and in fact would love to expand the program in the future. Lucinda, I can't say enough. Your support of the police department is superb and I am grateful to you for all that you have done for us, before and since I became Trumbull's chief.

Thank you again!

Michael Lombardo
Chief of Police
Trumbull Police Department

-----Original Message-----
From: Faiella, Denise <DFaiella@trumbullps.org>
Sent: Friday, August 21, 2020 11:25 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>
Cc: Timpanelli, Lucinda <LTimpane@trumbullps.org>; Ralph Iassogna <riassogn@trumbullps.org>
Subject: Letter from the Board Chairman Lucinda Timpanelli

Dear Chief,

Board Chairman Lucinda Timpanelli wanted you to have a copy of her letter to Senator Chris Murphy. This letter was sent to 2 Hartford addresses and one in Washington.

Thank you,

Denise M. Faiella
Executive Assistant to the Superintendent Trumbull Public Schools
6254 Main Street
Trumbull, CT 06611
(203) 452-4301

TOWN OF TRUMBULL
BOARD OF EDUCATION

6254 MAIN STREET
TRUMBULL, CONNECTICUT 06611

203-452-4301

FAX # (203) 452-4305

August 21, 2020

Senator Chris Murphy
One Constitution Plaza, 7th Floor
Hartford, CT 06103

Dear Senator Murphy,

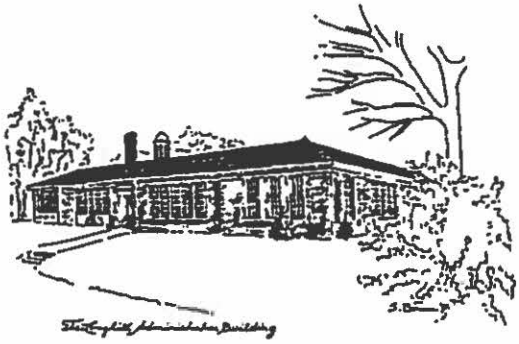
This letter comes in support of the SRO's assigned to schools. Let me explain and inform you how they are true partners with school administration to maintain a positive culture in the schools.

They are trained officers via a national SRO program with established objectives which are the foundation the program encompasses, The TRIAD: Teacher, Counselor, and Law Enforcement, are the elements on which the program was founded. They are trained to be the liaison between the school and police community. They teach classes including the harmful effect of tobacco, alcohol, vaping and drug use and their ramifications. They also teach violence prevention as it exists in the home and in relationships. They are truly role models for our students.

Please do not let emotions enter into your decision. It appears, a jump to action to eradicate this is based on issues that do not relate to public schools.

As a former school administrator and present Chairman of the Board of Education of Trumbull Public Schools who supports their presence, I can attest to the validity of their work. They are positive, proactive, sincere and caring individuals.

They do care about our community, they provide protection from visitors entering our schools. Their vigilance and attention foster a protective climate keeping all safe. Their presence provides an added level of security which has proven to lessen the anxiety level of students, staff, and the parent community.



They teach, they allow students to dialogue in a non-judgmental and inviting environment. Ideas and opinions given by students are respected and heard. They investigate when necessary and resolve issues in a calm appropriate manner. I am asking you to investigate their work rather than respond to an emotional outcry that has no basis or relation to the actual job the SROs are trained to do.

I tried to call your office but received no response, hence this letter. Please do not arbitrarily remove them from our environment. We need them. I personally have worked with SROs for many years and found them to be respectful, diligent, genuine and eager to promote a positive school climate. It should be our decision to employ them or not. With all due respect, you are not present in schools on a daily basis. We know what we need. Please respect that. Remember, not all police are bad. Generalizing is a mistake.

I can be reached at the number on the first page which is my school number, if and when there is an actual need/desire to investigate their work.

Respectfully,

Lucinda A. Timpanelli, Board Chairman
Trumbull Public Schools

Thank You

DEAR CHIEF LOMBARDO,

WORDS CAN'T EXPRESS
JUST HOW DEEPLY
YOUR LOVE AND SUPPORT
HAS BEEN APPRECIATED.

THANK YOU TO YOU AND THE OFFICERS INVOLVED FOR THE MOTORCYCLE ESCORT FOR MY HUSBAND'S FUNERAL. WE ALSO APPRECIATE THE FRUIT BASKET SENT TO OUR FAMILY. IT WAS VERY KIND OF YOU AND THE DEPARTMENT.

SINCERELY,
ALICE TARGOWSKI + FAMILY

Vivian Munoz

From: Michael Lombardo
Sent: Friday, August 7, 2020 1:44 PM
To: +Police Department
Cc: Vicki A. Tesoro; Raymond Baldwin
Subject: Tropical Storm Isaias

All Personnel:

Since Tuesday afternoon, when tropical storm Isaias arrived the Department has been dealing with the aftermath of road closures, power outages, house fires and continuous calls for services. I want to begin by thanking the many supervisors, officers and dispatchers who worked the afternoon and night during the height of the storm. Multiple officers were needed to answer the constant calls for wires down, trees down and a variety of other service calls. Closing roads fully or partially was required at more than 100 locations throughout town and we have returned to many of them since.

Now that we are several days from the storm the impact is still being felt in the community and well beyond as many of you who live in other communities can attest to.

I have heard nothing but positive feedback about the manner in which each of you responded and how helpful you were to those in need.

Your level of professionalism and high level of performance is clearly a testament to your dedication to serve and protect.

I thank all of you for your continuing efforts during this difficult time, aiding many residents while each of you may have the same issues at your own homes.

Once again, thank you.

Michael Lombardo
Chief of Police
Trumbull Police Department

Pam's
COOKIES
COOKIES
FOR COPS
Buy one cookie, we
donate one cookie to
Trumbull Police
@Trumbull Farmers Market
June 25 or July 2nd

Pam's
COOKIES
COOKIES
FOR COPS
Buy one cookie, we
donate one cookie to
Trumbull Police
@Trumbull Farmers Market
June 25 or July 2nd

Apple-Peanut Butter
DOG COOKIES
Ingredients: Whole Grain Rolled Oats, Unsweetened Applesauce (Apples, Water, Vitamin C), Natural Peanut Butter (Roasted Peanuts, Sugar, Palm Oil, Salt), Egg, Cinnamon
CONTAINS: Rolled Oats, Peanuts, Palm Oil
KEEP REFRIGERATED TO STAY FRESH LONGER
Made in a Cottage Food Operation that is not subject to Routine Government Food Safety
NET WT: 6.9 oz (195.6 g)
Pam's Cookies, 31 W Orland, Milford, CT
203.767.0175, pamscookies4u@gmail.com

COMMISSION

From the Morello family
Trumbull Residents
For 25 years!
Thank You!

To the officers & team
at TRUMBULL P.D.

Thank you so much for
all you do! Please, let
us know if we can do anything
for you. Your dedication and
service during this challenging
time hasn't gone unnoticed.
Sincerely Lisa Morello

Commission

Amazon Music Unlimited | (8) Trumbull Police Department | (8) Trumbull Police Department

facebook.com/trumbullpolice/notifications/?section=activity_feed&subsection=mention&ref=notif&target_story=S%3A_I1466617530271623%3A2675582246041806

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Look-up CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Not

Trumbull Police Department | Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | **Notifications** | More | Edit Page Info | Settings 6 | Help

Activity

Reviews and Recommendations

Check-ins

Mentions

Shares (28)

Requests

Promote Page

Invite Friends

Share Page

Get Started With Automated Ads

Get personalized ads that adjust over time to help you get better results

Get Started

Reach More People Nearby

Set your location and reach potential customers in your area

Bridges by EPOCH at Trumbull

3 hrs

#BridgesByEPOCHAtTrumbull delivered freshly made lunch to the men and women of the Trumbull Police Department. 😄 Our very own talented #Dining Services Director, Gary Seri, prepared it. On the menu? Mouthwatering pasta and meatballs and lemon chicken! 😋 It was such a wonderful moment - Gary couldn't help but pull down his mask for a quick smile and snap!

Chat

Bridges.jpg

The reason why I baked these cookies for you guys is because you have done everything good around our town and I really appreciate you guys keeping us safe. You guys are true heroes.

- Michael Buchta

Commission

Amazon Music Unlimited · S | (8) Trumbull Police Department

facebook.com/trumbullpolice/inbox/?mailbox_id=144395192273996&selected_item_id=1624592576

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Trumbull Police Department | Vivian | Home | Create

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Messages | Main

All Messages
Messenger
Instagram Direct
Comments & More
Facebook
Instagram
Automated Responses

Colonese Greene — Thu
You: This account is NOT monitor

Glonanne Lagnese — Mon
You: Thank you for your message

Kim Wuebber Schneider — Mon

Debra J Coz — Mon
You: Thank you for your kind

Jenny Hodny Duffy — Jul 2
You: This account is NOT monitor

LeeAnn Anita — Jul 1
LeeAnn sent a video.

Melissa Svindland — Jul 1
You: You are welcome

Colonese Greene
Assign Conversation
Move to Done

THU 3 05 PM

💙💙💙 Dear Police Officers, you can't hear us right now because of all the noise, but there are millions of Americans who appreciate you, support you and thank you for your service 💙💙💙

Write a reply...

Colonese Gre

About
Add details about people, I information. Only people w Page can see added detail
Add Details
Facebook
No public information avail

Labels
Add Label
Suggested Labels
New Customer
Important
Today's Date (7/1

Activity
Keep track of important cu

Commission

(1) Trumbull Police Department

facebook.com/trumbullpolice/inbox/?mailbox_id=1443951922739968selected_item_id=2690461

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Look-up CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Notary Public Licen...

Trumbull Police Department

Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | Notifications 6 | More | Edit Page Info | Settings | Help

Messages | Main

All Messages

Messenger

Instagram Direct

Comments & More

Facebook

Instagram

Automated Responses

Check Unread Messages

2 unread messages are waiting for you. Take a moment to review or reply

View Messages

Colonese Greene and are waiting for a response

Gina Donnarummo — Sat
Gina sent a photo

Colonese Greene — Fri

Glonanne Lagnese — Jul 6
You: Thank you for your message

Kim Wuebber Schneider — Jul 6

Gina Donnarummo
Assign Conversation

Move to Done

SAT 7:04 PM

I just wanted to take a moment to thank the police officers who have been at the 111 crossing by the trail. This is such a dangerous spot and I felt safe today crossing twice.

This account is NOT monitored 24/7. If this is an emergency, call 911. If you wish to make a report please call 203-261-3665

Compiaints/investigations will not be processed through this message

We will respond to your message as quickly as possible. Thank you.

Gina Donnarummo

About

Add details about people like ... information. Only people who ma... Page can see added details

Add Details

Facebook

Liked since Jul 11, 2020

Works at Immaculate High Sc...

Labels | Man...

Add Label

Suggested Labels

New Customer

Important

Today's Date (7/13)

Activity

10:26
7/13/2

(1) Trumbull Police Department

facebook.com/trumbullpolice/inbox/?mailbox_id=1443951922739968selected_item_id=26904611

Apps | Phone List – Town o... | Home - Trumbull, C... | PowerDMS Login | Administrative – Tru... | Case Look-up CT Ju... | DESPP Contact Us | Wells Fargo | Account Information | Notary Public Lice

Trumbull Police Department

Vivian | Home | Create

Page | Inbox | COVID-19 | Manage Jobs | Notifications | More | Edit Page Info | Settings | Help

Messages | Main

- All Messages
- Messenger
- Instagram Direct
- Comments & More
- Facebook
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- Automated Responses

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2 unread messages are waiting for you. Take a moment to review or reply

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Colonese Greene and are waiting for a response

Gina Donnarumma — Sat
Gina sent a photo

Colonese Greene — Fri

Glorianne Lagnese — Jul 6
You: Thank you for your message.

Kim Wuebber Schneider — Jul 6

Gina Donnarumma
Assign Conversation

Move to Done

261-3665

Complaints/investigations will not be processed through this message.

We will respond to your message as quickly as possible. Thank you

Gina Donnarum

About

Add details about people, like information. Only people who Page can see added details

Add Details

Facebook

Liked since Jul 11, 2020

Works at Immaculate Hig

Labels

Add Label

Suggested Labels

- New Customer
- Important
- Today's Date (7/13)

Activity

_0mmS8ton

just a little note

July 20

Dear Trumbull Police Department,
We wanted to take a moment to thank all of you for your service and sacrifice. We pray for you daily. Many blessings. May God + Sarah Since

Commission

City of Milford, Connecticut

(Founded 1639)

POLICE DEPARTMENT

430 Boston Post Road - Milford, CT 06460-2570
Telephone (203) 878-6551

Keith L. Mello
Chief of Police

July 8, 2020

RECEIVED
JUL 13 2020
BY:

Chief Michael Lombardo
Trumbull Police Department
158 Edison Rd
Trumbull CT 06611

Dear Chief Lombardo,

On June 18, 2020, the Connecticut Police Officers Standards and Training Council (POST) voted to establish a committee to create a comprehensive Use of Force Policy for all CT Municipal Law Enforcement Officers. This revised policy will protect our communities and provide critical guidance to our police officers.

We are honored and grateful that you have agreed to serve on this important committee. I look forward to working with you on this project and I thank you in advance for your contributions.

Sincerely,

Keith L. Mello
Chief of Police, City of Milford
Chairman, Police Officers Standards and Training Council

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Wednesday, July 15, 2020 1:25 PM
To: Leigh Goodman
Cc: Vivian Munoz
Subject: RE: Commendation

Dear Leigh:

Thank you for once again contacting me with this type of news. I will see who the officer was and add your email to his or her personnel file.

Thanks again.

Michael Lombardo
Chief of Police
Trumbull Police Department

From: Leigh Goodman <lgoodman@trumbull-ct.gov>
Sent: Tuesday, July 14, 2020 5:35 PM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>; Timothy Fedor <tfedor@trumbull-ct.gov>
Subject: Commendation

Chief,

I am writing to commend the Officers involved in working the cardiac arrest on 7/12 at Hampton Road. The EMT on the call came to see me to tell me they were so helpful and professional with very appropriate use of HEPA filter, PPE etc. Please extend our thanks to them for their professionalism on this call and for all their support in general.

We truly appreciate their efforts. Good job by all.

Thanks you,
Leigh

Leigh Goodman
Town of Trumbull
Director of Emergency Medical Services
Paramedic, EMS-I

lgoodman@trumbull-ct.gov

Office: 203 452 5079
Mobile: 203 690 2427

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copies in any form immediately. Receipt by anyone other than the named recipient(s) is not a waiver of any attorney-client, work product, or other applicable privilege.

Commission

Driscoll
Silljamaki

WAKELEE MEMORIAL
FUNERAL HOME, LLC

July 13, 2020

Michael Lombardo
Chief of Police
Trumbull Police Department
158 Edison Road
Trumbull, CT 06611

Dear Chief Lombardo:

I am writing to you with sincere gratitude for the exemplary traffic control provided for the funeral service of Atty. Thomas J. Monks, Trumbull Fire Commissioner, on July 9, 2020.

At age 59, Atty. Monks passed unexpectedly in his sleep on July 3, 2020. Needless to say his wife, his 5 children and the entire community were devastated.

In addition to processing this tremendous loss, the family was burdened with Covid-19 protocol and the logistics of traveling from the funeral home in Ansonia, to the church in Bridgeport and then to Derby for interment.

The Trumbull Motor Officers, assisted by the Bridgeport Police, provided invaluable assistance to the funeral cortege by stopping traffic at every intersection in the city, as well as every exit and entrance ramp of Rte. 8/25, allowing the procession to respectfully pass safely and uninterrupted.

Driving the lead vehicle, I'd look in the rear view mirror to see nearly 100 cars escorted by fire and police vehicles with strobes ablaze – a scene almost surreal and out of the movies! In 34 years of funeral service, I have never experienced greater assistance.

On behalf of myself and the Monks Family, kindly extended our sincere appreciation to your entire department for their time, effort and respect extended to Atty. Monks and his family in their time of grief.

Respectfully,

John Stanley Zaleski
Licensed Funeral Director

167 WAKELEE AVENUE, ANSONIA, CT 06401-1143 P • 203-734-1490 F • 203-735-4467
WWW.WAKELEEMEMORIAL.COM

Commission

14th July '20

From: Amelia Rogers
560 Yale Avenue
Unit 293
Meriden, CT 06450

To: Chief Michael Lombardo & Trumbull Police
158 Edison Road
Trumbull, CT 06611

Dear Chief Lombardo & T.P.D.,

Thank you so much for all you do on a daily basis and for everything you are doing throughout the COVID-19 pandemic!

Your service, dedication, and sacrifices should never go unnoticed! I am truly grateful for everything you all do!

Please give ear scratches and belly rubs to your K9's. They are truly appreciated by me as well!

I am a proud supporter of all LEO's with 2 feet and 4 paws! I got your six!

God bless you all! Stay safe! Be well!

With appreciation & gratitude,

Amelia Rogers

Commission

7-23-20

Dear Police Chief Michael Lombardo,

Please extend my sincere gratitude to all the officers who responded to my call on July 21, 2020. I especially appreciate Officer Robert Lee and Officer Matthew Corbit. Their compassion, help and professionalism during an extremely difficult and stressful time for me was amazing.

Having Officers that take the time to make people in need feel they are cared about is an asset to the Trumbull Police Dept.

With sincere thanks & appreciation,

Mrs Barbara Begg

RECEIVED
JUL 28 2020
BY:

Commission

Vivian Munoz

From: Andrea Kern <amkern416@gmail.com>
Sent: Thursday, July 23, 2020 1:42 PM
To: Vivian Munoz
Subject: Compliment - please read and circulate

For the Trumbull Chief of Police and appropriate others:

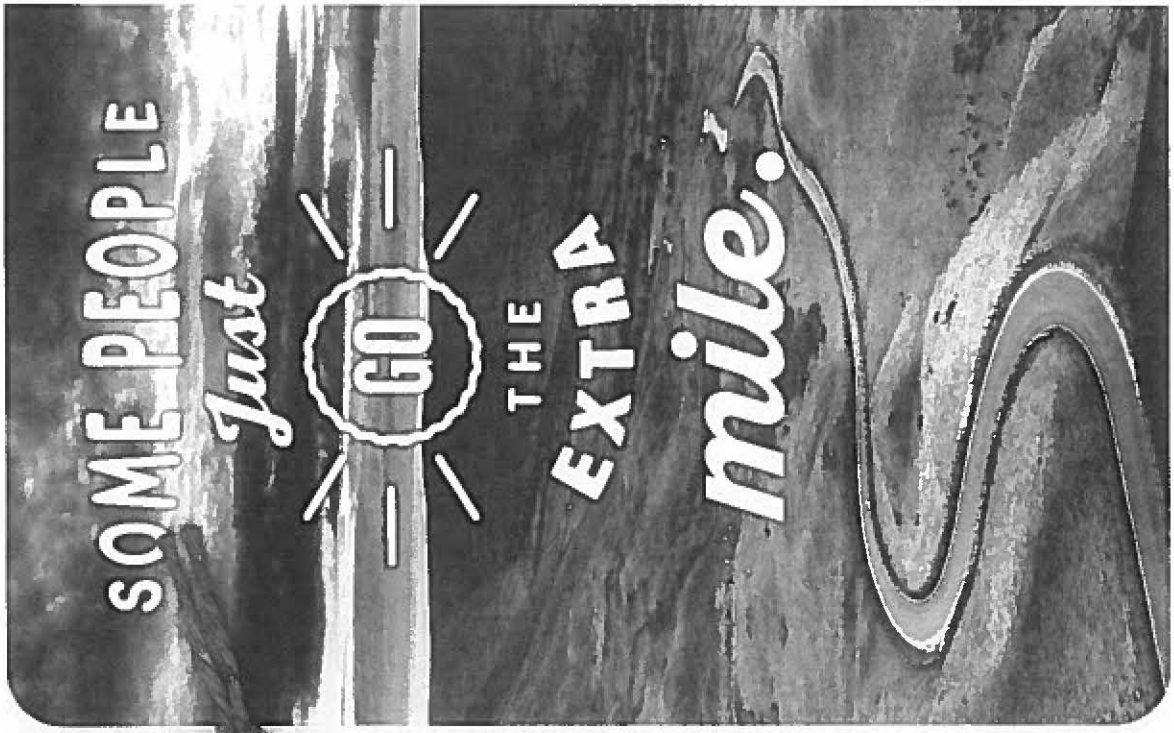
On Saturday, May 30, 2020 I called upon the Trumbull Police to assist me in locating my dearest friend who was not responding to my text or phone messages. Officer Teresa _____ and her partner discovered that Barbara Abraham (48 Craig Lane, Trumbull) had died in her sleep.

I did write down Teresa's last name and badge number but cannot locate it. With all the distress that followed and now the time that has elapsed, I do not want to wait any longer to compliment and acknowledge Teresa for being so professional and compassionate in a delicate and difficult situation. I hope that by sending this email it will find it's way to both proper channels for appropriate, official praise and also to Teresa. I believe I thanked her but I could never thank her enough!

Should you have additional questions, please do not hesitate to contact me via either return email or phone:203.259.3477.

Thank You,
Andrea M. Kern
947 Galloping Hill Road
Fairfield, CT 06824

Commission



TO: Brian Weir + Tim Fedor

Dear officer Fedor + SGT Weir,
I just wanted to give you a little something to you both to show you still mean so much. You both are amazing influencers + I look up to both of you to this day still. You both showed me how to be a better person + adapt and overcome any situation. Even though I havent visited in a while I never forgot about you both. Thank you for everything you do for the community + how you both impacted my life in such a better way.

BTW: sorry my handwritting sucks. I wrote this in the car!

- From Dobbs

— THANKS —
FOR BEING
ONE
OF THEM.

Lt Weir
Off. Fedor

Commission

Vivian Munoz

From: Michael Lombardo
Sent: Wednesday, July 22, 2020 10:28 AM
To: Vivian Munoz
Subject: RE: Thank You Message

Very nice. Please post along with the other remarkable comments about our officers. Thank you

Michael Lombardo
Chief of Police
Trumbull Police Department

From: Vivian Munoz <vmunoz@trumbull-ct.gov>
Sent: Wednesday, July 22, 2020 10:24 AM
To: Michael Lombardo <mlombardo@trumbull-ct.gov>
Subject: Thank You Message

Chief-

I received a call from Trumbull resident June Irolla, 203-459-2823. She wanted to let the Trumbull Police officers know that they are all doing a great job and is very proud of them all. With everything that is occurring she finds it sad and again she's proud of the Trumbull Police officers and would like them all to know.

Thank you.

Vivian

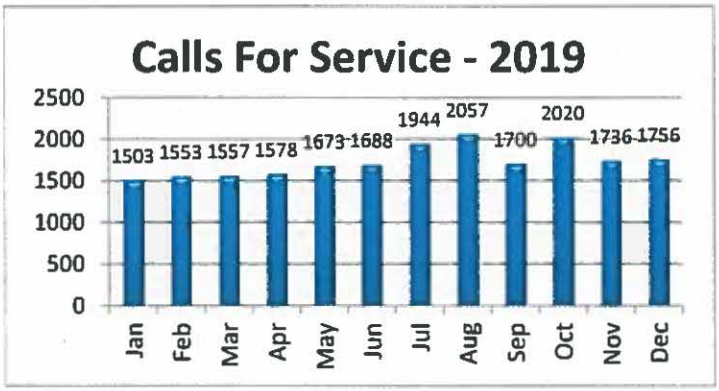
Vivian S. Munoz
Executive Assistant to Chief of Police
Trumbull Police Department
158 Edison Road
Trumbull, CT 06611
Tel: 203.261.3665 ext. 3240
Fax: 203.452.5162
vmunoz@trumbull-ct.gov

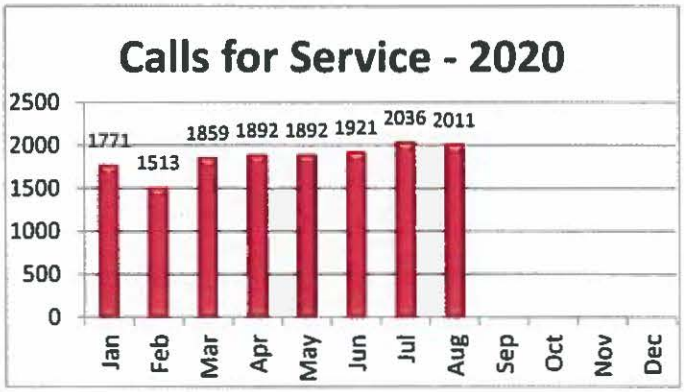
CONFIDENTIALITY NOTICE
The information in this e-mail and any attachments is strictly confidential. It is intended solely for the attention and use of the named addressee(s). If you are not the intended recipient, please notify the sender

Trumbull Police Department
2020 Calls-For-Service

TOTAL CALLS FOR SERVICE

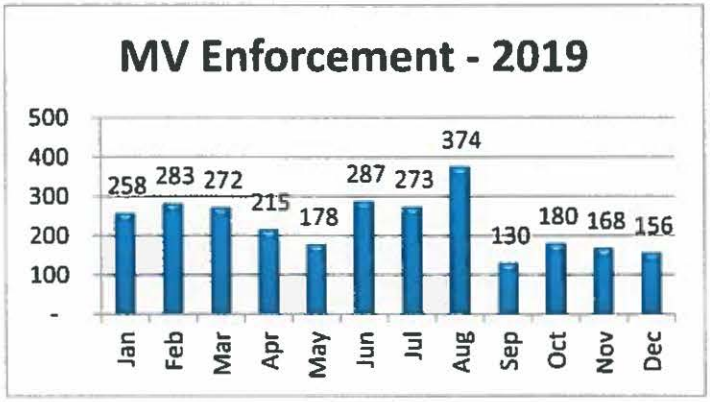
Calls for Service	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2019	1503	1553	1557	1578	1673	1688	1944	2057	1700	2020	1736	1756	20,765
2020	1771	1513	1859	1892	1892	1921	2036	2011					14,895

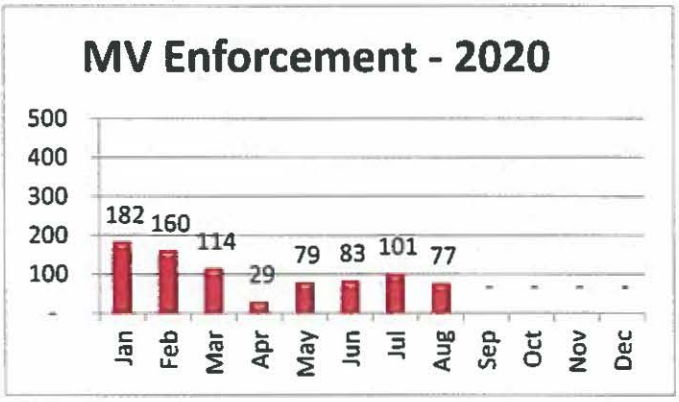




Motor Vehicle Enforcement

MV Enforcement	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
MV Warnings - 2019	99	137	137	78	85	137	135	125	50	110	98	67	1,258
2020	89	68	58	4	41	47	68	41					416
DUI Arrests - 2019	3	2	6	2	2	2	1	1	1	0	5	3	28
2020	1	0	1	3	0	1	2	1					9
MV Complaints - 2019	13	22	20	21	29	40	29	37	31	24	25	18	309
2020	24	18	19	20	31	32	27	32					203
MV Arrests - 2019	143	122	109	114	62	108	108	211	48	46	40	68	1,179
2020	68	74	36	2	7	3	4	3					197
MV Totals -2019	258	283	272	215	178	287	273	374	130	180	168	156	2,774
2020	182	160	114	29	79	83	101	77	-	-	-	-	825

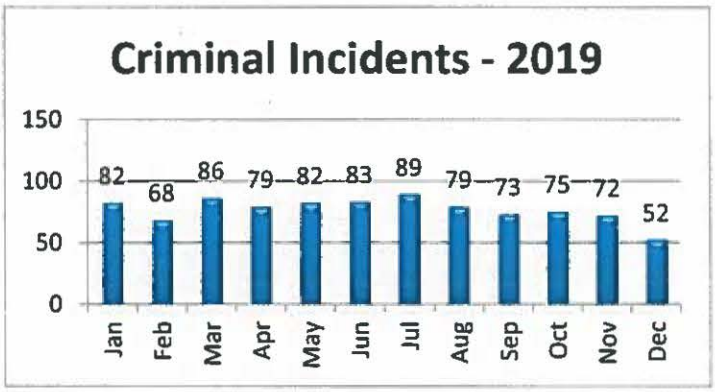




CRIMINAL INCIDENTS

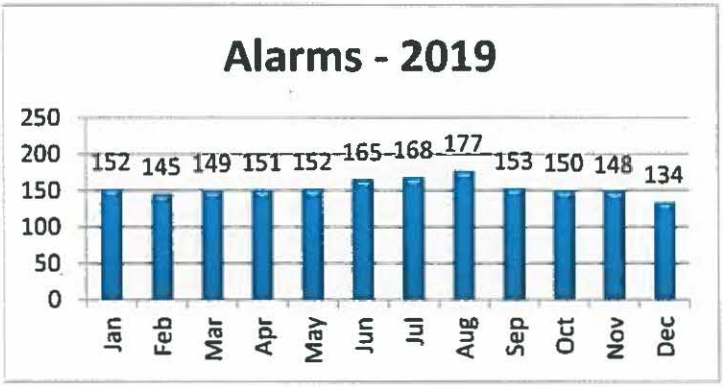
Trumbull Police Department
2020 Calls-For-Service

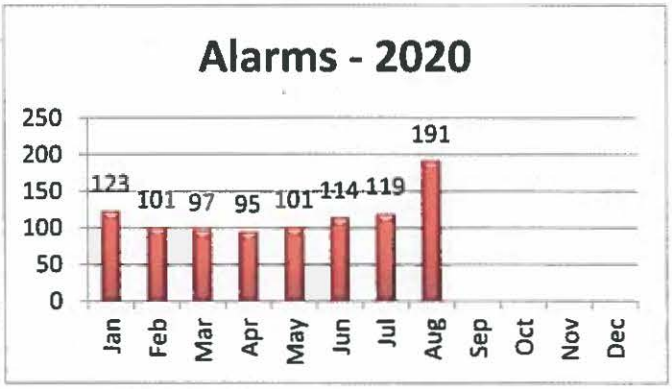
Criminal Activity: Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Larceny / Shoplifting - 2019	68	56	68	64	69	61	67	61	55	62	59	35	725
2020	60	59	50	24	56	52	68	73					442
MV Theft / Attempt - 2019	0	1	3	1	3	4	3	1	3	0	3	1	23
2020	1	0	3	4	3	5	7	8					31
Burglary / Attempt - 2019	3	2	1	7	5	3	4	8	6	2	3	3	47
2020	1	2	1	1	2	3	3	4					17
Theft From MV - 2019	11	9	14	7	5	15	15	9	9	11	7	13	125
2020	14	6	18	17	45	24	46	31					201
Criminal Totals - 2019	82	68	86	79	82	83	89	79	73	75	72	52	920
2020	76	67	72	46	106	84	124	116	0	0	0	0	691



ALARM RESPONSE SUMMARY

Total Alarms	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2019	152	145	149	151	152	165	168	177	153	150	148	134	1,844
2020	123	101	97	95	101	114	119	191					941





Trumbull Police Department

Incident Statistics Report

08/01/2020 00:00 Thru 08/31/2020 23:59

Call Type Description	Total for Period
911 HANG UP	14
ACCIDENT - EVADING	12
ACCIDENT - MV INJ	7
ACCIDENT - MV PROP DAM	42
ACCIDENT - MV VS PEDESTRIAN	1
ACCIDENT - NO INV	2
ACCIDENT PRIVATE PROPERTY	15
ALARM - BURGLARY	39
ALARM - FALSE	127
ALARM - FIRE	41
ALARM - HOLD UP	2
ALARM - MEDICAL	9
ALARM - MV	1
ALARM - OTHER	1
ALARM - TOWN	28
ANIMAL BITE	5
ANIMAL COMPLAINT	15
ASSAULT - HANDS	3
ASSIST FD	36
ASSIST MOTORIST	12
ASSIST MOTORIST - LOCKOUT	9
ASSIST NON-RESIDENT	4
ASSIST OTHER AGENCY	18
ASSIST OTHER AGENCY (WITH K-9)	2
ASSIST RESIDENT	13
Attempted Suicide	1
BREACH OF PEACE	6
BUILDING/LOCATION CHECK	380
BURGLARY - RESIDENTIAL	3
CAR SEAT INST	3
CELL BLOCK CHECK	31
CIVIL MATTER - NO INVESTIGATION	2
COMMUNICATION ABUSE	1
COMMUNITY POLICING	11
DEATH - NOT SUSP	1
DISPUTE - NEIGHBOR	5
DISPUTE - VERBAL	9
DOMESTIC - VERBAL	5
DOMESTIC - VIOL OF COURT ORD	1

Trumbull Police Department

Incident Statistics Report

08/01/2020 00:00 Thru 08/31/2020 23:59

Call Type Description	Total for Period
DOMESTIC - VIOLENT	7
DUI ARREST	1
DUMPING / LITTERING COMPLAINT	5
ESCORT - FUNERAL	7
ESCORT - MONEY	16
FIGHT - NO WEAPONS	1
FINGERPRINTED	19
FIRE - BRUSH FIRE	1
FIRE - CO ALARM	8
FIRE - HAZMAT	2
FIRE - SMOKE INV	1
FIRE - STRUCTURE FIRE	3
FIREWORKS	9
HARASSMENT	8
IDENTITY THEFT	1
INCIDENT UNFOUNDED	2
INTERFERING WITH POLICE	1
LANDLORD TENNANT DISPUTE	1
LARCENY	16
LARCENY - BAD CHECK	1
LARCENY - FRAUD	8
LARCENY FROM MV	31
LOITERING	1
MEDICAL CALL	140
MISSING PERSON - FOUND	2
MV ARREST	3
MV COMPLAINT	31
MV DAMAGE	7
MV RECOVERED STOLEN MV	2
MV THEFT	8
MV VERBAL WARNING	40
MV WARNING	1
NOISE COMP	35
OPEN DOOR/WINDOW	5
OUT OF TOWN JURISDICTION	2
OVERDOSE	1
PARKING VIOLATIONS	63
PHONE HARASSMENT	1
PISTOL PERMIT	48

Trumbull Police Department

Incident Statistics Report

08/01/2020 00:00 Thru 08/31/2020 23:59

Call Type Description	Total for Period
POLICE ADMIN / INFORMATION	9
PRESCRIPTION DRUG BIN	2
PROPERTY - LOST / FOUND	17
PUBLIC HAZARD	56
PURSE THEFT	1
PURSUIT	1
RADAR DETAIL	1
RISK OF INJURY TO MINOR	1
ROAD JOB CAR ASSIGNMENT	23
ROAD/TRAFFIC HAZARD	73
SCUBA - TRAINING	2
SELECTIVE ENFORCEMENT	30
SEXUAL ASSAULT	2
SHOPLIFTING	17
SOLICITING COMP	2
SPEED TRAILER	4
STRAY DOG	7
SUSPICIOUS ITEM	10
SUSPICIOUS MV	47
SUSPICIOUS NOISE	9
SUSPICIOUS PERSON	46
TAMPERING WITH M/V	3
THEFT OF PLATES	1
THREATENING	4
TIPSOFT	1
TPAUD	2
TRAFFIC CONTROL	1
TRESPASSING	1
UNWANTED PERSONS	6
VANDALISM - ACTIVE	3
VANDALISM - MAILBOX	1
VANDALISM TO MV	4
VENDOR PERMIT/BACKGROUND CHECK	2
WEAPONS - SAFE KEEPING	1
WELFARE CHECK	26
WIRES DOWN/BURNING	129
WPOT - WANTED PERSON OTHER TOWN	1
Total:	2002

Trumbull Police Department

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 29 Anderson, Steven C.

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/16/2020	23:00	92422	00158 Edison Road		430	Pinzon , Eimar	0690
			53a-125b	LARCENY 6TH DEG			

1 Arrest(s) for Officer 29 StevenC Anderson

Officer: 96 Bachiocchi, Edward

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/02/2020	06:30	92406	Bridgeport		520	Iucci , Joseph Victor	
			53a-61(a)(1)	ASSAULT 3RD DEG-PHYSICL INJURY			
		92406					
			53a-64cc	STRANGULTN/SUFFOCATE-3RD DEGRE			
		92406					
			53a-62	THREATENING 2ND DEG			
		92406					
			53a-182	DISORDERLY CONDUCT			

1 Arrest(s) for Officer 96 Edward Bachiocchi

Officer: 59 Ball, Sara

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/16/2020	20:24	92423	00845 DANIELS FARM RD		120	Ball , Sara	
			53a-182	DISORDERLY CONDUCT			

1 Arrest(s) for Officer 59 Sara Ball

Officer: 40 Bardos, Samantha

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	14:02	92413	00888 White Plains RD		420	Bardos , Samantha	
			53a-181	BREACH OF PEACE 2ND DEG			
08/07/2020	15:10	92412	00888 White Plains RD		420	McEnaney , Timothy J	
			53a-181	BREACH OF PEACE 2ND DEG			
		92412					
			53a-61	ASSAULT 3RD DEG			
08/16/2020	12:21	92420	05065 MAIN ST		310	Bardos , Samantha	
			53a-125a	LARCENY 5TH DEG			

3 Arrest(s) for Officer 40 Samantha Bardos

Officer: 71 Brown, Kelly

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/15/2020	23:30	91138	00003 BURTON AVE		420	Brown , Kelly	
			53a-181	BREACH OF PEACE 2ND DEG			

1 Arrest(s) for Officer 71 Kelly Brown

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 55 Corbit, Matthew

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/10/2020	19:04	92362	05065 MAIN ST		310	Corbit , Matthew	
			53a-223a	VIO STDING CRIM PROTECTIVE ORD			
		92362					
			53a-181	BREACH OF PEACE 2ND DEG			
08/17/2020	15:05	91550	05065 MAIN ST		310	Corbit , Matthew	
			53a-125a	LARCENY 5TH DEG			
08/19/2020	10:20	92426	GA2 Courthouse		220	Corbit , Matthew	
			53a-124	LARCENY 3RD DEG			
08/31/2020	15:36	92435	Bridgeport Hospital		430	Corbit , Matthew	
			14-213b	ILL OPN MV WO MINIMUM INSURNCE			

4 Arrest(s) for Officer 55 Matthew Corbit

Officer: 210 Dellabianca, Lynn

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/25/2020	16:15	92434			310	Dellabianca , Lynn	
			53-247(a)	CRUELTY TO ANIMALS			

1 Arrest(s) for Officer 210 Lynn Dellabianca

Officer: 90 Dzurenda, Thomas

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/18/2020	11:15	91641	Trumbull PD		110	Silva , Daniel	2600
			14-12(a)*	OPERATE/PARKS UNREGISTRD MV			
		91641					
			14-147(c)	IMPROPER USE-MARKER/LIC/RGSTR			
		91641					
			38a-371	FLR TO INSURE PRIVATE MTR VEH			
		91641					
			14-215	ILL OPN MV UNDER SUSPENSION			

1 Arrest(s) for Officer 90 Thomas Dzurenda

Officer: 65 Federowicz, Brian

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	03:00	92409	Rt 108/Penney AVE		530	Van Fleet , Nicholas	
			14-12(a)*	OPERATE/PARKS UNREGISTRD MV			
		92409					
			14-227a	ILL OPN MV UNDER INFL ALC/DRUG			

1 Arrest(s) for Officer 65 Brian Federowicz

Officer: 91 Fortunato, Samantha

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/03/2020	22:14	86069	6 Cambridge Drive		420		
			29-357	ILL SALE FIREWORKS WO PERMIT			

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 91 Fortunato, Samantha

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/03/2020	22:14	87570	6 Cambridge Drive		420	Fortunato , Samantha	
			29-357	ILL SALE FIREWORKS WO PERMIT			

2 Arrest(s) for Officer 91 Samantha Fortunato

Officer: 28 Frazier, Abigail

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/01/2020	14:45	92405	Fairfield Avenue/Alfred Avenue		310	Rampino , Christopher	
			53a-125b	LARCENY 6TH DEG			

1 Arrest(s) for Officer 28 Abigail Frazier

Officer: 75 Laaser, Derek

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/10/2020	19:00	92416	05065 Main ST		310	Laaser , Derek	
			53a-181	BREACH OF PEACE 2ND DEG			
08/10/2020	21:00	92415	05065 Main ST		310	Laaser , Derek	
			53a-181	BREACH OF PEACE 2ND DEG			
08/14/2020	17:00	92418	05065 MAIN ST		310	Laaser , Derek	
			53a-181	BREACH OF PEACE 2ND DEG			
08/16/2020	17:35	89150	05065 MAIN ST		310	Laaser , Derek	
			53a-167a	INTERFERE WITH OFFCR/RESISTING			

4 Arrest(s) for Officer 75 Derek Laaser

Officer: 35 Leos, James G

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/29/2020	15:50	92431	Partridge LN		510	Leos , James G	
			53-21(a)(1)	RISK OF INJURY TO CHILD			
08/30/2020	10:00	92432	00158 EDISON RD		420	Leos , James G	
			53a-60	ASSAULT 2ND DEG			
		92432					
			53a-62	THREATENING 2ND DEG			
		92432					
			53a-182	DISORDERLY CONDUCT			
08/30/2020	14:45	92433	05065 MAIN ST		310	Leos , James G	
			53a-125a	LARCENY 5TH DEG			

3 Arrest(s) for Officer 35 James G Leos

Officer: 47 Massa, Theresa

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/07/2020	14:04	92411	05065 main street		310	Massa , Theresa	
			53a-61	ASSAULT 3RD DEG			
		92411					
			53a-117	CRIMINAL MISCHIEF 3RD DEG			
08/07/2020	15:00	92410	5065 main street		310	Massa , Theresa	
			53a-117	CRIMINAL MISCHIEF 3RD DEG			

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 47 Massa, Theresa

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)	Grid	Off2	UCR
08/07/2020	15:00	92410	5065 main street	310	Massa , Theresa	
			53a-61 ASSAULT 3RD DEG			

2 Arrest(s) for Officer 47 Theresa Massa

Officer: 92 McEnaney, Timothy J.

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)	Grid	Off2	UCR
08/05/2020	08:30	92305	00120 CORPORATE DR	110	McEnaney , Timothy J	
			14-215 ILL OPN MV UNDER SUSPENSION			

1 Arrest(s) for Officer 92 TimothyJ McEnaney

Officer: 79 Pinzon, Eimar

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)	Grid	Off2	UCR
08/01/2020	14:45	92405	Fairfield Avenue/Alfred Avenue	310	Bardos , Samantha	
			53a-125b LARCENY 6TH DEG			
08/24/2020	21:00	90993	158 Edison Road	310	Pinzon , Eimar	
			53a-125a LARCENY 5TH DEG			

2 Arrest(s) for Officer 79 Eimar Pinzon

Officer: 88 Pysz, Robert

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)	Grid	Off2	UCR
08/18/2020	13:55	92364	Trumbull Police Department	310	Pysz , Robert	
			53a-125b LARCENY 6TH DEG			

1 Arrest(s) for Officer 88 Robert Pysz

Officer: 60 Rampino, Christopher

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)	Grid	Off2	UCR
08/15/2020	14:50	92419	00158 Edison Road	110	Rampino , Christopher	
			42-135a NOTICES IN SALES AGREEMENT			
		92419				
			20-427(b) VIO HOME IMPROVE CONTRACT REQS			

1 Arrest(s) for Officer 60 Christopher Rampino

Officer: 77 Ruiz, Jean

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)	Grid	Off2	UCR
08/03/2020	10:45	87135	00158 Edison Road	220	Ruiz , Jean	
			53a-32 VIOLATION OF PROBATION			
08/03/2020	15:31	92408	05065 Main Street	320	Ruiz , Jean	
			53a-181 BREACH OF PEACE 2ND DEG			
08/04/2020	11:00	87162	00158 EDISON RD	320	Ruiz , Jean	
			53a-32 VIOLATION OF PROBATION			
		87162		220	Ruiz , Jean	
			53a-32 VIOLATION OF PROBATION			

Arrest - All Officers

08/01/2020 00:00 Thru 08/31/2020 23:59

Officer: 77 Ruiz, Jean

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/04/2020	11:00	87162	158 edison road			Ruiz , Jean	
			53a-32	VIOLATION OF PROBATION			

5 Arrest(s) for Officer 77 Jean Ruiz

Officer: 89 Tantimonico, Ryan

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/16/2020	21:00	92421	00845 Daniels Farms Road		120	Dos Santos , Helder	
			53a-182	DISORDERLY CONDUCT			
		92421					
			53a-61	ASSAULT 3RD DEG			

1 Arrest(s) for Officer 89 Ryan Tantimonico

Officer: 97 Van Fleet, Nicholas

ARRESTS

Date	Time	Arrest-ID	Location and Charges (W = warrant)		Grid	Off2	UCR
08/22/2020	01:15	92427	00439 Church Hill Road		420	Iucci , Joseph Victor	
			53a-182	DISORDERLY CONDUCT			
		92427					
			53a-115	CRIMINAL MISCHIEF 1ST DEG			

1 Arrest(s) for Officer 97 Nicholas Van Fleet

Total Number of Arrests 38

POLICE DEPARTMENT
TOWN OF TRUMBULL
CONNECTICUT

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

RICHARD CARLSON

Trumbull K-9 Activity Report
(07/01/20 to 08/13/20)

K-9 Activity:

K-9 Rico

Case #20-13672 Assist other Agency K-9 Track.

K-9 Bane

Case #20-12163 K-9 Track
Case #20-12949 Building Search

July, Aug and Sept Training Schedule:

K-9 Rico

07/02/20 Training (Newtown)
07/28/20 Training (Newtown)
08/12/20 Training (Newtown)
08/27/20 Training (Newtown)
09/18/20 Training (TBD)
09/29/20 Training (TBD)

K-9 Bane

07/18/20 Training
07/26/20 Training
08/11/20 Training

POLICE DEPARTMENT
TOWN OF TRUMBULL
CONNECTICUT

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

KYLE SILJAMAKI
TRAFFIC UNIT

TRAFFIC COMPLAINTS / ISSUES
August 2020

Supplemental Information

There were 61 cases assigned to the Traffic Division during the month of August. These include but are not limited to:

2 MV Collisions Investigated
6 MV Complaints
30 MV Stops
3 Funeral Escorts
5 Car Seat Installations
2 Speed Trailer Locations
2 Speed Sign Locations

Submitted by: Ofc. Kyle Siljamaki
Date: September 1, 2020

POLICE DEPARTMENT
Town of Trumbull
158 Edison Road
Trumbull, CT 06611
(203) 261-3665 Fax (203) 452-5162

Kyle Siljamaki
Traffic Unit

To: Patrol Supervisors – ***Please Read at Line Up***
From: Ofc. K. Siljamaki
Auth: DC Scinto
Re: Traffic Issues/Complaints
Date: August 3, 2020

Sector 1
Speeding Vehicles – Main @ Regency Cir.
Stop Sign Violations – Plumb Creek Rd. @ Aspen Ln.

Sector 2
Speeding Vehicles – Lake Ave.

Sector 3
Speeding Vehicles – Chestnut Hill Rd.
Speeding Vehicles – Edison Rd.
Speeding Vehicles – Main St. @ Plymouth Ave.

Sector 4
Stop Sign Violations – Cobblers Hill Rd.

Sector 5
Speeding Vehicles – Huntington Rd.
Stop Sign Violations – Shelton Rd. / Huntington Tpke.

Check Town Parks for crowds (Social Distancing)
Check areas that have detours running through them

See 38 or 74 for handheld laser unit

Please have the Officer assigned to an enforcement detail log a case and forward a copy of the case to Traffic Division mailbox. Thank you.

Vivian Munoz

From: Leonard Scinto
Sent: Tuesday, September 1, 2020 10:16 AM
To: Vivian Munoz
Subject: FW: DUI Grant/Distracted Driving Grant - August

D.C. L. Scinto

Leonard Scinto
Deputy Chief of Police
Trumbull Police Department
158 Edison Road
Trumbull, CT 06611
Tel: 203.261.3665 ext. 3846
Fax: 203.452.5162
lscinto@trumbull-ct.gov

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From: Coleen Fitch <cfitch@trumbull-ct.gov>
Sent: Tuesday, September 1, 2020 8:29 AM
To: Leonard Scinto <lscinto@trumbull-ct.gov>
Subject: DUI Grant/Distracted Driving Grant - August

Good morning,

There is no grant activity for August.

We ARE restarting the DUI grant activity for September, in case anyone wanted to know that.

C

Coleen Fitch, Clerk
Traffic Division
Trumbull Police Department
203-452-3854 (direct line)

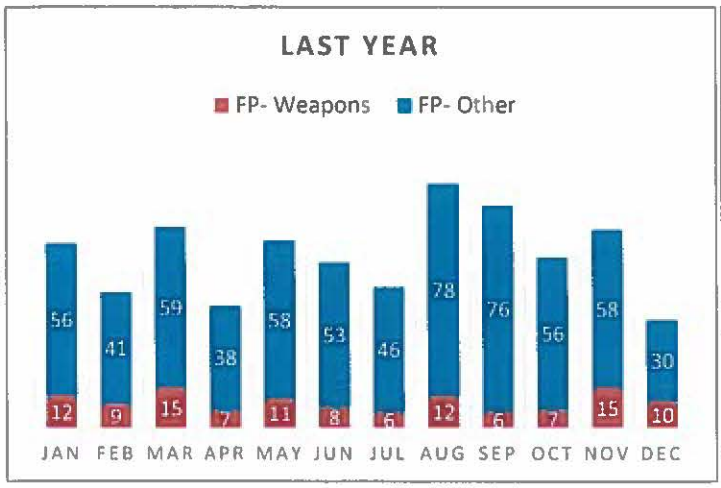
Trumbull Police Department
Detective Division Monthly Activity
August 2020

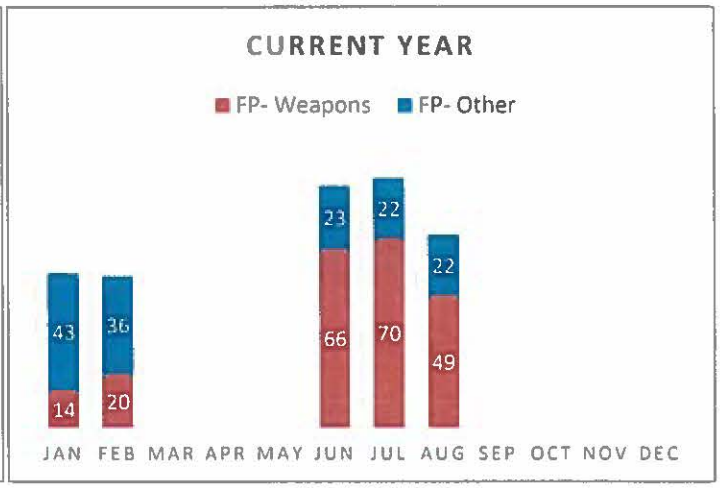
Investigations	New Cases Current Month	Cases Closed Current Month	All Open Cases
Arson			1
Assault			0
Auto Theft	2		3
Bias Crimes			0
Burglary: Residential			2
Burglary: Commercial			0
Counterfeiting			0
Criminal Mischief			1
Drug Investigation	1		3
Homicide/Suicide/DOA			3
Identity Thefts			0
Larceny			1
Larceny - Fraud	6	2	6
Larceny from MV			6
Missing Person			0
Robbery			0
Sexual Assault/Offenses	1		3
Threatening/Harassment			0
Other			1
Totals	10	2	30

WARRANT ACTIVITY

Arrest Warrant Applications	1
Arrest Warrants Served	2
Search Warrant Applications	1

FINGERPRINT CASES





TRUMBULL POLICE DEPARTMENT

DETECTIVE DIVISION
158 EDISON ROAD, TRUMBULL, CT 06611
(203) 261-3665 FAX (203) 452-3857

Brian Weir
Lieutenant

MONTHLY STATUS REPORT
(August 2020)

DB HIGHLIGHTS

*** Note: During the month of August 2020:

THIRTY-TWO (32) motor vehicles reported to have been entered.
SEVEN (7) vehicles were stolen.
SIX (6) of the 7 stolen vehicles were recovered.
ONE (1) juvenile **ARREST** and was in possession of several key fobs.
ALL OF THESE VEHICLES WERE LEFT UNLOCKED

Even though detectives have been working on these cases, many have not been officially assigned to a specific detective. These factors account for the low number of related cases shown below. ***

Investigations / Call Outs

Date	*Time*	*Location*	*Case*	*Incident Type*
5/26	18:23	Old Town Rd.	20-8664	Suspicious Activity

Complainant reported possible drug activity in the area. DB investigating. Case ACTIVE.

6/14	12:18	211 Fernwood Rd.	20-9879	Larceny from MV

Complainant/victim's unlocked car was entered where items and credit cards were stolen then used. DB investigated. Video surveillance showed the suspects wearing hoods and masks concealing their identity. No further leads. Case CLOSED on 8/17/20.

6/25	18:14	117 Meadowview Dr.	20-10590	Extortion

Complainant reported becoming in contact with someone over the internet (discord), and shared information/photos with this unknown person. The unknown person stated that they would share the information with others if money was not given to the unknown person. DB investigated, and served search warrants, however, no information was provided to further this case. Case CLOSED on 8/17/20.

Investigations / Call Outs

7/22 18:53 341 Shelton Rd. 20-12469 Larceny

TPD Patrol investigated a theft by a known party who was working at the residence. DB checked the items through a pawn shop database, and recovered one of the stolen items. Information was passed along to the investigating Patrol officer to apply for the arrest warrant.

7/31 7:46 38 Twitchgrass Rd. 20-13056 Larceny/Fraud

Complainant reported receiving a check to deposit into his account, to cash the check, and was told to purchase gift cards. The checks did not clear and the complainant suffered a loss from the fraudulent checks. DB investigating. Case ACTIVE.

7/31 7:57 27 Coventry Ln. 20-13057 MV Theft

Complaint reported their unlocked MV stolen overnight where the keys were left inside. Credit cards were later used. MV was later located and recovered on 8/11/20. Case ACTIVE.

8/4 11:47 TPD 20-13344 Assist Resident

Complaint reported their juvenile daughter received an inappropriate photo, via Snapchat, from an unknown individual. DB initiated this case, and is currently working on it. Case ACTIVE.

8/7 22:42 14 Frank St. 20-13821 Larceny – Fraud

Complainant reported several fraudulent transactions made to their account. DB investigating. Case ACTIVE.

8/9 10:01 427 Erwin St. 20-13918 MV Theft

Complainant's unlocked vehicle was stolen over night with the keys left inside. The victim's credit cards were illegally used. DB investigating. Case ACTIVE.

8/10 11:03 5065 Main St. 20-13970 Recovered Stolen MV

TPD DB located a stolen motor vehicle located at the Trumbull Mall. The vehicle was a 2020 Ford Explorer SUV white that was reported stolen out of NY. The vehicle was towed back to the TPD where New Castle (NY) Police Department detectives arrived and processed the vehicle. Case CLOSED on 8/10/20.

8/11 5:47 12 Old Farm Rd. 20-14018 MV Theft

Complainant parked their unlocked vehicle on the street and did not know if they left the keys inside. The complainant had CCTV footage that captured a light colored SUV drive up around 1:30 AM. The vehicle and had two individuals get out and look at the stolen vehicle. Bridgeport police later reported locating this vehicle. TPD detectives were notified by Bridgeport PD's Auto Theft Unit of a juvenile male in custody who was operating a stolen Mercedes out of Greenwich. The male had several sets of keys in his possession. TPD issued the 17 year old suspect a JV Summons to appear in court for the theft. Case CLOSED on 8/12/20.

Investigations / Call Outs

8/24 07:01 54 Plumtree Ln. 20-14736 Fraud-Checks
Complainant reported receiving a bad check for work that he had done. DB investigating. Case ACTIVE.

8/24 13:02 449 Booth Hill Rd. 20-14759 Larceny-Fraud
Complainant reported making a wire transfer from their banking account in response to a Craigslist ad, which turned to be fraudulent. Complainant was not able to obtain much information as to who received her money. DB investigating. Case ACTIVE.

Arrest Warrants Served

8/18 – Arrest Warrant Served - Op Unreg. MV, No Insurance, Suspended License, Misuse of Reg. – Gingell, Ian (DOB 04/10/1991), Released on PTA (Accident – MV INJURY – TPD case #19-5140).

8/19 – Habeas Corpus Arrest –Larc. 3rd. – Alamandy, Marc, (DOB 10/28/78) $500 bond. (Larceny– TPD case #19-10788).

Arrest Warrants Cleared by Detectives

8/18 – Arrest Warrant Served – No Insurance, Suspended License, Misuse of Registration, Operating Unregistered MV – Gingell, Ian, PTA. (Accident – MV INJ – TPD case #19-5140).

DB Investigations cleared by Arrest

8/12 - JV Summons - Larceny 2nd 53a-123. 20-14018 – 17 year old JV male, released to parent on PTA. (MV Theft – TPD case #20-14018).

8/15 – Arrest Warrant Served – Violation Home Improvement Contract, Notice in Sales Agreement – Guevara, Adrian Camilo (DOB 9/27/1980), $25,000 bond. (Larceny-Fraud – TPD case #20-1679).

Search Warrants Served

N/A

DB Arrest / PRAWN Warrant Detail

N/A

TRUMBULL POLICE DEPARTMENT

TRAINING DIVISION
158 EDISON ROAD, TRUMBULL, CT 06611
(203) 261-3665 X243 FAX (203) 452-3857

Timothy Fedor
Training Officer

August 2020 Training Report

TRAINING

Training Course	Location	Date	Officer Assigned
SRO; One Day Training Program	New Britain PD	8/3/20	Off. Duva Off. Bartosik Off. Federowicz Off. Jimenez
Emergency Medical Responder Training Program	New Haven PD Academy	8/10/20 – 8/21/20	Off. Fedor Instructor
SRO Basic 2.0	Bloomfield PD	8/10/20 – 8/14/20	Off. Federowicz
ERT Training (Try-Outs)	Trumbull	8/12/20	All ERT Officers
ERT Training	Trumbull	8/26/20	All ERT Officers
Training Officer Liability	Darien PD	8/28/20	Off. Fedor
Dive Team Training	Trumbull	8/27/20 – 8/28/20	All Dive Officers

Community Police

Event	Location	Date	Officer
Cookies for Cops	Nichols (NIA) Farmers Market	8/6/20	Off. Fedor
Cops & Cones	Sunny Daes (Trumbull)	8/15/20	Off. Fedor Off. Brown

TRUMBULL POLICE DEPARTMENT

POLICE CADET POST # 659

158 EDISON ROAD, TRUMBULL, CT 06611

(203) 452-3849 FAX (203) 452-3857

August 2020

Event	Location	Date	Advisor
No Meetings or Events			

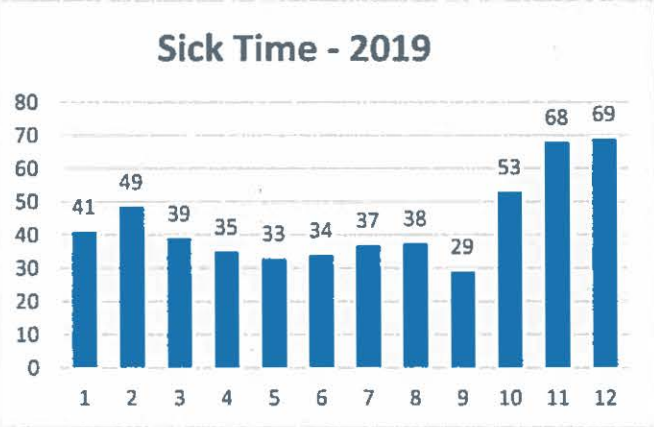
Trumbull Police Department
Monthly Sick Report
August 2020

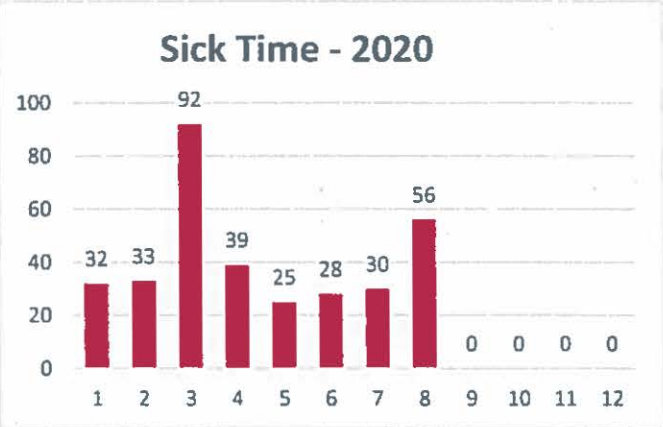
Personnel Sick Time

2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Sick	41	49	39	35	33	34	37	38	29	53	68	69	524
Job Injury	0	0	0	0	0	0	0	1	0	0	0	0	1
Light Duty	11	0	0	0	0	0	0	3	2	3	0	0	19
Total	52	49	39	35	33	34	37	42	31	56	68	69	544

2020	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Sick	32	33	92	39	25	28	30	56					335
Job Injury	0	0	0	0	0	0	0	0					0
Light Duty	0	0	0	0	0	0	0	0					0
Total	32	33	92	39	25	28	30	56	0	0	0	0	335

Sick Time Totals	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2019	41	49	39	35	33	34	37	38	29	53	68	69	524
2020	32	33	92	39	25	28	30	56	0	0	0	0	335
Average Per Officer - 2020	*0.4*	*0.4*	*1.2*	*0.5*	*0.3*	*0.4*	*0.4*	*0.7*	*0.0*	*0.0*	*0.0*	*0.0*	*4.5*





Police Department
FY 2021, Budget Status YTD

Account	Description	Approved	*Rev	Paid YTD		Avail YTD	
501101	Salaries- Full time	7,326,746		1,309,570	18%	6,017,176	82%
501102	Salaries- Part time	54,888		2,828	5%	52,060	95%
501103	Salaries- Seasonal / Temp	0		0			
501104	Salaries- Weekend	53,082		5,829	11%	47,253	89%
501105	Salaries- Overtime	830,000		92,131	11%	737,869	89%
501106	Longevity	17,325		0	0%	17,325	100%
501109	College Incentive	25,000		0	0%	25,000	100%
501112	Shift Differential	59,650		1,410	2%	58,240	98%
501113	Holiday	349,700		28,290	8%	321,410	92%
501114	Training	165,000		11,865	7%	153,135	93%
501887	Uniform Cleaning	18,500		2,700	15%	15,800	85%
501888	Uniform Allowance	59,750		14,296	24%	45,454	76%
522202	Services & Fees, Professional	0		0			
522203	Ancillary	20,000		40	0%	19,960	100%
534401	Office Supplies	14,400		5,299	37%	9,101	63%
534402	Program Supplies	37,000		2,967	8%	34,033	92%
534403	Materials and Supplies, Cleaning	6,000		1,138	19%	4,862	81%
545503	Public Relations	2,500		0	0%	2,500	100%
556601	Professional Development, Tuition Reimb	7,000		0	0%	7,000	100%
556602	Professional Development, Organizations	3,000		1,360	45%	1,640	55%
556603	Professional Development, In-Service	45,000		4,729	11%	40,271	89%
556604	Professional Development, Publications	300		82	27%	218	73%
567702	Vehicle Repair	40,000		12,719	32%	27,281	68%
567704	Transportation, Expense Account	13,250		2,133	16%	11,117	84%
578801	Service Contracts	224,010		65,201	29%	158,809	71%
578802	Equipment, Building	0		0			
578803	Maintenance, Program Related	6,000		1,010	17%	4,990	83%
578804	Maintenance, Refuse Removal	2,379		2,508	105%	-129	-5%
581888	Capitol Outlay	146,283		0	0%	146,283	100%
589901	Rentals	30,100		17,461	58%	12,639	42%
590011	Utility, Heat	9,000		0	0%	9,000	100%
590012	Utility, Electricity	66,000		9,570	15%	56,430	86%
590013	Utility, Water	3,200		446	14%	2,754	86%
590014	Utility, Telephones	15,000		2,565	17%	12,435	83%
590015	Utility, Traffic Lights	11,792		978	8%	10,814	92%
	Total	9,661,855		1,599,125	17%	8,062,730	83%
As of:	9/3/2020	Week Number = 9		Progress Perc. =	17%		
		Weeks Remain = 43				Remain Perc =	83%

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

Tighe&Bond
Engineers | Environmental Specialists
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

30% DESIGN SUBMISSION

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, Connecticut

MARK	DATE	DESCRIPTION

PROJECT NO:	T0196-130
DATE:	10/25/2019
FILE:	T0196-130-C-XXX-AERIAL.dwg
DRAWN BY:	MDS
CHECKED:	AJM
APPROVED:	XXX

ROADWAY PLAN

SCALE:

C-RP-1
SHEET 1 OF 2

Last Saved: 10/28/2019
Plotted On:Oct 28, 2019-2:46pm By: SansoneM
Tighe & Bond:J:\T\T0196\130 Route 111 Traffic Signal\Drawings_Figures\AutoCAD\Sheet\T0196-130-C-XXX-AERIAL.dwg

NOTES:

1. ALL ADDRESSES LOCATED IN THE TOWN OF TRUMBULL ZIP CODE 06611.

INTERSECTION SIGHT DISTANCE SUMMARY		
MEASURED FROM WOODLAND HILLS DRIVEWAY, 15' SETBACK FROM ROADWAY EDGE		
SIGHT DIRECTION	SIGHT DISTANCE AT 85TH PERCENTILE SPEED OF 45 MPH	ACTUAL SIGHT DISTANCE
LOOKING RIGHT (SOUTH)	530 FEET	>530 FEET
LOOKING LEFT (NORTH)	500 FEET	>500 FEET

PROPOSED DEVELOPMENT SUMMARY			
LAND USE	APPROVED OSTA AD NO. 1801 (OSTA NO. 144-1202-01)	PROPOSED ADMINISTRATIVE DECISION	ALLOWABLE DEVELOPMENT WITH ADMINISTRATIVE DECISION
37-57 MONROE TURNPIKE			
AUTO CARE CENTER	8,255 SF	-8,255 SF	0 SF
RETAIL	8,560 SF	+4,055 SF	12,615 SF
MEDICAL OFFICE	0 SF	+4,200 SF	4,200 SF
HEALTH/FITNESS CLUB	25,000 SF	NO CHANGE	25,000 SF
RESTAURANT	4,200 SF	NO CHANGE	4,200 SF
PARKING	323 SPACES	-10 SPACES	313 SPACES
REMAINDER OF TREFOIL INDUSTRIAL PARK			
OFFICE	186,602 SF	NO CHANGE	186,602 SF
ARENAS	107,298 SF	NO CHANGE	107,298 SF
CONDOS	99,000 SF	NO CHANGE	99,000 SF
COMMERCIAL WAREHOUSE	89,856 SF	NO CHANGE	89,856 SF
INDUSTRIAL	33,569 SF	NO CHANGE	33,569 SF
GYM	27,853 SF	NO CHANGE	27,853 SF
PARKING	1,059 SPACES	NO CHANGE	1,059 SPACES
TOTAL WITHIN OSTA CERTIFIABLE AREA			
DEVELOPMENT	590,193 SF	NO CHANGE	590,193 SF
PARKING	1,382 SPACES	-10 SPACES	1,372 SPACES

Tighe&Bond
1000 Bridgeport Avenue
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Shelton, CT 06484
(203) 712-1100

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, CT

MARK	DATE	DESCRIPTION

PROJECT NO:	T0196-130
DATE:	05/12/2020
FILE:	T0196-130-OSP-001.dwg
DRAWN BY:	ALW
CHECKED BY:	CDY
APPROVED BY:	AJM

OSTA OVERALL SITE PLAN

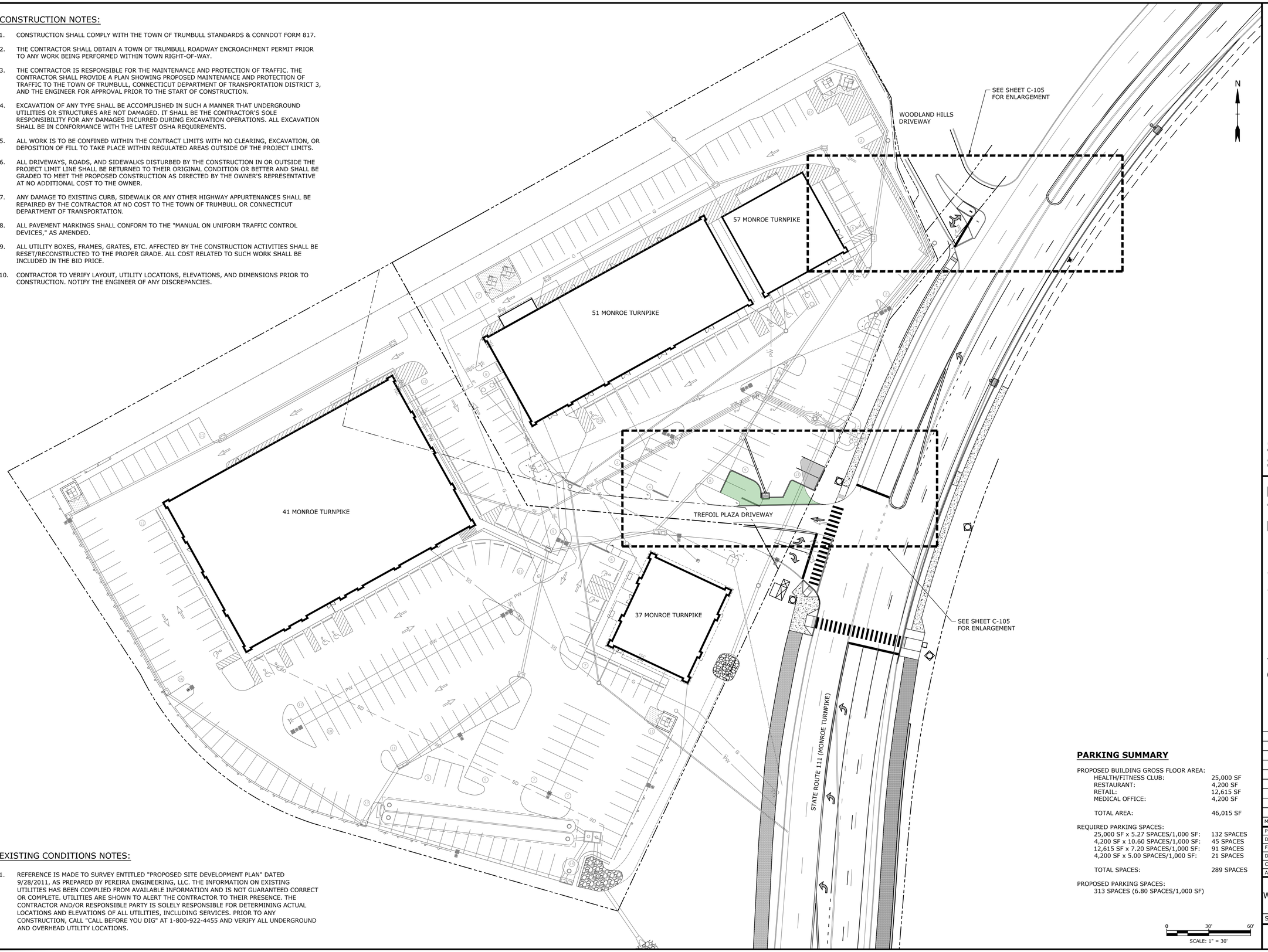
SCALE: 1" = 100'

OSP-001

Last Saved: 5/11/2020
Plotted On:May 12, 2020-7:53am By: ALWeber
Tighe & Bond:\\tighebond.com\data\boston\Projects\T\T0196\130_ Route 111 Traffic Signal\Drawings_Figures\AutoCAD\Figures\OSTA\T0196-130-OSP-001.dwg

CONSTRUCTION NOTES:

1. CONSTRUCTION SHALL COMPLY WITH THE TOWN OF TRUMBULL STANDARDS & CONNDOT FORM 817.
2. THE CONTRACTOR SHALL OBTAIN A TOWN OF TRUMBULL ROADWAY ENCROACHMENT PERMIT PRIOR TO ANY WORK BEING PERFORMED WITHIN TOWN RIGHT-OF-WAY.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC. THE CONTRACTOR SHALL PROVIDE A PLAN SHOWING PROPOSED MAINTENANCE AND PROTECTION OF TRAFFIC TO THE TOWN OF TRUMBULL, CONNECTICUT DEPARTMENT OF TRANSPORTATION DISTRICT 3, AND THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
4. EXCAVATION OF ANY TYPE SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT UNDERGROUND UTILITIES OR STRUCTURES ARE NOT DAMAGED. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY FOR ANY DAMAGES INCURRED DURING EXCAVATION OPERATIONS. ALL EXCAVATION SHALL BE IN CONFORMANCE WITH THE LATEST OSHA REQUIREMENTS.
5. ALL WORK IS TO BE CONFINED WITHIN THE CONTRACT LIMITS WITH NO CLEARING, EXCAVATION, OR DEPOSITION OF FILL TO TAKE PLACE WITHIN REGULATED AREAS OUTSIDE OF THE PROJECT LIMITS.
6. ALL DRIVEWAYS, ROADS, AND SIDEWALKS DISTURBED BY THE CONSTRUCTION IN OR OUTSIDE THE PROJECT LIMIT LINE SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER AND SHALL BE GRADED TO MEET THE PROPOSED CONSTRUCTION AS DIRECTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
7. ANY DAMAGE TO EXISTING CURB, SIDEWALK OR ANY OTHER HIGHWAY APPURTENANCES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE TOWN OF TRUMBULL OR CONNECTICUT DEPARTMENT OF TRANSPORTATION.
8. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AS AMENDED.
9. ALL UTILITY BOXES, FRAMES, GRATES, ETC. AFFECTED BY THE CONSTRUCTION ACTIVITIES SHALL BE RESET/RECONSTRUCTED TO THE PROPER GRADE. ALL COST RELATED TO SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.
10. CONTRACTOR TO VERIFY LAYOUT, UTILITY LOCATIONS, ELEVATIONS, AND DIMENSIONS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.



EXISTING CONDITIONS NOTES:

1. REFERENCE IS MADE TO SURVEY ENTITLED "PROPOSED SITE DEVELOPMENT PLAN" DATED 9/28/2011, AS PREPARED BY PEREIRA ENGINEERING, LLC. THE INFORMATION ON EXISTING UTILITIES HAS BEEN COMPLIED FROM AVAILABLE INFORMATION AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR AND/OR RESPONSIBLE PARTY IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SERVICES. PRIOR TO ANY CONSTRUCTION, CALL "CALL BEFORE YOU DIG" AT 1-800-922-4455 AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.

PARKING SUMMARY

PROPOSED BUILDING GROSS FLOOR AREA:

HEALTH/FITNESS CLUB:	25,000 SF
RESTAURANT:	4,200 SF
RETAIL:	12,615 SF
MEDICAL OFFICE:	4,200 SF
TOTAL AREA:	46,015 SF

REQUIRED PARKING SPACES:

25,000 SF x 5.27 SPACES/1,000 SF:	132 SPACES
4,200 SF x 10.60 SPACES/1,000 SF:	45 SPACES
12,615 SF x 7.20 SPACES/1,000 SF:	91 SPACES
4,200 SF x 5.00 SPACES/1,000 SF:	21 SPACES
TOTAL SPACES:	289 SPACES

PROPOSED PARKING SPACES:
313 SPACES (6.80 SPACES/1,000 SF)

Tighe&Bond
Engineers | Environmental Specialists
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

30% DESIGN SUBMISSION

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, Connecticut

MARK	DATE	DESCRIPTION

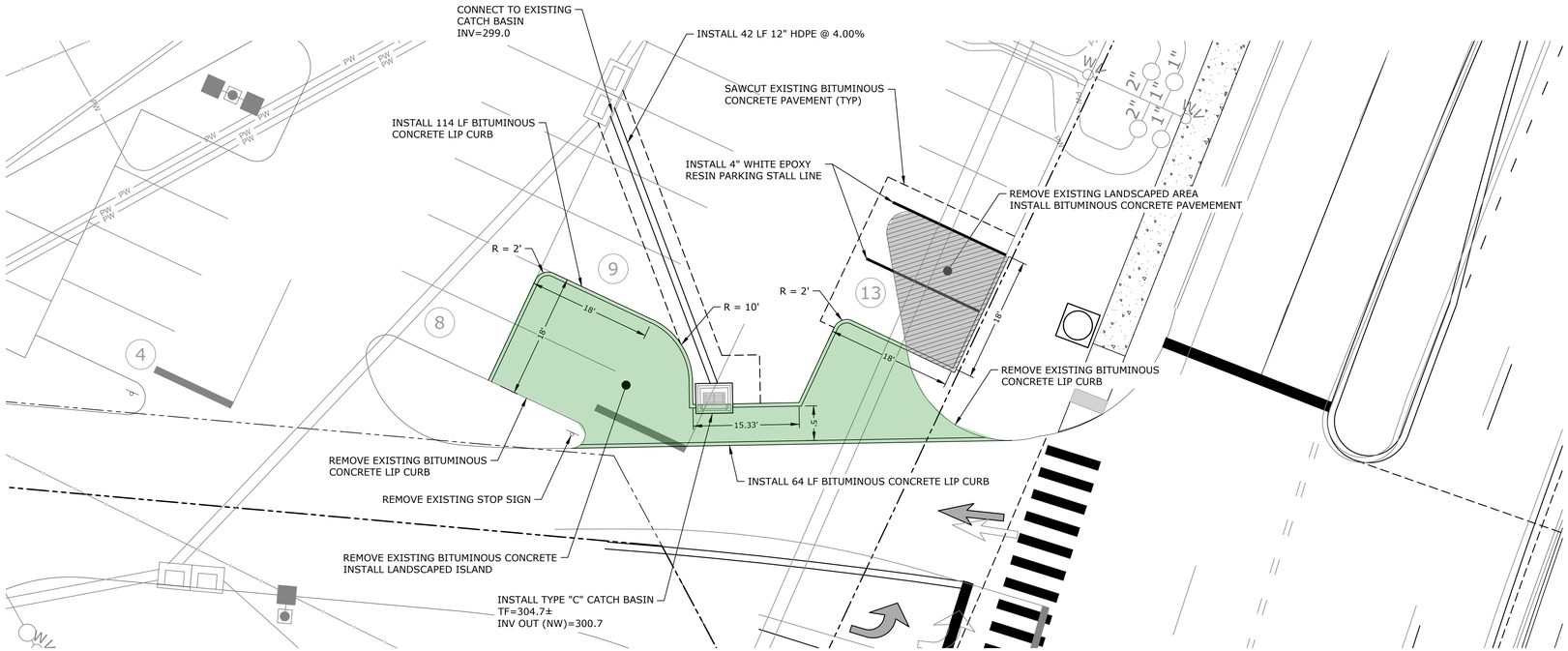
PROJECT NO:	T0196-130
DATE:	04/30/2020
FILE:	T0196-130-C-104.dwg
DRAWN BY:	ALW
CHECKED:	AJM
APPROVED:	DCH

TREFOIL PLAZA AND WOODLAND HILLS DRIVEWAY CONSTRUCTION PLAN

SCALE: 1" = 30'

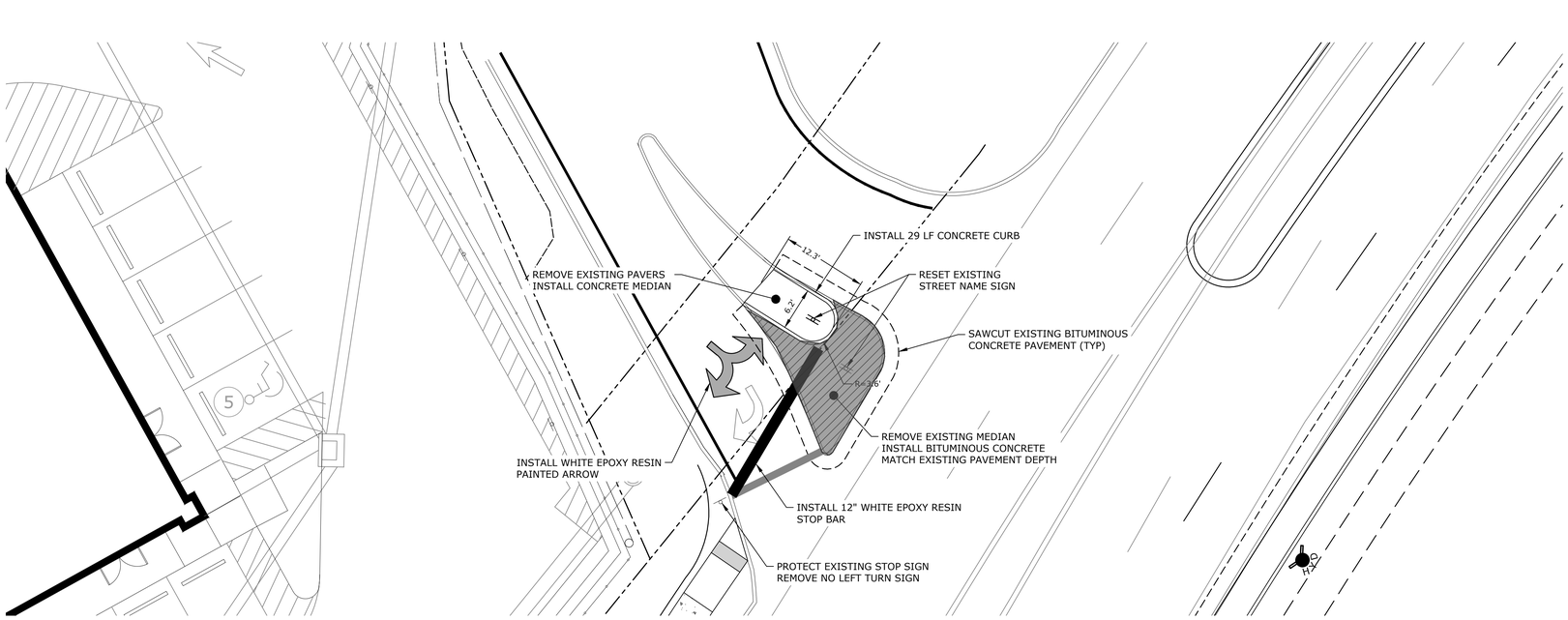
C-104

Last Saved: 4/28/2020
Plotted On:Apr 28, 2020-11:06am By: ALWeber
Tighe & Bond:J:\T\T0196\130 Route 111 Traffic Signal\Drawings_Figures\AutoCAD\Figures\GSTA\T0196-130-C-104.dwg



TREFOIL PLAZA ENLARGEMENT PLAN
SCALE: 1" = 10'

0 10' 20'
SCALE: 1" = 10'



WOODLAND HILLS DRIVEWAY ENLARGEMENT PLAN
SCALE: 1" = 10'

0 10' 20'
SCALE: 1" = 10'

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Shelton, CT 06484
(203) 712-1100

30% DESIGN SUBMISSION

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, Connecticut

MARK	DATE	DESCRIPTION

PROJECT NO:	T0196-130
DATE:	04/30/2020
FILE:	T0196-130-C-104.dwg
DRAWN BY:	ALW
CHECKED:	AJM
APPROVED:	DCH

TREFOIL PLAZA AND WOODLAND HILLS DRIVEWAY ENLARGEMENT PLANS

SCALE: 1" = 10'

C-105

Last Saved: 4/28/2020
Plotted On:Apr 28, 2020-11:07am By: ALWeber
Tighe & Bond: J:\T\T0196\130_Route 111 Traffic Signal\Drawings_Figures\AutoCAD\Figures\OSTA\T0196-130-C-104.dwg

OLD BUSINESS

- 7120 Main Street Traffic Flow Consideration – Robert Librandi, Planning & Zoning and William Maurer, Engineering Department and representatives of Russo & Rizio, LLC and BL Companies

Russo & Rizio, LLC
ATTORNEYS AT LAW

Colin B. Connor
Elizabeth A. Falkoff*
Robert G. Golger
Michael C. Jankovsky
David K. Kurata
Katherine M. Macol
Leah M. Parisi
William M. Petroccio*
Raymond Rizio*
Christopher B. Russo
Robert D. Russo
John J. Ryan
Vanessa R. Wambolt
(*Also Admitted in NY)

July 29, 2020

Rob Librandi
Land Use Planner
Trumbull Planning & Zoning Department
5866 Main Street
Trumbull, CT 06611

Re: Special Permit and Site Plan Review Application to the Trumbull Planning and Zoning Commission for the property located at 7120 Main Street

Dear Mr. Librandi:

Please accept the following narrative as part of a modification of a previously approved Special Permit and Site Plan Review to the Trumbull Planning and Zoning Commission for the property located at 7120 Main Street (the "Site") in the Industrial I-L2 Zone to support the approved warehousing and distribution use.

Proposed Development

The Applicant was previously approved on December 18, 2019, for a warehousing and distribution use within the existing building located at the Site (the "Prior Approval"). The Applicant did not propose to increase the building footprint of the Site at that time and do not propose the same with this Application. As the Applicant has begun work on the Site, they have realized some slight modifications and restructuring of the parking area are necessary for a more safe and efficient use. The Site will serve as a package delivery warehouse and distribution for the "last mile" of package delivery for Amazon, which means distribution will be to residences and businesses within an approximate Sixty (60) minute driving time radius of the Site.

The Site itself is 10.17 ac. and contains an existing building with approximately 114,000 SF of usable floor area. The Site is located on the corner of Main Street (Rte. 25) and Spring Hill Road. The building is surrounded on three (3) sides by off-street parking areas and drive aisles. The Site features Two (2) curb cuts along Main Street and a single curb cut on Spring Hill Road.

The main modification under the Application from the Prior Approval is to change the side of the existing building where the delivery vans will enter. Under the Prior Approval, delivery vans entered the building on its west side and exited on its east side. The Application proposes to reverse this traffic flow so delivery vans will enter on the east side and will exit on the west side of the building. As a consequence of such change, the Applicant also proposes

West to East to
East to West.
Exit onto Rt. 25
- Rt turn only south curb cut
- Left turn only north curb cut

2.0 every 20 minutes
x 3 hrs 9:50 - 1:00

1 Post Road
Fairfield, CT 06824
Tel 203-255-9928
Fax 203-255-6618

slight modifications to the interior traffic flow of the southern parking area, so it does not conflict with the proposed delivery vans circulation.

Under the Prior Approval, the traffic flow of the delivery vans crossed in one location. An "empty" delivery van entering the Site from Spring Hill Road to load the van would have to cross in front of a "loaded" delivery van exiting the Site onto Spring Hill Road near the Spring Hill Road curb cut. The Application eliminates this "crossing." Under the Application, the "empty" delivery vans will still enter the Site from Spring Hill Road, but they will then exit onto Main Street. In addition, delivery vans exiting the Site to head north on Main Street will only exit the Site via the southern curb cut on Main Street. This right-turn only exit will be the closest to the existing traffic signal at the intersection of Main Street and Spring Hill Road. Delivery vans exiting the Site to head south on Main Street, which will require crossing the northbound lane of Main Street, will only exit the Site via the northern curb cut on Main Street. This exit will give delivery vans enough space in between the curb cut and the above-described traffic signal. Operationally, the Applicant will be revising its schedule to reduce trips during the peak hour periods of the surrounding roadway network. Together, the above-stated revisions will improve the traffic flow and circulation within the Site and its surrounding roadways.

The Amazon tractor trailers, which will actually bring the consumer goods to the Site that are to be loaded on the delivery vans, will still utilize the same route as the Prior Approval. The vehicles of Amazon Employees will also enter and exit the same as the Prior Approval. The Application proposes a parking area of Two Hundred and Thirteen (213) off-street parking spaces, which still far exceeds the requirement under the Regulations.

For the reasons stated above, the Applicant respectfully requests approval of the modification to its Special Permit and Site Plan Review.

Sincerely,

Raymond Rizio

Trumbull Police Department

158 Edison Road, Trumbull CT 06611

(203) 261-3665

CASE/INCIDENT REPORT

SUPPLEMENTARY X

CFS NO	DAY	INCIDENT DATE	TIME	DATE OF RPT	TIME OF RPT	TYPE OF INCIDENT	INCIDENT CD	INVESTIGATING OFFICER	BADGE NO
1900019732	2	12/09/2019 12/09/2019	14:30	09/02/2020	12:14	POLICE ADMIN / INFORMATION	810	Officer Siljamaki, Kyle	74

DIVISION	DIVISION NO	REFERENCE DIVISION	REFERENCE DIVISION NO	CASE X-REFERENCE	UNIT ID	TYPIST	DATE TYPED	TIME TYPED
Traffic					38	KSILJAMAKI	09/02/2020	12:14

STREET NO	STREET NAME AND TYPE	APT NO.	INTERSECTING STREET NAME AND TYPE	PREMISE NAME	STATUS	TOWN CD
07120	MAIN STREET St TRUMBULL			07120 MAIN STREET	Closed	T144

The Traffic Division was asked to evaluate the current traffic pattern at the newly opened Amazon facility located at 7120 Main St. I spoke with Mgr. Ryan Hubert who explained the current set up and the proposed change to the pattern. Ryan stated that the delivery vans currently enter the front of the building through the bays which face Main St. Once the vans are loaded they exit through the rear of the building and out onto Spring Hill Rd. Ryan stated that the location is set up in reverse and is meant to accept the vehicles through the rear of the building for loading, then exit through the front of the location and directly out onto Main St. However, almost the entire fleet heads south on Main St. which would cause traffic concerns due to the difficulty in taking a left turn out of the location. Ryan stated that twenty delivery vans would be exiting the location every twenty minutes for a three hour period which begins at 0950 hrs. This would be for the small delivery vans, the large tractor trailers would still unload during night time hours.

I advised Ryan my recommendation would be to continue to exit out onto Spring Hill Rd. and utilize the traffic light at Spring Hill Rd. and Main St. It's safer and more efficient to use the light rather than trying to find adequate space and a break in the constant congestion of Main St.

Ryan stated the corporation recently purchased the property located at 7100 Main St. which is at the corner of Spring Hill Rd. and Main St. The long term goal is to re-configure the parking area and incorporate the purchased land to make it more feasible to exit directly out onto Main St.

THE UNDERSIGNED AN INVESTIGATOR HAVING BEEN DULY SWORN DEPOSES AND SAYS THAT: I AM THE WRITER OF THE ATTACHED POLICE REPORT PERTAINING TO THIS INCIDENT NUMBER. THAT THE INFORMATION CONTAINED THEREIN WAS SECURED AS A RESULT OF (1)MY PERSONAL OBSERVATION AND KNOWLEDGE. OR (2)INFORMATION RELAYED TO ME BY OTHER MEMBERS OF MY POLICE DEPARTMENT OR OF ANOTHER POLICE DEPARTMENT OR (3)INFORMATION SECURED BY MYSELF OR ANOTHER MEMBER OF A POLICE DEPARTMENT FROM THE PERSON OR PERSONS NAMED OR IDENTIFIED THEREIN AS INDICATED IN THE ATTACHED REPORT. THAT THE REPORT IS AN ACCURATE STATEMENT OF THE INFORMATION SO RECEIVED BY ME.

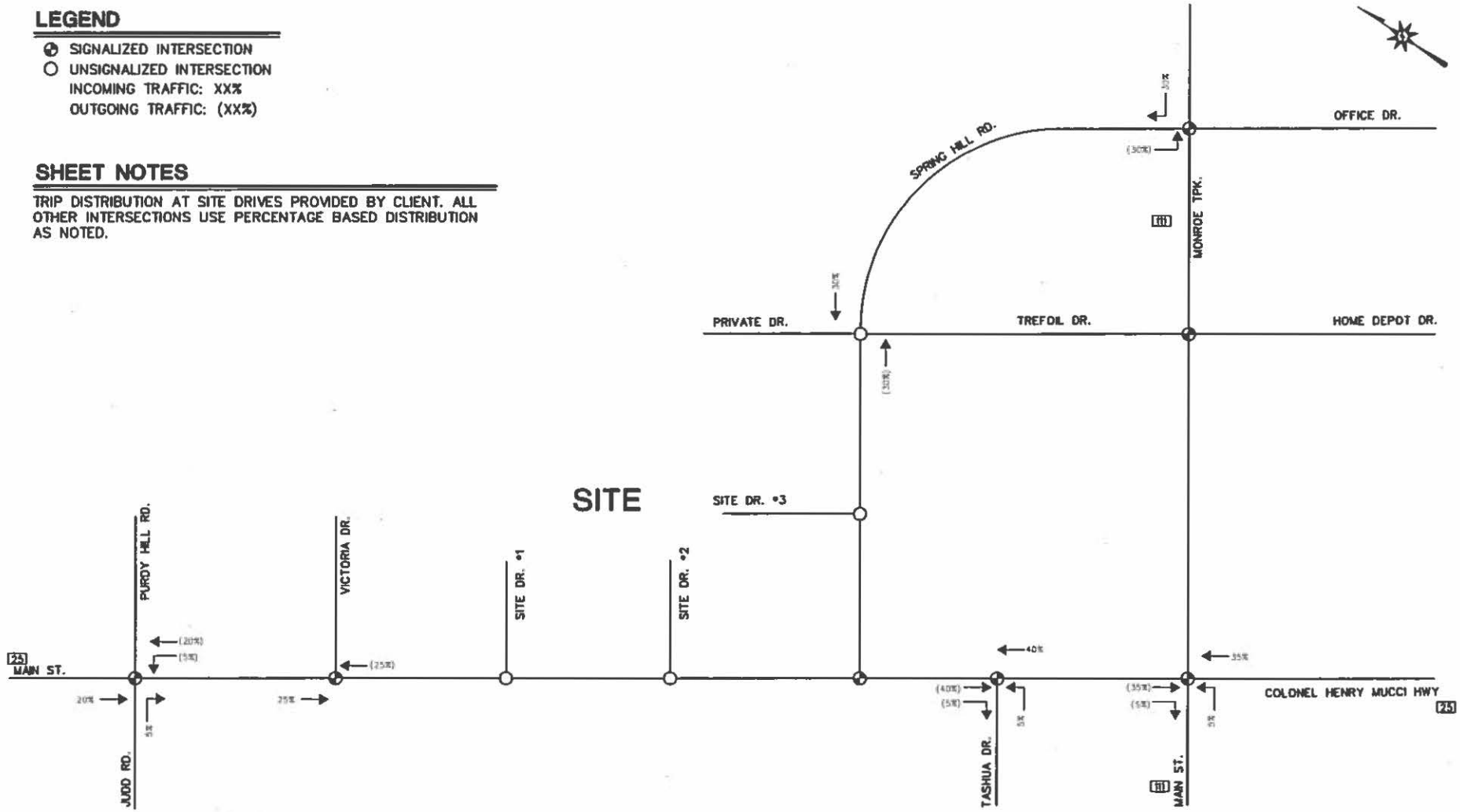
INVESTIGATOR SIGNATURE:	INVESTIGATOR I.D.#:	SIGNED DATE:	SUPERVISOR SIGNATURE	SUPERVISOR I.D.#:
/OFC. Kyle Siljamaki/	74	09/02/2020	/SGT. Paul S Driscoll/	21

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
  INCOMING TRAFFIC: XX%
  OUTGOING TRAFFIC: (XX%)

SHEET NOTES

TRIP DISTRIBUTION AT SITE DRIVES PROVIDED BY CLIENT. ALL OTHER INTERSECTIONS USE PERCENTAGE BASED DISTRIBUTION AS NOTED.



ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING
BL Companies

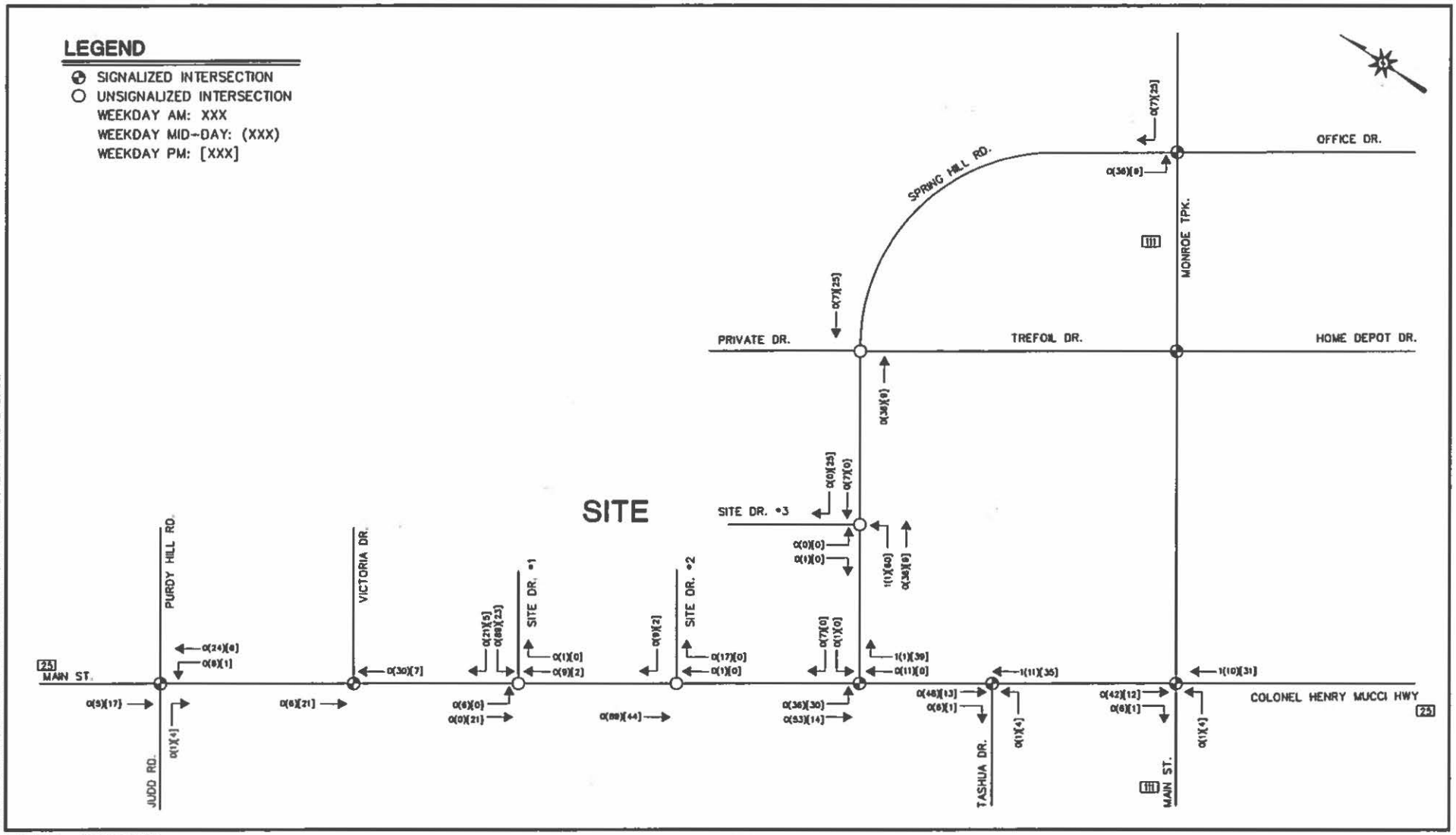
TRIP DISTRIBUTION
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 4

© 2020 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES.

6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOBS\P\129190141\DWG\FIGURES\FIGURE 4.DWG, FIGURE 4.



ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING
BL Companies

SITE GENERATION TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 5

© 2020 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES.

PARKING BREAKDOWN

PARKING	REQUIRED	PROPOSED ON-SITE	PROPOSED OFF-SITE	DELTA (+/-)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL AUTO SPACES (SHIFT)	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL VAN SPACES (SHIFT)	264	34	230	-62
TOTAL PARKING	528	205	530	230
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ZONING INFORMATION

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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PARKING INFORMATION

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LEGEND

[illegible]

SITE PLAN LEGEND

[illegible]

NOTES

[illegible]

SIGN INFORMATION

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
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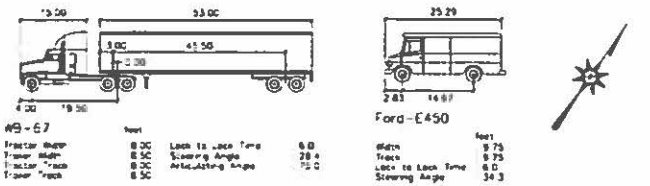
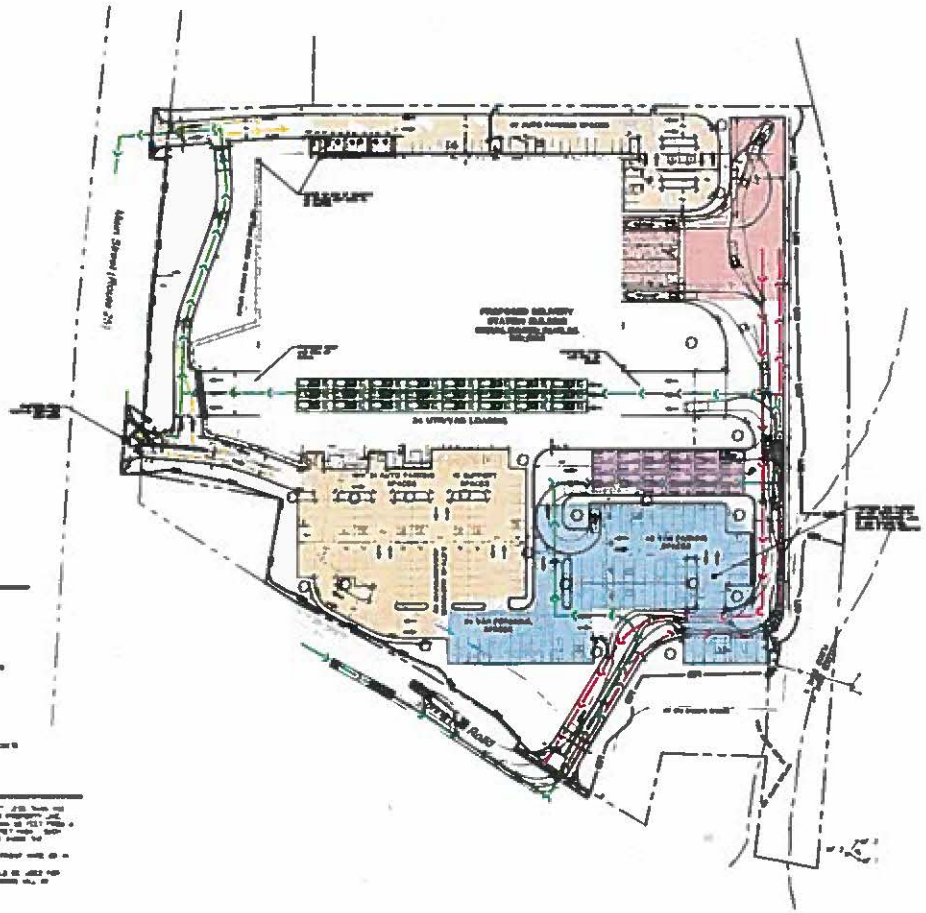
[illegible]	[illegible]	[illegible]	[illegible]





Architecture Engineering Environmental Land Surveying

BL Companies

PROPOSED DEVELOPMENT

7120 MAIN STREET

TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

SITE CONCEPT - DYOS_E1

SC (R0)

Town of Trumbull

TRUMBULL POLICE COMMISSION

158 EDISON ROAD
TRUMBULL, CONNECTICUT 06611

P (203) 261-3665
F (203) 452-5162

POLICE COMMISSION

RAYMOND G. BALDWIN, JR., CHAIRMAN
ANGELO MAGLIOCCO, VICE CHAIRMAN
JOHN VAZZANO, SECRETARY
LISA LABELLA, COMMISSIONER
ALBERT ZAMARY, COMMISSIONER
CHRIS TREFZ, COMMISSIONER

Special Trumbull Police Commission Meeting
Trumbull Police Department
December 17, 2019

MINUTES

The Trumbull Police Commission meeting was called to order at 3:02 p.m.

Members present: Raymond G. Baldwin, Jr., Chairman
Angelo Magliocco, Vice Chairman
John Vazzano
Albert Zamary

Also Present: Chief Michael Lombardo
Assistant Chief Glenn Byrnes
Deputy Chief Leonard Scinto
Officer Robert Harry

Absent: Lisa Labella
Chris Trefz

Public Comment

Opened Public Comment at 3:02 pm. There was no public comments. Public Comment was closed at 3:02 p.m.

Old Business

7120 Main Street Traffic Consideration of Approval, Rob Librandi-Planning & Zoning

Rob Librandi and Bill Maurer from Planning & Zoning where present. Mr. Librandi explained the 7120 Main Street application is going before Planning and Zoning Commission on December 18, 2019. Mr. Librandi asked that the applicant provide to him along with the Commission an update on the Traffic Study conducted, as there have been some modifications. Mr. Librandi thanked the Commission for having this Special meeting to review the application.

Raymond Rizio thanked the Commission for taking the time to have a special meeting, as this is a big project for the Town of Trumbull along for his client. The project is on 7120 Main Street that was utilized by Reid and Oxford Healthcare as a warehouse center. There are no changes as this area is in an industrial zone and it is permitted use. It will now be a major Distribution Center; under the confidentiality, the name of company was not shared. There are no modifications to the building; there is no increase to the footprint. They are adding a couple loading docks in the rear of property. Distribution will be made between 9 p.m. and 2 a.m. All of the larger vehicles which will be tractor-trailers will come in off Spring Hill Road and will deliver to the back of the building. Again, this will be done between 9 p.m. and 2 a.m. and the tractors trailers will be gone before the employees arrive for work. There will be drivers coming in to pick up their deliveries and that traffic will come in off Main Street. This will go before OSTA (Office of the State Traffic Administration) if approved by P&Z on December 18, 2019. The client has prefilled with OSTA and they will move forward with State Traffic Commission. There are two curb cuts on Main Street and they are restricting the southern curb cut to a right in, right out only. They believe it is too close to the corner and making a left turn will not work. Some of the delivery trucks will be pre-loaded so the drivers can just take their truck and begin their route. This will occur around 7:30 a.m. – 10:00 a.m. and 12:00 p.m. – 1:30 p.m. These vehicles will enter from Spring Hill Road. They indicated that this should not be an issue for the school buses as they leave the bus parking lot by 7 a.m. The only time there might be an issue is on Saturday due to the garbage station. Mr. Rizio again commented there are no additions to the building, there are expanding the parking lot and adding two loading docks. The building will look brand new. There was detailed conversations between the Commission and Mr. Rizio about the prior use of building.

The Commission asked Officer Harry if he had any concerns with the area in reference to traffic.

Chief Lombardo commented that Officer Harry from the Traffic Division conducted a study. Officer Harry in his report recommends the proposed traffic study be approved.

Officer Harry indicated he received the amended traffic study, which showed the reduced number of truck drivers, etc. He noticed nothing was attached in the recommendations. There were recommendation with traffic control signal and southbound turning lane. Mr. Dion indicated that it was in the previous report. Officer Harry mentioned that in the recent report it still shows the traffic control signal are still unacceptable. Will this be addressed? Officer Harry reported that after reviewing the study he saw that most of the traffic would be during the day which should not have an impact. Officer Harry also noted that the study was conducted in July when school is not in session. He spoke with Dawn Perkins from Transportation and she reported there are 85 school buses each day that leave the area during the school year. The buses leave between 6:16 a.m. and 6:45 a.m. The buses return between 8:30 a.m. and 9 a.m. Officer Harry indicated that the buses back on up and block the Spring Hill Road entrance. That might be a problem.

Mr. Dion indicated this will be presented to OSTA (Office of the State Traffic Administration) and it will be their decision.

Mr. Rizio indicated that he believes this is one of the best spots in the Town of Trumbull to have this warehouse.

Chairman Baldwin asked Officer Harry after reviewing the study if he sees any concerns that need to be addressed.

Officer Harry indicated it is tough depending on the shifts of the warehouse there might be some complications with the buses, especially on school delays. Restriction of the right in and right out onto the southbound driveway closer Spring Hill Road would alleviate traffic issues. People leaving the property will need to merge on to existing traffic and could be less of an impact to traffic as they already have the right of way on Main Street or Spring Hill Road.

Mr. Librandi asked if there would be signage in the area indicating tractor-trailer only access or anything to that effect.

Mr. Dion indicated he has not seen anything on the signage.

Mr. Rizio will look at this before the P&Z meeting and they will do any accommodations.

Mr. Librandi mentioned that if the Commission has any other concerns or questions, they could write a letter to him.

Chairman Baldwin asked if there were any other questions or concerns.

Vice Chairman Magliocco indicated at the moment the way this is project is being presented maybe be acceptable. He is concerned in the growth in the future.

There was no further discussion.

A motion was made by Vazzano to approve subject to approval of the State Traffic Commission and any recommendations made to come back to the Trumbull Police Commission for 7120 Main Street in Trumbull, seconded by Magliocco. There was no further discussion. Motion passed unanimously.

There being no further business, a motion was made by Vazzano and seconded by Magliocco to adjourn the meeting at 3:30 p.m. The motion passed unanimously.

Respectfully submitted,

Vivian Munoz
Clerk of the Commission

Planning and Zoning
Department
Telephone (203) 452-5044
Fax (203) 452-5169

Town of Trumbull
CONNECTICUT

Town Hall
5866 Main Street
Trumbull, Connecticut 06611

PLANNING AND ZONING DEPARTMENT

APPLICATION FOR SPECIAL PERMIT OR SITE PLAN APPROVAL

☒ **SPECIAL PERMIT**

☒ **SITE PLAN REVIEW**

ZONE:

☐ **Commercial Zone B-C, B-C LH, TH Node, MDD**

☒ **Industrial Zone I-L, I-L2, I-L3**

☐ **Residential Zone A, AA, AAA**

☐ **Overlay Zone** _____

Location of Property: 7120 Main Street

Assessor's Map No.: C Parcel No.: 01 Lot No.: 00023/000

Trumbull Land Records: Volume: 1803 Page: 581

Applicant: Amazon.com Services, LLC

Address of Applicant: PO Box 80416, Seattle, WA 98108-0416

Telephone Number: Day 203-528-0590 Evening 203-528-0590

Email Address: Chris@russorizio

Owner of Record: Amazon.com Services, LLC

Address of Owner of Record: PO Box 80416, Seattle, WA 98108-0416

Telephone Number: 203-528-0590 Email Chris@russorizio.com

Party to be notified: Chris Russo, Russo & Rizio, LLC

Address of Attorney or Agent: 10 Sasco Hill Rd, Fairfield, CT 06824

Telephone Number: 203-528-0590 Email: Chris@russorizio.com

Site Engineer: BL Companies

Address of Owner of Record: 355 Research Parkway, Meriden, CT 06450

Telephone Number: 203-630-1406 Email: Chris@russorizio.com

Relevant Article(s) and Section(s) of the Regulations: (i.e. Art__, Sec __)
Art. II, Section 4.2; Art XV

Description of the proposed request, including specific use to be conducted:
See Attached

Is the property within 500 feet of another municipality?

☒ YES ☐ NO

Does this proposal involve a structure that was built before 1940?

☐ YES ☒ NO

Does this proposal require the approval of the Inland Wetlands Agency?

☐ YES ☒ NO

Are there any deed restrictions on this property that may affect this application?

☐ YES ☒ NO

Has a previous application been filed for this property?

☒ YES ☐ NO

If yes, when? 12/18/19 - Approved Attach a copy of decision letter.

Project is to be started on ASAP Completed on ASAP

List of Federal and State permits required and their status:
N/A

Certification

I/We certify that all of the above information and statements contained in any documentation submitted with the application are true to the best of my/our knowledge.

I/We fully understand that the Planning and Zoning Commission reserves the right to revoke any permit should the information contained herein not be true or that the information requested by the application has not been fully disclosed.

Signature of Owner

Signature of Applicant (if not property owner)

07/22/20

Date

07/22/20

Date

NOTICE: By signing this application, owner and applicant consent to site inspections by Town Staff and/or Commissioners.

A FEE IN ACCORDANCE WITH APPROVED FEE SCHEDULE MUST ACCOMPANY THIS APPLICATION. Make check payable to TOWN OF TRUMBULL.

FOR OFFICE USE ONLY

Date Application and Fee Received:_____ By:_____

Date of Public Hearing:_____ Date Action Taken:_____

List of Abutters Submitted:_____

Revised 2.25/2020

Russo & Rizio, LLC
ATTORNEYS AT LAW

Colin R. Connor
Elizabeth A. Falkoff*
Robert G. Golger
Michael C. Jankowsky
David K. Kurata
Katherine M. Macol
Leah M. Parisi
William M. Petroccio*
Raymond Rizio*
Christopher R. Russo
Robert D. Russo
John J. Ryan
Vanessa R. Wamholt
(*Also Admitted in NY)

July 29, 2020

Rob Librandi
Land Use Planner
Trumbull Planning & Zoning Department
5866 Main Street
Trumbull, CT 06611

Re: Special Permit and Site Plan Review Application to the Trumbull Planning and Zoning Commission for the property located at 7120 Main Street

Dear Mr. Librandi:

Please accept the following narrative as part of a modification of a previously approved Special Permit and Site Plan Review to the Trumbull Planning and Zoning Commission for the property located at 7120 Main Street (the "Site") in the Industrial I-L2 Zone to support the approved warehousing and distribution use.

Proposed Development

The Applicant was previously approved on December 18, 2019, for a warehousing and distribution use within the existing building located at the Site (the "Prior Approval"). The Applicant did not propose to increase the building footprint of the Site at that time and do not propose the same with this Application. As the Applicant has begun work on the Site, they have realized some slight modifications and restructuring of the parking area are necessary for a more safe and efficient use. The Site will serve as a package delivery warehouse and distribution for the "last mile" of package delivery for Amazon, which means distribution will be to residences and businesses within an approximate Sixty (60) minute driving time radius of the Site.

The Site itself is 10.17 ac. and contains an existing building with approximately 114,000 SF of usable floor area. The Site is located on the corner of Main Street (Rte. 25) and Spring Hill Road. The building is surrounded on three (3) sides by off-street parking areas and drive aisles. The Site features Two (2) curb cuts along Main Street and a single curb cut on Spring Hill Road.

The main modification under the Application from the Prior Approval is to change the side of the existing building where the delivery vans will enter. Under the Prior Approval, delivery vans entered the building on its west side and exited on its east side. The Application proposes to reverse this traffic flow so delivery vans will enter on the east side and will exit on the west side of the building. As a consequence of such change, the Applicant also proposes

1 Post Road
Fairfield, CT 06824

Tel 203-255-9928
Fax 203-255-6618

slight modifications to the interior traffic flow of the southern parking area, so it does not conflict with the proposed delivery vans circulation.

Under the Prior Approval, the traffic flow of the delivery vans crossed in one location. An "empty" delivery van entering the Site from Spring Hill Road to load the van would have to cross in front of a "loaded" delivery van exiting the Site onto Spring Hill Road near the Spring Hill Road curb cut. The Application eliminates this "crossing." Under the Application, the "empty" delivery vans will still enter the Site from Spring Hill Road, but they will then exit onto Main Street. In addition, delivery vans exiting the Site to head north on Main Street will only exit the Site via the southern curb cut on Main Street. This right-turn only exit will be the closest to the existing traffic signal at the intersection of Main Street and Spring Hill Road. Delivery vans exiting the Site to head south on Main Street, which will require crossing the northbound lane of Main Street, will only exit the Site via the northern curb cut on Main Street. This exit will give delivery vans enough space in between the curb cut and the above-described traffic signal. Operationally, the Applicant will be revising its schedule to reduce trips during the peak hour periods of the surrounding roadway network. Together, the above-stated revisions will improve the traffic flow and circulation within the Site and its surrounding roadways.

The Amazon tractor trailers, which will actually bring the consumer goods to the Site that are to be loaded on the delivery vans, will still utilize the same route as the Prior Approval. The vehicles of Amazon Employees will also enter and exit the same as the Prior Approval. The Application proposes a parking area of Two Hundred and Thirteen (213) off-street parking spaces, which still far exceeds the requirement under the Regulations.

For the reasons stated above, the Applicant respectfully requests approval of the modification to its Special Permit and Site Plan Review.

Sincerely,

Raymond Rizio

Properties within 250' of 7120 Main Street

Name	Address
Alan R. Stewart and Suzanne D. Skinn	7125 Old Turnpike Rd, Trumbull, CT 06611
The Baghdady Family Ltd Partnership	7090 Main St, Trumbull, CT 06611
Trumbull Properties LLC	1428 Monroe Turnpike, Monroe, CT 06468
Estate of David Preusser, c/o Eloise R. Johnson, Ancillary Executor	7100 Main Street, Trumbull, CT 06611
Town of Trumbull	5866 Main St, Trumbull, CT 06611
7120 Main LLC, c/o Ed Harsche	120 Oneida Drive, Greenwich, CT 06830
Rowan Properties LLC	7176 Main St, Trumbull, CT 06611
State of Connecticut, Office of the Attorney General	55 Elm Street, Hartford, CT 06106
Jacques Family LLC	62 Spring Hill Rd, Trumbull, CT 06611

3672

TOWN OF TRUMBULL
NOTICE

VOL 1802 PAGE 0431

VARIANCE [ ] SPECIAL EXCEPTION [ ] SPECIAL PERMIT [X]

GRANTED BY:
PLANNING AND ZONING COMMISSION [X] ZONING BOARD OF APPEALS [ ]

OWNER(S) OF RECORD: 7120 Main LLC c/o Raymond Rizio
120 Oncida Drive, Greenwich CT 06830

Doc ID: 004998410002 Type: LAN
Book 1802 Page 431 - 432
File# 3672

LOCATION OF PREMISES: 7120 Main Street, Trumbull CT 06611

Assessor's Map No.: C-01 Parcel No. 00023 Lot No. 0
Trumbull Land Records: Volume 1129 Page 207

ZONING REGULATIONS:

ARTICLE(S) II, XV SECTION(S) 4.2
PARAGRAPH(S) SUBPARAGRAPH(S)

NATURE OF APPLICATION: Special Permit/Site Plan to use the existing building in an IL-2 Zone for warehousing and distribution purposes with site improvements consisting of restructuring and expansion of the parking area and the addition of loading bays pursuant to Art II, Sec 4.2 and Art XV of the Town of Trumbull Zoning Regulations.

Special Conditions: Applicant must provide a snow removal plan to be approved by the Town Planner and adjusted by the Town Planner and applicant must provide a dark sky compliant plan to be approved by the Town Planner.

SPECIFIC CONDITIONS IMPOSED UPON THE GRANT OF SUCH APPLICATION MAY BE FOUND IN COPIES OF ACTION TAKEN ON FILE IN THE OFFICE OF THE TOWN CLERK.

DATE OF APPLICATION 11/27/19 DATE OF PUBLIC HEARING 12/18/19
DATE OF ACTION TAKEN 12/18/19 FIXED EFFECTIVE DATE 01/04/20

Larry LaConte, Sr
(Secretary)

CERTIFICATION

I, Linda Finger, Clerk of the Planning and Zoning Commission of the Town of Trumbull, do, hereby, certify this notice of decision to contain true accurate statements for Special Permit granted with respect to the application of 7120 Main LLC dated November 27, 2019 for premises owned by 7120 Main LLC and as more fully appears in the files of said Planning and Zoning Commission.

Linda Finger
(Clerk)

SCHEDULE A

All that certain piece or parcel of land, together with the buildings and improvements thereon, situated in the Town of Trumbull, County of Fairfield and State of Connecticut, and shown on that certain map entitled "Map of Survey of Property in Trumbull, CT for: Allied Stores, Inc." dated April 27, 1965 and on file in the Trumbull Town Clerk's Office as Map No. 1300, said parcel being bounded as follows:

Northwesterly:	by land now or formerly of Howard S. Rowan, 676.15 feet;
Northeasterly:	by land of the Town of Trumbull, 807.26 feet;
Southeasterly:	by Spring Hill Road, 58.98 feet;
Southwesterly:	by land of the Town of Trumbull, 106.20 feet;
Southeasterly again:	by land of the Town of Trumbull, 110.19 feet;
Northeasterly again:	by land of the Town of Trumbull; 77.97 feet;
Southerly:	by Spring Hill Road, 474.27 feet;
Southerly again:	by land now or formerly of Kenneth and Grace Farrar, 89.73 feet;
Southeasterly again:	by land now or formerly of Kenneth and Grace Farrar, 150.00 feet; and
Southwesterly again:	by Newtown Turnpike, 384.50 feet.

Being all and the same premises conveyed to Alstores Realty Corporation by that certain Warranty Deed recorded in Volume 175 at Page 34 of the Trumbull Land Records, less that small portion of property conveyed to the Town of Trumbull by that certain Quit Claim Deed recorded in Volume 179 at Page 211 of the Trumbull Land Records.

JAN 7 2020

TOWN CLERK OFFICE, TRUMBULL, CT

RECEIVED FOR RECORD

AT 11:26 A M. ATTEST Barbara L Murphy TOWN CLERK

7120 MAIN STREET

Location	7120 MAIN STREET	**Mblu**	C/01 / 00023/ 000/
Acct#		**Owner**	AMAZON.COM SERVICES LLC
Assessment	$4,036,620	**Appraisal**	$5,766,600
PID	10325	**Building Count**	1
Fire District	L		

Current Value

Appraisal	
Valuation Year	**Total**
2015	$5,766,600
Assessment	
Valuation Year	**Total**
2015	$4,036,620

Owner of Record

Owner	AMAZON.COM SERVICES LLC	**Sale Price**	$7,500,000
Co-Owner		**Book & Page**	1803/ 581
Address	P O BOX 80416 SEATTLE, WA 98108-0416	**Sale Date**	01/22/2020

Ownership History

Ownership History			
Owner	**Sale Price**	**Book & Page**	**Sale Date**
AMAZON.COM SERVICES LLC	$7,500,000	1803/ 581	01/22/2020
SEVENTY-ONE TWENTY MAIN LLC	$0	1129/ 207	05/09/2002

Building Information

Building 1 : Section 1

Year Built: 2004
Living Area: 114,000

Building Attributes

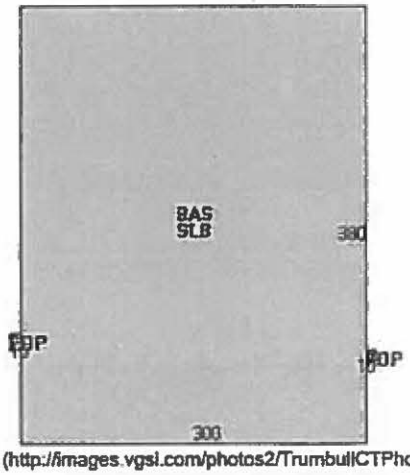
Field	Description
STYLE	Office/Warehs
Stories:	1 Story
Occupancy	1
Exterior Wall 1	Concrete
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minimum
Interior Wall 2	Drywall
Interior Floor 1	Concrete
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Hot Water
AC Type	Central
Bldg Use	Off/Whse
1st Floor Use:	
Heat/AC	Heat/AC Pkgs
Frame Type	Fireprf Steel
Baths/Plumbing	Average
Ceiling/Walls	Sus-Ceil & WL
Rooms/Prtns	Average
Wall Height	24
% Comn Wall	

Building Photo

C01-23 05/02/2015

(http://images.vgsi.com/photos2/TrumbullCTPhotos/\00\01\62/52.JPG)

Building Layout



(http://images.vgsi.com/photos2/TrumbullCTPhotos//Sketches/10325_1032

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	114,000	114,000
FOP	Open Porch	215	0
SLB	Slab	114,000	0
		228,215	114,000

Extra Features

Extra Features			Legend
Code	Description	Size	Bldg #
SPR	Sprinklers	114000 S.F.	1

Land

Land Use

Land Line Valuation

Use Code	407	**Size (Acres)**	10.1
Description	Off/Whse	**Frontage**	
Zone	IL2	**Depth**	
Neighborhood	255		
Alt Land Appr	No		
Category			

Outbuildings

Outbuildings					Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Bldg #**
PAV1	Paving Asph.			120000 S.F.	1

Valuation History

Appraisal	
Valuation Year	**Total**
2018	$5,766,600
2017	$5,766,600
2016	$5,766,600

Assessment	
Valuation Year	**Total**
2018	$4,036,620
2017	$4,036,620
2016	$4,036,620

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5735

Please record and return to:
Amazon.com Services LLC
P.O. Box 80416
Seattle, WA 98108-0416

Doc ID: 005007990004 Type: LAN
Book 1803 Page 581 - 584
File# 5735

STATUTORY FORM
WARRANTY DEED

TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, GREETING:

Know Ye That **7120 Main, LLC**, a Connecticut limited liability company with a business address of 120 Oneida Drive, Greenwich, Connecticut ("Grantor"), for the consideration of **Seven Million Five Hundred Thousand Dollars ($7,500,000.00)** received to its full satisfaction from **Amazon.com Services LLC**, a Delaware limited liability company with an of P.O. Box 80416, Seattle, Washington 98108-0416 (the "Grantee") does hereby give, grant, bargain, sell and confirm unto the Grantee, **WITH WARRANTY COVENANTS**, all that real property situated in the Town of Trumbull, County of Fairfield and State of Connecticut, commonly known as **7120 Main Street**, as more particularly described on **SCHEDULE A** attached hereto.

[Remainder of page intentionally left blank]

Conveyance Tax Received
Mary Markham
State Town Clerk of Trumbull Town

9375.00 18750.00

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal this 25th day January, 2020.

Signed and Delivered
in the presence of:

Christopher Russo

Ane Rio

7120 Main, LLC

By: Joseph Pontoriero
Its Manager

STATE OF CONNECTICUT)
) **ss. Fairfield**
COUNTY OF FAIRFIELD)

On this 4th day of January, 2020, personally appeared, **Joseph Pontoriero,** Manager of 7120 Main, LLC, signer of the foregoing instrument and acknowledged to be his free act and deed, and the free act and deed of 7120 Main, LLC before me.

Raymond Rizio
Commissioner of the Superior Court

SCHEDULE A

ALL THAT CERTAIN piece or parcel of land, together with the buildings and improvements thereon, situated in the Town of Trumbull, County of Fairfield, and State of Connecticut, and shown on that certain map entitled, "Map of Survey of Property in Trumbull, CT for: Allied Stores, Inc.", dated April 27, 1965, and on file in the Trumbull Town Clerk's Office as Map No. 1300, said parcel being bounded as follows:

NORTHWESTERLY: NORTHEASTERLY: SOUTHEASTERLY: SOUTHWESTERLY: SOUTHEASTERLY AGAIN: NORTHEASTERLY AGAIN: SOUTHERLY:
SOUTHERLY AGAIN: SOUTHEASTERLY AGAIN: SOUTHWESTERLY AGAIN:

by land now or formerly of Howard S. Rowan, 676.15 feet;
by land now or formerly of the Town of Trumbull, 807.26 feet;
by Spring Hill Road, 58.98 feet;
by land now or formerly of the Town of Trumbull, 106.20 feet;
by land now or formerly of the Town of Trumbull, 110.19 feet;
by land now or formerly of the Town of Trumbull, 77.97 feet;
by Spring Hill Road, 474.27 feet;
by land now or formerly of Kenneth and Grace Farrar, 89.73 feet;
by land now or formerly of Kenneth and Grace Farrar, 150.00 feet; and
by Newtown Turnpike, 384.50 feet.

LESS AND EXCEPTING THEREFROM that certain piece or parcel of land situated in the Town of Trumbull, County of Fairfield, and State of Connecticut, on the northwesterly side of Present Spring Hill Road, containing 1,387 square feet, more or less, as more particularly shown on a map filed in the Trumbull Town Clerk's Office as Map No. C-510 entitled: "TOWN OF TRUMBULL MAP SHOWING LAND ACQUIRED FROM 7120 MAIN, LLC BY THE STATE OF CONNECTICUT DEPT. OF TRANSPORTATION INTERSECTION IMPROVEMENTS ALONG ROUTE 25 SCALE: 1" = 20' DECEMBER, 2003 ARTHUR W. GRUHN, P.E. - TRANSPORTATION CHIEF ENGINEER DEPARTMENT OF TRANSPORTATION-BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS." Sheet 1 of 1, Last revised 2/2/05, (144181-7), and bounded and described as follows:
SOUTHEASTERLY: by Present Spring Hill Road, 266 feet, more or less;
SOUTHWESTERLY: running to a point;
NORTHWESTERLY: by Owner's remaining land, 219 feet, more or less, by a line designated "TAKING LINE," as shown on said map;
NORTHERLY: by said Owner's remaining land, 48 feet, more or less, by a line designated "TAKING LINE," as shown on said map;
NORTHEASTERLY: running to a point.

Subject to:

1. Real estate taxes on the Grand List of October 1, 2018, hereafter due and payable which the Grantee herein assumes and agrees to pay.

2. Any and all provisions of any statute, ordinance, municipal regulation, zoning planning and wetland laws and regulations, building lines, if established, or public or private law, local, state or federal.

3. Sewer use charges hereafter due and payable.

4. Sewer Assessment charges hereafter due and payable.

5. Long Hill Fire District Taxes hereafter due and payable.

6. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded October 7, 1977 in Volume 378 at Page 48 of the Trumbull Land Records.

7. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded November 5, 1979 in Volume 432 at Page 426 of the Trumbull Land Records.

8. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded June 15, 1993 in Volume 808 at Page 241 of the Trumbull Land Records.

9. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded October 11, 1996 in Volume 907 at Page 532 of the Trumbull Land Records.

10. Easements in favor of the State of Connecticut set forth in a Certificate of Taking dated September 1, 2005 and recorded in Volume 1356 at Page 155 of the Trumbull Land Records.

11. Planning and Zoning Commission Special Permit recorded January 7, 2020 in Volume 1802 at Page 431 of the Trumbull Land Records.

JAN 22 2020

TOWN CLERK OFFICE, TRUMBULL, CT
RECEIVED FOR RECORD
AT 3:34P M. ATTEST Gloria A. Murphy
TOWN CLERK

Architecture
Engineering
Environmental
Land Surveying
Companies

An Employee-Owned Company

June 24, 2020

Project Stormwater Summary

Proposed Improvements to
71250 Main Street
Trumbull, Connecticut

Purpose and Description

On December 18, 2019, the Trumbull Planning and Zoning Commission approved the Special Permit and Site Plan Review for the warehouse and distribution facility located at 7120 Main Street. The site is currently under construction in accordance with the approved plans.

Our client is constantly investigating ways to improve their site operations for efficiency and safety. In a recent analysis of the approved site plan, it was determined that the efficiency and safety of the site operations logistics could be improved with a few minor site alterations to the easterly parking area. For this reason, we are proposing minor modifications to the easterly parking area and site access/egress. All other aspects of the approved site plan will remain as originally approved by the Commission.

These proposed site modifications include the realignment of parking and building access/egress to allow the delivery vans to access the building from the east (rear) and exit on the west (front) side of the building. These site modifications will not have any significant impacts upon the stormwater management system that was originally approved and constructed. All stormwater inlets, conveyance piping, treatment and detention features will remain as per the originally approved plans. These plan modifications will result in minor changes to the watershed areas for each inlet system. As the original system had been designed to provide more than ample capacity, these minor changes will not impact the capacity or function of each system component or the overall system design. For more detailed information, reference the project Stormwater Management Report dated April 2020.

The proposed stormwater system has been designed in accordance with the *Town of Trumbull Inland Wetlands and Watercourses Regulations,* the *Town of Trumbull Zoning Regulations,* the *Town of Trumbull 2014 Administrative Policy for Stormwater Management and Drainage Design Standards,* the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control and the 2004 Connecticut Stormwater Quality Manual.*

Stormwater Impact Assessment

As originally designed, the stormwater management system greatly reduces the peak runoff flow rates from the site as well as significantly improves the water quality of the stormwater leaving the site. The site plan modifications result in a net 192 square foot reduction in impervious areas.

There are no modifications planned or proposed along the northern and western portions of the site. The proposed site modifications mainly occur in the southern and eastern parking areas. These modifications result in small changes to the watershed areas contributing to individual inlets, however the resulting watersheds to the Stormwater Management Basins (SWMB) have not been significantly altered. The stormwater collection, conveyance, pre-treatment and detention/infiltration systems will be maintained and function as originally designed.

Water Quality

The water quality improvements are developed with a multi-tier approach.

- Tier 1: The first flush of runoff is collected and directed into a hydrodynamic separator.
- Tier 2: The first flush is then directed into the subsurface infiltration system where the majority of the first flush will be infiltrated into the ground.
- Tier 3: All flows exceeding the first flush will be directed into the subsurface infiltration system where a portion of the runoff will be infiltrated into the ground.

The remainder will be detained and released to assure there is no increase in the peak runoff flow rates.

The Stormwater Management Basins (SWMB) provide more than ample storage to completely store and infiltrate the Water Quality Volume (WQV). The minor modifications to the parking lot will not impact the required water quality volume. For the WQV calculations prepared for the original design, please reference Appendix E of the Stormwater Management Report.

Required design WQV and provided WQV are as follow:

Management Basin	Contributing Sub-Watershed	Impervious Area (sf)	Required WQV (cf)	Provided WQV (cf)
SWMB-1	PDA-220	99,273	8,625	13,282
SWMB-2	PDA-300	68,785	4,531	4,810

Water Quantity

The subsurface infiltration systems installed onsite provide for a significant reduction in the peak runoff flow rate from the project site. The minor modifications to the parking lot will not impact the peak runoff flow rates due to the reduction in impervious area onsite. For more detailed information, reference the Stormwater Management Report. Below is a table defining the reductions anticipated:

Existing vs. Proposed Peak Runoff Rates

Peak Flow (cfs)			
Drainage Area	**2-YR**	**10-YR**	**100-YR**
POI-100			
Existing	2.42	4.14	6.82
Proposed	2.49	4.08	6.52
Percent Change	2.89%	-1.45%	-4.40%
POI-200			
Existing	22.44	35.07	54.75
Proposed	12.55	29.23	41.08
Percent Change	-44.07%	-16.65%	-24.97%
POI-300			
Existing	8.85	13.18	19.91
Proposed	6.66	10.73	17.28
Percent Change	-24.75%	-18.59%	-13.21%
Overall Total			
Existing	33.71	52.39	81.48
Proposed	21.70	44.04	64.88
Percent Change	-35.63%	-15.94%	-20.37%

Summary

The proposed site plan modifications will not result in any significant changes to the originally designed stormwater management system. As previously designed and installed, the stormwater collection, conveyance and management system provide significant improvement to the quality of the water leaving the site, as well as provides a significant reduction in the peak flow rate leaving the site.

June 2020

Addendum #1 - TRAFFIC STUDY

Proposed Delivery Station Building Improvements

7120 Main Street
Trumbull, CT

PREPARED BY:
BL Companies
355 Research Parkway
Meriden, CT 06450

Architecture
Engineering
Environmental
Land Surveying

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APPENDIX

NO BUILD TRAFFIC VOLUMES
CAPACITY ANALYSES

EXECUTIVE SUMMARY

On December 18, 2019 the Trumbull Planning and Zoning Commission approved the Special Permit and Site Plan Review for the warehouse and distribution facility located at 7120 Main Street. The site is currently under construction in accordance with the approved plans.

The client is constantly investigating ways to improve the site operations for efficiency and safety. In a recent analysis of the approved site plan, it was determined that the efficiency and safety of the site operations logistics can be improved with some minor site alterations. These alterations pertain to the easterly parking area. For this reason, some minor modifications to the easterly parking area and site access/egress are proposed. All other aspects of the approved site plan will remain as originally approved by the Commission. The proposed site modifications include the realignment of parking and building access/egress to allow the delivery vans to access the building from the east (rear) and exit on the west (front) side of the building. The site also has proposed a revised operating schedule to reduce trips during the peak hour periods of the roadway network.

This traffic study has been prepared for the proposed improvements and revised operating schedule to the warehouse and distribution facility located at 7120 Main Street. The focus of this study was to evaluate the traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the proposed improvements and revised operating schedule and to quantify the potential traffic impacts on these roadways and intersections.

This study investigated the potential traffic impacts of the proposed improvements and revised operating schedule during the weekday morning, midday and evening peak periods. Traffic turning movement counts were obtained at each of the study intersections during the peak periods. A 2% annual growth rate was applied to the existing traffic volumes to develop the 2021 horizon year traffic volumes. In addition to applying this growth rate, traffic volumes from a proposed mixed-use development at 205 Monroe Turnpike were used to determine the No Build (2021) Traffic Volumes.

The site will remain as a package delivery station which will provide "last mile" package delivery services to residences and businesses with an approximate 60-minute driving time radius of the site. As indicated in this table, the proposed improvements and revised operating schedule for the delivery station is projected to generate 1 (1 enter, 0 exit) vehicle trip during the weekday morning peak hour, 145 (25 enter, 120 exit) vehicle trips during the midday peak hour and 115 (85 enter, 30 exit) during the weekday evening peak hour.

A detailed traffic analysis was also conducted at the intersections and roadways in the general vicinity of the site in accordance with methodologies outlined in the Highway Capacity Manual 2010, published by the Transportation Research Board. The greatest cumulative impacts of project related traffic are likely to occur during the weekday morning, mid-day, and evening peak hours, when traffic consists mostly of commuters. As such, traffic operating conditions at the study intersections were analyzed during these peak periods.

In the 2021 Build Scenarios, there is insignificant impact to the network from the proposed development and revised operating schedule. The revised operating schedule is proposed to significantly improve the network compared to the December 19, 2019 approved conditions. The only movement in the study that experiences a change in LOS is in the evening peak hour at the Route 25 at Judd Road and Purdy Hill Road intersection; the Judd Road EB Thru/Right movement changes from a D to an E with only a 5' increase in queue length from 255' in the no build to 260' in the build condition.

It was determined from the analysis no mitigation and/or road improvements are not needed for these proposed improvements. No LOS for an intersection or a specific movement becomes substantially worse than existing. No specific intersection movements that have a LOS "D" or less in the background condition and the control delay per vehicle for such specific movement is increased by more than 15 seconds per vehicle as a result of the development's added traffic at signalized intersections.

I. INTRODUCTION

On December 18, 2019 the Trumbull Planning and Zoning Commission approved the Special Permit and Site Plan Review for the warehouse and distribution facility located at 7120 Main Street. The site is currently under construction in accordance with the approved plans.

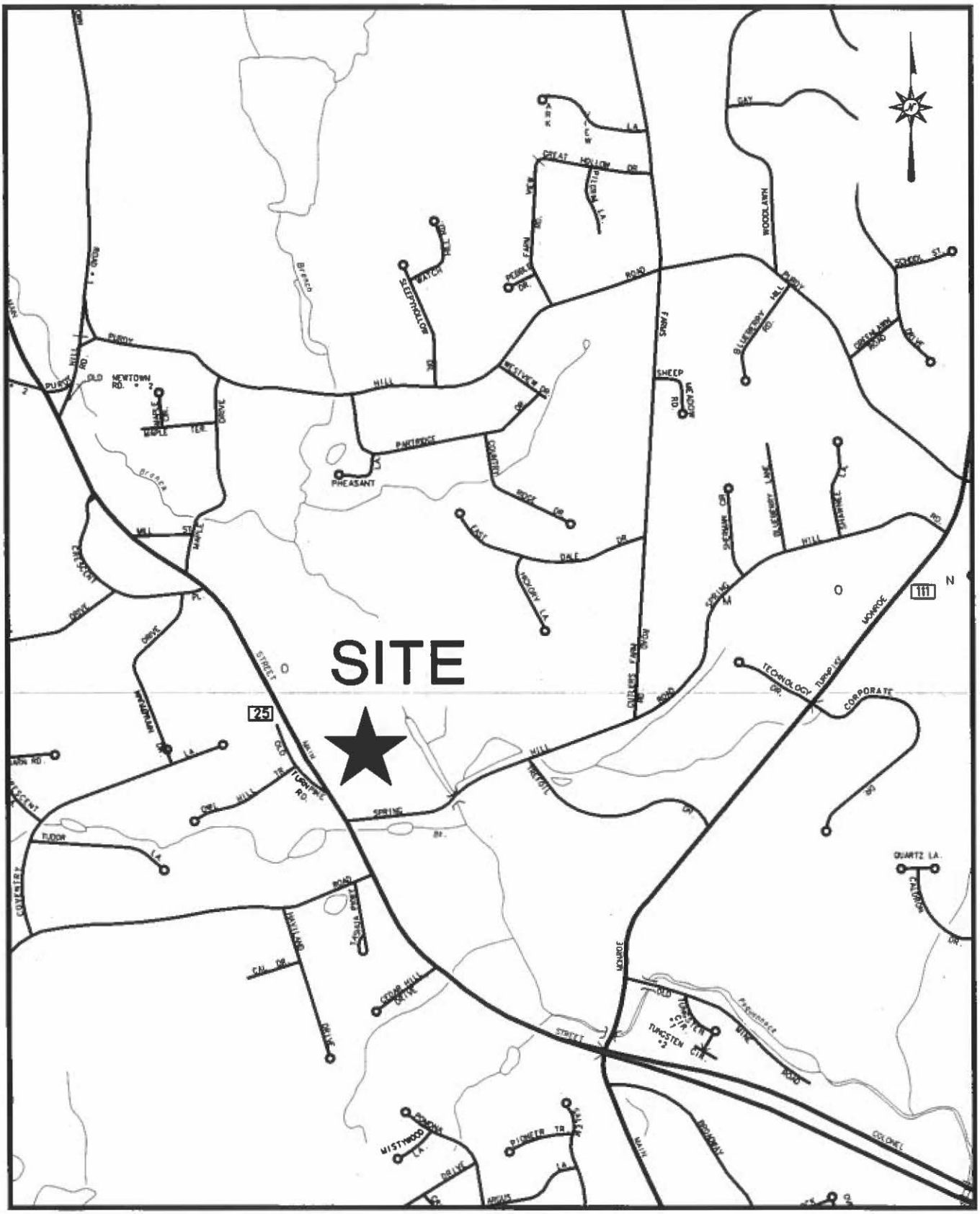
The client is constantly investigating ways to improve the site operations for efficiency and safety. In a recent analysis of the approved site plan, it was determined that the efficiency and safety of the site operations logistics can be improved with some minor site alterations. These alterations pertain to the easterly parking area. For this reason, some minor modifications to the easterly parking area and site access/egress are proposed. All other aspects of the approved site plan will remain as originally approved by the Commission. The proposed site modifications include the realignment of parking and building access/egress to allow the delivery vans to access the building from the east (rear) and exit on the west (front) side of the building. The site also has proposed a revised operating schedule to reduce trips during the peak hour periods of the roadway network.

This traffic study has been prepared for the proposed improvements and revised operating schedule to the warehouse and distribution facility located at 7120 Main Street. The focus of this study was to evaluate the traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the proposed improvements and revised operating schedule and to quantify the potential traffic impacts on these roadways and intersections.

The study area is along a suburban stretch of CT Route 25 (Main Street) that has numerous apartment complexes and residential neighborhoods. See **Figure 1** for a location map.

The site will remain as a package delivery station which will provide "last mile" package delivery services to residences and businesses with an approximate 60-minute driving time radius of the site. The project will include retrofitting the existing 114,000 SF warehouse building. Access to the site will be via curb cuts on Spring Hill Road and Route 25 (Main Street).

The study investigated the potential traffic impacts associated with the development in the weekday morning, mid-day, and evening peak periods. Three existing curb cuts are to remain in the redevelopment of the site. The greatest cumulative impacts of project related traffic are likely to occur during the weekday morning, mid-day, and evening peak hours, when traffic consists mostly of commuters. As such, traffic operating conditions at the study intersections were analyzed during these peak periods.



ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

BL Companies

LOCATION MAP

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
NOT TO SCALE

FIGURE 1

II. EXISTING CONDITIONS

An investigation of the existing traffic conditions on the adjacent roadway network formed the basis for assessing any traffic issues associated with the proposed improvements and revised operating schedule. This investigation included a field reconnaissance, traffic counting, and research of pertinent planning and traffic data available with Connecticut Department of Transportation (CTDOT) and the Town of Trumbull.

Access Network

The project study area consists of the signalized intersection at the following locations:

- CT Route 25 (Main Street) at Judd and Purdy Hill Road
- CT Route 25 (Main Street) at Victoria Drive
- CT Route 25 (Main Street) at Spring Hill Road
- CT Route 25 (Main Street) at Tashua Road
- CT Route 25 (Main Street) at CT Route 111 (Main Street/Monroe Turnpike)
- CT Route 111 (Monroe Turnpike) at Trefoil Drive and Old Mine Plaza Driveway
- CT Route 111 (Monroe Turnpike) at Spring Hill Road

The unsignalized intersection of Trefoil Drive and Spring Hill Road was also included in this study. Major roadways in the vicinity of the project include CT Route 25 (Main Street), CT Route 111 (Main Street/Monroe Turnpike), Trefoil Drive, Tashua Road, Purdy Hill Road, Judd Road, and Spring Hill Road.

CT Route 25 (Main Street) is an urban principal arterial that originates to the south in the City of Bridgeport at an interchange with I-95 and extends to the Town of Brookfield in the north at an intersection with US Route 202. In the vicinity of the project, CT Route 25 (Main Street) currently has one travel lane in each direction. The road has an expressway section south of the intersection with CT Route 111, which is three-lanes in both directions. The speed limit is 40 mph and the average daily traffic, provided by CTDOT, is approximately 20,500 near CT Route

111 and approximately 28,500 north of the intersection of Judd and Purdy Hill Road. The road provides access to primarily residential neighborhoods and small retail developments.

Route 111 (Main Street/Monroe Turnpike) is an urban minor arterial, that originates to the southwest at an interchange with CT Route 15 (Merritt Parkway) and terminates at an intersection with CT Route 34 in Monroe. The average daily traffic, provided by CTDOT, ranges from 12,800 vehicles just south of CT Route 25 (Main Street) to 27,700 vehicles at the Monroe-Trumbull Town Line. It generally has two travel lanes in both directions. The speed limit is 40 mph and provides access to major retail and industrial developments.

Tashua Road is an urban collector that originates at an intersection with North Madison and Madison Avenue and terminates at CT Route 25 (Main Street). The average daily traffic, provided by CTDOT, is approximately 2,500 vehicles. The speed limit is 25 mph and provides access to residential neighborhoods.

Spring Hill Road is an urban local street that originates at CT Route 25 (Main Street) in Trumbull and terminates at an intersection with CT Route 111 in Monroe. The speed limit is 25 mph and provides access to residential neighborhoods and industrial developments. Along Spring Hill Road north of the site there is a school bus company. Existing counts were collected while summer school was in session.

Judd Road is a major urban collector that originates at an intersection with CT Route 59 in Easton and ends at CT Route 25 (Main Street) and Purdy Hill Road. The speed limit is 25 mph and the average daily traffic, provided by CTDOT, was 2,500 vehicles just west of the intersection with CT Route 25 (Main Street). It provides access to residential neighborhoods.

Purdy Hill Road is a major urban collector that originates at the intersection with CT Route 25 (Main Street) and Judd Road and terminates in Monroe at an intersection with Elm Street. The speed limit is 25 mph and it provides access to residential neighborhoods.

Intersection Characteristics

Several key intersections were reviewed in this study to determine if they would be impacted by the expected site traffic volumes. They are as follows:

- **CT Route 25 (Main Street) at Judd and Purdy Hill Road –** At this signalized intersection, every approach has an exclusive left turn lane and a shared thru/right lane. The five-phase fully actuated traffic signal includes protected phasing for the exclusive left turns on both approaches of CT Route 25 (Main Street). Both Purdy Hill Road and Judd Road's approaches have permitted phasing. There is a "No Turn on Red" on the southbound CT Route 25 (Main Street) and Purdy Hill Road approaches.

- **CT Route 25 (Main Street) at Victoria Drive-** At this signalized intersection, CT Route 25 (Main Street) has an exclusive left turn lane and thru lane on the southbound approach. On the northbound approach, there is one thru lane and a shared thru/right-turn lane. On the Victoria Drive approach, there is an exclusive left and right-turn lane. The signal is three-phased and fully actuated with a protected/permitted phasing for the exclusive left-turn on southbound CT Route 25 (Main Street).

- **CT Route 25 (Main Street) at Spring Hill Road and Tashua Road–** The two side street approaches, Spring Hill Road and Tashua Road, are on the same signal controller, but are offset by 450'. Each side street approach has an exclusive left and right-turn lane. There is an exclusive left-turn lane on the southbound side of CT Route 25 (Main Street) approaching Spring Hill Road and an exclusive left turn lane on northbound CT Route 25 approaching Tashua Road. An exclusive right turn lane is on northbound CT Route 25 (Main Street) approaching Spring Hill Road. The signal is 5-phased and fully actuated.

- **CT Route 25 (Main Street) at Route 111 (Monroe Turnpike/Main Street) –** At this signalized intersection, the CT Route 25 (Main Street) approaches have two

travel lanes in both directions. There is an exclusive left and right-turn lane in the northbound direction and an exclusive left-turn and channelized right-turn lane. The channelized right is signalized. CT Route 111 northbound approach has an exclusive left-turn, an exclusive right-turn, and two through lanes. The southbound approach has dual exclusive left-turn lanes and a shared thru/right turn lane. The eight-phase traffic signal is fully actuated and includes protected left turn phasing for both CT Route 25 (Main Street) approaches. A permitted/overlapping right-turn is on the CT Route 25 (Main Street) northbound approach. The Route 111 exclusive left turns have protected phasing. Emergency pre-emption is installed at this location for the northbound CT Route 25 (Main Street) approach.

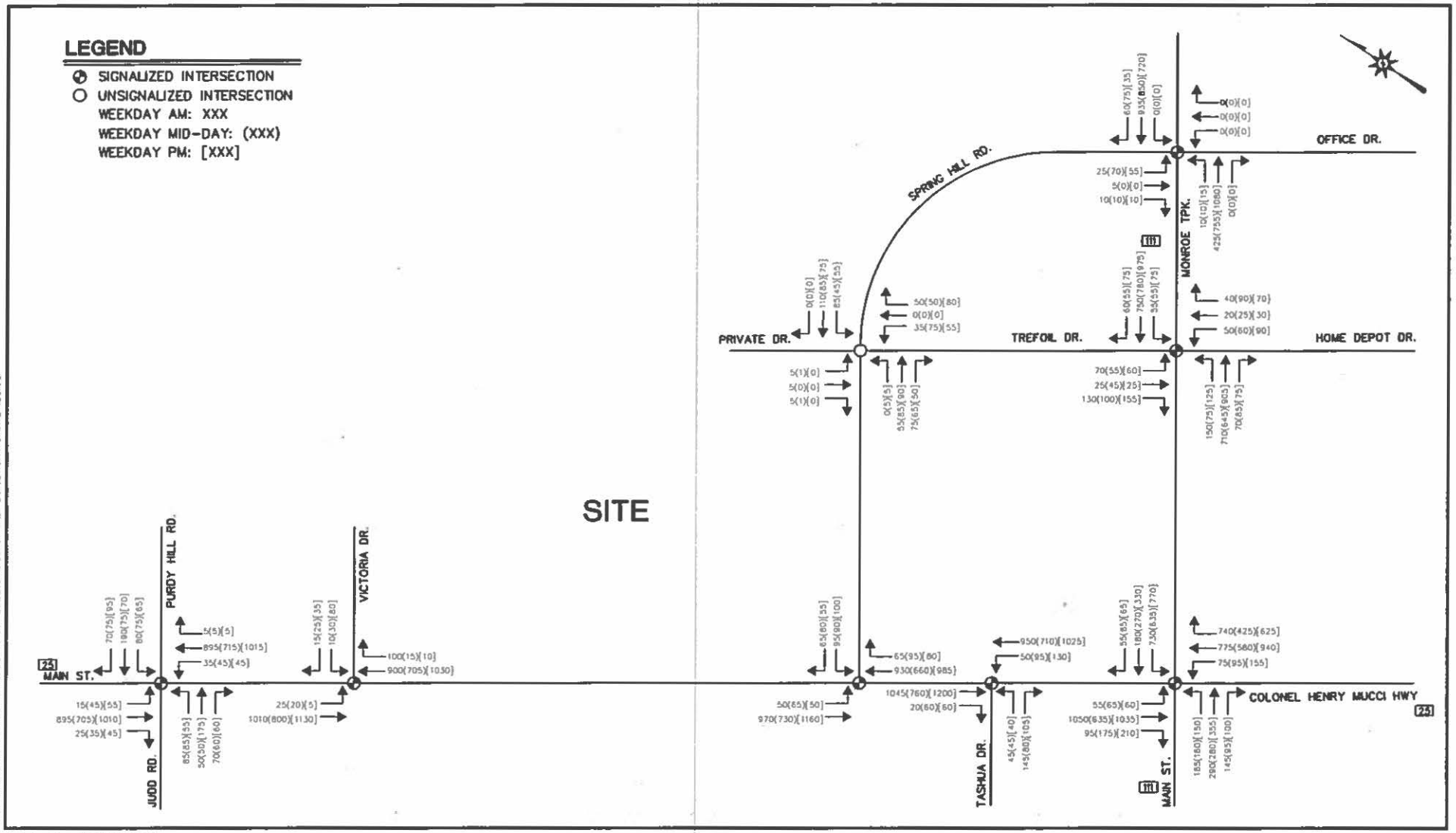
- **CT Route 111 (Monroe Turnpike) at Trefoil Drive and Old Mine Plaza Driveway** – At this signalized intersection, there are two travel lanes in both directions of CT Route 111. The northbound approach has an exclusive left and right-turn lane and the southbound approach has an exclusive left turn lane only both directions have through lanes. Both side street approaches, Trefoil Drive and the Old Mine Plaza driveway have an exclusive left-turn lane and a shared thru/right-turn lane. The signal is 5-phased and has protected left-turns on both CT Route 111 approaches. The side street approaches are permitted phasing. The cycle length in all peak period analyzed for this study is 70" system.

- **CT Route 111 (Monroe Turnpike) at Spring Hill Road and Office Driveway** – At this signalized intersection, there are two travel lanes in both directions of CT Route 111, with one being a shared left/thru lane and the other being a shared thru/right turn lane. The side street approaches of Trefoil Drive and the office driveway have a shared left/thru/right turn lane. The signal has time-based coordination on a system present along CT Route 111 (Monroe Turnpike). The cycle length in all peak periods analyzed for this study is 70".

- **Spring Hill Road at Trefoil Drive** – At this unsignalized intersection, Trefoil Drive is stop-controlled. Every approach has a single lane.

Existing Traffic Volumes

To asses existing traffic conditions in the vicinity of the site, peak hour manual turning movement traffic volumes, vehicle classification and pedestrian counts were recorded at the intersections above. The counts were recorded during typical weekday morning (7am-9am), evening (4pm-6pm) and midday (11am-1pm) peak traffic periods in July of 2019. The current peak hour traffic volumes for the intersections are illustrated in **Figure 2**. These are the existing counts that were approved by Trumbull Planning and Zoning Commission on December 18, 2019 and have no impact from the global pandemic, COVID-19.



ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING
BL Companies

EXISTING (2019) TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 2

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Crash Data Analysis

As part of the existing condition analysis, crash data from the most recent three-year period, January 1, 2017 to December 31, 2019, was obtained from the Connecticut Crash Data Repository.

Two hundred forty-six (246) crashes in the study area were reviewed, the most common crashes were the front to rear at seventy-eight percent (78%). The majority of crashes resulted in "No Apparent Injury" at seventy-five percent (75%). There were no fatalities in the corridor for the three-year period. However, there were two crashes that resulted in "Suspected Serious Injury". One of those crashes occurred at each of the following intersections: Route 25 (Main Street) at Tashua Road and Route 25 (Main Street) at Judd Road. The signalized intersection of Route 25 (Main Street) at Route 11 and Route 111 experienced the majority of the crashes in the corridor at forty four percent (44%). Below **Table 1** summarizes the crash data.

Table 1 – Crash Data Summary

	Route 25 (Main Street) at Spring Hill Road	Route 25 (Main Street) at Tashua Road	Route 25 (Main Street) at Victoria Drive	Route 25 (Main Street) at Judd Road	Route 25 (Main Street) at Route 111	Route 111 at Spring Hill Road	Route 111 at Trefoil Drive	Spring Hill Road at Trefoil Drive
Year								
2017	16	11	1	8	42	4	7	1
2018	17	16	2	9	27	1	11	0
2019	6	11	0	3	40	5	8	0
Total	39	38	3	20	109	10	26	1
Crash Type								
Angle	1	1	0	5	8	2	5	0
Front to Front	1	0	1	0	1	0	0	0
Front to Rear	36	36	2	14	83	5	17	0
Not Applicable	0	0	0	0	0	2	0	1
Other/Unknown	0	1	0	0	2	0	0	0
Rear to Side	0	0	0	0	0	0	2	0
Sideswipe, Opposite Direction	1	0	0	0	1	0	0	0
Sideswipe, Same Direction	0	0	0	1	14	1	2	0
Total	39	38	3	20	109	10	26	1
Severity								
Fatal Injury (K)	0	0	0	0	0	0	0	0
Suspected Serious Injury (A)	0	1	0	1	0	0	0	0
Suspected Minor Injury (B)	8	6	1	1	9	0	2	0
Possible Injury (C)	7	6	0	3	9	2	5	0
No Apparent Injury (O)	24	25	2	15	91	8	19	1
Unknown	0	0	0	0	0	0	0	0
Total	39	38	3	20	109	10	26	1

Note: Data collected from the Connecticut Crash Data Repository

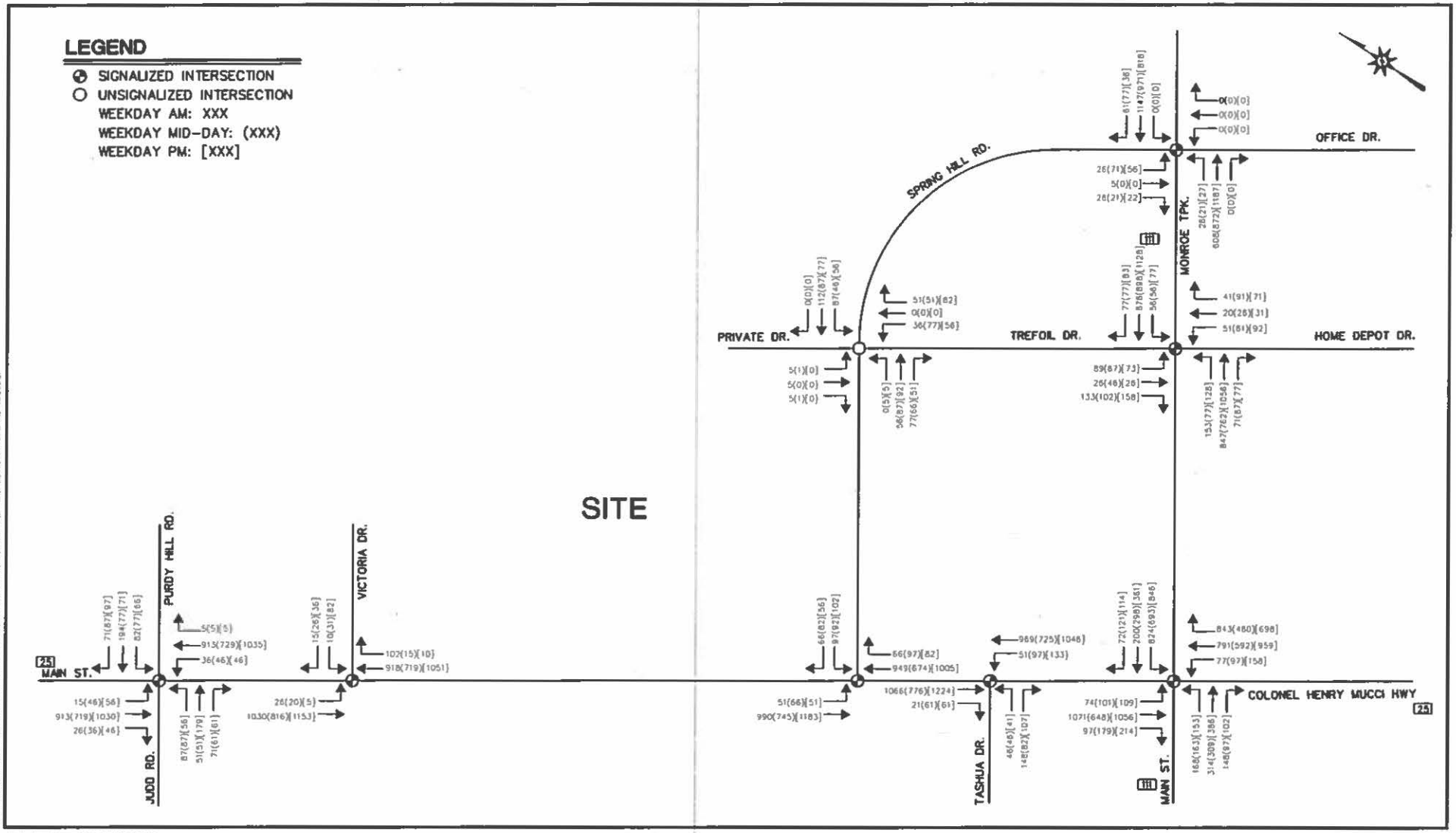
III. PROJECTED TRAFFIC CONDITIONS

In order to evaluate traffic conditions when the proposed improvements are completed in 2021, future traffic volumes networks were forecast under the 2021 No-Build Conditions (without the proposed improvements) and under 2021 Build Conditions (with the proposed improvements). The projected traffic volumes on the roadway network under 2021 No-Build conditions were assumed to include all existing traffic and new traffic resulting from background sources of traffic growth, independent of the proposed improvements and revised operating schedule. The project traffic volumes on the roadway network under 2021 Build conditions were assumed to include the anticipated project site-generated traffic volumes in addition to the assumed background traffic growth.

No Build Traffic Volumes

A 2% annual growth rate was applied to the 2019 existing traffic volumes to develop the 2021 No-Build traffic volumes. In addition to applying this growth rate, any approved or pending developments in the area that may add substantial traffic volume to the study intersections were considered. In discussions with Connecticut Department of Transportation, there is one planned mixed-use development at 205 Monroe Turnpike was identified. The proposed development consists of mix uses totaling about 36,726 square feet. Proposed volumes from the mixed-use development are shown in the Appendix and were included in the No Build Traffic Volumes for the weekday morning, midday and evening peak hours.

The annual growth and other project volumes were added to the Existing Traffic Volumes to determine the No Build (2021) Traffic Volumes. **Figure 3** graphically illustrates the No Build Traffic Volumes.



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NO BUILD (2021) TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
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FIGURE 3

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Trip Generation and On-Site Circulation

From the previous study that was approved by Trumbull Planning and Zoning Commission on December 18, 2019, a summary of the existing trip generation projections for the approved delivery station from the December study is presented in **Table 2**.

As indicated in this table, the 2019 approved delivery station is projected to generate 62 (49 enter, 13 exit) vehicle trips during the weekday morning peak hour, 81 (34 enter, 47 exit) vehicle trips during the midday peak hour and 58 (24 enter, 34 exit) during the weekday evening peak hour. The schedule from the previous proposed study had a traditional operating pattern where high volume of trips came during the adjacent street traffic's peak hours.

Table 2 – 2019 Approved Operating Schedule Trip Generation

2019 Approved Operating Schedule Trip Generation									
Trips By	**Trips**								
	AM Peak Hour of Adjacent Street			Midday Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
	Total	In	Out	Total	In	Out	Total	In	Out
Associates/Managers	24	24	0	13	0	13	10	0	10
DSP	36	24	12	48	24	24	48	24	24
Flex Drivers	0	0	0	20	10	10	0	0	0
Trucks	2	1	1	0	0	0	0	0	0
Trips	**62**	**49**	**13**	**81**	**34**	**47**	**58**	**24**	**34**

The client has proposed revising the operating schedule to allow for the least amount of impact to the public, daily commuters and its own employees. The operating schedule has shifted majority of its site generated trips throughout the day to better accommodate loading and delivery of packages.

The level of traffic likely generated by the proposed improvements and revised operating schedule from the delivery station has been estimated by the tenant to determine the potential traffic impact on the study intersections. The tenant completed a detailed analysis for the new operating schedule determining the number and time of site traffic arrivals and departures at the site.

The Tenant anticipates that this facility will employ approximately 169 associates/managers on-site over various shifts during the course of the day. These employees will have two parking areas on site with access from U.S. Route 25 via full access site drive 1 and right in right out restrictions for site drive 2.

In addition to the associates/managers working in the facility, the tenant expects that 239 delivery service personnel (DSP) and 84 flex drivers will be utilized for daily package deliveries within an approximately 60-minute radius of the facility. Flex drivers will arrive on-site in the evening (two shifts of 68 and 16 drivers between 4:00 and 4:30 p.m.) through the site drive on Spring Hill Road. The flex drivers enter the building in their personal vehicle, the vehicle will be loaded and then the flex drivers will leave via the Route 25 access drives and make deliveries in their personal vehicles.

Delivery stations operate 24/7, with most of the sortation activity done early in the morning when the line haul trucks arrive with customer packages DSP drivers will arrive on-site in the morning (three shifts of 120, 60 and 59 drivers between 10:30 and 11:30 a.m.) through the site drive on Spring Hill Road. The DSP drivers will park their personal vehicles on-site and then leave the site in a delivery van, exiting on Route 25 via site drives 1 and 2. The first set of 24 vans will be pre-loaded within the building overnight so that the first wave of DSP drivers arrives on-site and leave quickly. Subsequent shifts of vans will enter the building, get loaded and then proceed out for deliveries. As DSP drivers finish their deliveries, they return to the site on Spring Hill Road, park the delivery vans and leave the site in their personal vehicles (four shifts of 45, 105, 74 and 15 drivers between 9:00 and 11:00 p.m.)

The site is expected to process 18 tractor-trailers per day, generally between 9:00 p.m. and 2:00 a.m. Tractor trailers will enter and exit on Spring Hill Road.

After the check out and release of all delivery vehicles by 10:00 PM, delivery station associates prepare the delivery station for the next day's packages.

A summary of the existing trip generation projections for the proposed improvements and revised operating schedule of the delivery station is presented in **Table 3**.

As indicated in this table, the proposed improvements and revised operating schedule for the delivery station is projected to generate 1 (1 enter, 0 exit) vehicle trip during the weekday morning peak hour, 145 (25 enter, 120 exit) vehicle trips during the midday peak hour and 115 (85 enter, 30 exit) during the weekday evening peak hour. This reflects the revised operating schedule to remove the trips from the adjacent street peak hour. The Net Trips are for comparison showing the positive impact to the roadway network the revised operating schedule will have.

Table 3 – Proposed Revised Operating Schedule Trip Generation

Proposed Revised Operating Schedule Trip Generation									
Trips By	**Trips**								
	AM Peak Hour of Adjacent Street			Midday Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
	Total	In	Out	Total	In	Out	Total	In	Out
Associates/Managers	0	0	0	24	24	0	0	0	0
DSP	0	0	0	119	0	119	0	0	0
Flex Drivers	0	0	0	0	0	0	114	84	30
Trucks	1	1	0	2	1	1	1	1	0
Revised Operating Trips	**1**	**1**	**0**	**145**	**25**	**120**	**115**	**85**	**30**
2019 Approved Trips	62	49	13	81	34	47	58	24	34
Net Trips	**-61**	**-48**	**-13**	**+64**	**-9**	**+73**	**+57**	**+61**	**-4**

Trip Distribution

The directional distribution of traffic is typically a function of population densities, competing opportunities, existing travel patterns adjacent to the site, and the efficiency and limitations of the existing roadway system. Based upon the site's close proximity to Route 25 (Main Street) and Route 111, it is anticipated that the majority of employees/delivery vehicles will utilize these roadways for access and egress from the site. The distribution of the anticipated traffic volumes was based on arrival/departure patterns shown in **Figure 4**. The distribution remained the same from the previous study that was approved by Trumbull Planning and Zoning Commission on December 18, 2019.

Assigned Site Generated Traffic Volumes

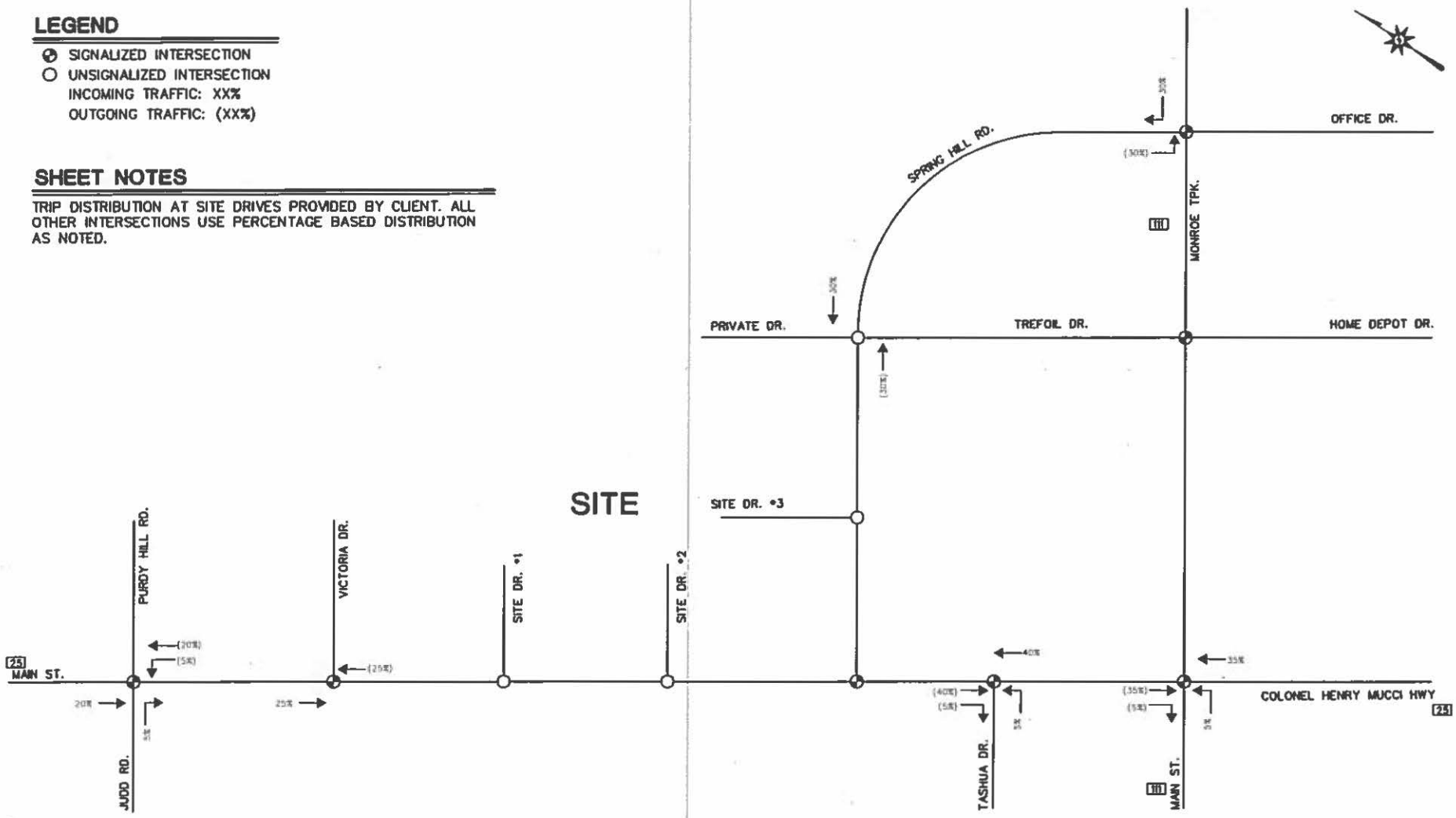
The generated trips are multiplied by the corresponding proportions to ascertain the site-generated traffic volumes. Site driveway specific traffic volumes were provided by the client. **Figure 5** shows the site generated peak hour traffic generated by the site assigned to the nearby roadway network.

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
  INCOMING TRAFFIC: XX%
  OUTGOING TRAFFIC: (XX%)

SHEET NOTES

TRIP DISTRIBUTION AT SITE DRIVES PROVIDED BY CLIENT. ALL OTHER INTERSECTIONS USE PERCENTAGE BASED DISTRIBUTION AS NOTED.



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TRIP DISTRIBUTION
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FIGURE 4

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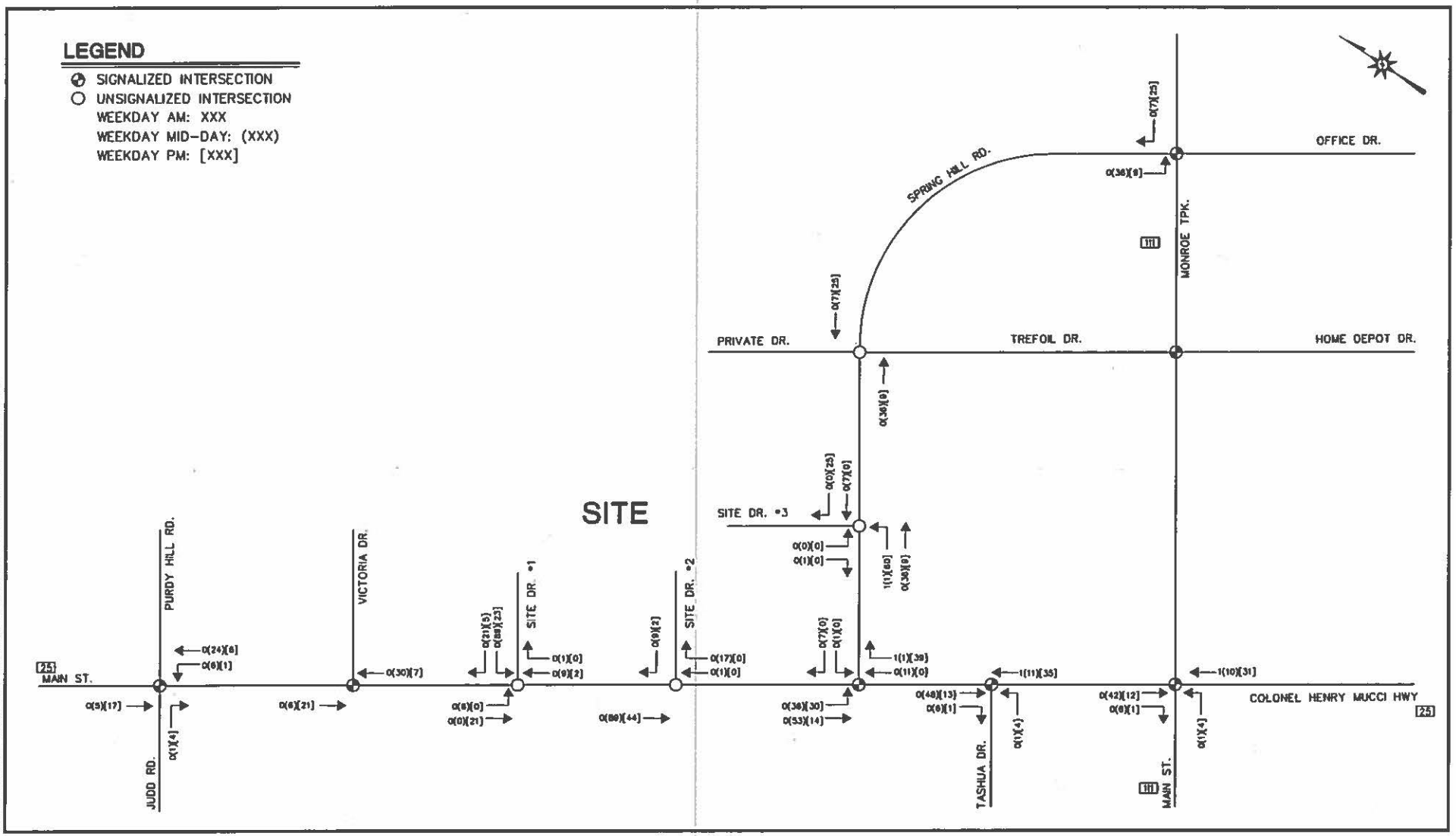
6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOBS\P\120190114\DWG\TRLO190114-FIG.DWG FIGURE 4



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SITE GENERATION TRAFFIC VOLUMES
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FIGURE 5

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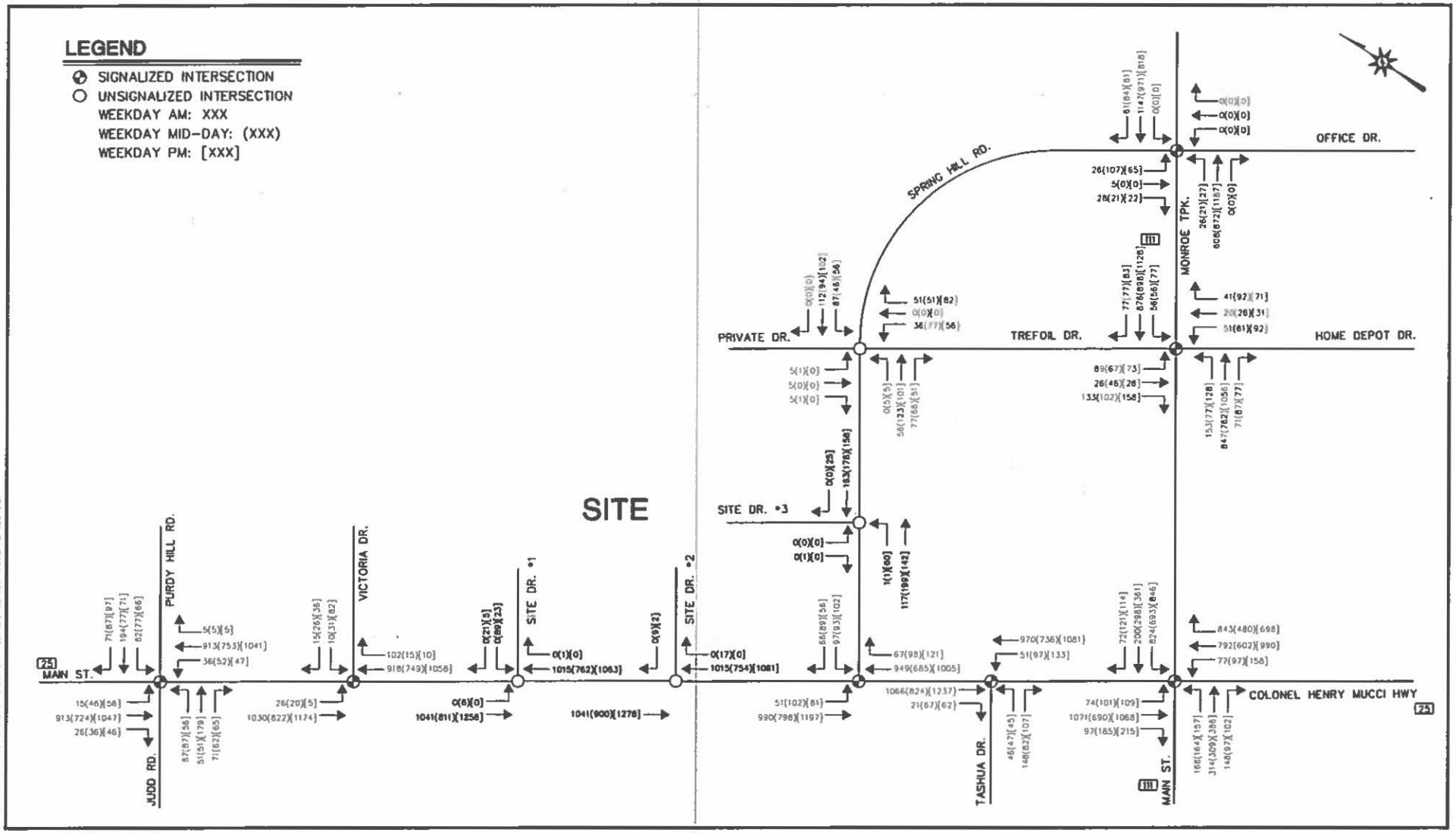
Build Traffic Volumes

The assigned site-generated volumes were superimposed onto the 2021 No Build Traffic volumes to establish the future 2021 Build Traffic volumes, as illustrated in **Figure 6**.



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BUILD (2021) TRAFFIC VOLUMES
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FIGURE 6

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IV. ROADWAY ADEQUACY

The intersection capacity analyses were prepared using the methodology described in the Highway Capacity Manual (HCM), published by the Transportation Research Board (TRB) for the no build and build traffic volume scenarios to simulate the traffic impact of proposed improvements and revised operating schedule on the adjacent roadway network. As documented in the HCM, intersection performance is influenced by a number of factors, including: traffic demand; lane configurations; lane widths; turning restrictions; roadway grades; and signal phasing. The existing physical roadway characteristics and signal phasing and timing settings were determined by observing conditions in the field and reviewing the current traffic control signal plans provided by the Connecticut Department of Transportation.

Synchro™ software (Version 10) was used to model the study intersections based on the parameters mentioned above. The Synchro software is widely utilized by the traffic engineering industry and is consistent with the procedures in the HCM.

Signalized Intersections

Signalized intersections are analyzed in terms of vehicle capacity and motorist delay. Capacity is the maximum rate of vehicle flow through an intersection given typical operating conditions. The number of vehicles traveling through an intersection is divided by the capacity of the intersection to determine an overall volume to capacity ratio (v/c). A v/c value under 1.00 indicates that the number of vehicles traveling through an intersection is less than capacity.

As stated in the HCM, level of service for signalized intersections is defined in terms of control delay. Control delay measures the increase in delay a motorist experiences while encountering a traffic control signal. These factors include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. This delay is measured per vehicle for a 15-minute analysis period and is associated with the levels of service, which are summarized in **Table 4** below:

Table 4 – Signalized Intersection - Level of Service

Level of Service	Average Control Delay (seconds per vehicle)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of service A represents the optimum level where most motorists arrive at the subject intersection during the green phase and thus experience virtually no delay. Conversely, level of service F indicates that motorists are delayed over 80 seconds while traveling through the intersection, and can often imply a complete breakdown of that location. Level of service D is generally considered the limit of acceptable motorist delay.

Unsignalized Intersections

Unsignalized intersections are generally evaluated in terms of average side street delay, as well as the capacity of the roadway approach. This analysis is based on the random arrival of vehicles and the associated gaps generated by this random arrival within the traffic stream. There is no overall level of service for unsignalized intersections. The relationship between levels of service and average side street delay are summarized in **Table 5** below:

Table 5 – Unsignalized Intersection – Level of Service

Level of Service	Average Control Delay (seconds per vehicle)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

It should be noted that unsignalized levels of service do not correspond to those for signalized intersections, nor do they constitute warrants for the installation of traffic control signals. It is also recognized that the methodology is overly conservative and that computations can indicate operations at poor levels of service (E or F) with even very low side street volumes, although they often function without serious problems in the real world.

Table 6 shows the levels of service (LOS) at the subject intersections. A more detailed table is included in the Appendix.

Table 6 – Peak Hour Levels of Service

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 25 at Judd Road and Purdy Hill Road[1]	**D/36.3**	**D/36.3**	**C/27.2**	**C/27.5**	**E/61.2**	**E/65.0**
Judd Road EB Left	F/0.83/155	F/0.83/155	D/0.47/90	D/0.48/90	D/0.35/75	D/0.34/75
Judd Road EB Thru/Right	C/0.34/90	C/0.34/90	B/0.34/70	B/0.35/70	D/0.81/255	E/0.82/260
Purdy Hill Road WB Left	D/0.36/100	D/0.36/100	C/0.38/80	C/0.39/80	E/0.65/105	E/0.67/105
Purdy Hill Road WB Thru/Right	E/0.82/315	E/0.82/315	D/0.60/150	D/0.61/150	D/0.62/175	D/0.61/175
Route 25 NB Left	D/0.38/60	D/0.38/60	D/0.31/60	D/0.36/70	E/0.51/80	E/0.52/85
Route 25 NB Thru/Right	C/0.88/860	C/0.88/860	C/0.80/635	C/0.81/665	E/1.03/1040	E/1.04/1050
Routh 25 SB Left	D/0.16/35	D/0.16/35	D/0.31/60	D/0.32/60	E/0.62/100	E/0.62/100
Route 25 SB Thru/Right	D/0.94/895	D/0.94/895	C/0.83/665	C/0.82/670	E/1.07/1095	E/1.09/1120
Route 25 at Victoria Drive[1]	**B/12.6**	**B/12.6**	**A/7.8**	**A/8.0**	**C/21.1**	**C/22.3**
Victoria Drive WB Left	C/0.06/25	C/0.06/25	C/0.14/40	C/0.15/40	C/0.36/75	C/0.36/75
Victoria Drive WB Right	B/0.08/25	B/0.08/25	B/0.12/25	B/0.12/25	B/0.15/25	B/0.15/25
Route 25 NB Thru/Right	B/0.72/700	B/0.72/700	A/0.53/345	A/0.55/370	B/0.84/820	B/0.84/830
Route 25 SB Left	A/0.08/25	A/0.08/25	A/0.04/25	A/0.04/25	A/0.02/25	A/0.02/25
Route 25 SB Thru	B/0.71/700	B/0.71/700	A/0.59/440	A/0.59/450	C/0.91/910	C/0.93/930

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 25 at Spring Hill Road[1]	**B/16.8**	**B/16.8**	**B/10.7**	**B/12.0**	**C/33.1**	**D/37.1**
Spring Hill Road WB Left	D/0.50/110	D/0.50/110	D/0.45/110	D/0.48/110	D/0.52/120	D/0.52/120
Spring Hill Road WB Right	B/0.29/40	B/0.29/40	B/0.32/45	B/0.35/45	B/0.25/40	B/0.25/40
Route 25 NB Thru	A/0.81/805	A/0.81/805	A/0.54/85	A/0.59/85	A/0.81/890	A/0.82/850
Route 25 NB Right	A/0.07/25	A/0.07/25	A/0.09/25	A/0.10/25	A/0.08/25	A/0.11/25
Route 25 SB Left	A/0.19/25	A/0.19/25	A/0.13/25	A/0.22/30	A/0.20/25	A/0.31/25
Route 25 SB Thru	C/0.88/890	C/0.88/890	B/0.67/470	B/0.73/535	E/1.04/1200	E/1.05/1220
Route 25 at Tashua Road[1]	**C/20.6**	**C/20.6**	**B/10.5**	**B/12.3**	**D/48.4**	**D/52.0**
Tashua Road EB Left	D/0.24/65	D/0.24/65	D/0.22/65	D/0.24/65	D/0.21/60	D/0.23/65
Tashua Road EB Right	B/0.37/90	B/0.37/90	A/0.21/35	A/0.19/35	B/0.29/70	B/0.29/75
Route 25 NB Left	A/0.27/25	A/0.27/25	A/0.27/25	A/0.32/25	C/0.60/100	C/0.60/105
Route 25 NB Thru	B/0.83/845	B/0.83/845	B/0.59/420	B/0.64/445	C/0.84/965	C/0.88/1050
Route 25 SB Thru/Right	C/0.96/325	C/0.96/325	A/0.76/135	B/0.83/165	E/1.13/345	E/1.15/345

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 111 at Route 25[1]	**E/57.6**	**E/57.6**	**D/39.9**	**D/40.6**	**E/61.1**	**E/62.2**
Route 25 EB Left	F/0.80/155	F/0.80/155	E/0.67/145	E/0.68/155	F/0.78/175	F/0.78/175
Route 25 EB Thru	E/0.97/640	E/0.97/640	D/0.82/315	D/0.82/335	E/0.99/630	E/1.00/640
Route 25 EB Right	A/0.13/30	A/0.13/30	A/0.24/40	A/0.24/40	A/0.27/85	A/0.27/85
Route 25 WB Left	F/0.82/165	F/0.82/165	E/0.65/135	E/0.66/140	F/0.99/285	F/0.99/285
Route 25 WB Thru	D/0.71/395	D/0.71/395	D/0.76/285	D/0.72/285	D/0.87/535	D/0.89/565
Route 25 WB Right	C/0.82/670	C/0.82/670	B/0.55/225	B/0.54/225	B/0.70/470	B/0.70/470
Route 111 NB Left	F/1.74/370	F/1.74/370	E/0.73/240	E/0.74/255	F/0.82/240	F/0.83/250
Route 111 NB Thru	E/0.82/205	E/0.82/205	D/0.55/180	D/0.57/190	F/0.97/285	F/0.97/285
Route 111 NB Right	B/0.48/60	B/0.48/60	A/0.25/25	A/0.26/25	A/0.32/25	A/0.32/25
Route 111 SB Left	D/0.91/430	D/0.91/430	D/0.85/345	D/0.86/355	F/1.02/525	F/1.02/525
Route 111 SB Thru/Right	C/0.47/245	C/0.47/245	D/0.85/515	D/0.87/535	F/1.04/665	F/1.05/665

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Home Depot Drive/Trefoil Drive & Route 111[1]	**B/15.9**	**B/15.9**	**B/13.7**	**B/13.7**	**B/19.6**	**B/19.6**
Route 111 EB Left	D/0.61/145	D/0.61/145	C/0.38/70	C/0.38/70	D/0.55/135	D/0.55/135
Route 111 EB Thru	B/0.44/215	B/0.44/215	A/0.39/180	A/0.39/180	B/0.61/365	B/0.61/365
Route 111 EB Right	A/0.08/25	A/0.08/25	A/0.09/25	A/0.09/25	A/0.09/25	A/0.09/25
Route 111 WB Left	C/0.30/60	C/0.30/60	C/0.30/60	C/0.30/60	C/0.38/70	C/0.38/70
Route 111 WB Thru/Right	B/0.60/245	B/0.60/245	B/0.54/255	B/0.54/255	C/0.78/405	C/0.78/405
Home Depot Drive NB Left	C/0.34/50	C/0.34/50	C/0.43/60	C/0.43/60	D/0.60/80	D/0.60/80
Home Depot Drive NB Thru/Right	B/0.22/40	B/0.22/40	B/0.40/55	B/0.40/55	B/0.31/50	B/0.31/50
Trefoil Drive SB Left	C/0.47/75	C/0.47/75	C/0.41/65	C/0.41/65	C/0.35/60	C/0.35/60
Trefoil Drive SB Thru/Right	B/0.46/55	B/0.46/55	B/0.48/65	B/0.48/65	A/0.47/55	A/0.47/55
Trefoil Drive/Private Drive & Spring Hill Road[2]	-	-	-	-	-	-
Trefoil Drive NB	B/0.14/25	B/0.14/25	B/0.20/25	B/0.21/25	B/0.20/25	B/0.21/25
Spring Hill Road EB	A/0.00/25	A/0.00/25	A/0.00/25	A/0.00/25	A/0.00/25	A/0.00/25
Spring Hill Road WB Left	B/0.07/25	B/0.07/25	A/0.04/25	A/0.04/25	A/0.04/25	A/0.04/25
Private Drive SB	B/0.03/25	B/0.03/25	B/0.00/25	B/0.00/25	A/0.00/25	A/0.00/25
Route 111 & Spring Hill Road/Office Drive[1]	**A/3.9**	**A/3.9**	**A/5.1**	**A/6.5**	**A/4.9**	**A/5.3**
Spring Hill Road EB Left/Thru/Right	C/0.34/45	C/0.34/45	C/0.47/60	C/0.58/80	C/0.41/50	C/0.45/55
Route 111 NB Left/Thru/Right	A/0.27/70	A/0.27/70	A/0.39/120	A/0.40/140	A/0.52/175	A/0.52/185
Route 111 SB Left/Thru/Right	A/0.45/150	A/0.45/150	A/0.42/140	A/0.43/165	A/0.34/100	A/0.35/105

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 25 & Site Drive #1[2]	-	-	-	-	-	-
Site Drive #1 WB Left/Right	-	A/0.00/25	-	F/1.07/180	-	F/0.82/75
Route 25 SB Left	-		-	A/0.01/25	-	A/0.00/25
Route 25 & Site Drive #2[2]	-	-	-	-	-	-
Site Drive #2 WB Right	-	A/0.00/25	-	C/0.03/25	-	C/0.01/25
Spring Hill Road & Site Drive #3[2]	-	-	-	-	-	-
Spring Hill Road NB Left	-	A/0.00/25	-	A/0.00/25	-	A/0.05/25
Spring Hill Road NB Thru	-	A/0.00/25	-	A/0.00/25	-	A/0.00/25
Site Drive #3 EB Left/Right	-	A/0.00/25	-	B/0.00/25	-	A/0.00/25

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

As illustrated in **Table 6**, the 2021 No-Build Scenarios traffic operations were analyzed as the base conditions for comparison with the 2021 Build Scenarios. In the 2021 No Build Scenarios, several intersections and approaches are projected to operate at unacceptable Levels of Service. Specific movements that experience Levels of Service D, E or F in the 2021 No Build Scenarios for the respective peak hours (AM, MIDDAY, PM) are as follows:

Route 25 (Main Street) at Judd Road and Purdy Hill Road

- Judd Road EB Left (F, D, D)
- Judd Road EB Thru/Right (D PM)
- Purdy Hill Road WB Left (D AM, E PM)
- Purdy Hill Road WB Thru/Right (E, D, D)
- Route 25 (Main Street) NB Left (D, D, E)
- Route 25 (Main Street) NB Thru/Right (E PM)
- Route 25 (Main Street) SB Left (D, D, E)
- Route 25 (Main Street) SB Thru/Right (D AM, E PM)

Route 25 at Spring Hill Road

- Spring Hill Road WB Left (D, D, D)
- Route 25 SB Thru (E PM)

Route 25 at Tashua Road

- Tashua Road EB Left (D, E, E)
- Route 25 SB Thru (E PM)

Route 111 at Route 25 (Main Street)

- Route 25 (Main Street) EB Left (F, E, F)
- Route 25 (Main Street) EB Thru (E, D, E)
- Route 25 (Main Street) WB Left (F, E, F)
- Route 25 (Main Street) WB Thru (D, D, D)
- Route 111 NB Left (F, E, F)
- Route 111 NB Thru (E, D, F)
- Route 111 SB Left (D, D, F)

- Route 111 SB Thru/Right (D MIDDAY, F PM)

Home Depot Drive/Trefoil Drive & Route 111

- Route 111 EB Left (D AM, D PM)
- Home Depot Drive NB Left (D PM)

In the 2021 Build Scenarios, there is insignificant impact to the network from the proposed improvements and revised operating schedule. The revised operating schedule is proposed to significantly improve the network compared to the December 19, 2019 approved conditions. The only movement in the study that experiences a change in LOS is in the evening peak hour at the Route 25 at Judd Road and Purdy Hill Road intersection; the Judd Road EB Thru/Right movement changes from a D to an E with only a 5' increase in queue length from 255' in the no build to 260' in the build condition.

V. CONCLUSIONS AND RECOMMENDATIONS

This traffic study has been prepared for the proposed improvements and revised operating schedule to the warehouse and distribution facility located at 7120 Main Street. The focus of this study was to evaluate the traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the proposed improvements and revised operating schedule and to quantify the potential traffic impacts on these roadways and intersections.

In the 2021 Build Scenarios, there is insignificant impact to the network from the proposed improvements and revised operating schedule. The revised operating schedule is proposed to significantly improve the network compared to the December 19, 2019 approved conditions. The only movement in the study that experiences a change in LOS is in the evening peak hour at the Route 25 at Judd Road and Purdy Hill Road intersection; the Judd Road EB Thru/Right movement changes from a D to an E with only a 5' increase in queue length from 255' in the no build to 260' in the build condition.

It was determined from the analysis no mitigation and/or road improvements are not needed for these proposed improvements. No LOS for an intersection or a specific movement becomes substantially worse than existing. No specific intersection movements that have a LOS "D" or less in the background condition and the control delay per vehicle for such specific movement is increased by more than 15 seconds per vehicle as a result of the development's added traffic at signalized intersections.

APPENDIX

NO BUILD TRAFFIC VOLUMES

SOLLI ENGINEERING

July 11, 2018

Mr. Jim Jurczyk
Connecticut Department of Transportation
Office of the State Traffic Administration
2800 Berlin Turnpike
Newington, Connecticut 06131-7546

RE: OSTA Step 1: Pre-Certificate Application Response to Comments
Proposed Mixed-Use Development
OSTA # 084-1806-01
205 Monroe Turnpike, Monroe, CT 06468
Project Number: 1402801

Dear Mr. Jurczyk:

Please find enclosed a revised package for the major traffic generator pre-certificate application for the proposed development at 205 Monroe Turnpike in Monroe, Connecticut. The package has been revised to address the comment dated June 21, 2018 to include background trips associated with the refill of the United Healthcare Facility and projected trips from the Trefoil Corporate Park.

Enclosed are one (1) paper copy and one (1) DVD copy of the revised application materials. We look forward to working with you in the processing of this application.

Respectfully,

Solli Engineering, LLC

Collene Byrne
Project Manager

Kevin Solli, PE
Principal

Enclosures
CC: Mike Schinella
Thomas Schinella

X:\SE Files\Project Data\2014\1402801 - 205 Monroe Tpke\Engineering Data\Traffic\OSTA\Step 1\1402801 - CT DOT_OSTA Step 1 Cover Letter (2018-07-11).docx

STATE OF CONNECTICUT

Office of the State Traffic Administration
Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546
Phone: (860) 594-3020 Fax: (860) 594-2552

Date: 06/01/18

STEP 1
Major Traffic Generator
Pre-Certificate Application
Traffic Volume Data Requirements

Name of Facility:

Proposed Mixed-Use Development

Location (complete street address; if none, provide map/block/lot information):

205 Monroe Turnpike

Town and Zip Code:

Monroe, Connecticut 06468

Proposed Gross Floor Area (GSF) and Land Use of Expansion:

N/A

Proposed GSF and Land Use of Land Use Change (i.e. xx retail to xx office etc.):

N/A

Total Gross Floor Area: Categorized By Land Use:

Retail: 15,000sf, Medical Office: 10,000sf, High-Turnover Restaurant: 4,950sf, Drive-In Bank: 2,500sf, Gas Station w/ Convenience Store: 3,276sf, Coffee Shop w/ Drive Thru: 1,000sf

Development financing includes State or Federal funding sources? ○ Yes ⊙ No

If "Yes," then the Step 2 Checklist will require completion of the Connecticut Department of Transportation's Bicycle and Pedestrian Travel Needs Assessment Form.

Submit one (1) paper copy and one (1) DVD of the following materials, along with confirmation that the development has been submitted for local planning and zoning approval, to the Office of the State Traffic Administration.

MAJOR TRAFFIC GENERATOR
Traffic Volume Data Requirements

Submitted	N/A		
		I.	**PROJECT DESCRIPTION**
☑			Provide a detailed narrative describing the nature of the proposal.
		II.	**SITE LOCATION PLAN**
☑			A site location plan showing State highways and major intersecting Town roads in the vicinity of the site is to be submitted. Typically 8 ½' X 11" or it may be shown on the Site Plan if space allows.
		III.	**OVERALL SITE PLAN**
☑			An overall site plan showing the entire certifiable area shall be provided, sized to fit on a single 2' x 3' plan sheet. The entire certifiable area shall include all parcels whose traffic must use the applicant development's access drive(s) (not an access of convenience), and shall be distinguishable by a distinct peripheral property line with the call out "OSTA Certifiable Area". The plan is to identify all new buildings (including gross floor area and land use for each), parking spaces, property lines, internal connections to abutting properties, names of all property owners (including the abutting property owners) and the complete street address(es) for all properties within the certifiable area. If street address information is not available, show map/block/lot information. An aerial photograph may be used.
		IV.	**TRAFFIC VOLUME INFORMATION**
☑	☐		Traffic information is required for all site drives and for intersections in proximity to the site that will be **significantly** affected by newly generated traffic.

Significantly *is defined as: 100 or more peak hour vehicle trips at any given intersection or; 50 or more peak hour vehicle trips on any left-hand turning movement.*

A. Existing Traffic Volumes

☑	☐	1. Identify the hours of the day, day of week and how the peak hours were determined in relation to the proposed development. The morning/afternoon weekday and weekend midday peak hours are the most typical time periods analyzed. Depending on the type of proposed development, all or some combination of these hours will be required. In some cases, the peak hour of the generator may be needed (e.g. movie theatre – evenings, school – afternoon peak). Areas experiencing a significant recreational peak shall be counted during the peak season. When this is not possible, traffic volumes may be seasonally adjusted to reflect the heaviest peak hour volume using Department seasonal adjustment factors. All traffic counts shall specify non-motorized users (pedestrians and bicycles).

Submitted	N/A	
		B. Background Traffic Volumes – the existing traffic volumes adjusted to the year of the development's opening.
☑	☐	1. Identify any annual growth or seasonal adjustment factors used and explain their selection. Identify other developments, including those previously approved by the STC, or pending, but not yet operational, and include that volume to develop the background traffic.
☑	☐	2. Submit flow diagrams showing the appropriate background peak hour traffic volumes for the proposed development as determined in the Existing Traffic Volumes section above. Diagrams must indicate both the date of submission and date (year) of the background traffic. Approach volumes must be totaled and checked for accuracy before submission. Traffic volumes between intersections shall be balanced or an explanation for the break in traffic flow must be provided. Background traffic flow diagrams must be consistent with existing traffic diagrams.
☑	☐	3. If there are overlapping intersections studied by a recently approved MTG, the combined traffic figures from the prior MTG shall be used as the base traffic for the new project.
		C. Trip Distribution
☑	☐	1. Provide a description of the methodology used to develop the trip distribution. Any differences in the approach and departure distribution shall be explained.
☑	☐	2. Submit flow diagrams showing the percent distribution of generated traffic, by direction, for each major road leading to the area and at all access points. Diagrams must indicate the date of submission and shall be consistent with the peak hours analyzed in the existing and background traffic conditions.
		D. Site Generated Traffic/Combined Traffic Volumes
☑	☐	1. Submit flow diagrams for the applicable peak hour(s) for the site generated traffic volumes. Diagrams must include the date of submission and date (year) for the site generated traffic. In most cases, trip generation data derived from the latest ITE Trip Generation Report will be acceptable. Approved ConnDOT studies are currently utilized to derive trip generation data for home improvement stores, super food stores and Dunkin' Donuts locations. Other studies will be taken into consideration, but will be subject to approval. Out parcels contained within retail developments shall utilize the most specific land use code available via ITE or other acceptable study data. For restaurants, indicate whether it is a fast-food or sit-down, and if there is a drive-up window proposed. Trip generation for the Christmas Season, as defined by ITE, is not currently required. Trip generation shall reflect a successful day, not abnormally high-peak periods such as holiday weekends. For retail developments, Friday afternoon and Saturday midday peak are required study periods. For apartments, condominiums, hotels and motels, the number of 1-, 2- and 3-bedroom units, and the square foot area of each type of unit shall be noted. For hotels and motels, list the number of rooms.
☑	☐	2. Submit flow diagrams for the applicable peak hour(s) for the combined traffic volumes (the sum of the background and site generated traffic volumes). Diagrams must include date of submission and date (year) of combined traffic and shall be consistent with the peak hours analyzed in the existing and background traffic conditions. Flow diagrams shall be consistent with the peak hours analyzed in the existing and background traffic conditions.
		3. Contact the Trip Analysis Section at (860) 594-2025 with any questions.

SOLLI ENGINEERING

PROJECT NARRATIVE

To: The Connecticut Department of Transportation
Office of the State Traffic Administration

From: Kevin Solli, P.E. / Solli Engineering, LLC
Collene Byrne / Solli Engineering, LLC

Subject: OSTA Step 1: Major Traffic Generator Pre-Certificate Application
Proposed Mixed-Use Development
OSTA # 084-1806-01
205 Monroe Turnpike, Monroe, CT
Project #: 1402801

Date: 6/1/2018
Revised: 7/11/2018

This project consists of 8.63± acres of undeveloped land in Monroe, Connecticut and is bound by Monroe Turnpike (Route 111) to the east, the Residential-Farming District (RF-1) to the north and west, and the Limited Office Retail District (LOR) to the south. Refer to Figure 1, Site Location Map, for more details on the project location.

The proposed development is estimated to include approximately 36,726± square feet of gross floor space on the 8.63± acre project site located along Monroe Turnpike (Route 111) in Monroe, Connecticut. The proposed development will be a mixed-use complex comprised of two (2) primary lots that are proposed to include retailers, a restaurant, medical office, a drive-in bank, a gas station with convenience store and an integrated drive-thru coffee shop. The proposed development consists of the following land uses on each parcel:

Lot 1:

- 15,000 sf retail (Shopping Center)
- 10,000 sf medical office
- 2,500 sf drive-in bank
- 4,950 sf high-turnover restaurant

Lot 2:

- 3,276 sf gas station with convenience store (10 pumps)
- 1,000 sf coffee shop with drive-thru (integrated into gas station building)

Access will be provided from Monroe Turnpike (Route 111) via a proposed full-movement, signalized, site access driveway as well as a STOP-controlled, right-out only driveway exiting the gas station area on Lot 2. Refer to Figure 8, the OSTA Certifiable Area Map, for more detail on the proposed site layout and access.

Traffic volume information was obtained for the following seven (7) key intersections that were identified as being affected by the newly generated traffic of the proposed development:

- Monroe Turnpike (Route 111) & Purdy Hill Road
- Monroe Turnpike (Route 111) & Spring Hill Road
- Monroe Turnpike (Route 111) & Technology Drive / Corporate Drive
- Monroe Turnpike (Route 111) & Trefoil Drive / Home Depot Driveway
- Monroe Turnpike (Route 111) & United Healthcare Driveway
- Monroe Turnpike (Route 111) & Trefoil Plaza (Chips/Edge Driveway)
- Monroe Turnpike (Route 111) & Main Street (Route 25)

Existing traffic volumes were compiled through manual turning movement count data collected during the month of August 2016. Traffic volumes for the study area intersections were obtained during the AM, PM and Saturday peak periods. This data was obtained from data published in a study prepared by Tighe & Bond for Metro-COG entitled "Engineering Planning Study for Route 25 and Route 111, Monroe & Trumbull, CT". Figure 2 illustrates the 2016 Existing Traffic Volumes for the AM, PM, and Saturday midday peak hours of the study area intersections.

The anticipated distribution of traffic entering and exiting the site was developed based on area populations, existing traffic patterns, layout of the adjacent roadway network, and geographic locations of similar residential, business and commercial retail developments. Due to the mixed-use nature of the site and the directional distributions along Monroe Turnpike (Route 111), each peak period was determined to have its own distribution of trips. The anticipated distributions of the new site generated trips are illustrated in Figure 3, Trip Distribution.

The anticipated number of trips that will be generated by proposed development was estimated using data from the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition. The trip generation for each proposed land use was calculated for the AM, PM and Saturday midday peak hours. The trip generation for the proposed development was calculated based on the proposed land uses and resulted in 666 (350 entering, 316 exiting) new trips during the AM peak hour, 483 (241 entering, 242 exiting) new trips during the PM peak hour, and 563 (290 entering, 273 exiting) new trips during the Saturday midday peak hour. The new site generated trips anticipated to be generated by the proposed development were assigned to the study area roadway network based on the anticipated percent distributions and the resulting trip assignment is illustrated in Figure 4, Trip Assignments.

As per CTDOT and OSTA standards, a "pass-by" trip credit of 20% of the retail component of the site generated trips was applied at the site driveway intersections. Pass-by trips are trips associated with the proposed development which are already on the adjacent roadway network who will patronize the retail

development and continue along their route. The resulting pass-by trips at the site driveway intersections are illustrated on Figure 5.

As the proposed development is anticipated to be opened in 2019, background traffic growth is estimated to account for the traffic increase as a result of regional population growth. Existing traffic volumes were projected to the 2019 design year using a conservative 2.0 percent per year growth factor.

Several background generator projects were identified in the project study area. The traffic volumes associated with these projects have been included as part of this analysis. The table below summarizes the trip generation for these projects.

BACKGROUND GENERATOR PROJECTS
TRIP GENERATION SUMMARY

USE	AM PEAK HOUR			PM PEAK HOUR			SAT PEAK HOUR		
	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Certificate#1601-A[1,2]	184	149	333	405	398	804	519	499	1,018
Pondview Shopping Center[3]	174	114	288	474	479	953	538	518	1,056
UHC Refill/Trefoil Corporate Park[4]	420	60	480	70	380	450	60	50	110
Total Proposed Trips	**778**	**323**	**1,101**	**949**	**1,257**	**2,207**	**1,117**	**1,067**	**2,184**

[1] Based on Frederick P. Clark Associates, Inc., Traffic Impact Study: Canterbury Square, Monroe, Connecticut; July 10, 2002
[2] Based on Solli Engineering, LLC, Traffic Impact Study: Victoria Place, Monroe, Connecticut; September 18, 2013
[3] Based on Fuss & O'Neill, Traffic Impact Study: Pond View Shopping Center, Monroe, Connecticut; March 1, 2012
[4] Based on data provided by CTDOT; June 21, 2018

The total proposed trips were distributed to the study area intersections according to data provided in the respective traffic impact studies. Those distributed trips were added together to comprise the total background generator trips added to the network.

The traffic volumes associated with the background generators were added to the 2016 existing volumes, along with the 2% annual background growth, to obtain the 2019 background volumes. The AM, PM and Saturday midday peak hour volumes for the 2019 Background Condition are illustrated in Figure 6.

The trip assignment volumes illustrated in Figure 4 and the pass-by trips illustrated in Figure 5 were combined with the 2019 background volumes illustrated in Figure 6 to develop the 2019 Build Volumes. The AM, PM and Saturday midday peak hour volumes for the 2019 build condition are illustrated in Figure 7.

Peak Hour Trip Generation Summary
Proposed Development, 205 Monroe Turnpike, Monroe, Connecticut

			AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	Variable	LUC	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Medical Office	10.00	720	19	5	24	11	25	36	22	15	37
Shopping Center	15.00	820	10	5	15	27	29	56	38	35	73
Drive-In Bank	2.50	912	18	13	31	31	30	61	34	32	66
High Turnover (Sit Down) Restaurant	4.95	932	38	31	70	38	25	63	48	43	91
Coffee Shop w/ Drive Thru	1.00	937	200	200	400	22	21	43	43	42	85
Gas Station w/ Convenience	3.28	945	138	132	270	160	160	320	160	160	320
Total New Trips			**423**	**386**	**810**	**289**	**290**	**579**	**345**	**327**	**672**
20% Pass-By			*73*	*70*	*143*	*48*	*48*	*96*	*55*	*54*	*109*
Net Trips			**350**	**316**	**666**	**241**	**242**	**483**	**290**	**273**	**563**

CT DOT Dunkin' Donuts Trip Generation

Source: ITE Trip Generation, 9th Edition

Land Use	Time Period	Avg. Rate	Entering	Exiting
LUC 720 - Medical Office	AM	2.39	79%	21%
	PM	3.57	28%	72%
	SAT	3.63	57%	43%
LUC 820 - Shopping Center	AM	0.96	62%	38%
	PM	3.71	48%	52%
	SAT	4.82	52%	48%
LUC 912 - Drive - In Bank	AM	12.08	57%	43%
	PM	24.30	50%	50%
	SAT	26.31	51%	49%
LUC 932 - High Turnover (Sit Down) Restaurant	AM	10.81	55%	45%
	PM	9.85	60%	40%
	SAT	14.07	53%	47%
LUC 937 - Coffee Shop w/ Drive Thru	AM	100.58	51%	49%
	PM	42.8	50%	50%
	SAT	84.52	50%	50%
LUC 945 - Gas Station w/ Conveinience	AM	82.13	51%	49%
	PM	97.47	50%	50%
	SAT	97.47	50%	50%

CT DOT Dunkin' Donuts Trip Generation

Based on LUC 945 - Gas Station w/ Convenience (PM)

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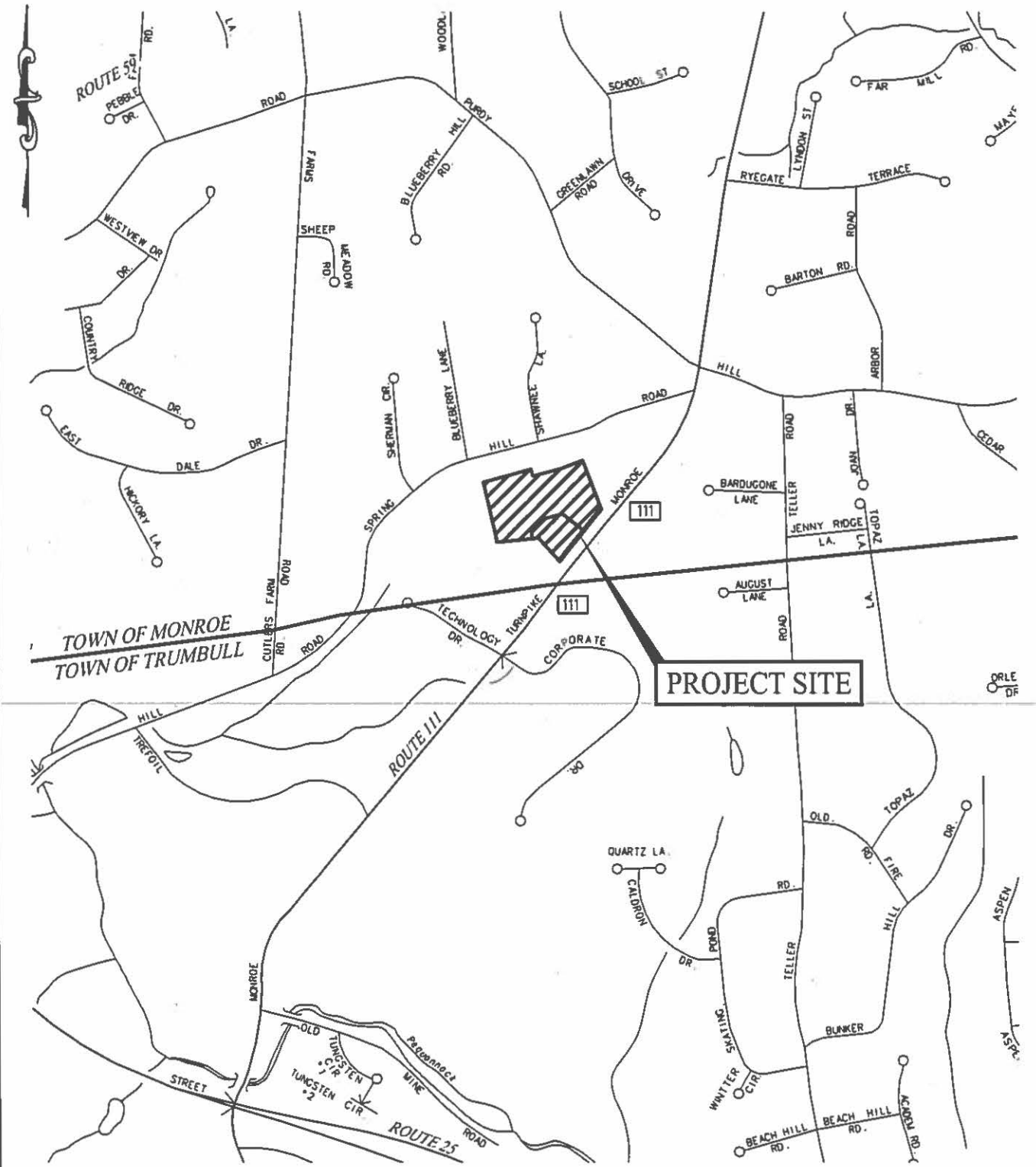


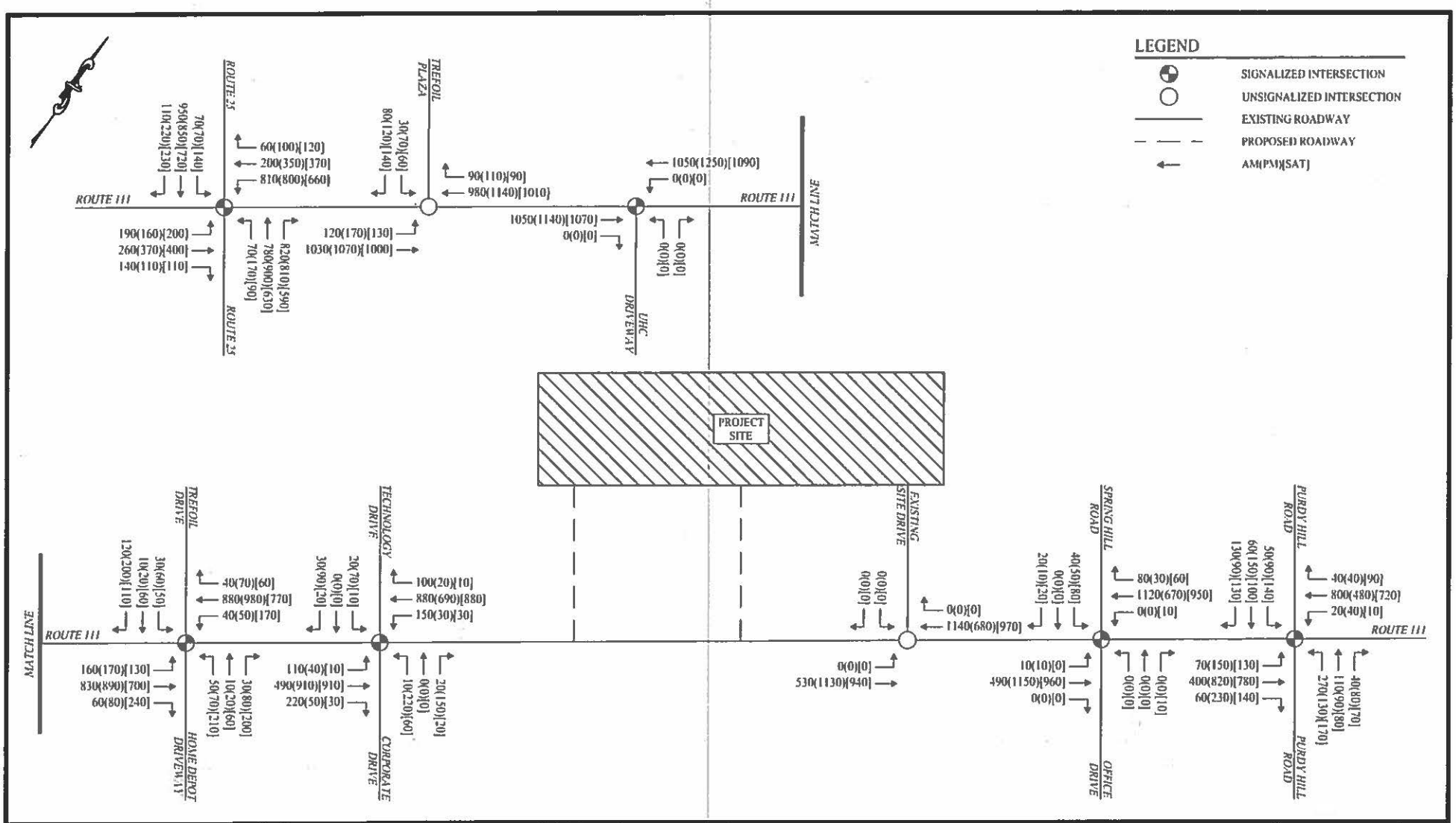
NOTE: BASE MAP INFORMATION TAKEN FROM THE CONNDOT TOWN ROAD MAPS (TRU), MAP NUMBER 84 AND 144.

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

SITE LOCATION MAP

205 MONROE TURNPIKE
MONROE, CONNECTICUT

Project #:	1402801
Plan Date:	06/01/18
Scale:	1" = 1,000'
Figure:	1



Rev. #:	Date	Description

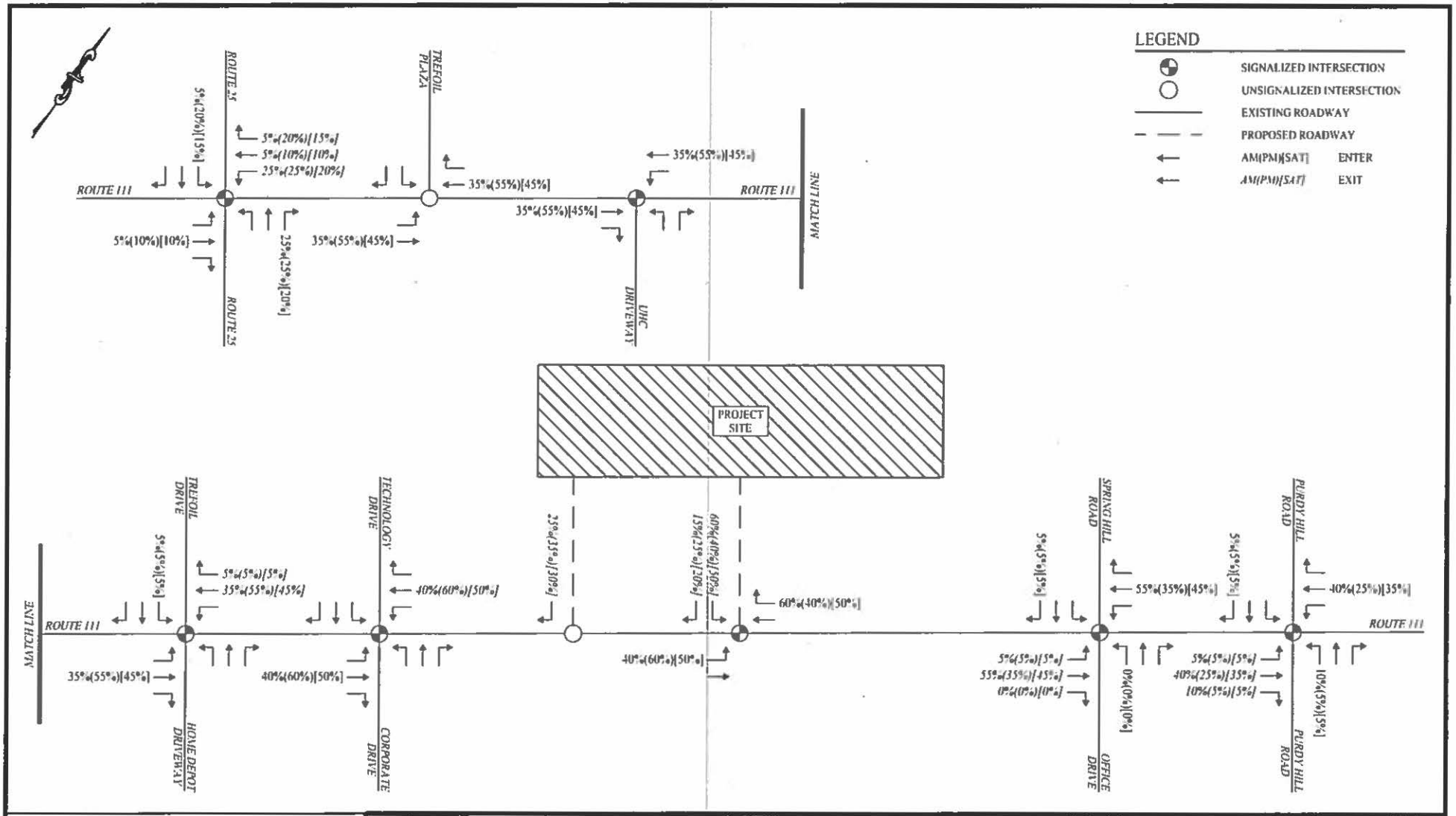
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: 2016 EXISTING TRAFFIC VOLUMES

SHEET #: FIGURE 2



Rev. #:	Date	Description

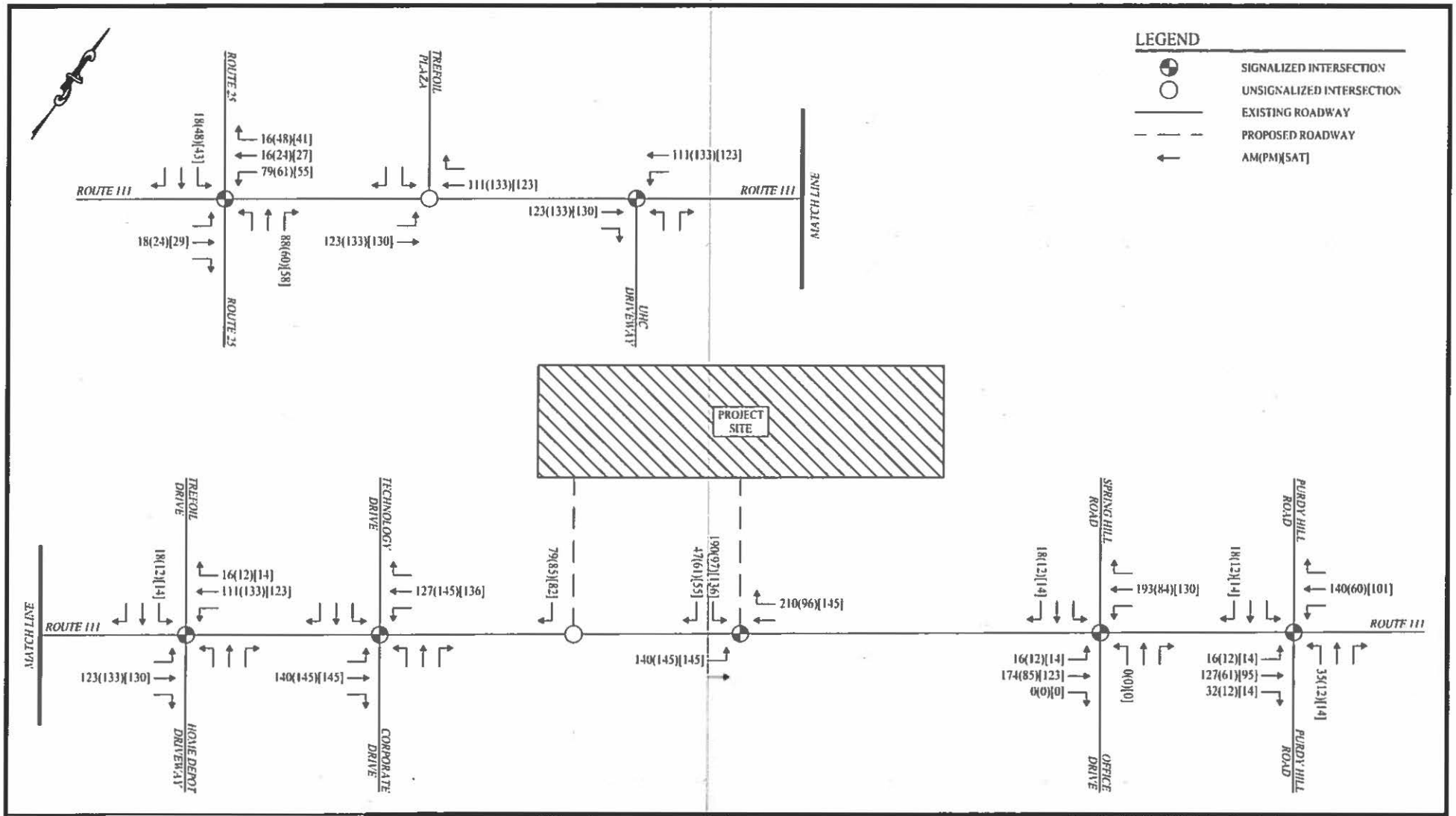
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: TRIP DISTRIBUTION

SHEET #: FIGURE 3



Rev. #:	Date	Description

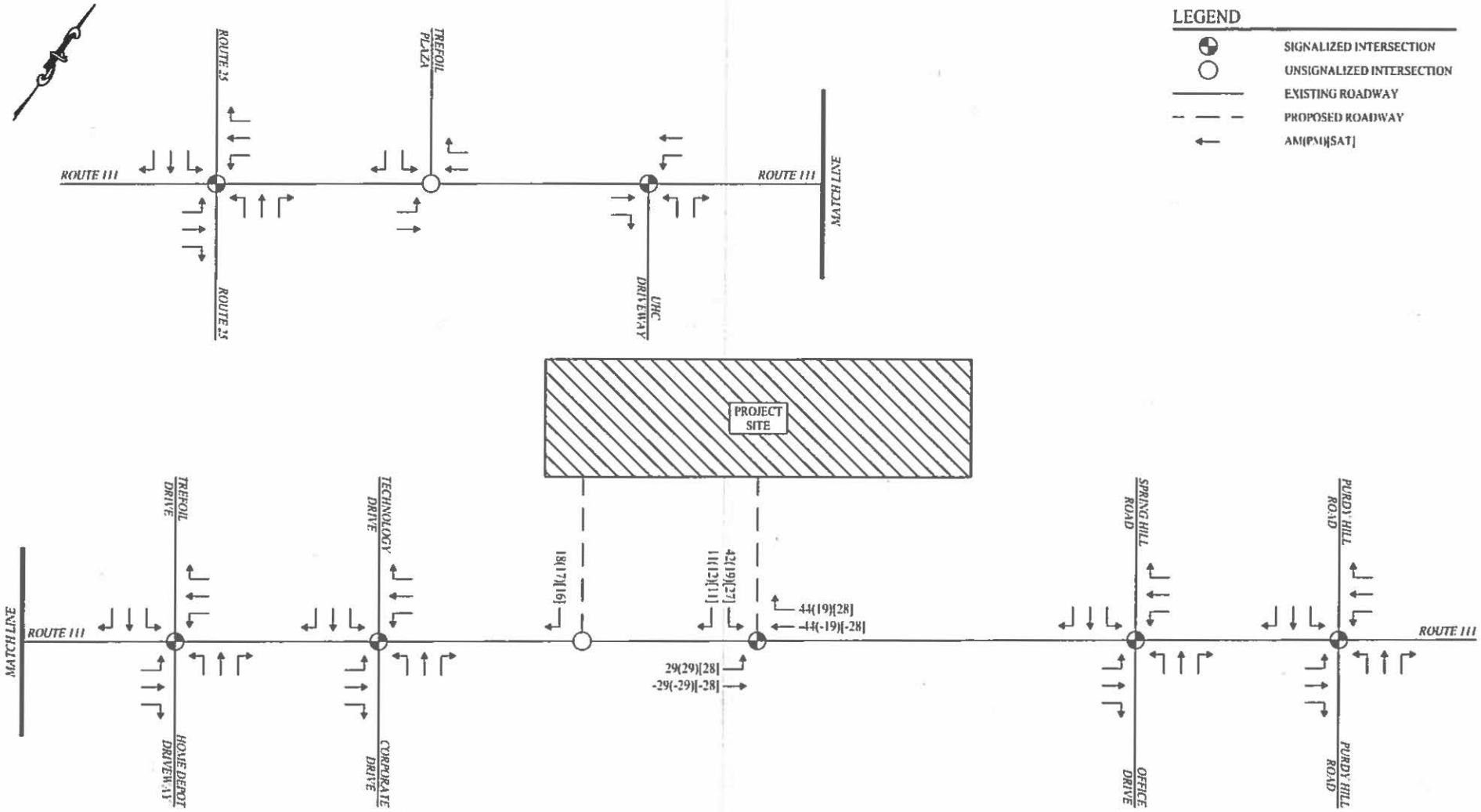
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: TRIP ASSIGNMENT

SHEET #: FIGURE 4



Rev. #	Date	Description

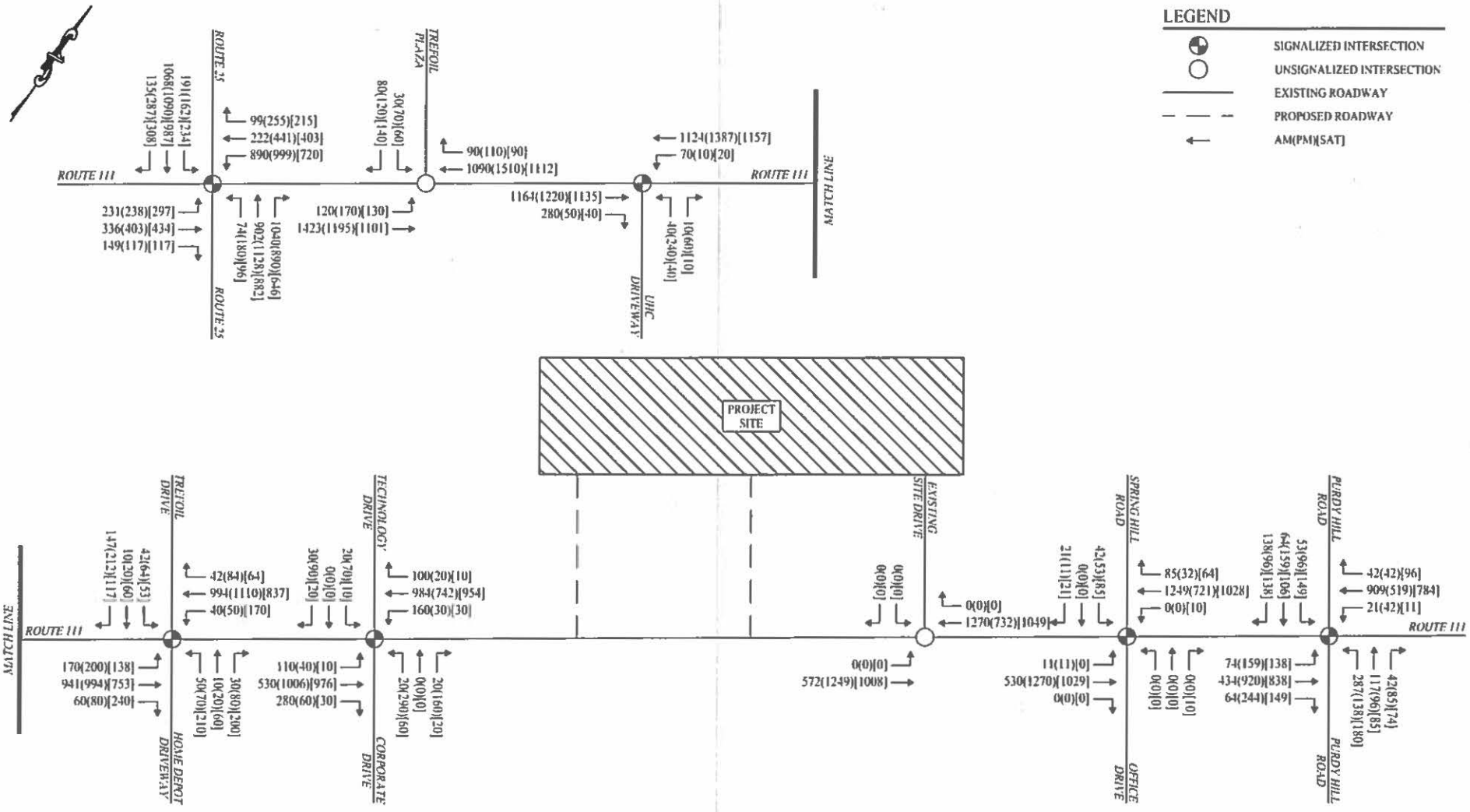
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: PASS-BY TRIPS

SHEET #: FIGURE 5



Rev #:	Date	Description
1	06/28/18	Response to CT DOT Comments

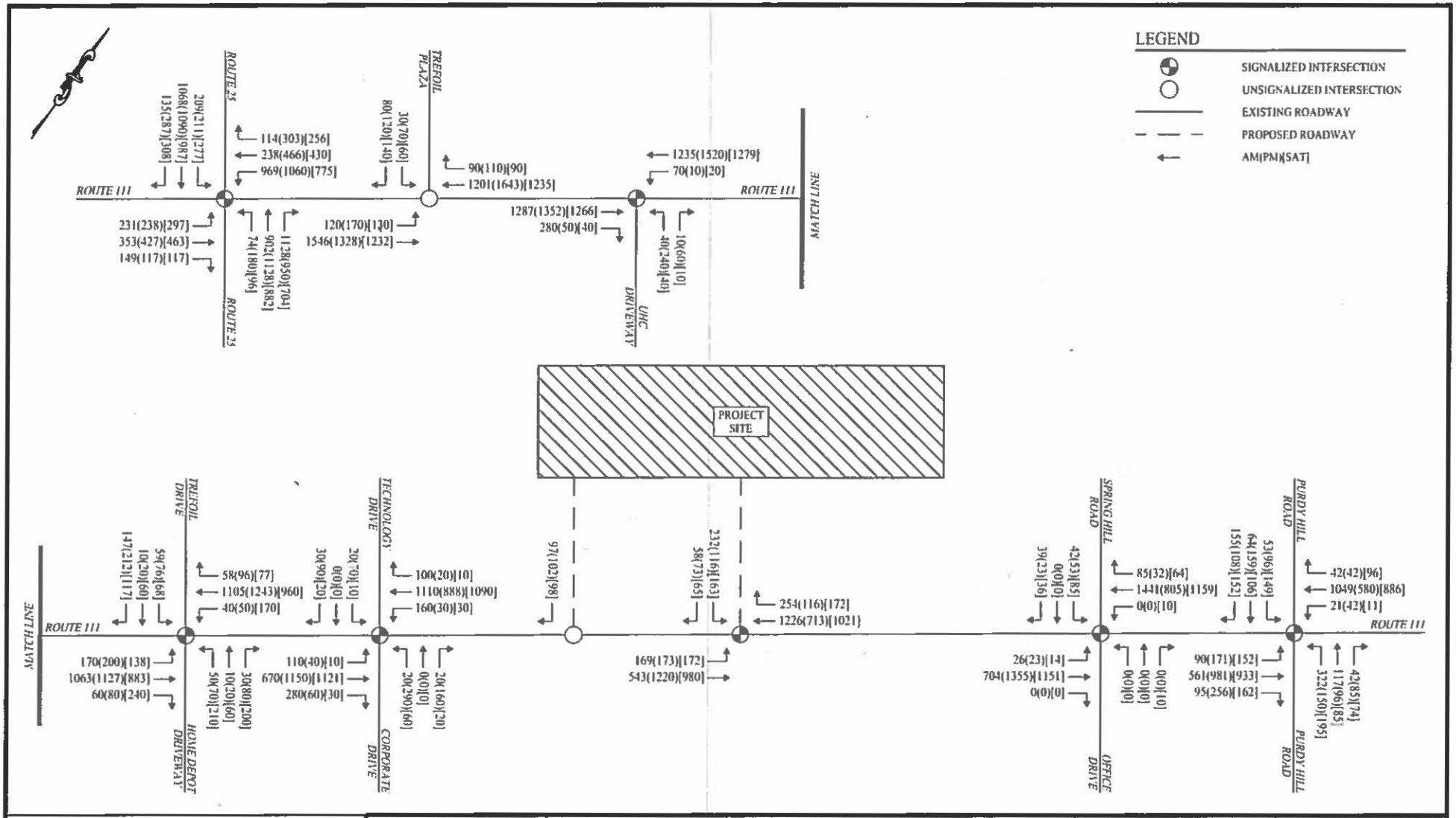
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	140280J
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: 2019 BACKGROUND TRAFFIC VOLUMES

SHEET #: FIGURE 6



Rev #:	Date	Description
1	06/28/18	Response to CT DOT Comments

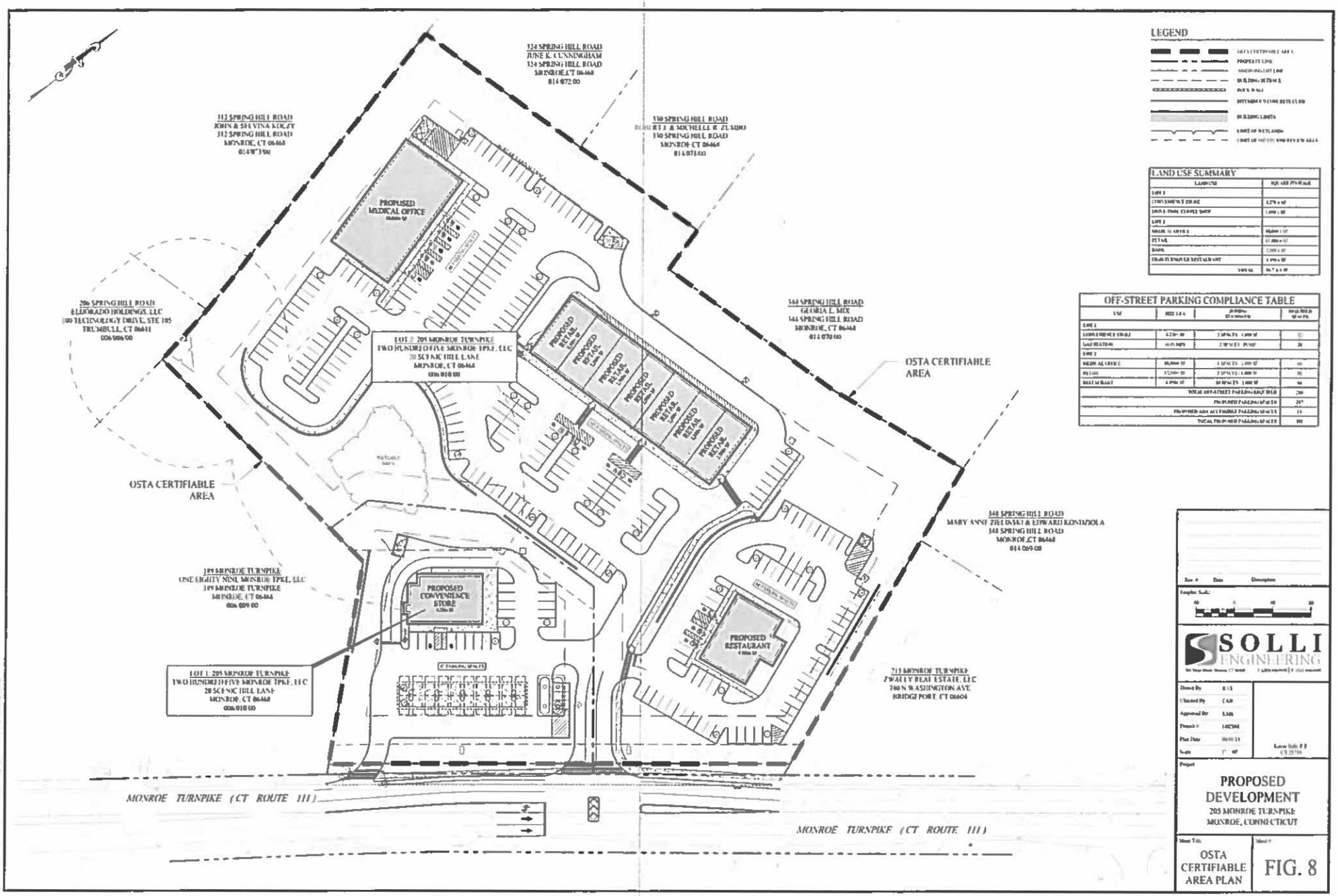
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: 2019 BUILD TRAFFIC VOLUMES

SHEET #: FIGURE 7



LEGEND

	OSTA CERTIFIABLE AREA
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	BUILDING SETBACK
	PARKING
	DETENTION/COMPENSATION CUT
	BUILDING LIMITS
	LIMIT OF WETLANDS
	LIMIT OF [illegible] AREA

LAND USE SUMMARY

LAND USE	SQUARE FOOTAGE
LOT 1	
[illegible]	[illegible]
[illegible]	[illegible]
LOT 2	
[illegible]	[illegible]
[illegible]	[illegible]
BANK	[illegible]
[illegible] RESTAURANT	[illegible]
TOTAL	[illegible]

OFF-STREET PARKING COMPLIANCE TABLE

USE	SIZE [illegible]	[illegible]	[illegible]
LOT 1			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
LOT 2			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
RESTAURANT	[illegible]	[illegible]	[illegible]
TOTAL OFF-STREET PARKING REQUIRED			[illegible]
PROPOSED PARKING SPACES			[illegible]
PROPOSED ADA ACCESSIBLE PARKING SPACES			[illegible]
TOTAL PROPOSED PARKING SPACES			[illegible]

Rev #	Date	Description

Graphic Scale: [illegible]

SOLLI ENGINEERING

Drawn By	[illegible]
Checked By	[illegible]
Approved By	[illegible]
Project #	[illegible]
Plot Date	[illegible]
Scale	[illegible]

Layer Table [illegible]

Project

PROPOSED DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: OSTA CERTIFIABLE AREA PLAN

Sheet #: FIG. 8

SOLLI ENGINEERING

May 22, 2018

Hand Delivery

Inland Wetlands Commission
Town of Monroe
7 Fan Hill Road
Monroe, CT 06468

RE: Proposed Development
Two Hundred Five Monroe Turnpike LLC
205 Monroe Turnpike
Monroe, Connecticut 06468
Project Number: 1402801

Dear Commission Members:

On behalf of Two Hundred Five Monroe Turnpike, LLC, please find enclosed an application for the proposed development and associated activity located at 205 Monroe Turnpike, Monroe, Connecticut.

The project proposes to consolidate the existing parcels that make up 205 Monroe Turnpike into two new lots, labeled Lot 1 and Lot 2 for the purposes of this application. Lot 1 consists of the construction of a convenience store with retail space, with a coffee shop, and associated driveways, parking lots, drainage, utilities, landscaping, and lighting. Lot 2 will contain three separate buildings: a proposed restaurant, a proposed retail building, and a proposed medical office with associated driveways, parking lots, drainage, utilities, landscaping, and lighting.

The proposed development includes a central 38 foot wide main driveway providing access to both lots of the development. In addition, there is an exit-only driveway proposed on Lot 1 for the convenience store.

While the project involves work within the upland review area, no direct wetland impact is proposed. All known wetlands have been flagged by William Kenny Associates and were located by Accurate Land Surveying.

Also enclosed are the requisite copies and a check in the amount of $710.00 representing the requisite filing fee. We look forward to working with you in the processing of this application

Respectfully,

Solli Engineering, LLC

Douglas R. Reich, RLA
Landscape Architect

RECEIVED
MAY 22 2018
Town of Monroe
Inland Wetlands Department

Enclosures

CC: Mike Schinella
Thomas Schinella

X:\SE Files\Project Data\2014\1402801 - 205 Monroe Tpke\Office Data\Applications\2018-05-22 IW Initial Submission\2018-05-22 - IWC Submission Letter.docx

BL Companies — Architecture Engineering Environmental Land Surveying

Appendix - No Build Traffic Volume Support

Proposed Mixed Use Development
Trip Generation

5/2019

Land Use	ITE Land Use Code	Size	Trips		
			MIDDAY Peak Hour		
			Total	In	Out
Medical	720 - Medical Office	10	28	14	14
Retail	820 - Shopping Center	15.00	56	28	28
Bank	912 - Drive-in Bank	2.50	29	15	14
Restaurant	932 - High Turnover (Sit Down) Restaurant	4.95	68	34	34
Coffee Shop	937 - Coffee Shop w/Drive Thru[2]	1.00	85	43	42
Gas Station	945 - Gas Station w/Convenience	3.28	279	140	139
	Gross Trips		**545**	**274**	**271**
	Less pass-by (use 20% of LUC 820,912,937,945 traffic)[1]		-88	-44	-44
Total	**Net New Trips**		**457**	**230**	**227**

[1]20% max per CTDOT; [2]Per SAT Peak used by Solli Engineers for Proposed Mixed-Used Development at 205 Monroe Turnpike
Ref: Trip Generation, 10th Edition

CAPACITY ANALYSES

NO BUILD

Map - Proposed Delivery Station Building Improvements
Levels of Service

No Build
Timing Plan: AM Peak

BL Companies
G:\JOBS19\10\1901141\TRAF\Adendum #1 - 2020\SYNCHRO\T-1901141-NOBUILD-AM.syn

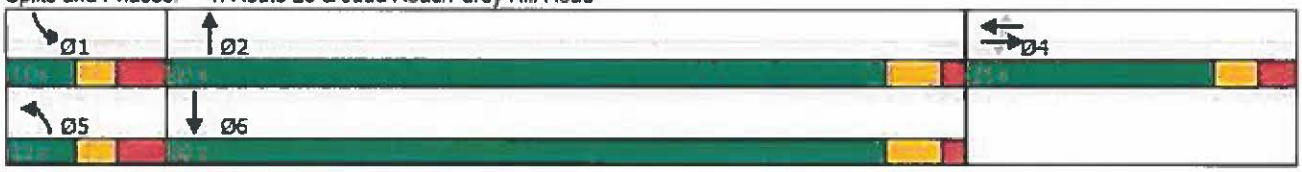
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	51	71	82	194	71	36	913	5	15	913	26
Future Volume (vph)	87	51	71	82	194	71	36	913	5	15	913	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.960			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1699	0	1770	1788	0	1770	1861	0	1770	1855	0
Flt Permitted	0.317			0.673			0.950			0.950		
Satd. Flow (perm)	590	1699	0	1254	1788	0	1770	1861	0	1770	1855	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		64										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			332	
Travel Time (s)		8.5			7.5			37.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	55	77	89	211	77	39	992	5	16	992	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	132	0	89	288	0	39	997	0	16	1020	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	60.0		12.0	60.0	
Total Split (%)	25.8%	25.8%		25.8%	25.8%		12.4%	61.9%		12.4%	61.9%	
Maximum Green (s)	18.6	18.6		18.6	18.6		5.2	54.0		5.2	54.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	17.4	17.4		17.4	17.4		5.2	54.2		5.2	52.0	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.06	0.61		0.06	0.59	
v/c Ratio	0.83	0.34		0.36	0.82		0.38	0.88		0.16	0.94	
Control Delay	86.6	21.3		38.4	56.5		54.7	27.0		47.4	35.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	86.6	21.3		38.4	56.5		54.7	27.0		47.4	35.8	
LOS	F	C		D	E		D	C		D	D	
Approach Delay		48.6			52.2			28.0			36.0	
Approach LOS		D			D			C			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	57	36		48	173		24	373		10	583	
Queue Length 95th (ft)	#152	88		96	#311		58	#858		31	#891	
Internal Link Dist (ft)		293			248			2130			252	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	126	413		268	382		105	1202		105	1152	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.75	0.32		0.33	0.75		0.37	0.83		0.15	0.89	

Intersection Summary

Area Type: Other
Cycle Length: 97
Actuated Cycle Length: 88.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 36.3 — Intersection LOS: D
Intersection Capacity Utilization 84.6% — ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	15	918	102	26	1030
Future Volume (vph)	10	15	918	102	26	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1837	0	1770	1863
Flt Permitted	0.950				0.137	
Satd. Flow (perm)	1770	1583	1837	0	255	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		16	10			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		2307			466
Travel Time (s)	14.3		39.3			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	16	998	111	28	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	16	1109	0	28	1120
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	7.0	7.0	52.6		51.9	52.6
Actuated g/C Ratio	0.11	0.11	0.84		0.83	0.84
v/c Ratio	0.06	0.08	0.72		0.08	0.71
Control Delay	27.0	15.1	12.6		2.3	12.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.0	15.1	12.6		2.3	12.6
LOS	C	B	B		A	B
Approach Delay	20.0		12.6			12.3
Approach LOS	B		B			B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	4	0	0		1	0
Queue Length 95th (ft)	17	16	#699		6	#698
Internal Link Dist (ft)	446		2227			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	497	456	1550		474	1571
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.02	0.04	0.72		0.06	0.71

Intersection Summary

Area Type: Other
Cycle Length: 82
Actuated Cycle Length: 62.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 12.6 — Intersection LOS: B
Intersection Capacity Utilization 68.1% — ICU Level of Service C
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

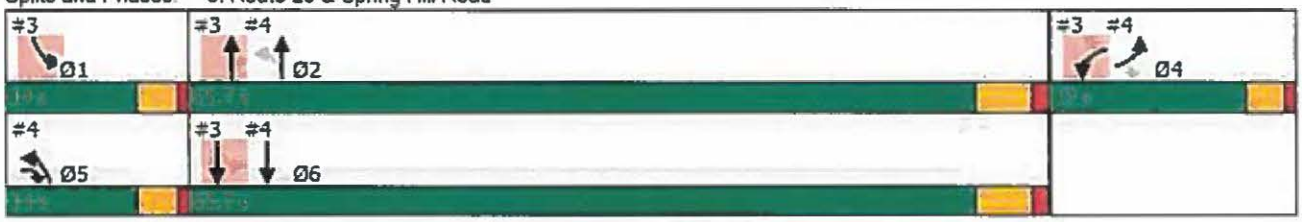
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	97	66	949	66	51	990	
Future Volume (vph)	97	66	949	66	51	990	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.136		
Satd. Flow (perm)	1770	1583	1863	1583	253	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		72		45			
Link Speed (mph)	25		40			40	
Link Distance (ft)	563		462			2307	
Travel Time (s)	15.4		7.9			39.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	105	72	1032	72	55	1076	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	105	72	1032	72	55	1076	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	10.8	10.8	62.4	62.4	68.1	60.1	
Actuated g/C Ratio	0.12	0.12	0.68	0.68	0.75	0.66	
v/c Ratio	0.50	0.29	0.81	0.07	0.19	0.88	
Control Delay	46.2	12.4	8.5	1.4	4.0	23.6	
Queue Delay	0.0	0.0	0.4	0.0	0.0	0.0	
Total Delay	46.2	12.4	8.8	1.4	4.0	23.6	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	C	
Approach Delay	32.5		8.4			22.6	
Approach LOS	C		A			C	
Queue Length 50th (ft)	57	0	84	0	5	437	
Queue Length 95th (ft)	110	38	#801	m1	15	#889	
Internal Link Dist (ft)	483		382			2227	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	291	320	1275	1097	366	1229	
Starvation Cap Reductn	0	0	40	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.36	0.23	0.84	0.07	0.15	0.88	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 16.8 — Intersection LOS: B
Intersection Capacity Utilization 66.0% — ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	46	148	51	969	1066	21	
Future Volume (vph)	46	148	51	969	1066	21	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.997		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1857	0	
Flt Permitted	0.950		0.064				
Satd. Flow (perm)	1770	1583	119	1863	1857	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		86			2		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	50	161	55	1053	1159	23	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	50	161	55	1053	1182	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	10.8	21.2	69.3	62.4	60.1		
Actuated g/C Ratio	0.12	0.23	0.76	0.68	0.66		
v/c Ratio	0.24	0.37	0.27	0.83	0.96		
Control Delay	39.1	16.5	6.0	19.6	21.6		
Queue Delay	0.0	0.0	0.0	0.3	0.0		
Total Delay	39.1	16.5	6.0	19.9	21.6		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	B	A	B	C		
Approach Delay	21.9			19.2	21.6		
Approach LOS	C			B	C		
Queue Length 50th (ft)	26	35	5	416	125		
Queue Length 95th (ft)	61	87	16	#843	m#324		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	291	493	275	1275	1226		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	26	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.17	0.33	0.20	0.84	0.96		

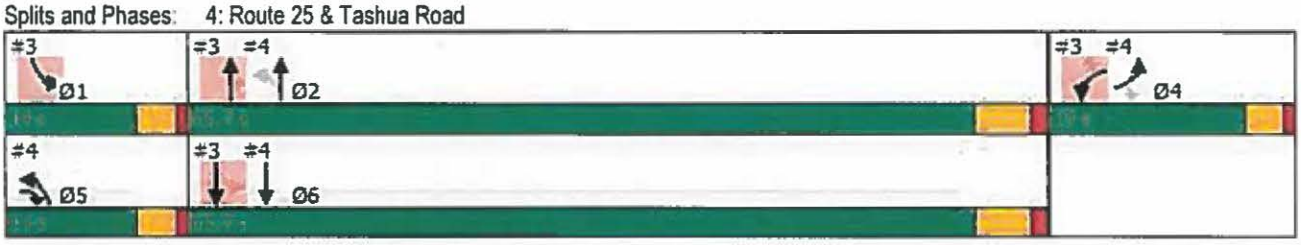
Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 20.6 — Intersection LOS: C
Intersection Capacity Utilization 74.6% — ICU Level of Service D
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Route 25 & Tashua Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1071	97	77	791	843	168	314	148	824	200	72
Future Volume (vph)	74	1071	97	77	791	843	168	314	148	824	200	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1788	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116			72			170		17	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			1769	
Travel Time (s)		14.7			12.1			7.5			30.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	1164	105	84	860	916	183	341	161	896	217	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	1164	105	84	860	916	183	341	161	896	295	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	12.0	47.0	12.0	12.0	47.0	42.0	12.0	21.0	21.0	42.0	51.0	
Total Split (%)	9.8%	38.5%	9.8%	9.8%	38.5%	34.4%	9.8%	17.2%	17.2%	34.4%	41.8%	
Maximum Green (s)	7.0	40.0	7.0	7.0	40.0	37.0	7.0	15.0	15.0	37.0	45.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	6.7	40.1	54.1	6.8	40.2	81.1	7.0	13.8	13.8	33.9	40.7	
Actuated g/C Ratio	0.06	0.34	0.46	0.06	0.34	0.69	0.06	0.12	0.12	0.29	0.35	
v/c Ratio	0.80	0.97	0.13	0.82	0.71	0.82	1.74	0.82	0.48	0.91	0.47	
Control Delay	103.3	58.0	3.3	107.1	38.5	20.1	403.6	68.0	11.4	54.0	30.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	103.3	58.0	3.3	107.1	38.5	20.1	403.6	68.0	11.4	54.0	30.7	
LOS	F	E	A	F	D	C	F	E	B	D	C	
Approach Delay		56.4			32.5			144.3			48.3	
Approach LOS		E			C			F			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	63	~484	0	67	315	439	~217	139	0	342	163	
Queue Length 95th (ft)	#153	#640	27	#161	392	670	#366	#204	57	#429	245	
Internal Link Dist (ft)		780			631			358			1689	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	105	1205	790	105	1209	1154	105	452	350	1082	696	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.76	0.97	0.13	0.80	0.71	0.79	1.74	0.75	0.46	0.83	0.42	

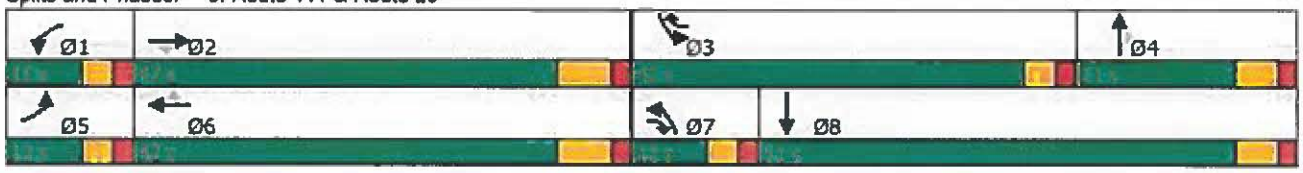
Intersection Summary

Area Type: Other
Cycle Length: 122
Actuated Cycle Length: 117.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.74
Intersection Signal Delay: 57.6 — Intersection LOS: E
Intersection Capacity Utilization 85.2% — ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25



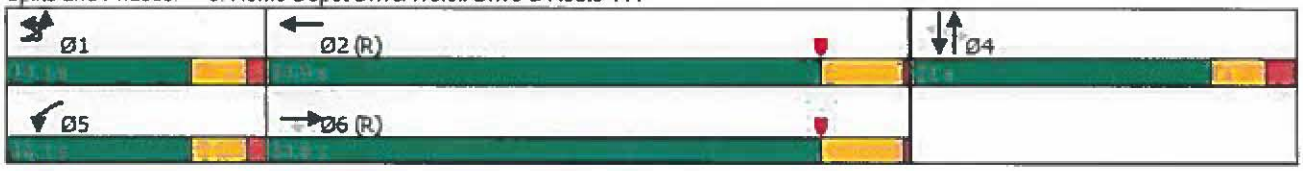
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	847	71	56	876	77	51	20	41	89	26	133
Future Volume (vph)	153	847	71	56	876	77	51	20	41	89	26	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.899			0.874	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3497	0	1770	1675	0	1770	1628	0
Flt Permitted	0.950			0.950			0.560			0.713		
Satd. Flow (perm)	1770	3539	1583	1770	3497	0	1043	1675	0	1328	1628	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92		16			45			145	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		481			302			288			263	
Travel Time (s)		8.2			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	921	77	61	952	84	55	22	45	97	28	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	921	77	61	1036	0	55	67	0	97	173	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	14.1	34.9	34.9	14.1	34.9		21.0	21.0		21.0	21.0	
Total Split (%)	20.1%	49.9%	49.9%	20.1%	49.9%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	10.0	30.0	30.0	10.0	30.0		16.2	16.2		16.2	16.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	10.8	41.5	41.5	7.9	34.5		10.9	10.9		10.9	10.9	
Actuated g/C Ratio	0.15	0.59	0.59	0.11	0.49		0.16	0.16		0.16	0.16	
v/c Ratio	0.61	0.44	0.08	0.30	0.60		0.34	0.22		0.47	0.46	
Control Delay	38.1	10.9	2.6	31.9	15.4		30.9	13.5		33.5	11.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.1	10.9	2.6	31.9	15.4		30.9	13.5		33.5	11.1	
LOS	D	B	A	C	B		C	B		C	B	
Approach Delay		14.2			16.3			21.3			19.2	
Approach LOS		B			B			C			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	86	119	0	25	160		22	8		39	11	
Queue Length 95th (ft)	#143	212	18	56	245		49	37		75	55	
Internal Link Dist (ft)		401			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	285	2099	976	254	1730		241	422		307	488	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.58	0.44	0.08	0.24	0.60		0.23	0.16		0.32	0.35	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	56	77	87	112	0	36	0	51	5	5	5
Future Volume (vph)	0	56	77	87	112	0	36	0	51	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.922						0.921			0.955	
Flt Protected					0.979			0.980			0.984	
Satd. Flow (prot)	0	1717	0	0	1824	0	0	1681	0	0	1750	0
Flt Permitted					0.979			0.980			0.984	
Satd. Flow (perm)	0	1717	0	0	1824	0	0	1681	0	0	1750	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1279			533			365			165	
Travel Time (s)		34.9			14.5			10.0			3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	61	84	95	122	0	39	0	55	5	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	0	0	217	0	0	94	0	0	15	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 35.7% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	56	77	87	112	0	36	0	51	5	5	5
Future Vol, veh/h	0	56	77	87	112	0	36	0	51	5	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	61	84	95	122	0	39	0	55	5	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	122	0	0	145	0	0	420	415	103	443	457	122
Stage 1	-	-	-	-	-	-	103	103	-	312	312	-
Stage 2	-	-	-	-	-	-	317	312	-	131	145	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1465	-	-	1437	-	-	544	528	952	525	500	929
Stage 1	-	-	-	-	-	-	903	810	-	699	658	-
Stage 2	-	-	-	-	-	-	694	658	-	873	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1465	-	-	1437	-	-	507	491	952	468	465	929
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	491	-	468	465	-
Stage 1	-	-	-	-	-	-	903	810	-	699	611	-
Stage 2	-	-	-	-	-	-	635	611	-	822	777	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	11	11.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	1465	-	-	1437	-	-	559
HCM Lane V/C Ratio	0.135	-	-	-	0.066	-	-	0.029
HCM Control Delay (s)	11	0	-	-	7.7	0	-	11.6
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.1

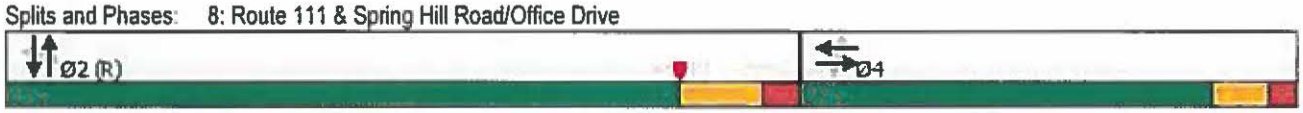
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	5	28	0	0	0	26	608	0	0	1147	61
Future Volume (vph)	26	5	28	0	0	0	26	608	0	0	1147	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.936									0.992	
Flt Protected		0.978						0.998				
Satd. Flow (prot)	0	1705	0	0	1863	0	0	3532	0	0	3511	0
Flt Permitted		0.857						0.868				
Satd. Flow (perm)	0	1494	0	0	1863	0	0	3072	0	0	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30									11	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	5	30	0	0	0	28	661	0	0	1247	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	0	0	0	689	0	0	1313	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		7.6						58.5			58.5	
Actuated g/C Ratio		0.11						0.84			0.84	
v/c Ratio		0.34						0.27			0.45	
Control Delay		22.9						2.8			3.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		22.9						2.8			3.6	
LOS		C						A			A	
Approach Delay		22.9						2.8			3.6	
Approach LOS		C						A			A	
Queue Length 50th (ft)		13						39			92	
Queue Length 95th (ft)		45						67			149	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		496						2568			2937	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.13						0.27			0.45	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 3.9 — Intersection LOS: A
Intersection Capacity Utilization 51.1% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



Map - Proposed Delivery Station Building Improvements
Levels of Service

No Build
Timing Plan: MID Peak

BL Companies
G:\JOBS19\10\1901141\TRAF\Adendum #1 - 2020\SYNCHRO\T-1901141-NOBUILD-MID.syn

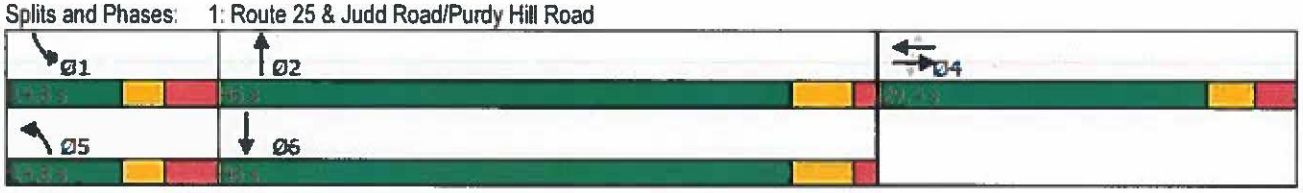
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	51	61	77	77	87	46	729	5	46	719	36
Future Volume (vph)	87	51	61	77	77	87	46	729	5	46	719	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.918			0.920			0.999			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1710	0	1770	1714	0	1770	1861	0	1770	1850	0
Flt Permitted	0.629			0.679			0.950			0.950		
Satd. Flow (perm)	1172	1710	0	1265	1714	0	1770	1861	0	1770	1850	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		64										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			483	
Travel Time (s)		8.5			7.5			37.7			8.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	55	66	84	84	95	50	792	5	50	782	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	121	0	84	179	0	50	797	0	50	821	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	29.4	29.4		29.4	29.4		14.8	46.0		14.8	46.0	
Total Split (%)	32.6%	32.6%		32.6%	32.6%		16.4%	51.0%		16.4%	51.0%	
Maximum Green (s)	23.0	23.0		23.0	23.0		8.0	40.0		8.0	40.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	12.2	12.2		12.2	12.2		6.4	37.7		6.4	37.7	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.09	0.54		0.09	0.54	
v/c Ratio	0.47	0.34		0.38	0.60		0.31	0.80		0.31	0.83	
Control Delay	36.7	18.2		33.7	37.8		40.0	24.1		40.0	25.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.7	18.2		33.7	37.8		40.0	24.1		40.0	25.9	
LOS	D	B		C	D		D	C		D	C	
Approach Delay		26.3			36.5			25.0			26.7	
Approach LOS		C			D			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	43	24		37	82		24	310		24	328	
Queue Length 95th (ft)	90	70		80	148		60	#631		60	#663	
Internal Link Dist (ft)		293			248			2130			403	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	403	630		435	590		212	1114		212	1108	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.19		0.19	0.30		0.24	0.72		0.24	0.74	

Intersection Summary

Area Type: Other
Cycle Length: 90.2
Actuated Cycle Length: 70.1
Natural Cycle: 70
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 27.2 — Intersection LOS: C
Intersection Capacity Utilization 69.9% — ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	26	719	15	20	816
Future Volume (vph)	31	26	719	15	20	816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1857	0	1770	1863
Flt Permitted	0.950				0.278	
Satd. Flow (perm)	1770	1583	1857	0	518	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		28	2			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		2307			466
Travel Time (s)	14.3		39.3			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	28	782	16	22	887
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	28	798	0	22	887
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	7.5	7.5	45.8		44.6	45.8
Actuated g/C Ratio	0.13	0.13	0.81		0.79	0.81
v/c Ratio	0.14	0.12	0.53		0.04	0.59
Control Delay	26.3	12.2	6.8		2.5	8.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	26.3	12.2	6.8		2.5	8.1
LOS	C	B	A		A	A
Approach Delay	19.9		6.8			8.0
Approach LOS	B		A			A

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	12	0	100		2	122
Queue Length 95th (ft)	37	21	341		6	#437
Internal Link Dist (ft)	446		2227			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	561	521	1474		653	1479
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.05	0.54		0.03	0.60

Intersection Summary

Area Type: Other
Cycle Length: 82
Actuated Cycle Length: 56.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 7.8 — Intersection LOS: A
Intersection Capacity Utilization 56.5% — ICU Level of Service B
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

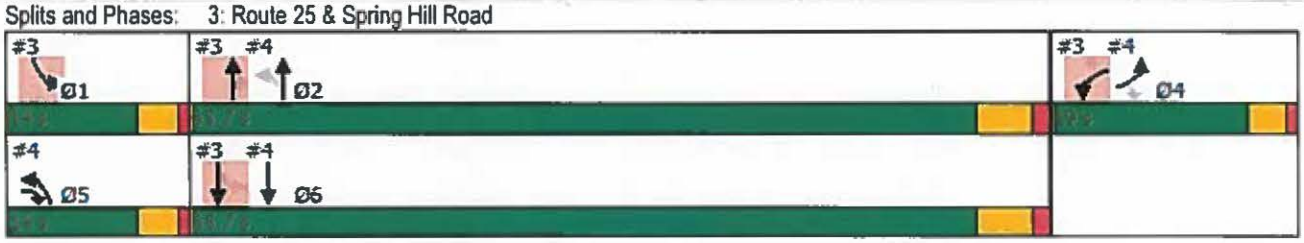
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	92	82	674	97	66	745	
Future Volume (vph)	92	82	674	97	66	745	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.320		
Satd. Flow (perm)	1770	1583	1863	1583	596	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		89		93			
Link Speed (mph)	25		40			40	
Link Distance (ft)	734		462			2307	
Travel Time (s)	20.0		7.9			39.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	100	89	733	105	72	810	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	100	89	733	105	72	810	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	10.7	10.7	61.3	61.3	63.4	55.0	
Actuated g/C Ratio	0.13	0.13	0.72	0.72	0.75	0.65	
v/c Ratio	0.45	0.32	0.54	0.09	0.13	0.67	
Control Delay	44.6	12.0	4.5	0.4	3.1	14.0	
Queue Delay	0.0	0.0	0.1	0.0	0.0	0.0	
Total Delay	44.6	12.0	4.6	0.4	3.1	14.0	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	B	
Approach Delay	29.2		4.1			13.1	
Approach LOS	C		A			B	
Queue Length 50th (ft)	56	0	66	0	7	262	
Queue Length 95th (ft)	107	43	83	m1	18	466	
Internal Link Dist (ft)	654		382			2227	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	329	367	1361	1181	619	1341	
Starvation Cap Reductn	0	0	80	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.24	0.57	0.09	0.12	0.60	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 84.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 10.7 — Intersection LOS: B
Intersection Capacity Utilization 56.9% — ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	46	82	97	725	776	61	
Future Volume (vph)	46	82	97	725	776	61	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.990		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1844	0	
Flt Permitted	0.950		0.171				
Satd. Flow (perm)	1770	1583	319	1863	1844	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		89			7		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	50	89	105	788	843	66	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	50	89	105	788	909	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	10.7	19.5	67.3	61.3	55.0		
Actuated g/C Ratio	0.13	0.23	0.79	0.72	0.65		
v/c Ratio	0.22	0.21	0.27	0.59	0.76		
Control Delay	39.3	7.4	4.2	11.3	9.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	39.3	7.4	4.2	11.3	9.2		

OLD BUSINESS

- Discussion and Approval of Traffic Light at Route 111 and 41-57 Monroe Turnpike – William Maurer, Town Engineer and Fred Mascia and Craig Yannes, Tighe & Bond

Vivian Munoz

From:	Margaret Mastroni
Sent:	Wednesday, September 2, 2020 12:24 PM
To:	Vivian Munoz
Cc:	William Maurer; Leonard Scinto
Subject:	Police Commission Mtg. Packet
Attachments:	2020_08-04 presentation (2)_compressed (1).pdf

RT 111 Traffic Signal

Hi Vivian,

I am sending the attached on behalf of Bill Maurer and T&B for your meeting packet.

Best,

Margaret D. Mastroni
Administrative Assistant to the Public Works Director/WPCA Clerk
Trumbull Town Hall
5866 Main Street, Trumbull CT 06611
(203) 452-5045 (203) 452-5048
http://www.trumbull-ct.gov/

Tighe&Bond
Engineers | Environmental Specialists
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1106

30% DESIGN SUBMISSION

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, Connecticut

NAME	DATE	DESCRIPTION

PROJECT NO.	[illegible]
DATE	08/05/2019
FILE	[illegible]-C-12-RPFINAL.dwg
DRAWN BY	[illegible]
CHECKED	[illegible]
APPROVED	[illegible]

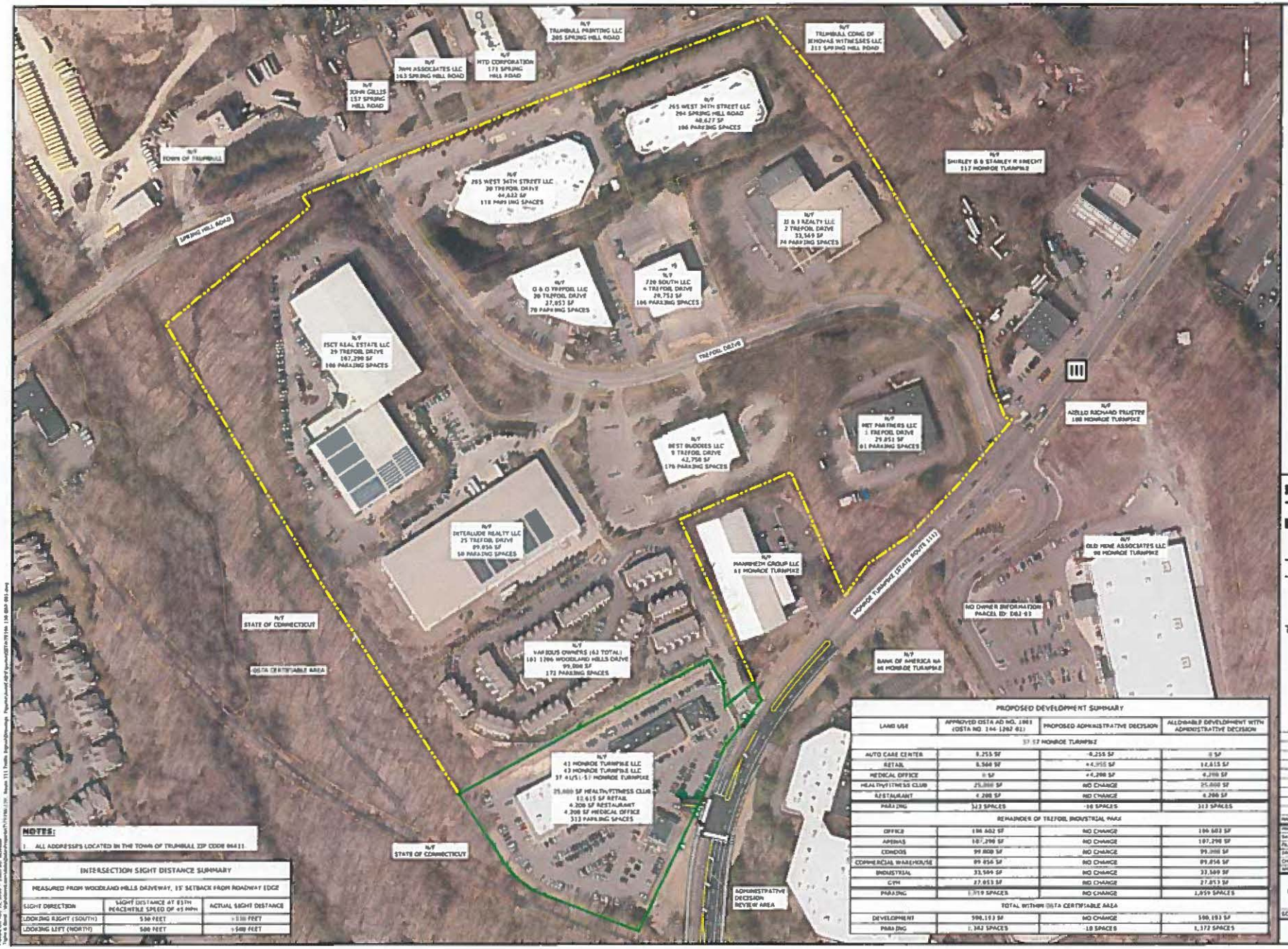
ROADWAY PLAN

SCALE:

C-RP-1

SHEET 1 OF 2

SCALE 1" = 40'



NOTES:

1. ALL ADDRESSES LOCATED IN THE TOWN OF TRUMBULL ZIP CODE 06611

INTERSECTION SIGHT DISTANCE SUMMARY

MEASURED FROM WOODLAND HILLS DRIVEWAY, 15' SETBACK FROM ROADWAY EDGE

SIGHT DIRECTION	SIGHT DISTANCE AT 85TH PERCENTILE SPEED OF 45 MPH	ACTUAL SIGHT DISTANCE
LOOKING RIGHT (SOUTH)	530 FEET	>530 FEET
LOOKING LEFT (NORTH)	500 FEET	>500 FEET

PROPOSED DEVELOPMENT SUMMARY

LAND USE	APPROVED OSTA AD NO. 1983 (OSTA NO. 144-1267-01)	PROPOSED ADMINISTRATIVE DECISION	ALLOWABLE DEVELOPMENT WITH ADMINISTRATIVE DECISION
37-57 MONROE TURNPIKE			
AUTO CARE CENTER	8,255 SF	-8,255 SF	0 SF
RETAIL	8,360 SF	+4,255 SF	12,615 SF
MEDICAL OFFICE	0 SF	+4,200 SF	4,200 SF
HEALTH/FITNESS CLUB	25,000 SF	NO CHANGE	25,000 SF
RESTAURANT	4,200 SF	NO CHANGE	4,200 SF
PARKING	323 SPACES	-10 SPACES	313 SPACES
REMAINDER OF TREFOIL INDUSTRIAL PARK			
OFFICE	106,602 SF	NO CHANGE	106,602 SF
APTS/ALS	107,290 SF	NO CHANGE	107,290 SF
CONDOS	99,008 SF	NO CHANGE	99,008 SF
COMMERCIAL WAREHOUSE	89,856 SF	NO CHANGE	89,856 SF
INDUSTRIAL	33,569 SF	NO CHANGE	33,569 SF
GYM	27,053 SF	NO CHANGE	27,053 SF
PARKING	1,959 SPACES	NO CHANGE	1,959 SPACES
TOTAL WITHIN OSTA CERTIFIABLE AREA			
DEVELOPMENT	590,193 SF	NO CHANGE	590,193 SF
PARKING	1,382 SPACES	-10 SPACES	1,372 SPACES

Tighe&Bond
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, CT

REV	DATE	DESCRIPTION

PROJECT NO. T0186-120
DATE: 05.12.2020
FILE: T0186-120-OSP-001.dwg
DRAWN BY: N.M.
CHECKED BY: TJM
APPROVED BY: J.M.

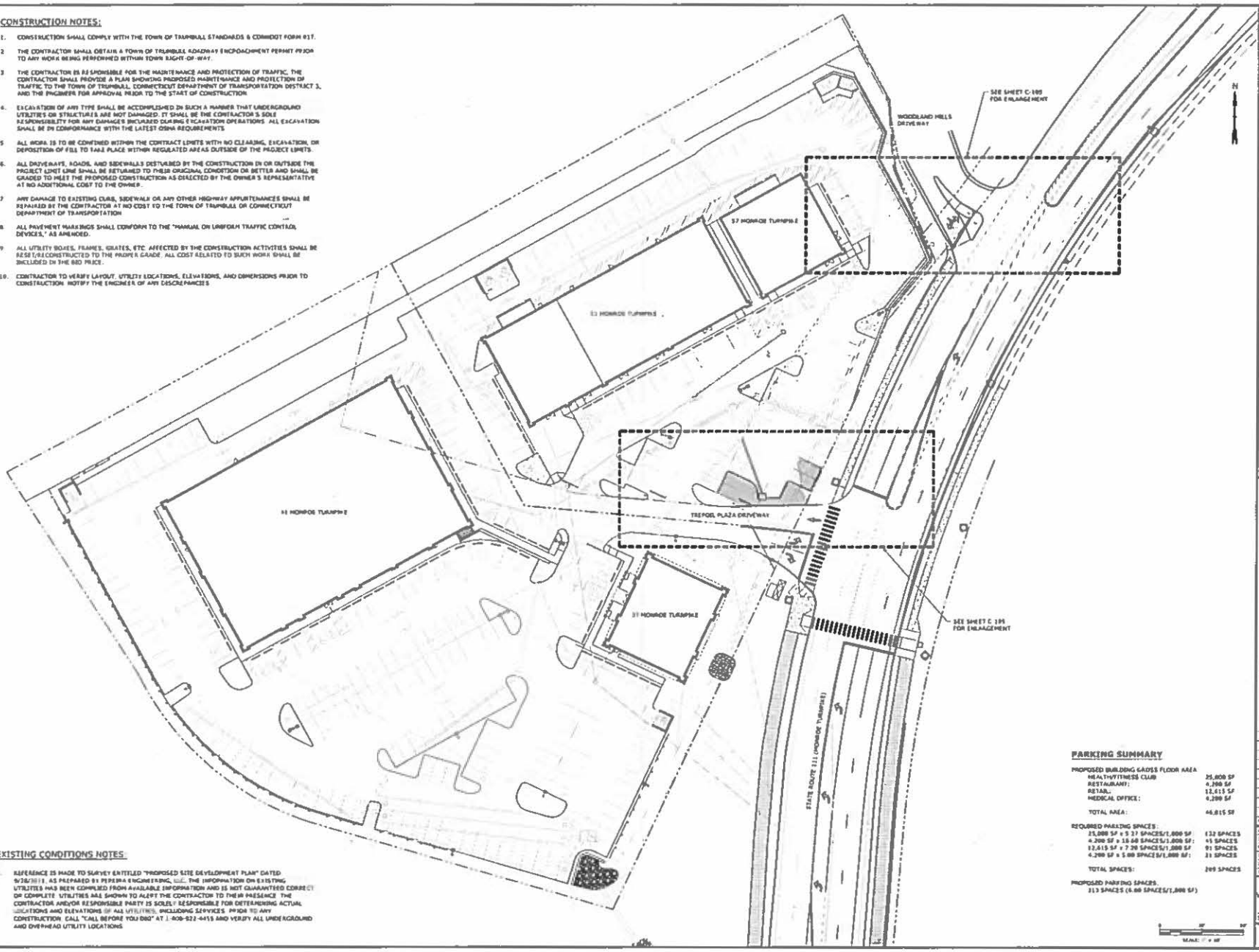
OSTA OVERALL SITE PLAN

SCALE: 1" = 100'

OSP-001

CONSTRUCTION NOTES:

1. CONSTRUCTION SHALL COMPLY WITH THE TOWN OF TRUMBULL STANDARDS & CONNDOT FORM 817.
2. THE CONTRACTOR SHALL OBTAIN A TOWN OF TRUMBULL ROADWAY ENCROACHMENT PERMIT PRIOR TO ANY WORK BEING PERFORMED WITHIN TOWN RIGHT-OF-WAY.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC. THE CONTRACTOR SHALL PROVIDE A PLAN SHOWING PROPOSED MAINTENANCE AND PROTECTION OF TRAFFIC TO THE TOWN OF TRUMBULL, CONNECTICUT DEPARTMENT OF TRANSPORTATION DISTRICT 3, AND THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
4. EXCAVATION OF ANY TYPE SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT UNDERGROUND UTILITIES OR STRUCTURES ARE NOT DAMAGED. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY FOR ANY DAMAGES INCURRED DURING EXCAVATION OPERATIONS. ALL EXCAVATION SHALL BE IN CONFORMANCE WITH THE LATEST OSHA REQUIREMENTS.
5. ALL WORK IS TO BE CONFINED WITHIN THE CONTRACT LIMITS WITH NO CLEARING, EXCAVATION, OR DEPOSITION OF FILL TO TAKE PLACE WITHIN REGULATED AREAS OUTSIDE OF THE PROJECT LIMITS.
6. ALL DRIVEWAYS, ROADS, AND SIDEWALKS DISTURBED BY THE CONSTRUCTION IN OR OUTSIDE THE PROJECT LIMIT LINE SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER AND SHALL BE GRADED TO MEET THE PROPOSED CONSTRUCTION AS DIRECTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
7. ANY DAMAGE TO EXISTING CURB, SIDEWALK OR ANY OTHER HIGHWAY APPURTENANCES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE TOWN OF TRUMBULL OR CONNECTICUT DEPARTMENT OF TRANSPORTATION.
8. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AS AMENDED.
9. ALL UTILITY BOXES, FRAMES, GRATES, ETC. AFFECTED BY THE CONSTRUCTION ACTIVITIES SHALL BE RESET/RECONSTRUCTED TO THE PROPER GRADE. ALL COST RELATED TO SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.
10. CONTRACTOR TO VERIFY LAYOUT, UTILITY LOCATIONS, ELEVATIONS, AND DIMENSIONS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.



PARKING SUMMARY

PROPOSED BUILDING GROSS FLOOR AREA

HEALTH/FITNESS CLUB	25,800 SF
RESTAURANT:	4,200 SF
RETAIL:	12,615 SF
MEDICAL OFFICE:	4,200 SF
TOTAL AREA:	46,815 SF

REQUIRED PARKING SPACES:

25,800 SF x 5.37 SPACES/1,000 SF:	138 SPACES
4,200 SF x 10.60 SPACES/1,000 SF:	45 SPACES
12,615 SF x 7.20 SPACES/1,000 SF:	91 SPACES
4,200 SF x 5.00 SPACES/1,000 SF:	21 SPACES
TOTAL SPACES:	295 SPACES

PROPOSED PARKING SPACES:
313 SPACES (6.68 SPACES/1,000 SF)

EXISTING CONDITIONS NOTES:

1. REFERENCE IS MADE TO SURVEY ENTITLED "PROPOSED SITE DEVELOPMENT PLAN" DATED 9/28/2011, AS PREPARED BY PERSIKO ENGINEERING, LLC. THE INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR AND/OR RESPONSIBLE PARTY IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SERVICES. PRIOR TO ANY CONSTRUCTION, CALL "CALL BEFORE YOU DIG" AT 1-800-922-4455 AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.

Tighe&Bond
Engineers | Environmental Specialists
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

30% DESIGN SUBMISSION

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, Connecticut

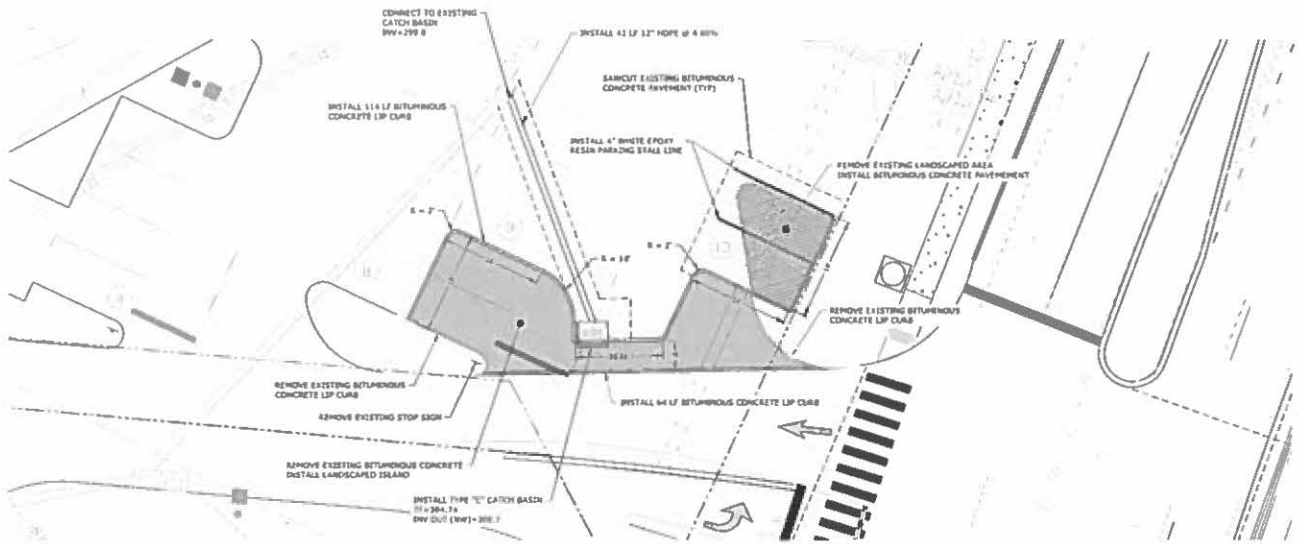
MARK	DATE	DESCRIPTION

PROJECT NO.	-17176.130
DATE	04/30/2020
FILE	17176-130-C-104.dwg
DRAWN BY	[illegible]
CHECKED	AJM
APPROVED	[illegible]

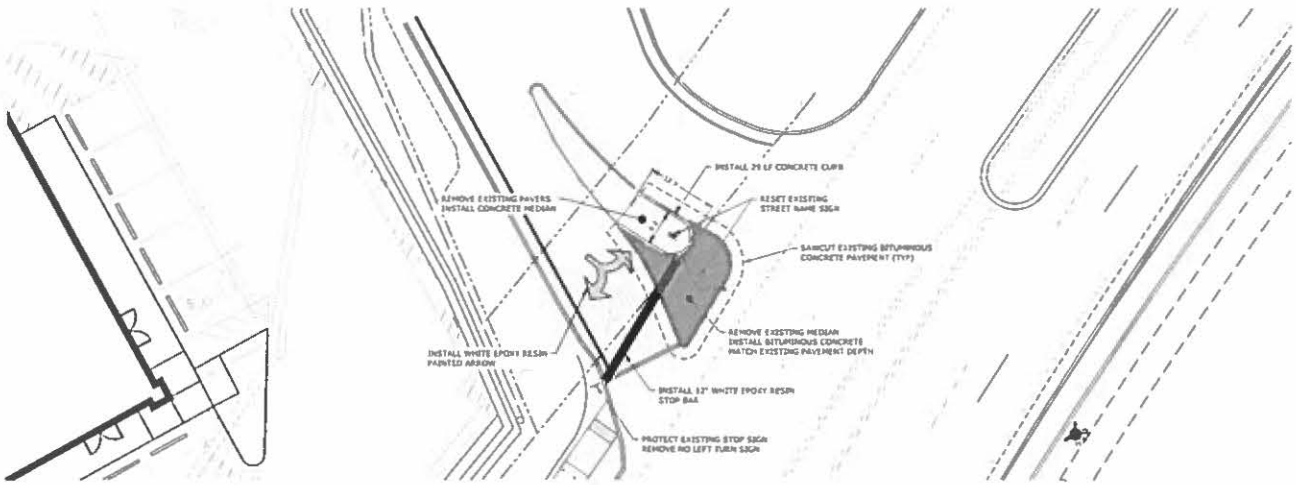
TREFOIL PLAZA AND WOODLAND HILLS DRIVEWAY CONSTRUCTION PLAN

SCALE: 1" = 30'

C-104



TREFOIL PLAZA ENLARGEMENT PLAN
SCALE: 1" = 10'



WOODLAND HILLS DRIVEWAY ENLARGEMENT PLAN
SCALE: 1" = 10'

Tighe&Bond
Engineers | Environmental Specialists
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

30% DESIGN SUBMISSION

Route 111 Traffic Signal Design

Town of Trumbull

Trumbull, Connecticut

MARK	DATE	DESCRIPTION

PROJECT NO.	[illegible]
DATE	[illegible]
FILE	[illegible]
DRAWN BY	[illegible]
CHECKED	[illegible]
APPROVED	[illegible]

TREFOIL PLAZA AND WOODLAND HILLS DRIVEWAY ENLARGEMENT PLANS

SCALE 1" = 10'

C-105

June 2020

Addendum #1 - TRAFFIC STUDY

Proposed Delivery Station Building Improvements

7120 Main Street
Trumbull, CT

PREPARED BY:
BL Companies
355 Research Parkway
Meriden, CT 06450

Architecture
Engineering
Environmental
Land Surveying
Companies

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NO BUILD TRAFFIC VOLUMES
CAPACITY ANALYSES

EXECUTIVE SUMMARY

On December 18, 2019 the Trumbull Planning and Zoning Commission approved the Special Permit and Site Plan Review for the warehouse and distribution facility located at 7120 Main Street. The site is currently under construction in accordance with the approved plans.

The client is constantly investigating ways to improve the site operations for efficiency and safety. In a recent analysis of the approved site plan, it was determined that the efficiency and safety of the site operations logistics can be improved with some minor site alterations. These alterations pertain to the easterly parking area. For this reason, some minor modifications to the easterly parking area and site access/egress are proposed. All other aspects of the approved site plan will remain as originally approved by the Commission. The proposed site modifications include the realignment of parking and building access/egress to allow the delivery vans to access the building from the east (rear) and exit on the west (front) side of the building. The site also has proposed a revised operating schedule to reduce trips during the peak hour periods of the roadway network.

This traffic study has been prepared for the proposed improvements and revised operating schedule to the warehouse and distribution facility located at 7120 Main Street. The focus of this study was to evaluate the traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the proposed improvements and revised operating schedule and to quantify the potential traffic impacts on these roadways and intersections.

This study investigated the potential traffic impacts of the proposed improvements and revised operating schedule during the weekday morning, midday and evening peak periods. Traffic turning movement counts were obtained at each of the study intersections during the peak periods. A 2% annual growth rate was applied to the existing traffic volumes to develop the 2021 horizon year traffic volumes. In addition to applying this growth rate, traffic volumes from a proposed mixed-use development at 205 Monroe Turnpike were used to determine the No Build (2021) Traffic Volumes.

The site will remain as a package delivery station which will provide “last mile” package delivery services to residences and businesses with an approximate 60-minute driving time radius of the site. As indicated in this table, the proposed improvements and revised operating schedule for the delivery station is projected to generate 1 (1 enter, 0 exit) vehicle trip during the weekday morning peak hour, 145 (25 enter, 120 exit) vehicle trips during the midday peak hour and 115 (85 enter, 30 exit) during the weekday evening peak hour.

A detailed traffic analysis was also conducted at the intersections and roadways in the general vicinity of the site in accordance with methodologies outlined in the Highway Capacity Manual 2010, published by the Transportation Research Board. The greatest cumulative impacts of project related traffic are likely to occur during the weekday morning, mid-day, and evening peak hours, when traffic consists mostly of commuters. As such, traffic operating conditions at the study intersections were analyzed during these peak periods.

In the 2021 Build Scenarios, there is insignificant impact to the network from the proposed development and revised operating schedule. The revised operating schedule is proposed to significantly improve the network compared to the December 19, 2019 approved conditions. The only movement in the study that experiences a change in LOS is in the evening peak hour at the Route 25 at Judd Road and Purdy Hill Road intersection; the Judd Road EB Thru/Right movement changes from a D to an E with only a 5’ increase in queue length from 255’ in the no build to 260’ in the build condition.

It was determined from the analysis no mitigation and/or road improvements are not needed for these proposed improvements. No LOS for an intersection or a specific movement becomes substantially worse than existing. No specific intersection movements that have a LOS “D” or less in the background condition and the control delay per vehicle for such specific movement is increased by more than 15 seconds per vehicle as a result of the development’s added traffic at signalized intersections.

I. INTRODUCTION

On December 18, 2019 the Trumbull Planning and Zoning Commission approved the Special Permit and Site Plan Review for the warehouse and distribution facility located at 7120 Main Street. The site is currently under construction in accordance with the approved plans.

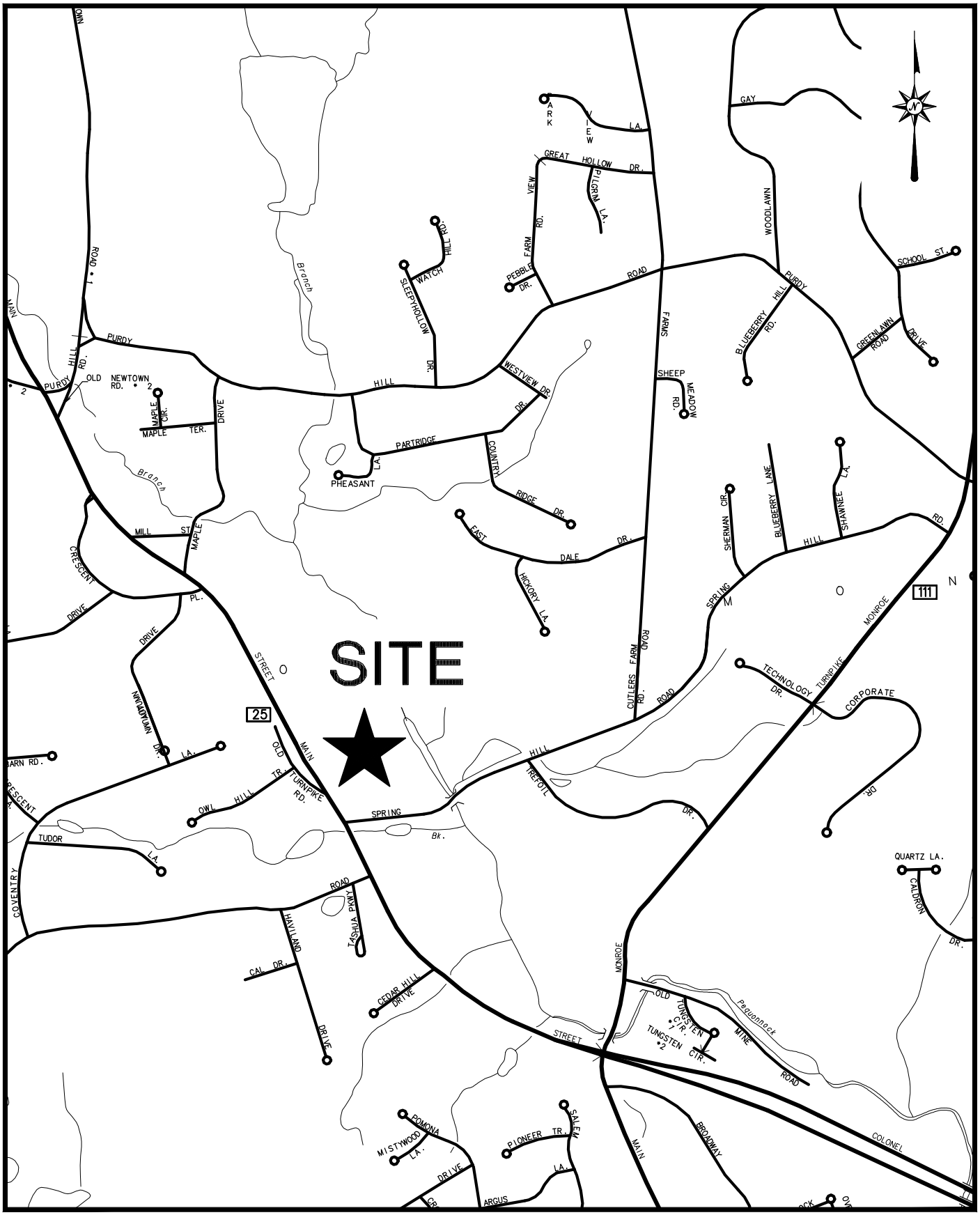
The client is constantly investigating ways to improve the site operations for efficiency and safety. In a recent analysis of the approved site plan, it was determined that the efficiency and safety of the site operations logistics can be improved with some minor site alterations. These alterations pertain to the easterly parking area. For this reason, some minor modifications to the easterly parking area and site access/egress are proposed. All other aspects of the approved site plan will remain as originally approved by the Commission. The proposed site modifications include the realignment of parking and building access/egress to allow the delivery vans to access the building from the east (rear) and exit on the west (front) side of the building. The site also has proposed a revised operating schedule to reduce trips during the peak hour periods of the roadway network.

This traffic study has been prepared for the proposed improvements and revised operating schedule to the warehouse and distribution facility located at 7120 Main Street. The focus of this study was to evaluate the traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the proposed improvements and revised operating schedule and to quantify the potential traffic impacts on these roadways and intersections.

The study area is along a suburban stretch of CT Route 25 (Main Street) that has numerous apartment complexes and residential neighborhoods. See **Figure 1** for a location map.

The site will remain as a package delivery station which will provide “last mile” package delivery services to residences and businesses with an approximate 60-minute driving time radius of the site. The project will include retrofitting the existing 114,000 SF warehouse building. Access to the site will be via curb cuts on Spring Hill Road and Route 25 (Main Street).

The study investigated the potential traffic impacts associated with the development in the weekday morning, mid-day, and evening peak periods. Three existing curb cuts are to remain in the redevelopment of the site. The greatest cumulative impacts of project related traffic are likely to occur during the weekday morning, mid-day, and evening peak hours, when traffic consists mostly of commuters. As such, traffic operating conditions at the study intersections were analyzed during these peak periods.



BL Companies

LOCATION MAP

PR□P□S□D□D□□□□□PM□□□
□□□□□M□□□S□R□□□
□R□M□□□□□□□□□□□□□□□□□□
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II. EXISTING CONDITIONS

An investigation of the existing traffic conditions on the adjacent roadway network formed the basis for assessing any traffic issues associated with the proposed improvements and revised operating schedule. This investigation included a field reconnaissance, traffic counting, and research of pertinent planning and traffic data available with Connecticut Department of Transportation (CTDOT) and the Town of Trumbull.

Access Network

The project study area consists of the signalized intersection at the following locations:

- CT Route 25 (Main Street) at Judd and Purdy Hill Road
- CT Route 25 (Main Street) at Victoria Drive
- CT Route 25 (Main Street) at Spring Hill Road
- CT Route 25 (Main Street) at Tashua Road
- CT Route 25 (Main Street) at CT Route 111 (Main Street/Monroe Turnpike)
- CT Route 111 (Monroe Turnpike) at Trefoil Drive and Old Mine Plaza Driveway
- CT Route 111 (Monroe Turnpike) at Spring Hill Road

The unsignalized intersection of Trefoil Drive and Spring Hill Road was also included in this study. Major roadways in the vicinity of the project include CT Route 25 (Main Street), CT Route 111 (Main Street/Monroe Turnpike), Trefoil Drive, Tashua Road, Purdy Hill Road, Judd Road, and Spring Hill Road.

CT Route 25 (Main Street) is an urban principal arterial that originates to the south in the City of Bridgeport at an interchange with I-95 and extends to the Town of Brookfield in the north at an intersection with US Route 202. In the vicinity of the project, CT Route 25 (Main Street) currently has one travel lane in each direction. The road has an expressway section south of the intersection with CT Route 111, which is three-lanes in both directions. The speed limit is 40 mph and the average daily traffic, provided by CTDOT, is approximately 20,500 near CT Route

111 and approximately 28,500 north of the intersection of Judd and Purdy Hill Road. The road provides access to primarily residential neighborhoods and small retail developments.

Route 111 (Main Street/Monroe Turnpike) is an urban minor arterial, that originates to the southwest at an interchange with CT Route 15 (Merritt Parkway) and terminates at an intersection with CT Route 34 in Monroe. The average daily traffic, provided by CTDOT, ranges from 12,800 vehicles just south of CT Route 25 (Main Street) to 27,700 vehicles at the Monroe-Trumbull Town Line. It generally has two travel lanes in both directions. The speed limit is 40 mph and provides access to major retail and industrial developments.

Tashua Road is an urban collector that originates at an intersection with North Madison and Madison Avenue and terminates at CT Route 25 (Main Street). The average daily traffic, provided by CTDOT, is approximately 2,500 vehicles. The speed limit is 25 mph and provides access to residential neighborhoods.

Spring Hill Road is an urban local street that originates at CT Route 25 (Main Street) in Trumbull and terminates at an intersection with CT Route 111 in Monroe. The speed limit is 25 mph and provides access to residential neighborhoods and industrial developments. Along Spring Hill Road north of the site there is a school bus company. Existing counts were collected while summer school was in session.

Judd Road is a major urban collector that originates at an intersection with CT Route 59 in Easton and ends at CT Route 25 (Main Street) and Purdy Hill Road. The speed limit is 25 mph and the average daily traffic, provided by CTDOT, was 2,500 vehicles just west of the intersection with CT Route 25 (Main Street). It provides access to residential neighborhoods.

Purdy Hill Road is a major urban collector that originates at the intersection with CT Route 25 (Main Street) and Judd Road and terminates in Monroe at an intersection with Elm Street. The speed limit is 25 mph and it provides access to residential neighborhoods.

Intersection Characteristics

Several key intersections were reviewed in this study to determine if they would be impacted by the expected site traffic volumes. They are as follows:

- **CT Route 25 (Main Street) at Judd and Purdy Hill Road –** At this signalized intersection, every approach has an exclusive left turn lane and a shared thru/right lane. The five-phase fully actuated traffic signal includes protected phasing for the exclusive left turns on both approaches of CT Route 25 (Main Street). Both Purdy Hill Road and Judd Road's approaches have permitted phasing. There is a "No Turn on Red" on the southbound CT Route 25 (Main Street) and Purdy Hill Road approaches.

- **CT Route 25 (Main Street) at Victoria Drive-** At this signalized intersection, CT Route 25 (Main Street) has an exclusive left turn lane and thru lane on the southbound approach. On the northbound approach, there is one thru lane and a shared thru/right-turn lane. On the Victoria Drive approach, there is an exclusive left and right-turn lane. The signal is three-phased and fully actuated with a protected/permitted phasing for the exclusive left-turn on southbound CT Route 25 (Main Street).

- **CT Route 25 (Main Street) at Spring Hill Road and Tashua Road–** The two side street approaches, Spring Hill Road and Tashua Road, are on the same signal controller, but are offset by 450'. Each side street approach has an exclusive left and right-turn lane. There is an exclusive left-turn lane on the southbound side of CT Route 25 (Main Street) approaching Spring Hill Road and an exclusive left turn lane on northbound CT Route 25 approaching Tashua Road. An exclusive right turn lane is on northbound CT Route 25 (Main Street) approaching Spring Hill Road. The signal is 5-phased and fully actuated.

- **CT Route 25 (Main Street) at Route 111 (Monroe Turnpike/Main Street) –** At this signalized intersection, the CT Route 25 (Main Street) approaches have two

travel lanes in both directions. There is an exclusive left and right-turn lane in the northbound direction and an exclusive left-turn and channelized right-turn lane. The channelized right is signalized. CT Route 111 northbound approach has an exclusive left-turn, an exclusive right-turn, and two through lanes. The southbound approach has dual exclusive left-turn lanes and a shared thru/right turn lane. The eight-phase traffic signal is fully actuated and includes protected left turn phasing for both CT Route 25 (Main Street) approaches. A permitted/overlapping right-turn is on the CT Route 25 (Main Street) northbound approach. The Route 111 exclusive left turns have protected phasing. Emergency pre-emption is installed at this location for the northbound CT Route 25 (Main Street) approach.

- **CT Route 111 (Monroe Turnpike) at Trefoil Drive and Old Mine Plaza Driveway –** At this signalized intersection, there are two travel lanes in both directions of CT Route 111. The northbound approach has an exclusive left and right-turn lane and the southbound approach has an exclusive left turn lane only both directions have through lanes. Both side street approaches, Trefoil Drive and the Old Mine Plaza driveway have an exclusive left-turn lane and a shared thru/right-turn lane. The signal is 5-phased and has protected left-turns on both CT Route 111 approaches. The side street approaches are permitted phasing. The cycle length in all peak period analyzed for this study is 70” system.

- **CT Route 111 (Monroe Turnpike) at Spring Hill Road and Office Driveway –** At this signalized intersection, there are two travel lanes in both directions of CT Route 111, with one being a shared left/thru lane and the other being a shared thru/right turn lane. The side street approaches of Trefoil Drive and the office driveway have a shared left/thru/right turn lane. The signal has time-based coordination on a system present along CT Route 111 (Monroe Turnpike). The cycle length in all peak periods analyzed for this study is 70”.

- **Spring Hill Road at Trefoil Drive –** At this unsignalized intersection, Trefoil Drive is stop-controlled. Every approach has a single lane.

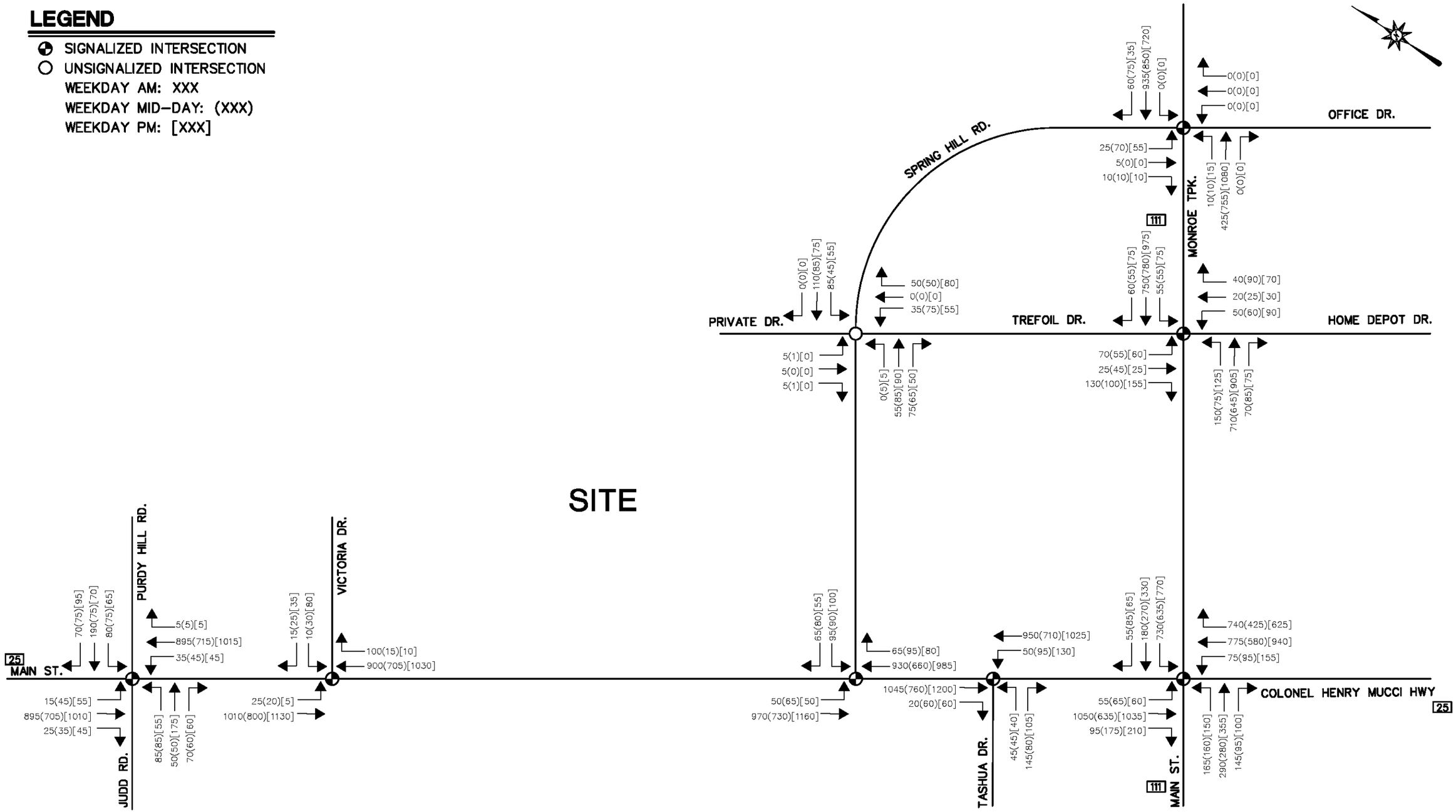
Existing Traffic Volumes

To asses existing traffic conditions in the vicinity of the site, peak hour manual turning movement traffic volumes, vehicle classification and pedestrian counts were recorded at the intersections above. The counts were recorded during typical weekday morning (7am-9am), evening (4pm-6pm) and midday (11am-1pm) peak traffic periods in July of 2019. The current peak hour traffic volumes for the intersections are illustrated in **Figure 2**. These are the existing counts that were approved by Trumbull Planning and Zoning Commission on December 18, 2019 and have no impact from the global pandemic, COVID-19.

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION

WEEKDAY AM: XXX
WEEKDAY MID-DAY: (XXX)
WEEKDAY PM: [XXX]



ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING
BL Companies

EXISTING (2019) TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 2

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6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOB519\10\1901141\DWG\TFLO1901141-E1.DWG,FIGURE 2.

Crash Data Analysis

As part of the existing condition analysis, crash data from the most recent three-year period, January 1, 2017 to December 31, 2019, was obtained from the Connecticut Crash Data Repository.

Two hundred forty-six (246) crashes in the study area were reviewed, the most common crashes were the front to rear at seventy-eight percent (78%). The majority of crashes resulted in “No Apparent Injury” at seventy-five percent (75%). There were no fatalities in the corridor for the three-year period. However, there were two crashes that resulted in “Suspected Serious Injury”. One of those crashes occurred at each of the following intersections: Route 25 (Main Street) at Tashua Road and Route 25 (Main Street) at Judd Road. The signalized intersection of Route 25 (Main Street) at Route 11 and Route 111 experienced the majority of the crashes in the corridor at forty four percent (44%). Below **Table 1** summarizes the crash data.

Table 1 – Crash Data Summary

	Route 25 (Main Street) at Spring Hill Road	Route 25 (Main Street) at Tashua Road	Route 25 (Main Street) at Victoria Drive	Route 25 (Main Street) at Judd Road	Route 25 (Main Street) at Route 111	Route 111 at Spring Hill Road	Route 111 at Trefoil Drive	Spring Hill Road at Trefoil Drive
Year								
2017	16	11	1	8	42	4	7	1
2018	17	16	2	9	27	1	11	0
2019	6	11	0	3	40	5	8	0
Total	39	38	3	20	109	10	26	1
Crash Type								
Angle	1	1	0	5	8	2	5	0
Front to Front	1	0	1	0	1	0	0	0
Front to Rear	36	36	2	14	83	5	17	0
Not Applicable	0	0	0	0	0	2	0	1
Other/Unknown	0	1	0	0	2	0	0	0
Rear to Side	0	0	0	0	0	0	2	0
Sideswipe, Opposite Direction	1	0	0	0	1	0	0	0
Sideswipe, Same Direction	0	0	0	1	14	1	2	0
Total	39	38	3	20	109	10	26	1
Severity								
Fatal Injury (K)	0	0	0	0	0	0	0	0
Suspected Serious Injury (A)	0	1	0	1	0	0	0	0
Suspected Minor Injury (B)	8	6	1	1	9	0	2	0
Possible Injury (C)	7	6	0	3	9	2	5	0
No Apparent Injury (O)	24	25	2	15	91	8	19	1
Unknown	0	0	0	0	0	0	0	0
Total	39	38	3	20	109	10	26	1
Note: Data collected from the Connecticut Crash Data Repository								

III. PROJECTED TRAFFIC CONDITIONS

In order to evaluate traffic conditions when the proposed improvements are completed in 2021, future traffic volumes networks were forecast under the 2021 No-Build Conditions (without the proposed improvements) and under 2021 Build Conditions (with the proposed improvements). The projected traffic volumes on the roadway network under 2021 No-Build conditions were assumed to include all existing traffic and new traffic resulting from background sources of traffic growth, independent of the proposed improvements and revised operating schedule. The project traffic volumes on the roadway network under 2021 Build conditions were assumed to include the anticipated project site-generated traffic volumes in addition to the assumed background traffic growth.

No Build Traffic Volumes

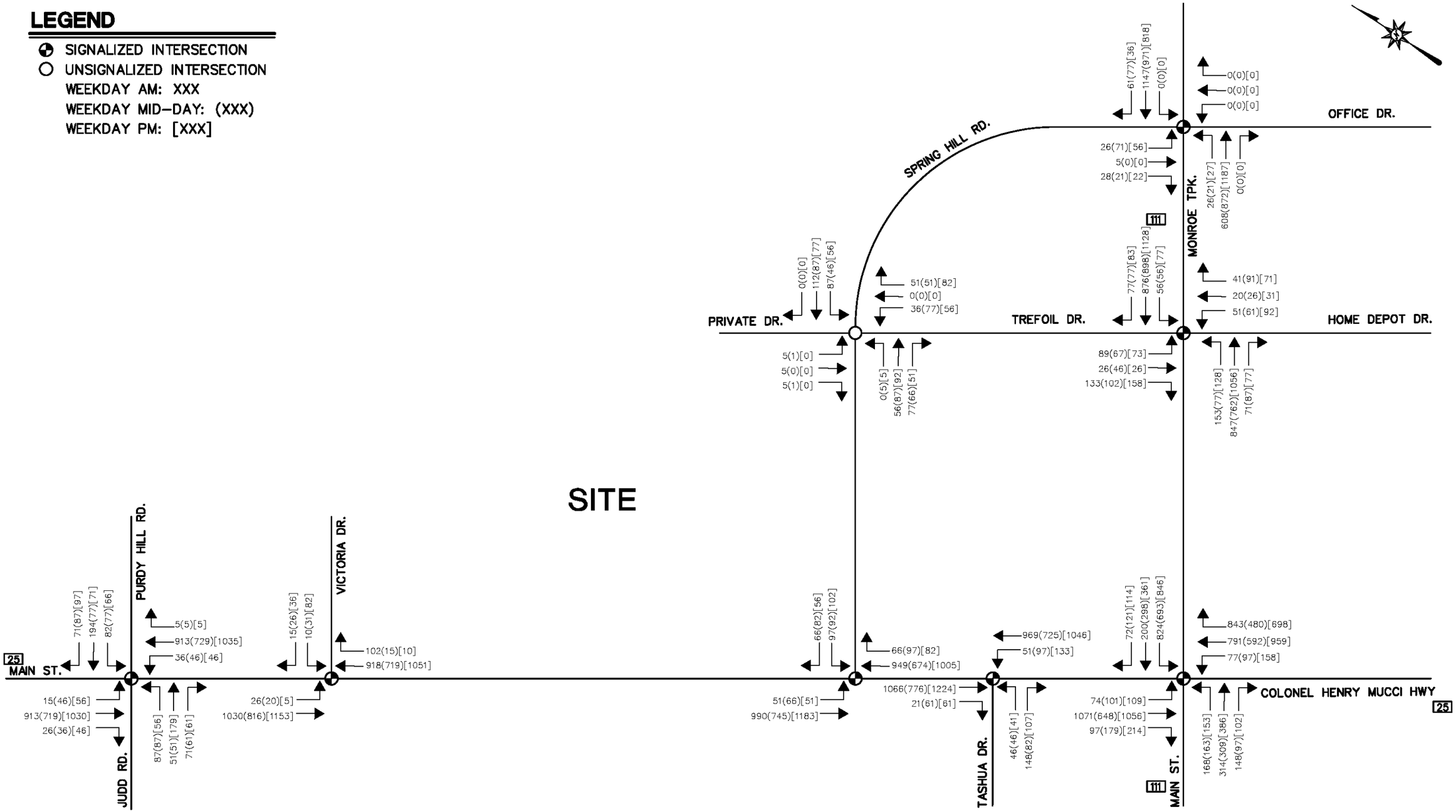
A 2% annual growth rate was applied to the 2019 existing traffic volumes to develop the 2021 No-Build traffic volumes. In addition to applying this growth rate, any approved or pending developments in the area that may add substantial traffic volume to the study intersections were considered. In discussions with Connecticut Department of Transportation, there is one planned mixed-use development at 205 Monroe Turnpike was identified. The proposed development consists of mix uses totaling about 36,726 square feet. Proposed volumes from the mixed-use development are shown in the Appendix and were included in the No Build Traffic Volumes for the weekday morning, midday and evening peak hours.

The annual growth and other project volumes were added to the Existing Traffic Volumes to determine the No Build (2021) Traffic Volumes. **Figure 3** graphically illustrates the No Build Traffic Volumes.

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION

WEEKDAY AM: XXX
WEEKDAY MID-DAY: (XXX)
WEEKDAY PM: [XXX]



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NO BUILD (2021) TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 3

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Trip Generation and On-Site Circulation

From the previous study that was approved by Trumbull Planning and Zoning Commission on December 18, 2019, a summary of the existing trip generation projections for the approved delivery station from the December study is presented in **Table 2**.

As indicated in this table, the 2019 approved delivery station is projected to generate 62 (49 enter, 13 exit) vehicle trips during the weekday morning peak hour, 81 (34 enter, 47 exit) vehicle trips during the midday peak hour and 58 (24 enter, 34 exit) during the weekday evening peak hour. The schedule from the previous proposed study had a traditional operating pattern where high volume of trips came during the adjacent street traffic's peak hours.

Table 2 – 2019 Approved Operating Schedule Trip Generation

2019 Approved Operating Schedule Trip Generation										
Trips By	**Trips**									
	AM Peak Hour of Adjacent Street			Midday Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
	Total	In	Out	Total	In	Out	Total	In	Out
Associates/Managers	24	24	0	13	0	13	10	0	10
DSP	36	24	12	48	24	24	48	24	24
Flex Drivers	0	0	0	20	10	10	0	0	0
Trucks	2	1	1	0	0	0	0	0	0
Trips	**62**	**49**	**13**	**81**	**34**	**47**	**58**	**24**	**34**

The client has proposed revising the operating schedule to allow for the least amount of impact to the public, daily commuters and its own employees. The operating schedule has shifted majority of its site generated trips throughout the day to better accommodate loading and delivery of packages.

The level of traffic likely generated by the proposed improvements and revised operating schedule from the delivery station has been estimated by the tenant to determine the potential traffic impact on the study intersections. The tenant completed a detailed analysis for the new operating schedule determining the number and time of site traffic arrivals and departures at the site.

The Tenant anticipates that this facility will employ approximately 169 associates/managers on-site over various shifts during the course of the day. These employees will have two parking areas on site with access from U.S. Route 25 via full access site drive 1 and right in right out restrictions for site drive 2.

In addition to the associates/managers working in the facility, the tenant expects that 239 delivery service personnel (DSP) and 84 flex drivers will be utilized for daily package deliveries within an approximately 60-minute radius of the facility. Flex drivers will arrive on-site in the evening (two shifts of 68 and 16 drivers between 4:00 and 4:30 p.m.) through the site drive on Spring Hill Road. The flex drivers enter the building in their personal vehicle, the vehicle will be loaded and then the flex drivers will leave via the Route 25 access drives and make deliveries in their personal vehicles.

Delivery stations operate 24/7, with most of the sortation activity done early in the morning when the line haul trucks arrive with customer packages DSP drivers will arrive on-site in the morning (three shifts of 120, 60 and 59 drivers between 10:30 and 11:30 a.m.) through the site drive on Spring Hill Road. The DSP drivers will park their personal vehicles on-site and then leave the site in a delivery van, exiting on Route 25 via site drives 1 and 2. The first set of 24 vans will be pre-loaded within the building overnight so that the first wave of DSP drivers arrives on-site and leave quickly. Subsequent shifts of vans will enter the building, get loaded and then proceed out for deliveries. As DSP drivers finish their deliveries, they return to the site on Spring Hill Road, park the delivery vans and leave the site in their personal vehicles (four shifts of 45, 105, 74 and 15 drivers between 9:00 and 11:00 p.m.)

The site is expected to process 18 tractor-trailers per day, generally between 9:00 p.m. and 2:00 a.m. Tractor trailers will enter and exit on Spring Hill Road.

After the check out and release of all delivery vehicles by 10:00 PM, delivery station associates prepare the delivery station for the next day's packages.

A summary of the existing trip generation projections for the proposed improvements and revised operating schedule of the delivery station is presented in **Table 3**.

As indicated in this table, the proposed improvements and revised operating schedule for the delivery station is projected to generate 1 (1 enter, 0 exit) vehicle trip during the weekday morning peak hour, 145 (25 enter, 120 exit) vehicle trips during the midday peak hour and 115 (85 enter, 30 exit) during the weekday evening peak hour. This reflects the revised operating schedule to remove the trips from the adjacent street peak hour. The Net Trips are for comparison showing the positive impact to the roadway network the revised operating schedule will have.

Table 3 – Proposed Revised Operating Schedule Trip Generation

Proposed Revised Operating Schedule Trip Generation										
Trips By		**Trips**								
		AM Peak Hour of Adjacent Street			Midday Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
		Total	In	Out	Total	In	Out	Total	In	Out
Associates/Managers		0	0	0	24	24	0	0	0	0
DSP		0	0	0	119	0	119	0	0	0
Flex Drivers		0	0	0	0	0	0	114	84	30
Trucks		1	1	0	2	1	1	1	1	0
Revised Operating Trips		**1**	**1**	**0**	**145**	**25**	**120**	**115**	**85**	**30**
2019 Approved Trips		62	49	13	81	34	47	58	24	34
Net Trips		**-61**	**-48**	**-13**	**+64**	**-9**	**+73**	**+57**	**+61**	**-4**

Trip Distribution

The directional distribution of traffic is typically a function of population densities, competing opportunities, existing travel patterns adjacent to the site, and the efficiency and limitations of the existing roadway system. Based upon the site's close proximity to Route 25 (Main Street) and Route 111, it is anticipated that the majority of employees/delivery vehicles will utilize these roadways for access and egress from the site. The distribution of the anticipated traffic volumes was based on arrival/departure patterns shown in **Figure 4**. The distribution remained the same from the previous study that was approved by Trumbull Planning and Zoning Commission on December 18, 2019.

Assigned Site Generated Traffic Volumes

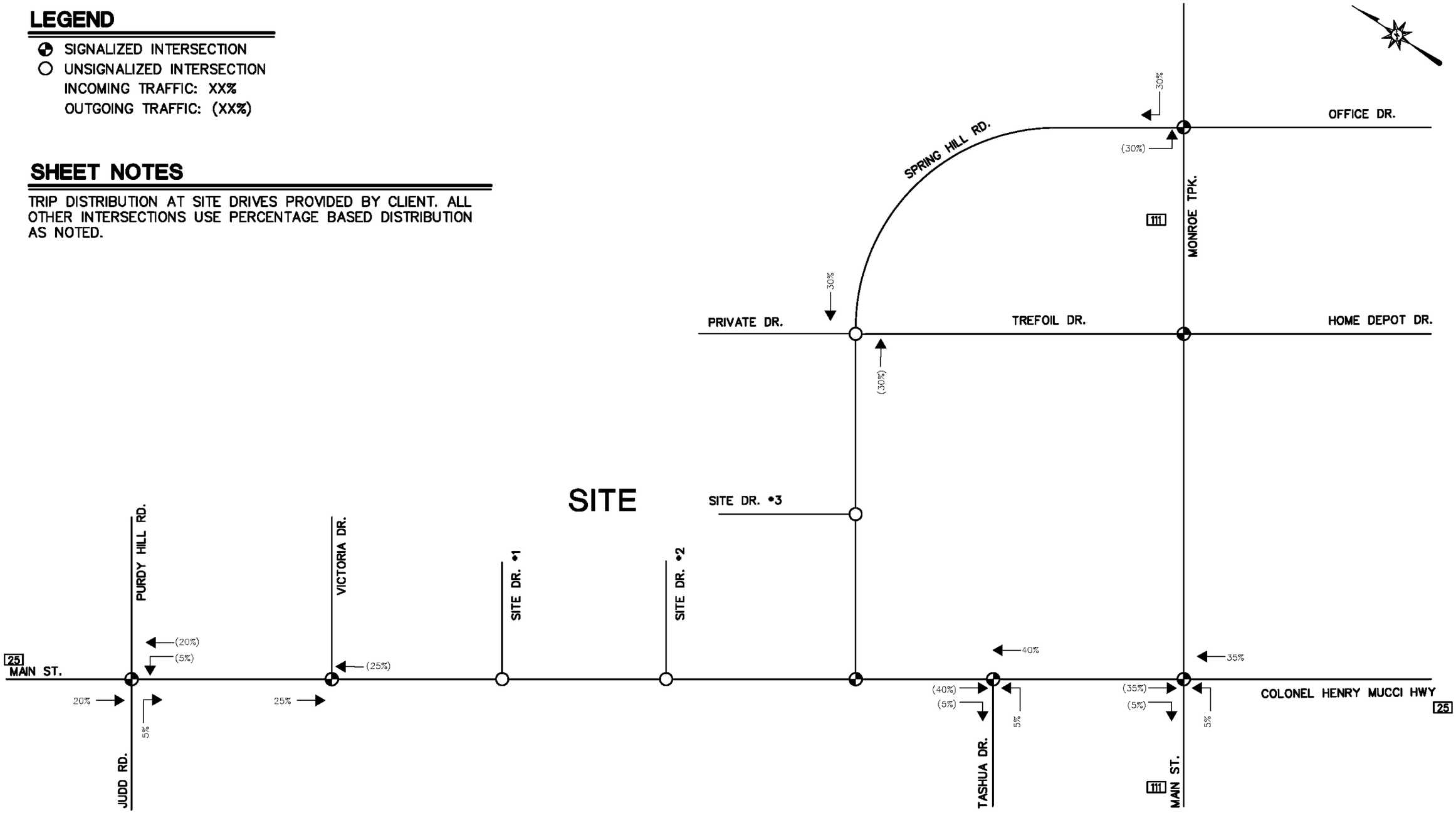
The generated trips are multiplied by the corresponding proportions to ascertain the site-generated traffic volumes. Site driveway specific traffic volumes were provided by the client. **Figure 5** shows the site generated peak hour traffic generated by the site assigned to the nearby roadway network.

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
  INCOMING TRAFFIC: XX%
  OUTGOING TRAFFIC: (XX%)

SHEET NOTES

TRIP DISTRIBUTION AT SITE DRIVES PROVIDED BY CLIENT. ALL OTHER INTERSECTIONS USE PERCENTAGE BASED DISTRIBUTION AS NOTED.



6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOBS19\10\1901141\DWG\TFLO1901141-E1.DWG,FIGURE 4,

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TRIP DISTRIBUTION
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
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JUNE 2020

FIGURE 4

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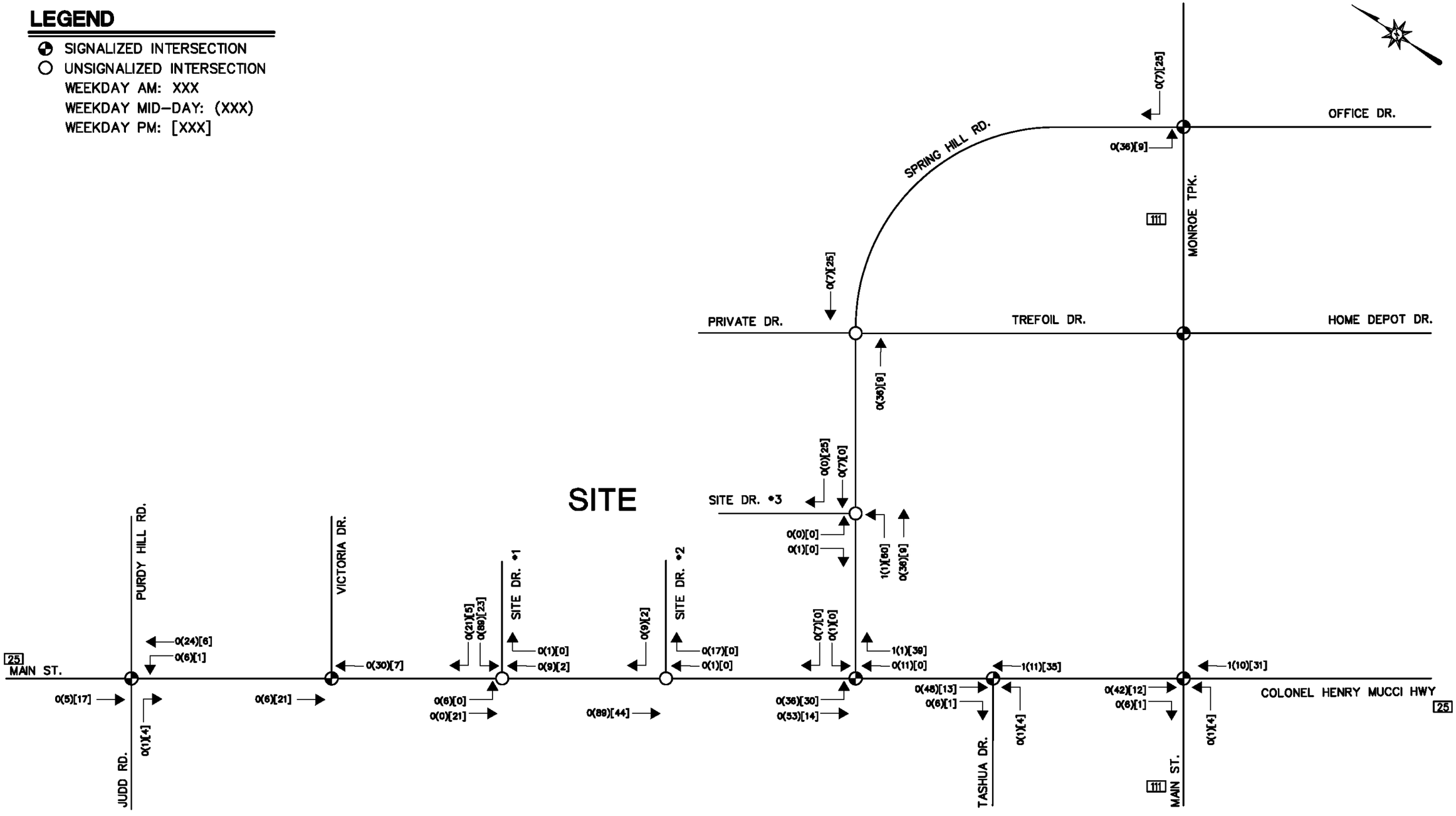
LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION

WEEKDAY AM: XXX
WEEKDAY MID-DAY: (XXX)
WEEKDAY PM: [XXX]



6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOB319\0\1901141\DWG\FIG\1901141-E1.DWG,FIGURE 5.

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SITE GENERATION TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
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JUNE 2020

FIGURE 5

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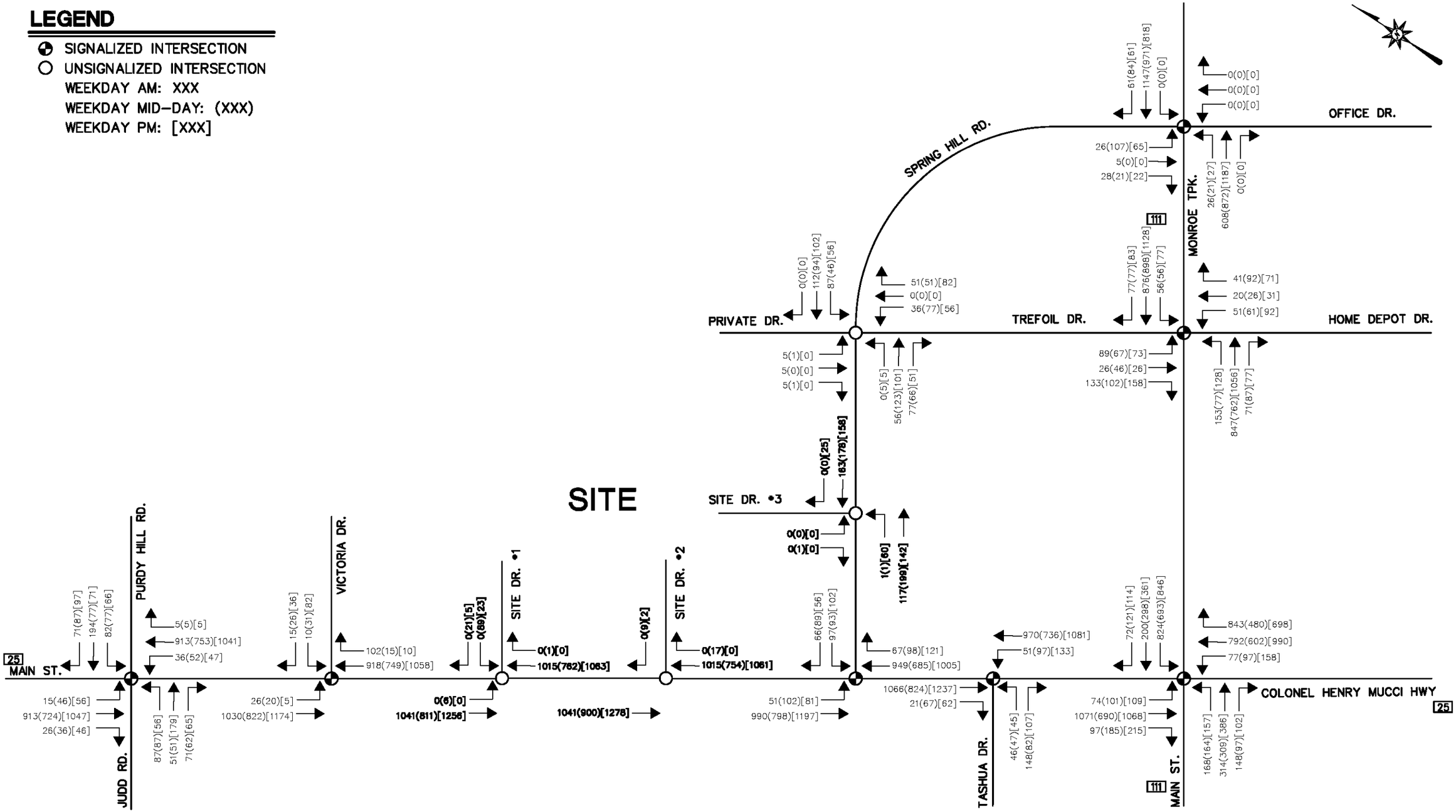
Build Traffic Volumes

The assigned site-generated volumes were superimposed onto the 2021 No Build Traffic volumes to establish the future 2021 Build Traffic volumes, as illustrated in **Figure 6**.

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION

WEEKDAY AM: XXX
WEEKDAY MID-DAY: (XXX)
WEEKDAY PM: [XXX]



6/11/2020, DGEHRING, G:\JOBS19\10\1901141\DWG\TFL01901141-E1.DWG,FIGURE 6.

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BUILD (2021) TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
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TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 6

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IV. ROADWAY ADEQUACY

The intersection capacity analyses were prepared using the methodology described in the Highway Capacity Manual (HCM), published by the Transportation Research Board (TRB) for the no build and build traffic volume scenarios to simulate the traffic impact of proposed improvements and revised operating schedule on the adjacent roadway network. As documented in the HCM, intersection performance is influenced by a number of factors, including: traffic demand; lane configurations; lane widths; turning restrictions; roadway grades; and signal phasing. The existing physical roadway characteristics and signal phasing and timing settings were determined by observing conditions in the field and reviewing the current traffic control signal plans provided by the Connecticut Department of Transportation.

Synchro™ software (Version 10) was used to model the study intersections based on the parameters mentioned above. The Synchro software is widely utilized by the traffic engineering industry and is consistent with the procedures in the HCM.

Signalized Intersections

Signalized intersections are analyzed in terms of vehicle capacity and motorist delay. Capacity is the maximum rate of vehicle flow through an intersection given typical operating conditions. The number of vehicles traveling through an intersection is divided by the capacity of the intersection to determine an overall volume to capacity ratio (v/c). A v/c value under 1.00 indicates that the number of vehicles traveling through an intersection is less than capacity.

As stated in the HCM, level of service for signalized intersections is defined in terms of control delay. Control delay measures the increase in delay a motorist experiences while encountering a traffic control signal. These factors include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. This delay is measured per vehicle for a 15-minute analysis period and is associated with the levels of service, which are summarized in **Table 4** below:

Table 4 – Signalized Intersection - Level of Service

Level of Service	Average Control Delay (seconds per vehicle)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of service A represents the optimum level where most motorists arrive at the subject intersection during the green phase and thus experience virtually no delay. Conversely, level of service F indicates that motorists are delayed over 80 seconds while traveling through the intersection, and can often imply a complete breakdown of that location. Level of service D is generally considered the limit of acceptable motorist delay.

Unsignalized Intersections

Unsignalized intersections are generally evaluated in terms of average side street delay, as well as the capacity of the roadway approach. This analysis is based on the random arrival of vehicles and the associated gaps generated by this random arrival within the traffic stream. There is no overall level of service for unsignalized intersections. The relationship between levels of service and average side street delay are summarized in **Table 5** below:

Table 5 – Unsignalized Intersection – Level of Service

Level of Service	Average Control Delay (seconds per vehicle)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

It should be noted that unsignalized levels of service do not correspond to those for signalized intersections, nor do they constitute warrants for the installation of traffic control signals. It is also recognized that the methodology is overly conservative and that computations can indicate operations at poor levels of service (E or F) with even very low side street volumes, although they often function without serious problems in the real world.

Table 6 shows the levels of service (LOS) at the subject intersections. A more detailed table is included in the Appendix.

Table 6 – Peak Hour Levels of Service

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 25 at Judd Road and Purdy Hill Road[1]	**D/36.3**	**D/36.3**	**C/27.2**	**C/27.5**	**E/61.2**	**E/65.0**
Judd Road EB Left	F/0.83/155	F/0.83/155	D/0.47/90	D/0.48/90	D/0.35/75	D/0.34/75
Judd Road EB Thru/Right	C/0.34/90	C/0.34/90	B/0.34/70	B/0.35/70	D/0.81/255	E/0.82/260
Purdy Hill Road WB Left	D/0.36/100	D/0.36/100	C/0.38/80	C/0.39/80	E/0.65/105	E/0.67/105
Purdy Hill Road WB Thru/Right	E/0.82/315	E/0.82/315	D/0.60/150	D/0.61/150	D/0.62/175	D/0.61/175
Route 25 NB Left	D/0.38/60	D/0.38/60	D/0.31/60	D/0.36/70	E/0.51/80	E/0.52/85
Route 25 NB Thru/Right	C/0.88/860	C/0.88/860	C/0.80/635	C/0.81/665	E/1.03/1040	E/1.04/1050
Routh 25 SB Left	D/0.16/35	D/0.16/35	D/0.31/60	D/0.32/60	E/0.62/100	E/0.62/100
Route 25 SB Thru/Right	D/0.94/895	D/0.94/895	C/0.83/665	C/0.82/670	E/1.07/1095	E/1.09/1120
Route 25 at Victoria Drive[1]	**B/12.6**	**B/12.6**	**A/7.8**	**A/8.0**	**C/21.1**	**C/22.3**
Victoria Drive WB Left	C/0.06/25	C/0.06/25	C/0.14/40	C/0.15/40	C/0.36/75	C/0.36/75
Victoria Drive WB Right	B/0.08/25	B/0.08/25	B/0.12/25	B/0.12/25	B/0.15/25	B/0.15/25
Route 25 NB Thru/Right	B/0.72/700	B/0.72/700	A/0.53/345	A/0.55/370	B/0.84/820	B/0.84/830
Route 25 SB Left	A/0.08/25	A/0.08/25	A/0.04/25	A/0.04/25	A/0.02/25	A/0.02/25
Route 25 SB Thru	B/0.71/700	B/0.71/700	A/0.59/440	A/0.59/450	C/0.91/910	C/0.93/930

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 25 at Spring Hill Road[1]	**B/16.8**	**B/16.8**	**B/10.7**	**B/12.0**	**C/33.1**	**D/37.1**
Spring Hill Road WB Left	D/0.50/110	D/0.50/110	D/0.45/110	D/0.48/110	D/0.52/120	D/0.52/120
Spring Hill Road WB Right	B/0.29/40	B/0.29/40	B/0.32/45	B/0.35/45	B/0.25/40	B/0.25/40
Route 25 NB Thru	A/0.81/805	A/0.81/805	A/0.54/85	A/0.59/85	A/0.81/890	A/0.82/850
Route 25 NB Right	A/0.07/25	A/0.07/25	A/0.09/25	A/0.10/25	A/0.08/25	A/0.11/25
Route 25 SB Left	A/0.19/25	A/0.19/25	A/0.13/25	A/0.22/30	A/0.20/25	A/0.31/25
Route 25 SB Thru	C/0.88/890	C/0.88/890	B/0.67/470	B/0.73/535	E/1.04/1200	E/1.05/1220
Route 25 at Tashua Road[1]	**C/20.6**	**C/20.6**	**B/10.5**	**B/12.3**	**D/48.4**	**D/52.0**
Tashua Road EB Left	D/0.24/65	D/0.24/65	D/0.22/65	D/0.24/65	D/0.21/60	D/0.23/65
Tashua Road EB Right	B/0.37/90	B/0.37/90	A/0.21/35	A/0.19/35	B/0.29/70	B/0.29/75
Route 25 NB Left	A/0.27/25	A/0.27/25	A/0.27/25	A/0.32/25	C/0.60/100	C/0.60/105
Route 25 NB Thru	B/0.83/845	B/0.83/845	B/0.59/420	B/0.64/445	C/0.84/965	C/0.88/1050
Route 25 SB Thru/Right	C/0.96/325	C/0.96/325	A/0.76/135	B/0.83/165	E/1.13/345	E/1.15/345

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 111 at Route 25[1]	**E/57.6**	**E/57.6**	**D/39.9**	**D/40.6**	**E/61.1**	**E/62.2**
Route 25 EB Left	F/0.80/155	F/0.80/155	E/0.67/145	E/0.68/155	F/0.78/175	F/0.78/175
Route 25 EB Thru	E/0.97/640	E/0.97/640	D/0.82/315	D/0.82/335	E/0.99/630	E/1.00/640
Route 25 EB Right	A/0.13/30	A/0.13/30	A/0.24/40	A/0.24/40	A/0.27/85	A/0.27/85
Route 25 WB Left	F/0.82/165	F/0.82/165	E/0.65/135	E/0.66/140	F/0.99/285	F/0.99/285
Route 25 WB Thru	D/0.71/395	D/0.71/395	D/0.76/285	D/0.72/285	D/0.87/535	D/0.89/565
Route 25 WB Right	C/0.82/670	C/0.82/670	B/0.55/225	B/0.54/225	B/0.70/470	B/0.70/470
Route 111 NB Left	F/1.74/370	F/1.74/370	E/0.73/240	E/0.74/255	F/0.82/240	F/0.83/250
Route 111 NB Thru	E/0.82/205	E/0.82/205	D/0.55/180	D/0.57/190	F/0.97/285	F/0.97/285
Route 111 NB Right	B/0.48/60	B/0.48/60	A/0.25/25	A/0.26/25	A/0.32/25	A/0.32/25
Route 111 SB Left	D/0.91/430	D/0.91/430	D/0.85/345	D/0.86/355	F/1.02/525	F/1.02/525
Route 111 SB Thru/Right	C/0.47/245	C/0.47/245	D/0.85/515	D/0.87/535	F/1.04/665	F/1.05/665

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Home Depot Drive/Trefoil Drive & Route 111[1]	**B/15.9**	**B/15.9**	**B/13.7**	**B/13.7**	**B/19.6**	**B/19.6**
Route 111 EB Left	D/0.61/145	D/0.61/145	C/0.38/70	C/0.38/70	D/0.55/135	D/0.55/135
Route 111 EB Thru	B/0.44/215	B/0.44/215	A/0.39/180	A/0.39/180	B/0.61/365	B/0.61/365
Route 111 EB Right	A/0.08/25	A/0.08/25	A/0.09/25	A/0.09/25	A/0.09/25	A/0.09/25
Route 111 WB Left	C/0.30/60	C/0.30/60	C/0.30/60	C/0.30/60	C/0.38/70	C/0.38/70
Route 111 WB Thru/Right	B/0.60/245	B/0.60/245	B/0.54/255	B/0.54/255	C/0.78/405	C/0.78/405
Home Depot Drive NB Left	C/0.34/50	C/0.34/50	C/0.43/60	C/0.43/60	D/0.60/80	D/0.60/80
Home Depot Drive NB Thru/Right	B/0.22/40	B/0.22/40	B/0.40/55	B/0.40/55	B/0.31/50	B/0.31/50
Trefoil Drive SB Left	C/0.47/75	C/0.47/75	C/0.41/65	C/0.41/65	C/0.35/60	C/0.35/60
Trefoil Drive SB Thru/Right	B/0.46/55	B/0.46/55	B/0.48/65	B/0.48/65	A/0.47/55	A/0.47/55
Trefoil Drive/Private Drive & Spring Hill Road[2]	-	-	-	-	-	-
Trefoil Drive NB	B/0.14/25	B/0.14/25	B/0.20/25	B/0.21/25	B/0.20/25	B/0.21/25
Spring Hill Road EB	A/0.00/25	A/0.00/25	A/0.00/25	A/0.00/25	A/0.00/25	A/0.00/25
Spring Hill Road WB Left	B/0.07/25	B/0.07/25	A/0.04/25	A/0.04/25	A/0.04/25	A/0.04/25
Private Drive SB	B/0.03/25	B/0.03/25	B/0.00/25	B/0.00/25	A/0.00/25	A/0.00/25
Route 111 & Spring Hill Road/Office Drive[1]	**A/3.9**	**A/3.9**	**A/5.1**	**A/6.5**	**A/4.9**	**A/5.3**
Spring Hill Road EB Left/Thru/Right	C/0.34/45	C/0.34/45	C/0.47/60	C/0.58/80	C/0.41/50	C/0.45/55
Route 111 NB Left/Thru/Right	A/0.27/70	A/0.27/70	A/0.39/120	A/0.40/140	A/0.52/175	A/0.52/185
Route 111 SB Left/Thru/Right	A/0.45/150	A/0.45/150	A/0.42/140	A/0.43/165	A/0.34/100	A/0.35/105

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

	AM		Mid-Day		PM	
	2021 No Build	2021 Build	2021 No Build	2021 Build	2021 No Build	2021 Build
Route 25 & Site Drive #1[2]	-	-	-	-	-	-
Site Drive #1 WB Left/Right	-	A/0.00/25	-	F/1.07/180	-	F/0.82/75
Route 25 SB Left	-		-	A/0.01/25	-	A/0.00/25
Route 25 & Site Drive #2[2]	-	-	-	-	-	-
Site Drive #2 WB Right	-	A/0.00/25	-	C/0.03/25	-	C/0.01/25
Spring Hill Road & Site Drive #3[2]	-	-	-	-	-	-
Spring Hill Road NB Left	-	A/0.00/25	-	A/0.00/25	-	A/0.05/25
Spring Hill Road NB Thru	-	A/0.00/25	-	A/0.00/25	-	A/0.00/25
Site Drive #3 EB Left/Right	-	A/0.00/25	-	B/0.00/25	-	A/0.00/25

Overall Intersection – X/XX.X - Level of Service/Intersection Signal Delay in sec
Approaches - X/X.XX/XXX – Level of Service/Volume to Capacity Ratio/95% Queue Length in ft
[1] – Signalized Intersection
[2] – Unsignalized Intersection, Analysis for controlled movements

As illustrated in **Table 6**, the 2021 No-Build Scenarios traffic operations were analyzed as the base conditions for comparison with the 2021 Build Scenarios. In the 2021 No Build Scenarios, several intersections and approaches are projected to operate at unacceptable Levels of Service. Specific movements that experience Levels of Service D, E or F in the 2021 No Build Scenarios for the respective peak hours (AM, MIDDAY, PM) are as follows:

Route 25 (Main Street) at Judd Road and Purdy Hill Road

- Judd Road EB Left (F, D, D)
- Judd Road EB Thru/Right (D PM)
- Purdy Hill Road WB Left (D AM, E PM)
- Purdy Hill Road WB Thru/Right (E, D, D)
- Route 25 (Main Street) NB Left (D, D, E)
- Route 25 (Main Street) NB Thru/Right (E PM)
- Route 25 (Main Street) SB Left (D, D, E)
- Route 25 (Main Street) SB Thru/Right (D AM, E PM)

Route 25 at Spring Hill Road

- Spring Hill Road WB Left (D, D, D)
- Route 25 SB Thru (E PM)

Route 25 at Tashua Road

- Tashua Road EB Left (D, E, E)
- Route 25 SB Thru (E PM)

Route 111 at Route 25 (Main Street)

- Route 25 (Main Street) EB Left (F, E, F)
- Route 25 (Main Street) EB Thru (E, D, E)
- Route 25 (Main Street) WB Left (F, E, F)
- Route 25 (Main Street) WB Thru (D, D, D)
- Route 111 NB Left (F, E, F)
- Route 111 NB Thru (E, D, F)
- Route 111 SB Left (D, D, F)

- Route 111 SB Thru/Right (D MIDDAY, F PM)

Home Depot Drive/Trefoil Drive & Route 111

- Route 111 EB Left (D AM, D PM)
- Home Depot Drive NB Left (D PM)

In the 2021 Build Scenarios, there is insignificant impact to the network from the proposed improvements and revised operating schedule. The revised operating schedule is proposed to significantly improve the network compared to the December 19, 2019 approved conditions. The only movement in the study that experiences a change in LOS is in the evening peak hour at the Route 25 at Judd Road and Purdy Hill Road intersection; the Judd Road EB Thru/Right movement changes from a D to an E with only a 5’ increase in queue length from 255’ in the no build to 260’ in the build condition.

V. CONCLUSIONS AND RECOMMENDATIONS

This traffic study has been prepared for the proposed improvements and revised operating schedule to the warehouse and distribution facility located at 7120 Main Street. The focus of this study was to evaluate the traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the proposed improvements and revised operating schedule and to quantify the potential traffic impacts on these roadways and intersections.

In the 2021 Build Scenarios, there is insignificant impact to the network from the proposed improvements and revised operating schedule. The revised operating schedule is proposed to significantly improve the network compared to the December 19, 2019 approved conditions. The only movement in the study that experiences a change in LOS is in the evening peak hour at the Route 25 at Judd Road and Purdy Hill Road intersection; the Judd Road EB Thru/Right movement changes from a D to an E with only a 5’ increase in queue length from 255’ in the no build to 260’ in the build condition.

It was determined from the analysis no mitigation and/or road improvements are not needed for these proposed improvements. No LOS for an intersection or a specific movement becomes substantially worse than existing. No specific intersection movements that have a LOS “D” or less in the background condition and the control delay per vehicle for such specific movement is increased by more than 15 seconds per vehicle as a result of the development’s added traffic at signalized intersections.

APPENDIX

NO BUILD TRAFFIC VOLUMES

July 11, 2018

Mr. Jim Jurczyk
Connecticut Department of Transportation
Office of the State Traffic Administration
2800 Berlin Turnpike
Newington, Connecticut 06131-7546

RE: OSTA Step 1: Pre-Certificate Application Response to Comments
Proposed Mixed-Use Development
OSTA # 084-1806-01
205 Monroe Turnpike, Monroe, CT 06468
Project Number: 1402801

Dear Mr. Jurczyk:

Please find enclosed a revised package for the major traffic generator pre-certificate application for the proposed development at 205 Monroe Turnpike in Monroe, Connecticut. The package has been revised to address the comment dated June 21, 2018 to include background trips associated with the refill of the United Healthcare Facility and projected trips from the Trefoil Corporate Park.

Enclosed are one (1) paper copy and one (1) DVD copy of the revised application materials. We look forward to working with you in the processing of this application.

Respectfully,

Solli Engineering, LLC

Collene Byrne
Project Manager

Kevin Solli, PE
Principal

Enclosures
CC: Mike Schinella
Thomas Schinella

X:\SE Files\Project Data\2014\1402801 - 205 Monroe Tpke\Engineering Data\Traffic\OSTA\Step 1\1402801 - CT DOT_OSTA Step 1 Cover Letter (2018-07-11).docx

S T A T E O F C O N N E C T I C U T
Office of the State Traffic Administration
Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546
Phone: (860) 594-3020 Fax: (860) 594-2552

Print Form

Date: 06/01/18

STEP 1
Major Traffic Generator
Pre-Certificate Application
Traffic Volume Data Requirements

Name of Facility:

Proposed Mixed-Use Development

Location (complete street address; if none, provide map/block/lot information):

205 Monroe Turnpike

Town and Zip Code:

Monroe, Connecticut 06468

Proposed Gross Floor Area (GSF) and Land Use of Expansion:

N/A

Proposed GSF and Land Use of Land Use Change (i.e. xx retail to xx office etc.):

N/A

Total Gross Floor Area: Categorized By Land Use:

Retail: 15,000sf, Medical Office: 10,000sf, High-Turnover Restaurant: 4,950sf, Drive-In Bank: 2,500sf, Gas Station w/ Convenience Store: 3,276sf, Coffee Shop w/ Drive Thru: 1,000sf

Development financing includes State or Federal funding sources? Yes No

If "Yes," then the Step 2 Checklist will require completion of the Connecticut Department of Transportation's Bicycle and Pedestrian Travel Needs Assessment Form.

Submit one (1) paper copy and one (1) DVD of the following materials, along with confirmation that the development has been submitted for local planning and zoning approval, to the Office of the State Traffic Administration.

MAJOR TRAFFIC GENERATOR
Traffic Volume Data Requirements

Submitted	N/A	
		I. PROJECT DESCRIPTION
✔		Provide a detailed narrative describing the nature of the proposal.
		II. SITE LOCATION PLAN
✔		A site location plan showing State highways and major intersecting Town roads in the vicinity of the site is to be submitted. Typically 8 ½' X 11" or it may be shown on the Site Plan if space allows.
		III. OVERALL SITE PLAN
✔		An overall site plan showing the entire certifiable area shall be provided, sized to fit on a single 2' x 3' plan sheet. The entire certifiable area shall include all parcels whose traffic must use the applicant development's access drive(s) (not an access of convenience), and shall be distinguishable by a distinct peripheral property line with the call out "OSTA Certifiable Area". The plan is to identify all new buildings (including gross floor area and land use for each), parking spaces, property lines, internal connections to abutting properties, names of all property owners (including the abutting property owners) and the complete street address(es) for all properties within the certifiable area. If street address information is not available, show map/block/lot information. An aerial photograph may be used.
		IV. TRAFFIC VOLUME INFORMATION
✔	☐	Traffic information is required for all site drives and for intersections in proximity to the site that will be **significantly** affected by newly generated traffic.
		Significantly *is defined as: 100 or more peak hour vehicle trips at any given intersection or; 50 or more peak hour vehicle trips on any left-hand turning movement.*
		A. Existing Traffic Volumes
✔	☐	1. Identify the hours of the day, day of week and how the peak hours were determined in relation to the proposed development. The morning/afternoon weekday and weekend midday peak hours are the most typical time periods analyzed. Depending on the type of proposed development, all or some combination of these hours will be required. In some cases, the peak hour of the generator may be needed (e.g. movie theatre – evenings, school – afternoon peak). Areas experiencing a significant recreational peak shall be counted during the peak season. When this is not possible, traffic volumes may be seasonally adjusted to reflect the heaviest peak hour volume using Department seasonal adjustment factors. All traffic counts shall specify non-motorized users (pedestrians and bicycles).

Submitted	N/A	
		B. Background Traffic Volumes – the existing traffic volumes adjusted to the year of the development's opening.
☑	☐	1. Identify any annual growth or seasonal adjustment factors used and explain their selection. Identify other developments, including those previously approved by the STC, or pending, but not yet operational, and include that volume to develop the background traffic.
☑	☐	2. Submit flow diagrams showing the appropriate background peak hour traffic volumes for the proposed development as determined in the Existing Traffic Volumes section above. Diagrams must indicate both the date of submission and date (year) of the background traffic. Approach volumes must be totaled and checked for accuracy before submission. Traffic volumes between intersections shall be balanced or an explanation for the break in traffic flow must be provided. Background traffic flow diagrams must be consistent with existing traffic diagrams.
☑	☐	3. If there are overlapping intersections studied by a recently approved MTG, the combined traffic figures from the prior MTG shall be used as the base traffic for the new project.
		C. Trip Distribution
☑	☐	1. Provide a description of the methodology used to develop the trip distribution. Any differences in the approach and departure distribution shall be explained.
☑	☐	2. Submit flow diagrams showing the percent distribution of generated traffic, by direction, for each major road leading to the area and at all access points. Diagrams must indicate the date of submission and shall be consistent with the peak hours analyzed in the existing and background traffic conditions.
		D. Site Generated Traffic/Combined Traffic Volumes
☑	☐	1. Submit flow diagrams for the applicable peak hour(s) for the site generated traffic volumes. Diagrams must include the date of submission and date (year) for the site generated traffic. In most cases, trip generation data derived from the latest ITE Trip Generation Report will be acceptable. Approved ConnDOT studies are currently utilized to derive trip generation data for home improvement stores, super food stores and Dunkin' Donuts locations. Other studies will be taken into consideration, but will be subject to approval. Out parcels contained within retail developments shall utilize the most specific land use code available via ITE or other acceptable study data. For restaurants, indicate whether it is a fast-food or sit-down, and if there is a drive-up window proposed. Trip generation for the Christmas Season, as defined by ITE, is not currently required. Trip generation shall reflect a successful day, not abnormally high-peak periods such as holiday weekends. For retail developments, Friday afternoon and Saturday midday peak are required study periods. For apartments, condominiums, hotels and motels, the number of 1-, 2- and 3-bedroom units, and the square foot area of each type of unit shall be noted. For hotels and motels, list the number of rooms.
☑	☐	2. Submit flow diagrams for the applicable peak hour(s) for the combined traffic volumes (the sum of the background and site generated traffic volumes). Diagrams must include date of submission and date (year) of combined traffic and shall be consistent with the peak hours analyzed in the existing and background traffic conditions. Flow diagrams shall be consistent with the peak hours analyzed in the existing and background traffic conditions.
		3. Contact the Trip Analysis Section at (860) 594-2025 with any questions.

PROJECT NARRATIVE

To: The Connecticut Department of Transportation
Office of the State Traffic Administration

From: Kevin Solli, P.E. / Solli Engineering, LLC
Collene Byrne / Solli Engineering, LLC

Subject: OSTA Step 1: Major Traffic Generator Pre-Certificate Application
Proposed Mixed-Use Development
OSTA # 084-1806-01
205 Monroe Turnpike, Monroe, CT
Project #: 1402801

Date: 6/1/2018
Revised: 7/11/2018

This project consists of 8.63± acres of undeveloped land in Monroe, Connecticut and is bound by Monroe Turnpike (Route 111) to the east, the Residential-Farming District (RF-1) to the north and west, and the Limited Office Retail District (LOR) to the south. Refer to Figure 1, Site Location Map, for more details on the project location.

The proposed development is estimated to include approximately 36,726± square feet of gross floor space on the 8.63± acre project site located along Monroe Turnpike (Route 111) in Monroe, Connecticut. The proposed development will be a mixed-use complex comprised of two (2) primary lots that are proposed to include retailers, a restaurant, medical office, a drive-in bank, a gas station with convenience store and an integrated drive-thru coffee shop. The proposed development consists of the following land uses on each parcel:

Lot 1:

- 15,000 sf retail (Shopping Center)
- 10,000 sf medical office
- 2,500 sf drive-in bank
- 4,950 sf high-turnover restaurant

Lot 2:

- 3,276 sf gas station with convenience store (10 pumps)
- 1,000 sf coffee shop with drive-thru (integrated into gas station building)

Access will be provided from Monroe Turnpike (Route 111) via a proposed full-movement, signalized, site access driveway as well as a STOP-controlled, right-out only driveway exiting the gas station area on Lot 2. Refer to Figure 8, the OSTA Certifiable Area Map, for more detail on the proposed site layout and access.

Traffic volume information was obtained for the following seven (7) key intersections that were identified as being affected by the newly generated traffic of the proposed development:

- Monroe Turnpike (Route 111) & Purdy Hill Road
- Monroe Turnpike (Route 111) & Spring Hill Road
- Monroe Turnpike (Route 111) & Technology Drive / Corporate Drive
- Monroe Turnpike (Route 111) & Trefoil Drive / Home Depot Driveway
- Monroe Turnpike (Route 111) & United Healthcare Driveway
- Monroe Turnpike (Route 111) & Trefoil Plaza (Chips/Edge Driveway)
- Monroe Turnpike (Route 111) & Main Street (Route 25)

Existing traffic volumes were compiled through manual turning movement count data collected during the month of August 2016. Traffic volumes for the study area intersections were obtained during the AM, PM and Saturday peak periods. This data was obtained from data published in a study prepared by Tighe & Bond for Metro-COG entitled "Engineering Planning Study for Route 25 and Route 111, Monroe & Trumbull, CT". Figure 2 illustrates the 2016 Existing Traffic Volumes for the AM, PM, and Saturday midday peak hours of the study area intersections.

The anticipated distribution of traffic entering and exiting the site was developed based on area populations, existing traffic patterns, layout of the adjacent roadway network, and geographic locations of similar residential, business and commercial retail developments. Due to the mixed-use nature of the site and the directional distributions along Monroe Turnpike (Route 111), each peak period was determined to have its own distribution of trips. The anticipated distributions of the new site generated trips are illustrated in Figure 3, Trip Distribution.

The anticipated number of trips that will be generated by proposed development was estimated using data from the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition. The trip generation for each proposed land use was calculated for the AM, PM and Saturday midday peak hours. The trip generation for the proposed development was calculated based on the proposed land uses and resulted in 666 (350 entering, 316 exiting) new trips during the AM peak hour, 483 (241 entering, 242 exiting) new trips during the PM peak hour, and 563 (290 entering, 273 exiting) new trips during the Saturday midday peak hour. The new site generated trips anticipated to be generated by the proposed development were assigned to the study area roadway network based on the anticipated percent distributions and the resulting trip assignment is illustrated in Figure 4, Trip Assignments.

As per CTDOT and OSTA standards, a "pass-by" trip credit of 20% of the retail component of the site generated trips was applied at the site driveway intersections. Pass-by trips are trips associated with the proposed development which are already on the adjacent roadway network who will patronize the retail

development and continue along their route. The resulting pass-by trips at the site driveway intersections are illustrated on Figure 5.

As the proposed development is anticipated to be opened in 2019, background traffic growth is estimated to account for the traffic increase as a result of regional population growth. Existing traffic volumes were projected to the 2019 design year using a conservative 2.0 percent per year growth factor.

Several background generator projects were identified in the project study area. The traffic volumes associated with these projects have been included as part of this analysis. The table below summarizes the trip generation for these projects.

BACKGROUND GENERATOR PROJECTS
TRIP GENERATION SUMMARY

USE	AM PEAK HOUR			PM PEAK HOUR			SAT PEAK HOUR		
	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Certificate#1601-A[1,2]	184	149	333	405	398	804	519	499	1,018
Pondview Shopping Center[3]	174	114	288	474	479	953	538	518	1,056
UHC Refill/Trefoil Corporate Park[4]	420	60	480	70	380	450	60	50	110
Total Proposed Trips	**778**	**323**	**1,101**	**949**	**1,257**	**2,207**	**1,117**	**1,067**	**2,184**

[1]Based on Frederick P. Clark Associates, Inc., Traffic Impact Study: Canterbury Square, Monroe, Connecticut; July 10, 2002
[2] Based on Solli Engineering, LLC, Traffic Impact Study: Victoria Place, Monroe, Connecticut; September 18, 2013
[3] Based on Fuss & O'Neill, Traffic Impact Study: Pond View Shopping Center, Monroe, Connecticut; March 1, 2012
[4] Based on data provided by CTDOT; June 21, 2018

The total proposed trips were distributed to the study area intersections according to data provided in the respective traffic impact studies. Those distributed trips were added together to comprise the total background generator trips added to the network.

The traffic volumes associated with the background generators were added to the 2016 existing volumes, along with the 2% annual background growth, to obtain the 2019 background volumes. The AM, PM and Saturday midday peak hour volumes for the 2019 Background Condition are illustrated in Figure 6.

The trip assignment volumes illustrated in Figure 4 and the pass-by trips illustrated in Figure 5 were combined with the 2019 background volumes illustrated in Figure 6 to develop the 2019 Build Volumes. The AM, PM and Saturday midday peak hour volumes for the 2019 build condition are illustrated in Figure 7.

Peak Hour Trip Generation Summary
Proposed Development, 205 Monroe Turnpike, Monroe, Connecticut

			AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	Variable	LUC	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Medical Office	10.00	720	19	5	24	11	25	36	22	15	37
Shopping Center	15.00	820	10	5	15	27	29	56	38	35	73
Drive-In Bank	2.50	912	18	13	31	31	30	61	34	32	66
High Turnover (Sit Down) Restaurant	4.95	932	38	31	70	38	25	63	48	43	91
Coffee Shop w/ Drive Thru	1.00	937	200	200	400	22	21	43	43	42	85
Gas Station w/ Convenience	3.28	945	138	132	270	160	160	320	160	160	320
Total New Trips			**423**	**386**	**810**	**289**	**290**	**579**	**345**	**327**	**672**
20% Pass-By			*73*	*70*	*143*	*48*	*48*	*96*	*55*	*54*	*109*
Net Trips			**350**	**316**	**666**	**241**	**242**	**483**	**290**	**273**	**563**

CT DOT Dunkin' Donuts Trip Generation

Source: ITE Trip Generation, 9th Edition

Land Use	Time Period	Avg. Rate	Entering	Exiting
LUC 720 - Medical Office	AM	2.39	79%	21%
	PM	3.57	28%	72%
	SAT	3.63	57%	43%
LUC 820 - Shopping Center	AM	0.96	62%	38%
	PM	3.71	48%	52%
	SAT	4.82	52%	48%
LUC 912 - Drive - In Bank	AM	12.08	57%	43%
	PM	24.30	50%	50%
	SAT	26.31	51%	49%
LUC 932 - High Turnover (Sit Down) Restaurant	AM	10.81	55%	45%
	PM	9.85	60%	40%
	SAT	14.07	53%	47%
LUC 937 - Coffee Shop w/ Drive Thru	AM	100.58	51%	49%
	PM	42.8	50%	50%
	SAT	84.52	50%	50%
LUC 945 - Gas Station w/ Conveinience	AM	82.13	51%	49%
	PM	97.47	50%	50%
	SAT	97.47	50%	50%

CT DOT Dunkin' Donuts Trip Generation

Based on LUC 945 - Gas Station w/ Coneivience (PM)

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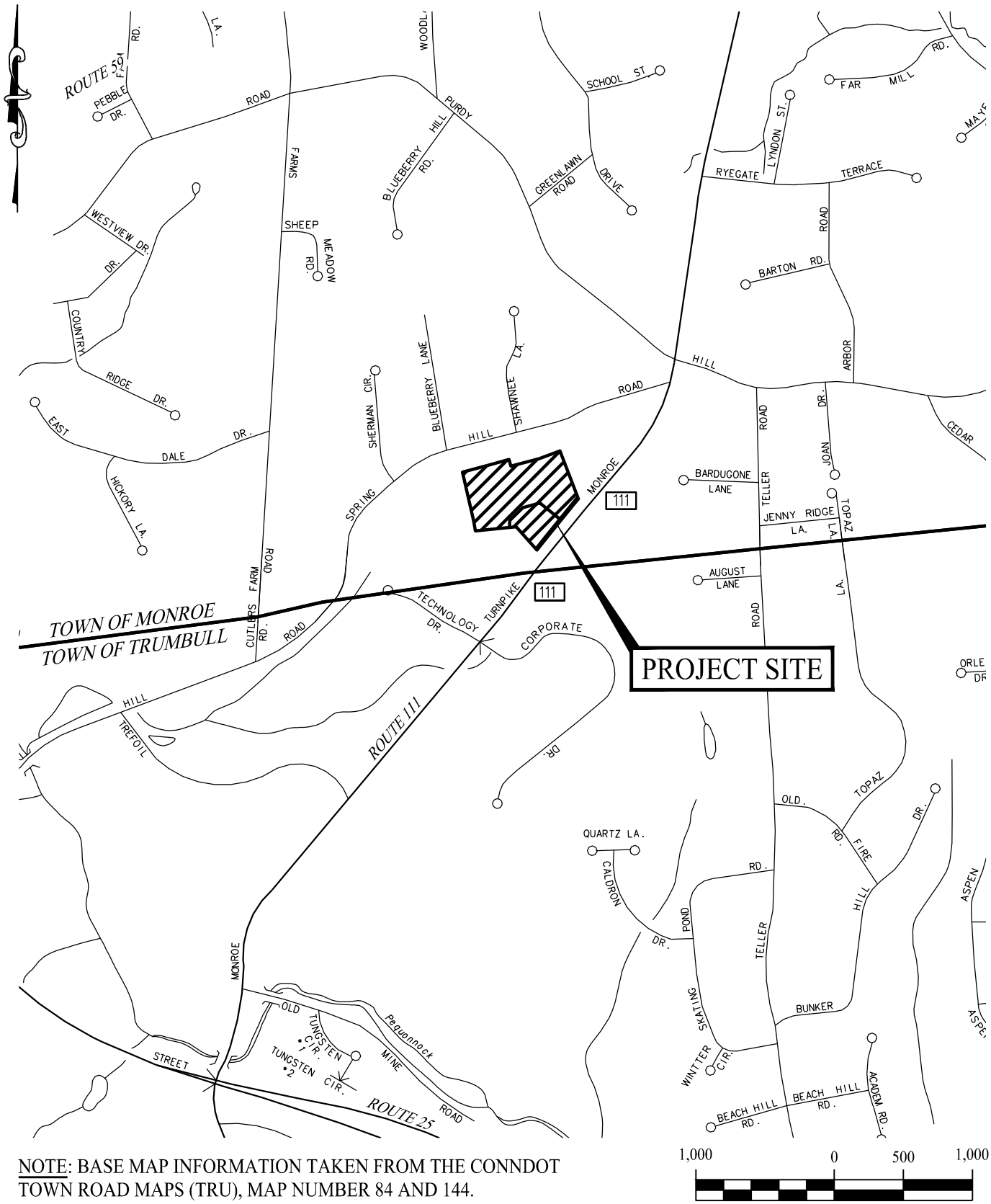


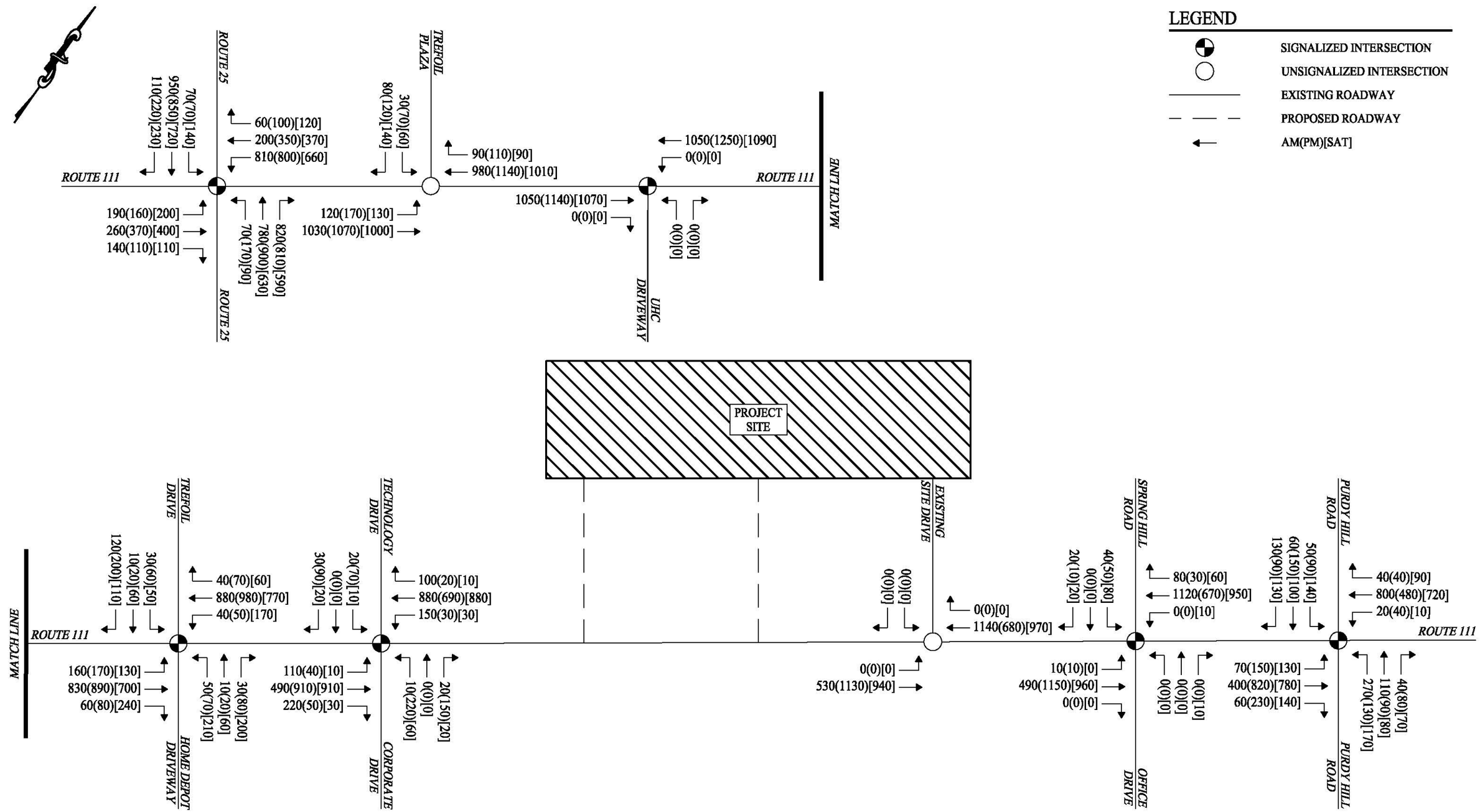
NOTE: BASE MAP INFORMATION TAKEN FROM THE CONNDOT TOWN ROAD MAPS (TRU), MAP NUMBER 84 AND 144.

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

SITE LOCATION MAP

205 MONROE TURNPIKE
MONROE, CONNECTICUT

Project #:	1402801
Plan Date:	06/01/18
Scale:	1" = 1,000'
Figure:	1



Rev. #:	Date	Description

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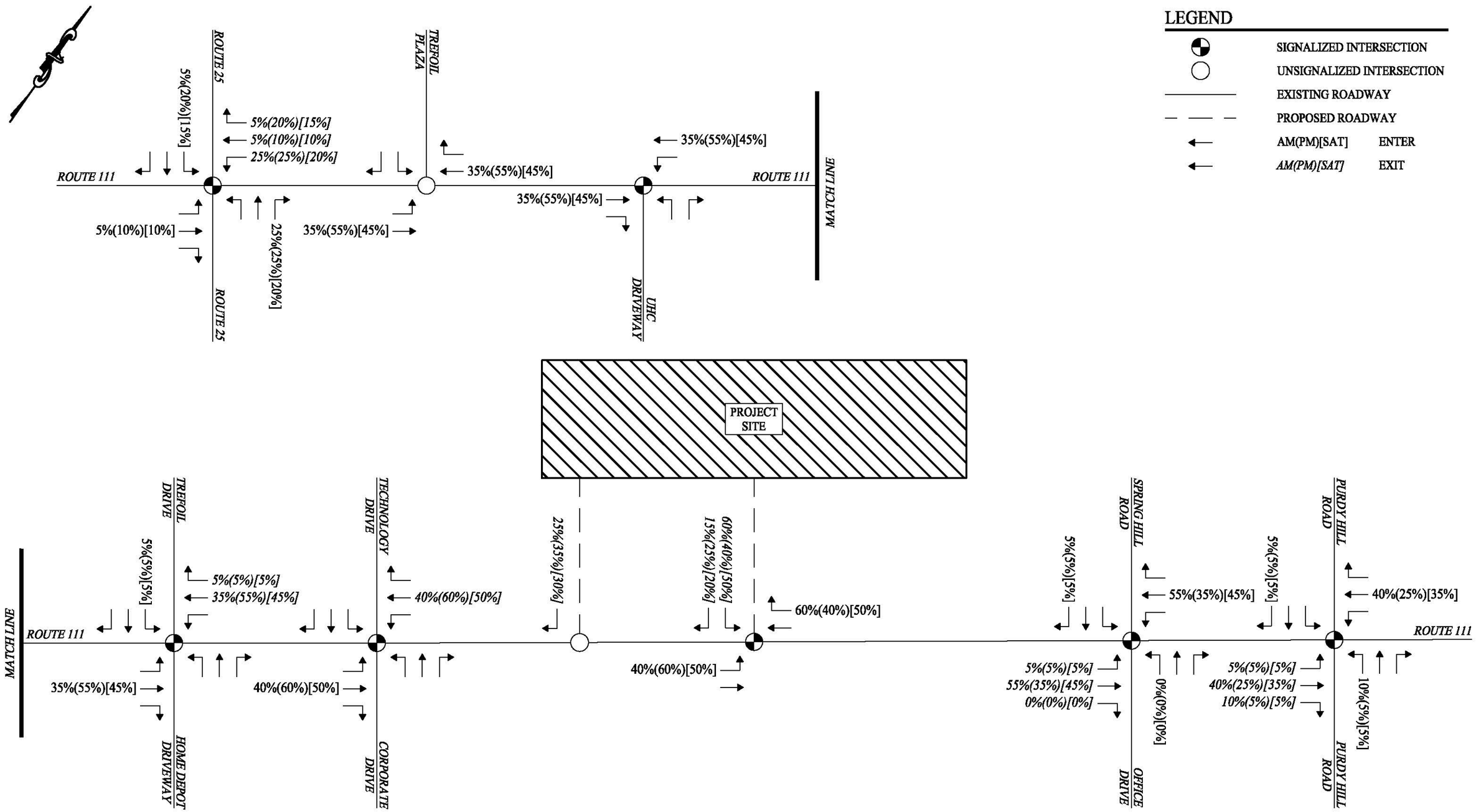
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: 2016 EXISTING TRAFFIC VOLUMES

SHEET #: FIGURE 2



Rev. #:	Date	Description

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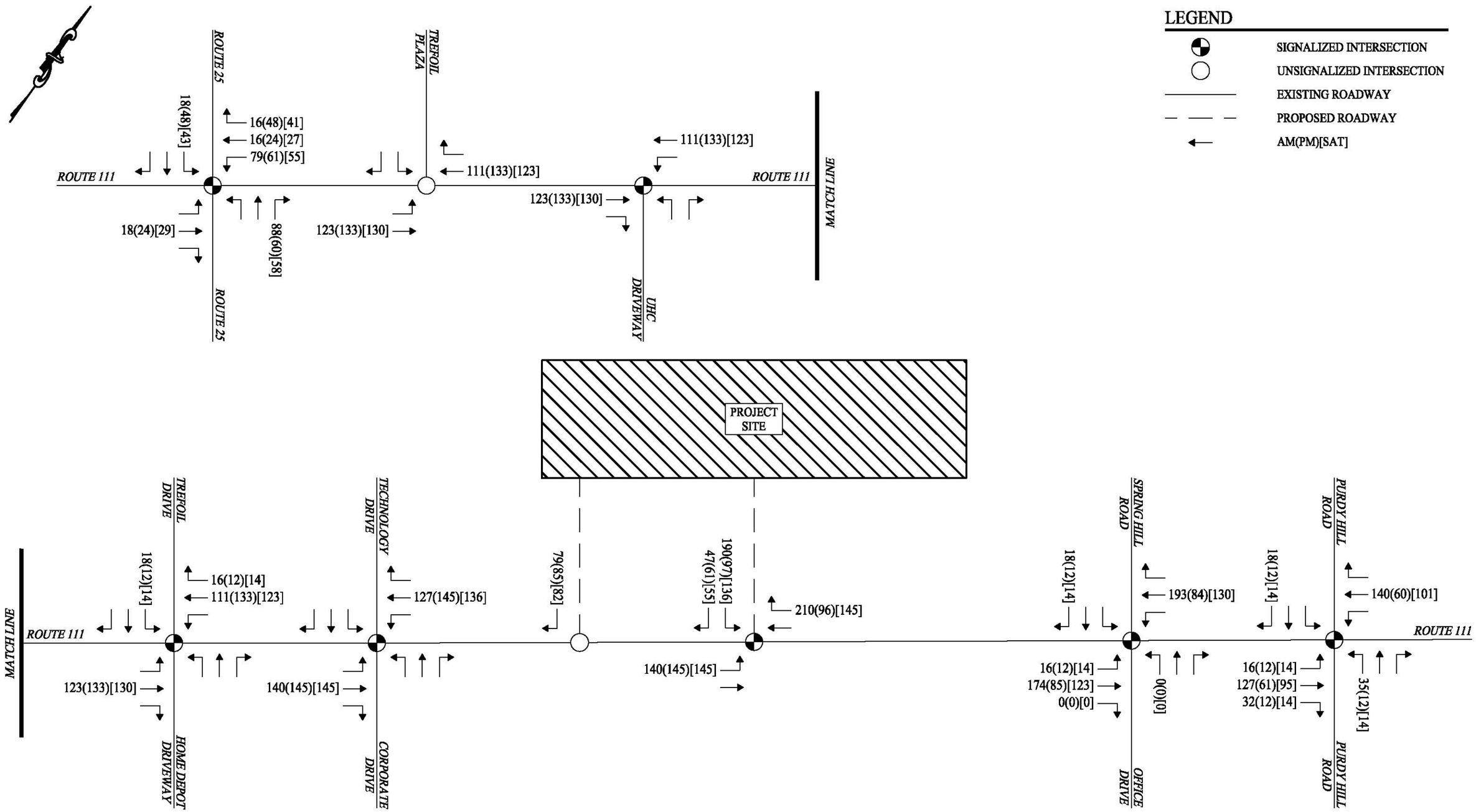
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: TRIP DISTRIBUTION

SHEET #: FIGURE 3



Rev. #:	Date	Description

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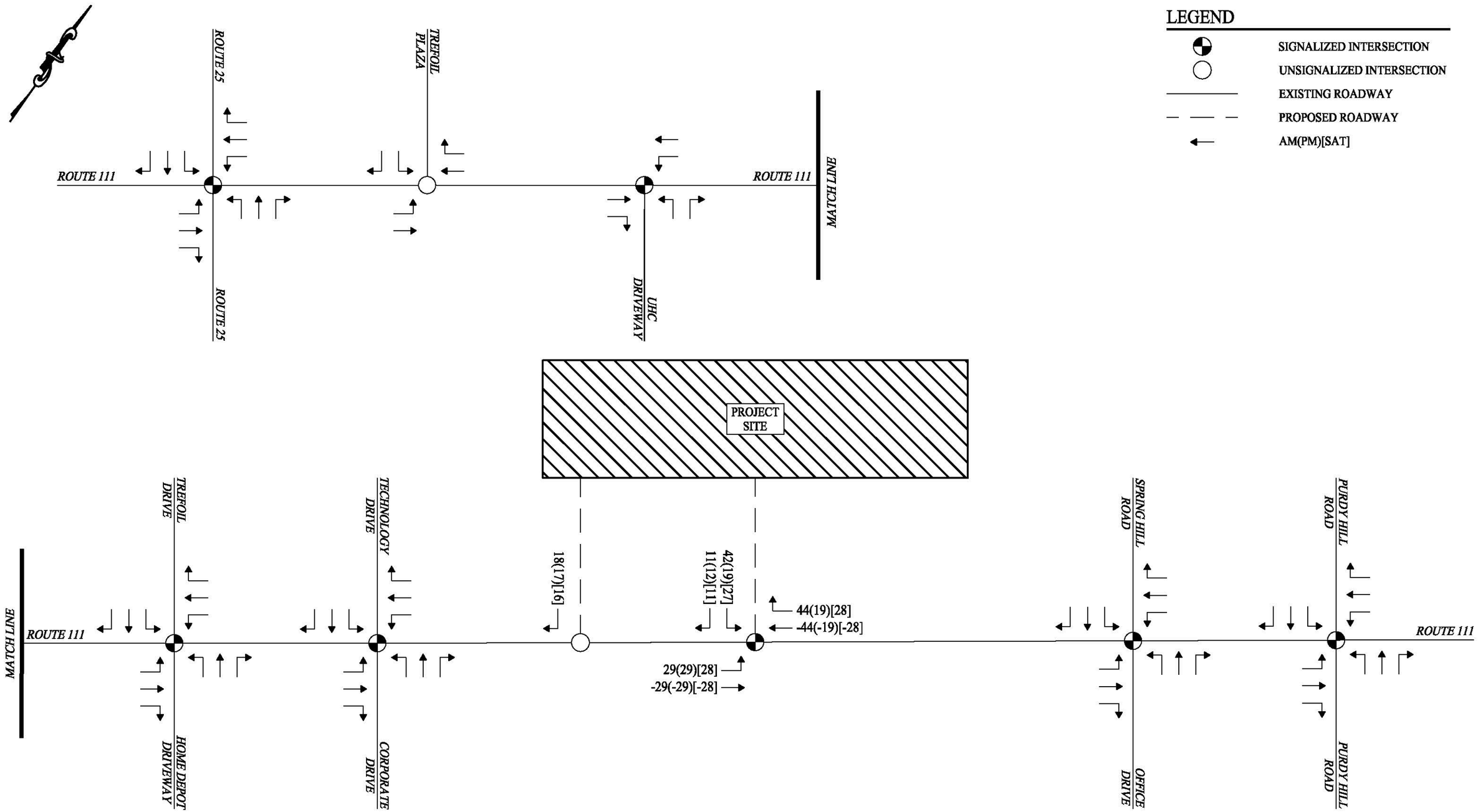
Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: TRIP ASSIGNMENT

SHEET #: FIGURE 4



Rev. #:	Date	Description

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
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Drawn By:	RAS
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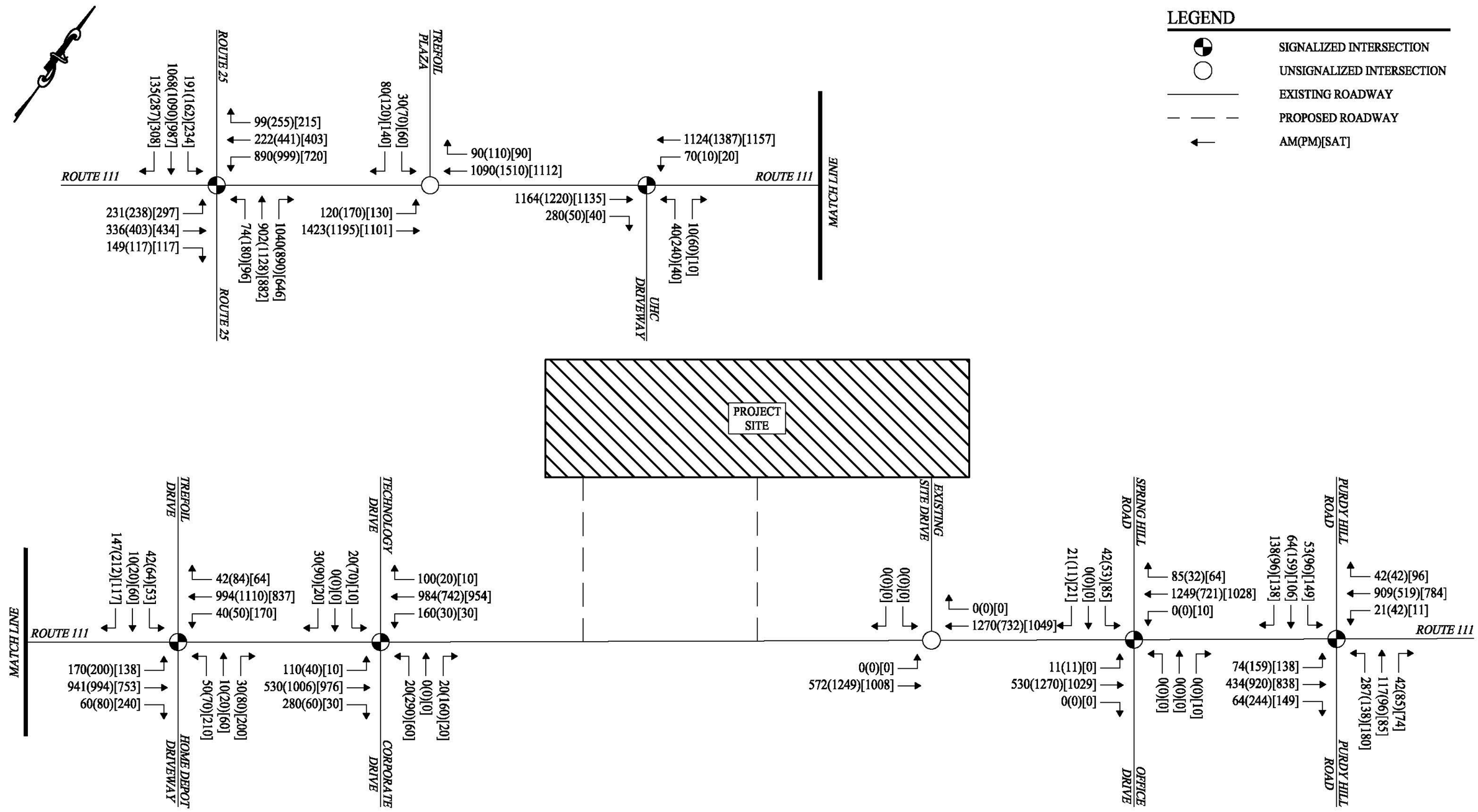
Project #:	1402801
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: PASS-BY TRIPS

SHEET #: FIGURE 5



Rev. #:	Date	Description
1	06/28/18	Response to CT DOT Comments

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501 Main Street, Monroe, CT 06468
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Drawn By:	RAS
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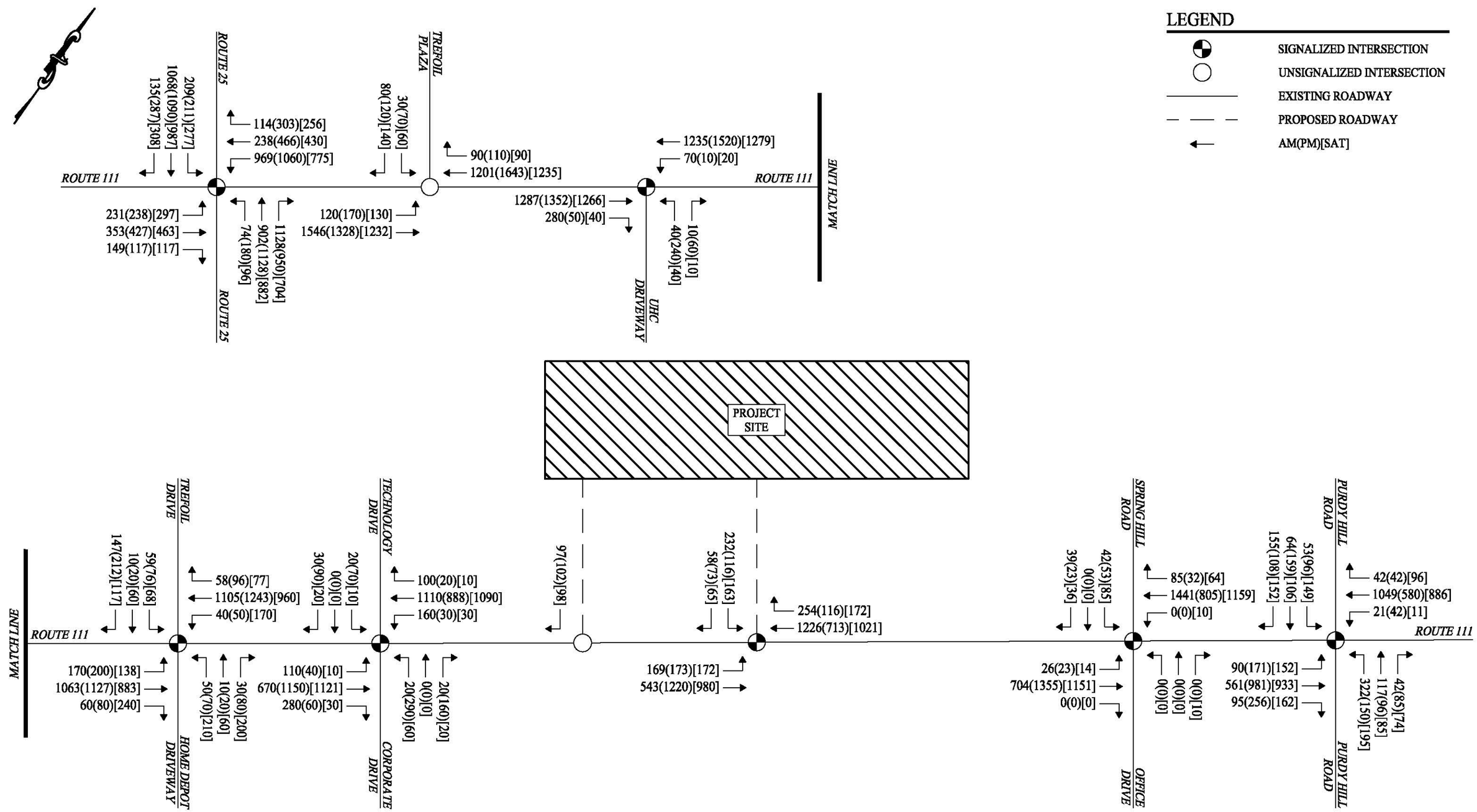
Plan Date:	06/01/18
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: 2019 BACKGROUND TRAFFIC VOLUMES

SHEET #: FIGURE 6



Rev. #:	Date	Description
1	06/28/18	Response to CT DOT Comments

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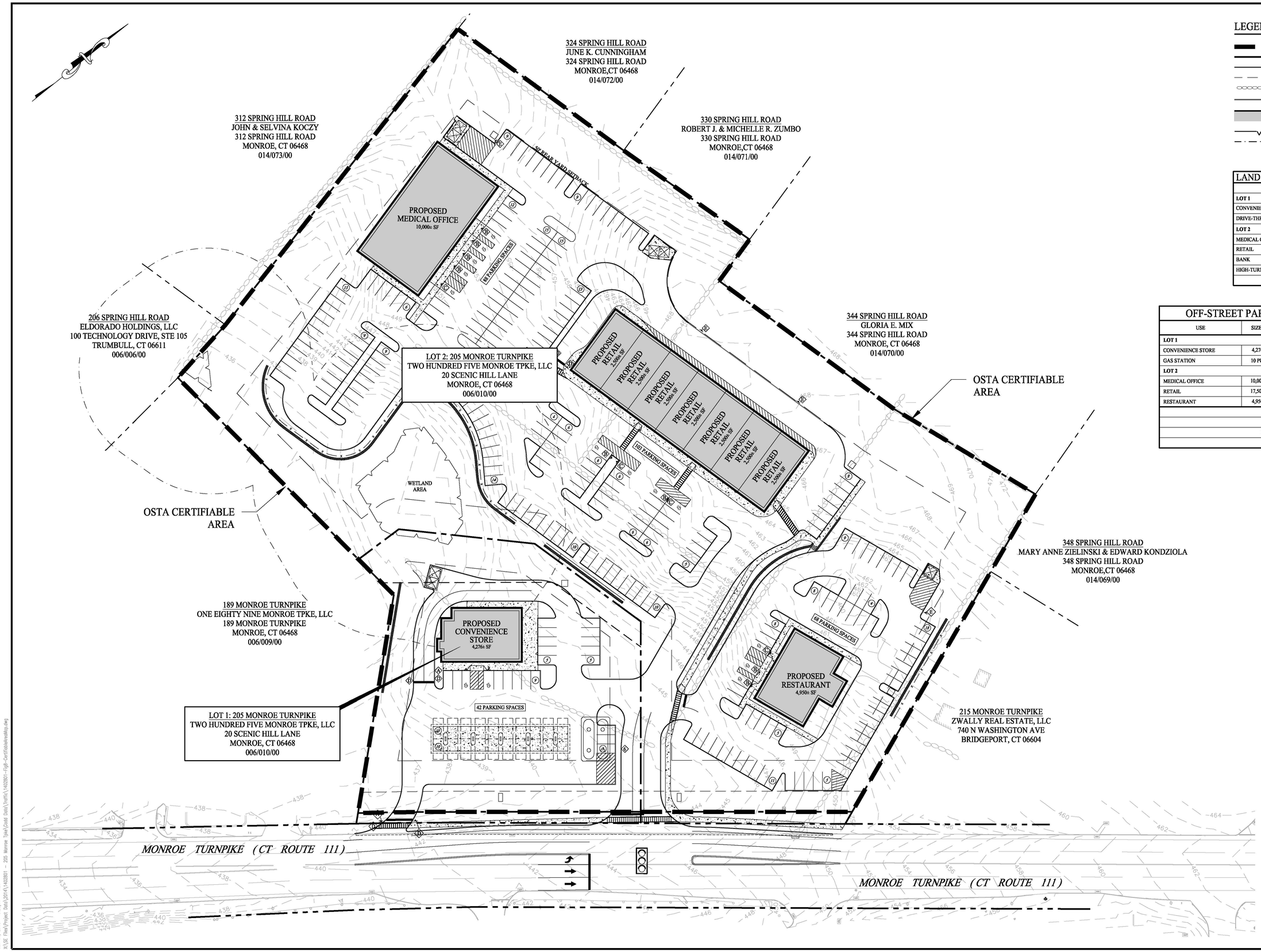
Scale:	NTS

Project: PROPOSED MIXED-USE DEVELOPMENT
205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: 2019 BUILD TRAFFIC VOLUMES

SHEET #: FIGURE 7



LEGEND

- OSTA CERTIFIABLE AREA
- PROPERTY LINE
- ADJOINING LOT LINE
- BUILDING SETBACK
- ROCK WALL
- BITUMINOUS CONCRETE CURB
- BUILDING LIMITS
- LIMIT OF WETLANDS
- LIMIT OF 100' UPLAND REVIEW AREA

LAND USE SUMMARY

LAND USE	SQUARE FOOTAGE
LOT 1	
CONVENIENCE STORE	3,276 ± SF
DRIVE-THRU COFFEE SHOP	1,000 ± SF
LOT 2	
MEDICAL OFFICE	10,000 ± SF
RETAIL	15,000 ± SF
BANK	2,500 ± SF
HIGH-TURNOVER RESTAURANT	4,950 ± SF
TOTAL	36,726 ± SF

OFF-STREET PARKING COMPLIANCE TABLE

USE	SIZE GFA	ZONING STANDARD	REQUIRED SPACES
LOT 1			
CONVENIENCE STORE	4,276± SF	5 SPACES / 1,000 SF	22
GAS STATION	10 PUMPS	2 SPACES / PUMP	20
LOT 2			
MEDICAL OFFICE	10,000± SF	6 SPACES / 1,000 SF	60
RETAIL	17,500± SF	5 SPACES / 1,000 SF	88
RESTAURANT	4,950± SF	18 SPACES / 1,000 SF	90
TOTAL OFF-STREET PARKING REQUIRED			280
PROPOSED PARKING SPACES			287
PROPOSED ADA ACCESSIBLE PARKING SPACES			14
TOTAL PROPOSED PARKING SPACES			301

Rev. #:	Date	Description

Graphic Scale: 40 0 40 80

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468 T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	RAS
Checked By:	CAB
Approved By:	KMS
Project #:	1402801
Plan Date:	06/01/18
Scale:	1" = 40'

Kevin Solli, P.E.
CT 25759

Project:

PROPOSED DEVELOPMENT

205 MONROE TURNPIKE
MONROE, CONNECTICUT

Sheet Title: OSTA CERTIFIABLE AREA PLAN

Sheet #: FIG. 8

Jun 01, 2018 – 3:28pm rich
X:\SE Files\Project Data\2014\1402801 – 205 Monroe Tpke\Cadd Data\Traffic\1402801–Fig8–CertifiableAreaMap.dwg

SOLLI ENGINEERING

May 22, 2018

Hand Delivery

Inland Wetlands Commission
Town of Monroe
7 Fan Hill Road
Monroe, CT 06468

RE: Proposed Development
Two Hundred Five Monroe Turnpike LLC
205 Monroe Turnpike
Monroe, Connecticut 06468
Project Number: 1402801

Dear Commission Members:

On behalf of Two Hundred Five Monroe Turnpike, LLC, please find enclosed an application for the proposed development and associated activity located at 205 Monroe Turnpike, Monroe, Connecticut.

The project proposes to consolidate the existing parcels that make up 205 Monroe Turnpike into two new lots, labeled Lot 1 and Lot 2 for the purposes of this application. Lot 1 consists of the construction of a convenience store with retail space, with a coffee shop, and associated driveways, parking lots, drainage, utilities, landscaping, and lighting. Lot 2 will contain three separate buildings: a proposed restaurant, a proposed retail building, and a proposed medical office with associated driveways, parking lots, drainage, utilities, landscaping, and lighting.

The proposed development includes a central 38 foot wide main driveway providing access to both lots of the development. In addition, there is an exit-only driveway proposed on Lot 1 for the convenience store.

While the project involves work within the upland review area, no direct wetland impact is proposed. All known wetlands have been flagged by William Kenny Associates and were located by Accurate Land Surveying.

Also enclosed are the requisite copies and a check in the amount of $710.00 representing the requisite filing fee. We look forward to working with you in the processing of this application

Respectfully,

Solli Engineering, LLC

Douglas R. Reich, RLA
Landscape Architect

RECEIVED
MAY 22 2018
Town of Monroe
Inland Wetlands Department

Enclosures

CC: Mike Schinella
Thomas Schinella

X:\SE Files\Project Data\2014\1402801 - 205 Monroe Tpke\Office Data\Applications\2018-05-22 IW Initial Submission\2018-05-22 - IWC Submission Letter.docx

Appendix - No Build Traffic Volume Support

Proposed Mixed Use Development
Trip Generation

5/2019

Land Use	ITE Land Use Code	Size	Trips		
			MIDDAY Peak Hour		
			Total	In	Out
Medical	720 - Medical Office	10	28	14	14
Retail	820 - Shopping Center	15.00	56	28	28
Bank	912 - Drive-in Bank	2.50	29	15	14
Restaurant	932 - High Turnover (Sit Down) Restaurant	4.95	68	34	34
Coffee Shop	937 - Coffee Shop w/Drive Thru[2]	1.00	85	43	42
Gas Station	945 - Gas Station w/Convenience	3.28	279	140	139
	Gross Trips		**545**	**274**	**271**
	Less pass-by (use 20% of LUC 820,912,937,945 traffic)[1]		-88	-44	-44
Total	**Net New Trips**		**457**	**230**	**227**

[1]20% max per CTDOT; [2]Per SAT Peak used by Solli Engineers for Proposed Mixed-Used Development at 205 Monroe Turnpike
Ref: Trip Generation, 10th Edition

CAPACITY ANALYSES

NO BUILD

Map - Proposed Delivery Station Building Improvements
Levels of Service

No Build
Timing Plan: AM Peak

BL Companies
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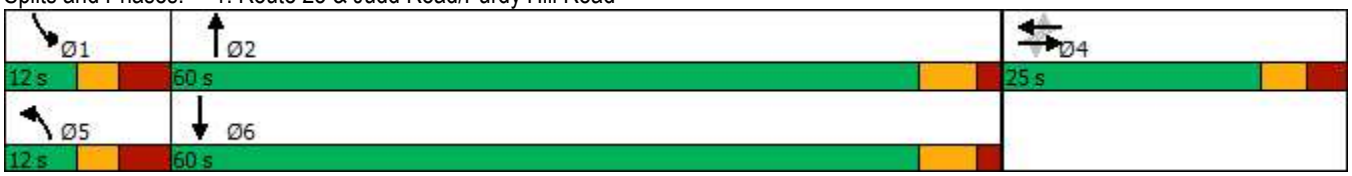
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	51	71	82	194	71	36	913	5	15	913	26
Future Volume (vph)	87	51	71	82	194	71	36	913	5	15	913	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.960			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1699	0	1770	1788	0	1770	1861	0	1770	1855	0
Flt Permitted	0.317			0.673			0.950			0.950		
Satd. Flow (perm)	590	1699	0	1254	1788	0	1770	1861	0	1770	1855	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		64										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			332	
Travel Time (s)		8.5			7.5			37.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	55	77	89	211	77	39	992	5	16	992	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	132	0	89	288	0	39	997	0	16	1020	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	60.0		12.0	60.0	
Total Split (%)	25.8%	25.8%		25.8%	25.8%		12.4%	61.9%		12.4%	61.9%	
Maximum Green (s)	18.6	18.6		18.6	18.6		5.2	54.0		5.2	54.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	17.4	17.4		17.4	17.4		5.2	54.2		5.2	52.0	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.06	0.61		0.06	0.59	
v/c Ratio	0.83	0.34		0.36	0.82		0.38	0.88		0.16	0.94	
Control Delay	86.6	21.3		38.4	56.5		54.7	27.0		47.4	35.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	86.6	21.3		38.4	56.5		54.7	27.0		47.4	35.8	
LOS	F	C		D	E		D	C		D	D	
Approach Delay		48.6			52.2			28.0			36.0	
Approach LOS		D			D			C			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	57	36		48	173		24	373		10	583	
Queue Length 95th (ft)	#152	88		96	#311		58	#858		31	#891	
Internal Link Dist (ft)		293			248			2130			252	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	126	413		268	382		105	1202		105	1152	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.75	0.32		0.33	0.75		0.37	0.83		0.15	0.89	

Intersection Summary	
Area Type:	Other
Cycle Length: 97	
Actuated Cycle Length: 88.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 36.3	Intersection LOS: D
Intersection Capacity Utilization 84.6%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	15	918	102	26	1030
Future Volume (vph)	10	15	918	102	26	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1837	0	1770	1863
Flt Permitted	0.950				0.137	
Satd. Flow (perm)	1770	1583	1837	0	255	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		16	10			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		2307			466
Travel Time (s)	14.3		39.3			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	16	998	111	28	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	16	1109	0	28	1120
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	7.0	7.0	52.6		51.9	52.6
Actuated g/C Ratio	0.11	0.11	0.84		0.83	0.84
v/c Ratio	0.06	0.08	0.72		0.08	0.71
Control Delay	27.0	15.1	12.6		2.3	12.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.0	15.1	12.6		2.3	12.6
LOS	C	B	B		A	B
Approach Delay	20.0		12.6			12.3
Approach LOS	B		B			B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	4	0	0		1	0
Queue Length 95th (ft)	17	16	#699		6	#698
Internal Link Dist (ft)	446		2227			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	497	456	1550		474	1571
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.02	0.04	0.72		0.06	0.71

Intersection Summary	
Area Type: Other	
Cycle Length: 82	
Actuated Cycle Length: 62.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

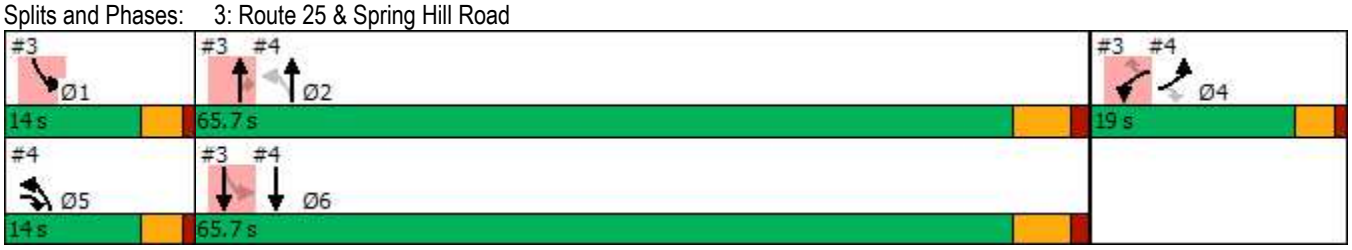
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	97	66	949	66	51	990	
Future Volume (vph)	97	66	949	66	51	990	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.136		
Satd. Flow (perm)	1770	1583	1863	1583	253	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		72		45			
Link Speed (mph)	25		40			40	
Link Distance (ft)	563		462			2307	
Travel Time (s)	15.4		7.9			39.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	105	72	1032	72	55	1076	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	105	72	1032	72	55	1076	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	10.8	10.8	62.4	62.4	68.1	60.1	
Actuated g/C Ratio	0.12	0.12	0.68	0.68	0.75	0.66	
v/c Ratio	0.50	0.29	0.81	0.07	0.19	0.88	
Control Delay	46.2	12.4	8.5	1.4	4.0	23.6	
Queue Delay	0.0	0.0	0.4	0.0	0.0	0.0	
Total Delay	46.2	12.4	8.8	1.4	4.0	23.6	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	C	
Approach Delay	32.5		8.4			22.6	
Approach LOS	C		A			C	
Queue Length 50th (ft)	57	0	84	0	5	437	
Queue Length 95th (ft)	110	38	#801	m1	15	#889	
Internal Link Dist (ft)	483		382			2227	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	291	320	1275	1097	366	1229	
Starvation Cap Reductn	0	0	40	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.36	0.23	0.84	0.07	0.15	0.88	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 16.8 — Intersection LOS: B
Intersection Capacity Utilization 66.0% — ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road



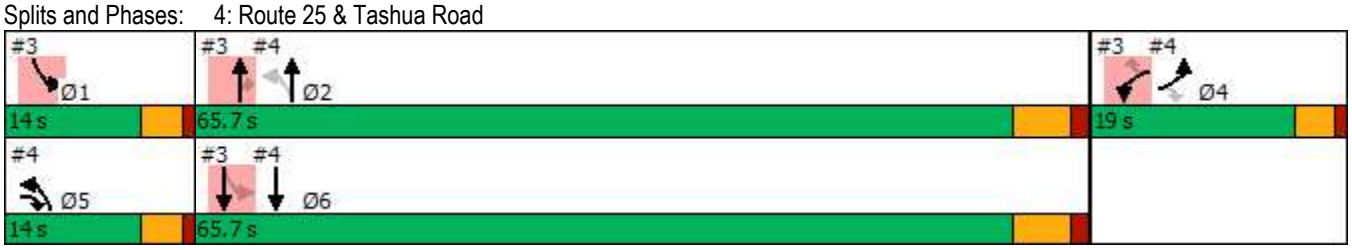
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	46	148	51	969	1066	21	
Future Volume (vph)	46	148	51	969	1066	21	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.997		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1857	0	
Flt Permitted	0.950		0.064				
Satd. Flow (perm)	1770	1583	119	1863	1857	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		86			2		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	50	161	55	1053	1159	23	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	50	161	55	1053	1182	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	10.8	21.2	69.3	62.4	60.1		
Actuated g/C Ratio	0.12	0.23	0.76	0.68	0.66		
v/c Ratio	0.24	0.37	0.27	0.83	0.96		
Control Delay	39.1	16.5	6.0	19.6	21.6		
Queue Delay	0.0	0.0	0.0	0.3	0.0		
Total Delay	39.1	16.5	6.0	19.9	21.6		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	B	A	B	C		
Approach Delay	21.9			19.2	21.6		
Approach LOS	C			B	C		
Queue Length 50th (ft)	26	35	5	416	125		
Queue Length 95th (ft)	61	87	16	#843	m#324		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	291	493	275	1275	1226		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	26	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.17	0.33	0.20	0.84	0.96		

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 20.6 — Intersection LOS: C
Intersection Capacity Utilization 74.6% — ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Route 25 & Tashua Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1071	97	77	791	843	168	314	148	824	200	72
Future Volume (vph)	74	1071	97	77	791	843	168	314	148	824	200	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1788	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116			72			170		17	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			1769	
Travel Time (s)		14.7			12.1			7.5			30.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	1164	105	84	860	916	183	341	161	896	217	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	1164	105	84	860	916	183	341	161	896	295	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	12.0	47.0	12.0	12.0	47.0	42.0	12.0	21.0	21.0	42.0	51.0	
Total Split (%)	9.8%	38.5%	9.8%	9.8%	38.5%	34.4%	9.8%	17.2%	17.2%	34.4%	41.8%	
Maximum Green (s)	7.0	40.0	7.0	7.0	40.0	37.0	7.0	15.0	15.0	37.0	45.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	6.7	40.1	54.1	6.8	40.2	81.1	7.0	13.8	13.8	33.9	40.7	
Actuated g/C Ratio	0.06	0.34	0.46	0.06	0.34	0.69	0.06	0.12	0.12	0.29	0.35	
v/c Ratio	0.80	0.97	0.13	0.82	0.71	0.82	1.74	0.82	0.48	0.91	0.47	
Control Delay	103.3	58.0	3.3	107.1	38.5	20.1	403.6	68.0	11.4	54.0	30.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	103.3	58.0	3.3	107.1	38.5	20.1	403.6	68.0	11.4	54.0	30.7	
LOS	F	E	A	F	D	C	F	E	B	D	C	
Approach Delay		56.4			32.5			144.3			48.3	
Approach LOS		E			C			F			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	63	~484	0	67	315	439	~217	139	0	342	163	
Queue Length 95th (ft)	#153	#640	27	#161	392	670	#366	#204	57	#429	245	
Internal Link Dist (ft)		780			631			358			1689	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	105	1205	790	105	1209	1154	105	452	350	1082	696	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.76	0.97	0.13	0.80	0.71	0.79	1.74	0.75	0.46	0.83	0.42	

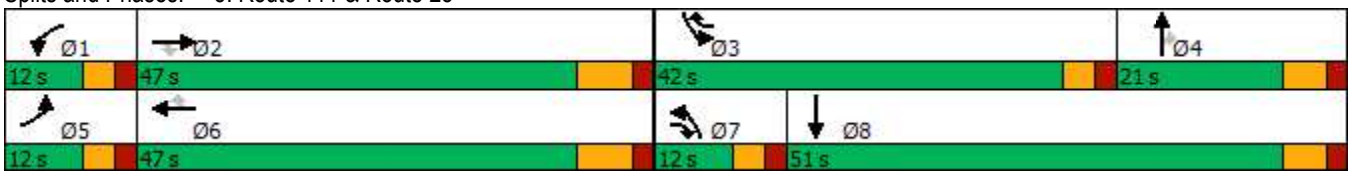
Intersection Summary

Area Type: Other
Cycle Length: 122
Actuated Cycle Length: 117.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.74
Intersection Signal Delay: 57.6 Intersection LOS: E
Intersection Capacity Utilization 85.2% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25



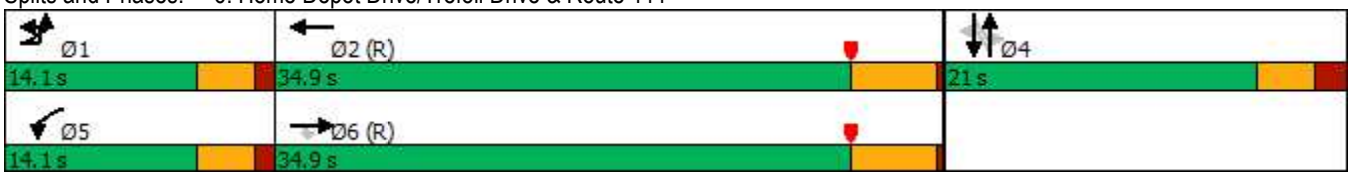
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	847	71	56	876	77	51	20	41	89	26	133
Future Volume (vph)	153	847	71	56	876	77	51	20	41	89	26	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.899			0.874	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3497	0	1770	1675	0	1770	1628	0
Flt Permitted	0.950			0.950			0.560			0.713		
Satd. Flow (perm)	1770	3539	1583	1770	3497	0	1043	1675	0	1328	1628	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92		16			45			145	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		481			302			288			263	
Travel Time (s)		8.2			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	921	77	61	952	84	55	22	45	97	28	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	921	77	61	1036	0	55	67	0	97	173	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	14.1	34.9	34.9	14.1	34.9		21.0	21.0		21.0	21.0	
Total Split (%)	20.1%	49.9%	49.9%	20.1%	49.9%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	10.0	30.0	30.0	10.0	30.0		16.2	16.2		16.2	16.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	10.8	41.5	41.5	7.9	34.5		10.9	10.9		10.9	10.9	
Actuated g/C Ratio	0.15	0.59	0.59	0.11	0.49		0.16	0.16		0.16	0.16	
v/c Ratio	0.61	0.44	0.08	0.30	0.60		0.34	0.22		0.47	0.46	
Control Delay	38.1	10.9	2.6	31.9	15.4		30.9	13.5		33.5	11.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.1	10.9	2.6	31.9	15.4		30.9	13.5		33.5	11.1	
LOS	D	B	A	C	B		C	B		C	B	
Approach Delay		14.2			16.3			21.3			19.2	
Approach LOS		B			B			C			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	66	119	0	25	160		22	8		39	11	
Queue Length 95th (ft)	#143	212	18	56	245		49	37		75	55	
Internal Link Dist (ft)		401			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	285	2099	976	254	1730		241	422		307	488	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.58	0.44	0.08	0.24	0.60		0.23	0.16		0.32	0.35	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	56	77	87	112	0	36	0	51	5	5	5
Future Volume (vph)	0	56	77	87	112	0	36	0	51	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.922						0.921			0.955	
Flt Protected					0.979			0.980			0.984	
Satd. Flow (prot)	0	1717	0	0	1824	0	0	1681	0	0	1750	0
Flt Permitted					0.979			0.980			0.984	
Satd. Flow (perm)	0	1717	0	0	1824	0	0	1681	0	0	1750	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1279			533			365			165	
Travel Time (s)		34.9			14.5			10.0			3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	61	84	95	122	0	39	0	55	5	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	0	0	217	0	0	94	0	0	15	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	56	77	87	112	0	36	0	51	5	5	5
Future Vol, veh/h	0	56	77	87	112	0	36	0	51	5	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	61	84	95	122	0	39	0	55	5	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	122	0	0	145	0	0	420	415	103	443	457	122
Stage 1	-	-	-	-	-	-	103	103	-	312	312	-
Stage 2	-	-	-	-	-	-	317	312	-	131	145	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1465	-	-	1437	-	-	544	528	952	525	500	929
Stage 1	-	-	-	-	-	-	903	810	-	699	658	-
Stage 2	-	-	-	-	-	-	694	658	-	873	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1465	-	-	1437	-	-	507	491	952	468	465	929
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	491	-	468	465	-
Stage 1	-	-	-	-	-	-	903	810	-	699	611	-
Stage 2	-	-	-	-	-	-	635	611	-	822	777	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	11	11.6
HCM LOS			B	B

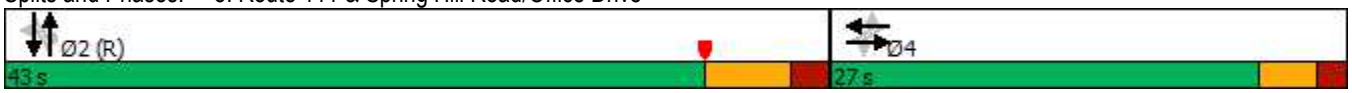
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	1465	-	-	1437	-	-	559
HCM Lane V/C Ratio	0.135	-	-	-	0.066	-	-	0.029
HCM Control Delay (s)	11	0	-	-	7.7	0	-	11.6
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	5	28	0	0	0	26	608	0	0	1147	61
Future Volume (vph)	26	5	28	0	0	0	26	608	0	0	1147	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.936									0.992	
Flt Protected		0.978						0.998				
Satd. Flow (prot)	0	1705	0	0	1863	0	0	3532	0	0	3511	0
Flt Permitted		0.857						0.868				
Satd. Flow (perm)	0	1494	0	0	1863	0	0	3072	0	0	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30									11	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	5	30	0	0	0	28	661	0	0	1247	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	0	0	0	689	0	0	1313	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		7.6						58.5			58.5	
Actuated g/C Ratio		0.11						0.84			0.84	
v/c Ratio		0.34						0.27			0.45	
Control Delay		22.9						2.8			3.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		22.9						2.8			3.6	
LOS		C						A			A	
Approach Delay		22.9						2.8			3.6	
Approach LOS		C						A			A	
Queue Length 50th (ft)		13						39			92	
Queue Length 95th (ft)		45						67			149	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		496						2568			2937	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.13						0.27			0.45	

Intersection Summary	
Area Type: Other	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 3.9	Intersection LOS: A
Intersection Capacity Utilization 51.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



Map - Proposed Delivery Station Building Improvements
Levels of Service

No Build
Timing Plan: MID Peak

BL Companies
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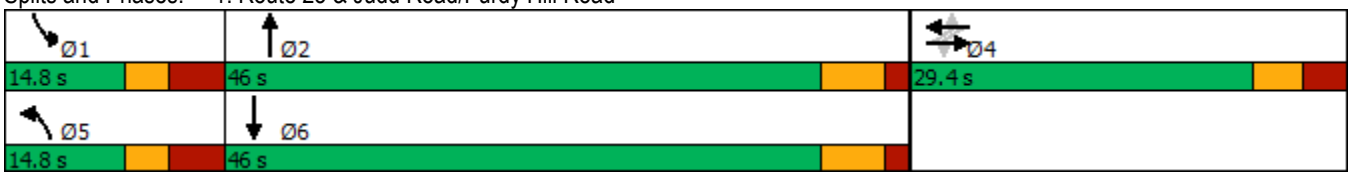
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	51	61	77	77	87	46	729	5	46	719	36
Future Volume (vph)	87	51	61	77	77	87	46	729	5	46	719	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.918			0.920			0.999			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1710	0	1770	1714	0	1770	1861	0	1770	1850	0
Flt Permitted	0.629			0.679			0.950			0.950		
Satd. Flow (perm)	1172	1710	0	1265	1714	0	1770	1861	0	1770	1850	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		64										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			483	
Travel Time (s)		8.5			7.5			37.7			8.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	55	66	84	84	95	50	792	5	50	782	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	121	0	84	179	0	50	797	0	50	821	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	29.4	29.4		29.4	29.4		14.8	46.0		14.8	46.0	
Total Split (%)	32.6%	32.6%		32.6%	32.6%		16.4%	51.0%		16.4%	51.0%	
Maximum Green (s)	23.0	23.0		23.0	23.0		8.0	40.0		8.0	40.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	12.2	12.2		12.2	12.2		6.4	37.7		6.4	37.7	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.09	0.54		0.09	0.54	
v/c Ratio	0.47	0.34		0.38	0.60		0.31	0.80		0.31	0.83	
Control Delay	36.7	18.2		33.7	37.8		40.0	24.1		40.0	25.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.7	18.2		33.7	37.8		40.0	24.1		40.0	25.9	
LOS	D	B		C	D		D	C		D	C	
Approach Delay		26.3			36.5			25.0			26.7	
Approach LOS		C			D			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	43	24		37	82		24	310		24	328	
Queue Length 95th (ft)	90	70		80	148		60	#631		60	#663	
Internal Link Dist (ft)		293			248			2130			403	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	403	630		435	590		212	1114		212	1108	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.19		0.19	0.30		0.24	0.72		0.24	0.74	

Intersection Summary	
Area Type: Other	
Cycle Length: 90.2	
Actuated Cycle Length: 70.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 27.2	Intersection LOS: C
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	26	719	15	20	816
Future Volume (vph)	31	26	719	15	20	816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1857	0	1770	1863
Flt Permitted	0.950				0.278	
Satd. Flow (perm)	1770	1583	1857	0	518	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		28	2			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		2307			466
Travel Time (s)	14.3		39.3			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	28	782	16	22	887
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	28	798	0	22	887
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	7.5	7.5	45.8		44.6	45.8
Actuated g/C Ratio	0.13	0.13	0.81		0.79	0.81
v/c Ratio	0.14	0.12	0.53		0.04	0.59
Control Delay	26.3	12.2	6.8		2.5	8.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	26.3	12.2	6.8		2.5	8.1
LOS	C	B	A		A	A
Approach Delay	19.9		6.8			8.0
Approach LOS	B		A			A

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	12	0	100		2	122
Queue Length 95th (ft)	37	21	341		6	#437
Internal Link Dist (ft)	446		2227			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	561	521	1474		653	1479
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.05	0.54		0.03	0.60

Intersection Summary	
Area Type: Other	
Cycle Length: 82	
Actuated Cycle Length: 56.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 56.5%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	92	82	674	97	66	745	
Future Volume (vph)	92	82	674	97	66	745	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.320		
Satd. Flow (perm)	1770	1583	1863	1583	596	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		89		93			
Link Speed (mph)	25		40			40	
Link Distance (ft)	734		462			2307	
Travel Time (s)	20.0		7.9			39.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	100	89	733	105	72	810	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	100	89	733	105	72	810	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	10.7	10.7	61.3	61.3	63.4	55.0	
Actuated g/C Ratio	0.13	0.13	0.72	0.72	0.75	0.65	
v/c Ratio	0.45	0.32	0.54	0.09	0.13	0.67	
Control Delay	44.6	12.0	4.5	0.4	3.1	14.0	
Queue Delay	0.0	0.0	0.1	0.0	0.0	0.0	
Total Delay	44.6	12.0	4.6	0.4	3.1	14.0	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	B	
Approach Delay	29.2		4.1			13.1	
Approach LOS	C		A			B	
Queue Length 50th (ft)	56	0	66	0	7	262	
Queue Length 95th (ft)	107	43	83	m1	18	466	
Internal Link Dist (ft)	654		382			2227	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	329	367	1361	1181	619	1341	
Starvation Cap Reductn	0	0	80	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.24	0.57	0.09	0.12	0.60	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 84.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 10.7 — Intersection LOS: B
Intersection Capacity Utilization 56.9% — ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	46	82	97	725	776	61	
Future Volume (vph)	46	82	97	725	776	61	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.990		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1844	0	
Flt Permitted	0.950		0.171				
Satd. Flow (perm)	1770	1583	319	1863	1844	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		89			7		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	50	89	105	788	843	66	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	50	89	105	788	909	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	10.7	19.5	67.3	61.3	55.0		
Actuated g/C Ratio	0.13	0.23	0.79	0.72	0.65		
v/c Ratio	0.22	0.21	0.27	0.59	0.76		
Control Delay	39.3	7.4	4.2	11.3	9.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	39.3	7.4	4.2	11.3	9.2		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	A	A	B	A		
Approach Delay	18.9			10.4	9.2		
Approach LOS	B			B	A		
Queue Length 50th (ft)	27	0	10	233	107		
Queue Length 95th (ft)	62	35	25	417	134		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	329	476	438	1361	1330		
Starvation Cap Reductn	0	0	0	0	1		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.15	0.19	0.24	0.58	0.68		

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 84.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 10.5 — Intersection LOS: B
Intersection Capacity Utilization 67.2% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 4: Route 25 & Tashua Road

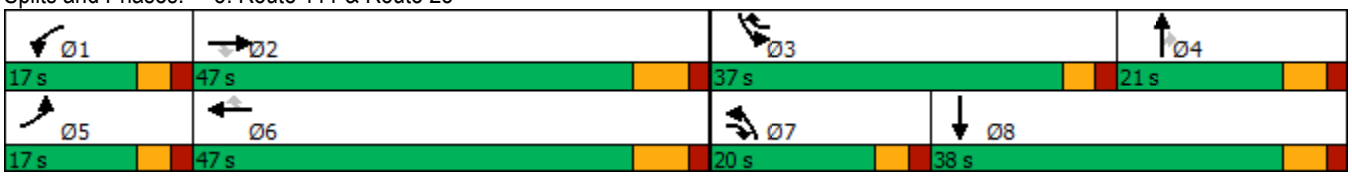
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	648	179	97	592	480	163	309	97	693	298	121
Future Volume (vph)	101	648	179	97	592	480	163	309	97	693	298	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.957	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1783	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			195			128			170		16	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			727	
Travel Time (s)		14.7			12.1			7.5			12.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	704	195	105	643	522	177	336	105	753	324	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	110	704	195	105	643	522	177	336	105	753	456	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	17.0	47.0	20.0	17.0	47.0	37.0	20.0	21.0	21.0	37.0	38.0	
Total Split (%)	13.9%	38.5%	16.4%	13.9%	38.5%	30.3%	16.4%	17.2%	17.2%	30.3%	31.1%	
Maximum Green (s)	12.0	40.0	15.0	12.0	40.0	32.0	15.0	15.0	15.0	32.0	32.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	9.3	24.3	45.2	9.1	24.1	57.2	13.8	17.4	17.4	26.0	29.6	
Actuated g/C Ratio	0.09	0.24	0.45	0.09	0.24	0.57	0.14	0.17	0.17	0.26	0.30	
v/c Ratio	0.67	0.82	0.24	0.65	0.76	0.55	0.73	0.55	0.25	0.85	0.85	
Control Delay	66.9	45.2	3.2	66.2	42.2	11.8	62.3	44.5	2.2	46.1	50.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	66.9	45.2	3.2	66.2	42.2	11.8	62.3	44.5	2.2	46.1	50.0	
LOS	E	D	A	E	D	B	E	D	A	D	D	
Approach Delay		39.5			31.7			42.4			47.5	
Approach LOS		D			C			D			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	72	237	0	69	212	155	114	107	0	247	274	
Queue Length 95th (ft)	#141	312	38	135	281	225	#239	180	6	341	#512	
Internal Link Dist (ft)		780			631			358			647	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	216	1443	842	216	1443	1056	270	618	416	1120	592	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.51	0.49	0.23	0.49	0.45	0.49	0.66	0.54	0.25	0.67	0.77	

Intersection Summary	
Area Type: Other	
Cycle Length: 122	
Actuated Cycle Length: 100.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 39.9	Intersection LOS: D
Intersection Capacity Utilization 74.5%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25

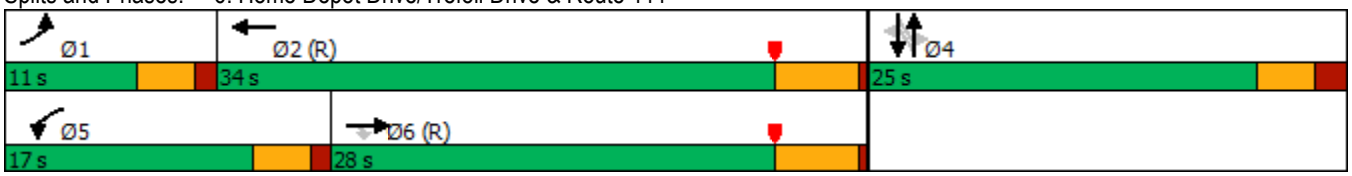


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	762	87	56	898	77	61	26	92	67	46	102
Future Volume (vph)	77	762	87	56	898	77	61	26	92	67	46	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.883			0.897	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3497	0	1770	1645	0	1770	1671	0
Flt Permitted	0.950			0.950			0.583			0.675		
Satd. Flow (perm)	1770	3539	1583	1770	3497	0	1086	1645	0	1257	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			156		16			100			111	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1534			302			288			263	
Travel Time (s)		26.1			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	828	95	61	976	84	66	28	100	73	50	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	828	95	61	1060	0	66	128	0	73	161	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	11.0	28.0	28.0	17.0	34.0		25.0	25.0		25.0	25.0	
Total Split (%)	15.7%	40.0%	40.0%	24.3%	48.6%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	6.9	23.1	23.1	12.9	29.1		20.2	20.2		20.2	20.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	8.7	42.3	42.3	8.0	39.4		10.0	10.0		10.0	10.0	
Actuated g/C Ratio	0.12	0.60	0.60	0.11	0.56		0.14	0.14		0.14	0.14	
v/c Ratio	0.38	0.39	0.09	0.30	0.54		0.43	0.40		0.41	0.48	
Control Delay	32.4	9.8	0.9	31.7	12.5		35.0	12.7		33.2	15.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.4	9.8	0.9	31.7	12.5		35.0	12.7		33.2	15.0	
LOS	C	A	A	C	B		C	B		C	B	
Approach Delay		10.9			13.6			20.3			20.7	
Approach LOS		B			B			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	34	100	0	25	142		27	11		29	20	
Queue Length 95th (ft)	69	180	8	56	255		58	51		62	64	
Internal Link Dist (ft)		1454			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	226	2140	1018	326	1976		313	545		362	561	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.39	0.09	0.19	0.54		0.21	0.23		0.20	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	87	66	46	87	0	77	0	51	1	0	1
Future Volume (vph)	5	87	66	46	87	0	77	0	51	1	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.943						0.947			0.932	
Flt Protected		0.999			0.983			0.971			0.976	
Satd. Flow (prot)	0	1755	0	0	1831	0	0	1713	0	0	1694	0
Flt Permitted		0.999			0.983			0.971			0.976	
Satd. Flow (perm)	0	1755	0	0	1831	0	0	1713	0	0	1694	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1116			533			365			137	
Travel Time (s)		30.4			14.5			10.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	95	72	50	95	0	84	0	55	1	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	172	0	0	145	0	0	139	0	0	2	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.0%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	87	66	46	87	0	77	0	51	1	0	1
Future Vol, veh/h	5	87	66	46	87	0	77	0	51	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	95	72	50	95	0	84	0	55	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	95	0	0	167	0	0	337	336	131	364	372	95
Stage 1	-	-	-	-	-	-	141	141	-	195	195	-
Stage 2	-	-	-	-	-	-	196	195	-	169	177	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1499	-	-	1411	-	-	617	585	919	592	558	962
Stage 1	-	-	-	-	-	-	862	780	-	807	739	-
Stage 2	-	-	-	-	-	-	806	739	-	833	753	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1499	-	-	1411	-	-	597	561	919	539	535	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	597	561	-	539	535	-
Stage 1	-	-	-	-	-	-	859	777	-	804	712	-
Stage 2	-	-	-	-	-	-	775	712	-	780	750	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.6	11.5	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	694	1499	-	-	1411	-	-	691
HCM Lane V/C Ratio	0.2	0.004	-	-	0.035	-	-	0.003
HCM Control Delay (s)	11.5	7.4	0	-	7.6	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0

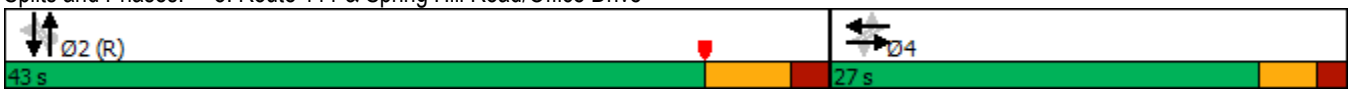
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	0	21	0	0	0	21	872	0	0	971	77
Future Volume (vph)	71	0	21	0	0	0	21	872	0	0	971	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.969									0.989	
Flt Protected		0.963						0.999				
Satd. Flow (prot)	0	1738	0	0	1863	0	0	3536	0	0	3500	0
Flt Permitted		0.775						0.911				
Satd. Flow (perm)	0	1399	0	0	1863	0	0	3224	0	0	3500	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55									18	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	0	23	0	0	0	23	948	0	0	1055	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	0	0	0	971	0	0	1139	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		8.2						54.2			54.2	
Actuated g/C Ratio		0.12						0.77			0.77	
v/c Ratio		0.47						0.39			0.42	
Control Delay		22.5						4.2			4.3	
Queue Delay		0.0						0.0			0.0	
Total Delay		22.5						4.2			4.3	
LOS		C						A			A	
Approach Delay		22.5						4.2			4.3	
Approach LOS		C						A			A	
Queue Length 50th (ft)		18						62			74	
Queue Length 95th (ft)		57						117			137	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		483						2496			2714	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.21						0.39			0.42	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 5.1 — Intersection LOS: A
Intersection Capacity Utilization 54.3% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



Map - Proposed Delivery Station Building Improvements
Levels of Service

No Build
Timing Plan: PM Peak

BL Companies
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	179	61	66	71	97	46	1035	5	56	1030	46
Future Volume (vph)	56	179	61	66	71	97	46	1035	5	56	1030	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.913			0.999			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1792	0	1770	1701	0	1770	1861	0	1770	1852	0
Flt Permitted	0.548			0.343			0.950			0.950		
Satd. Flow (perm)	1021	1792	0	639	1701	0	1770	1861	0	1770	1852	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		16										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			332	
Travel Time (s)		8.5			7.5			37.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	195	66	72	77	105	50	1125	5	61	1120	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	261	0	72	182	0	50	1130	0	61	1170	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	60.0		12.0	60.0	
Total Split (%)	25.8%	25.8%		25.8%	25.8%		12.4%	61.9%		12.4%	61.9%	
Maximum Green (s)	18.6	18.6		18.6	18.6		5.2	54.0		5.2	54.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	15.9	15.9		15.9	15.9		5.2	54.5		5.2	54.5	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.06	0.59		0.06	0.59	
v/c Ratio	0.35	0.81		0.65	0.62		0.51	1.03		0.62	1.07	
Control Delay	40.3	54.9		65.1	45.7		62.8	56.7		71.8	69.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.3	54.9		65.1	45.7		62.8	56.7		71.8	69.9	
LOS	D	D		E	D		E	E		E	E	
Approach Delay		52.1			51.2			56.9			70.0	
Approach LOS		D			D			E			E	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	33	143		41	102		31	~783		37	~838	
Queue Length 95th (ft)	72	#254		#103	172		#80	#1036		#100	#1094	
Internal Link Dist (ft)		293			248			2130			252	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	207	377		130	346		100	1100		100	1095	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.29	0.69		0.55	0.53		0.50	1.03		0.61	1.07	

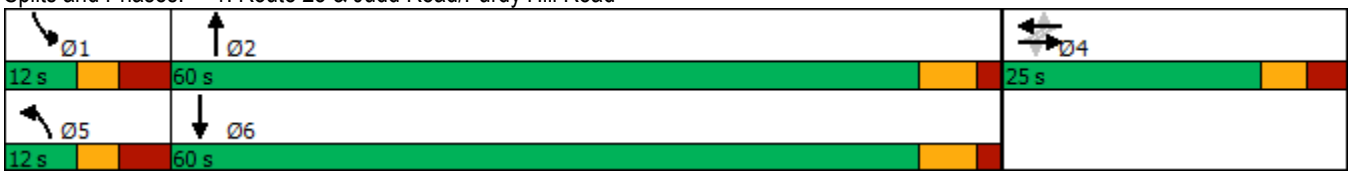
Intersection Summary

Area Type: Other
Cycle Length: 97
Actuated Cycle Length: 92.1
Natural Cycle: 120
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 61.3 Intersection LOS: E
Intersection Capacity Utilization 90.0% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	82	36	1051	10	5	1153
Future Volume (vph)	82	36	1051	10	5	1153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.999			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1861	0	1770	1863
Flt Permitted	0.950				0.088	
Satd. Flow (perm)	1770	1583	1861	0	164	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		39	1			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		2307			466
Travel Time (s)	14.3		39.3			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	39	1142	11	5	1253
Shared Lane Traffic (%)						
Lane Group Flow (vph)	89	39	1153	0	5	1253
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	8.8	8.8	46.6		46.8	46.6
Actuated g/C Ratio	0.14	0.14	0.74		0.74	0.74
v/c Ratio	0.36	0.15	0.84		0.02	0.91
Control Delay	28.9	10.6	17.9		3.2	23.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	28.9	10.6	17.9		3.2	23.9
LOS	C	B	B		A	C
Approach Delay	23.3		17.9			23.8
Approach LOS	C		B			C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	28	0	245		1	309
Queue Length 95th (ft)	74	24	#818		3	#907
Internal Link Dist (ft)	446		2227			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	494	470	1375		392	1376
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.18	0.08	0.84		0.01	0.91

Intersection Summary	
Area Type: Other	
Cycle Length: 82	
Actuated Cycle Length: 63.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 21.1	Intersection LOS: C
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	102	56	1005	82	51	1183	
Future Volume (vph)	102	56	1005	82	51	1183	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.123		
Satd. Flow (perm)	1770	1583	1863	1583	229	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		61		53			
Link Speed (mph)	25		40			40	
Link Distance (ft)	566		462			2307	
Travel Time (s)	15.4		7.9			39.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	111	61	1092	89	55	1286	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	111	61	1092	89	55	1286	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	11.0	11.0	66.2	66.2	68.6	60.5	
Actuated g/C Ratio	0.12	0.12	0.73	0.73	0.75	0.66	
v/c Ratio	0.52	0.25	0.81	0.08	0.20	1.04	
Control Delay	47.6	12.8	8.5	1.5	4.4	55.3	
Queue Delay	0.0	0.0	0.4	0.0	0.0	1.5	
Total Delay	47.6	12.8	8.9	1.5	4.4	56.8	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	E	
Approach Delay	35.3		8.3			54.7	
Approach LOS	D		A			D	
Queue Length 50th (ft)	63	0	85	0	5	~856	
Queue Length 95th (ft)	118	36	#889	m2	15	#1200	
Internal Link Dist (ft)	486		382			2227	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	294	314	1354	1165	352	1239	
Starvation Cap Reductn	0	0	49	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	5	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.38	0.19	0.84	0.08	0.16	1.04	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 33.1 — Intersection LOS: C
Intersection Capacity Utilization 76.2% — ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	41	107	133	1046	1224	61	
Future Volume (vph)	41	107	133	1046	1224	61	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.994		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1852	0	
Flt Permitted	0.950		0.062				
Satd. Flow (perm)	1770	1583	115	1863	1852	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		58			5		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	45	116	145	1137	1330	66	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	45	116	145	1137	1396	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	11.0	20.7	73.3	66.2	60.5		
Actuated g/C Ratio	0.12	0.23	0.81	0.73	0.66		
v/c Ratio	0.21	0.29	0.60	0.84	1.13		
Control Delay	39.6	16.7	26.0	20.9	75.8		
Queue Delay	0.0	0.0	0.0	0.4	0.0		
Total Delay	39.6	16.7	26.0	21.3	75.8		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	B	C	C	E		
Approach Delay	23.1			21.8	75.8		
Approach LOS	C			C	E		
Queue Length 50th (ft)	24	27	31	510	~317		
Queue Length 95th (ft)	58	70	99	#965	m#341		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	294	435	277	1354	1233		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	31	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.15	0.27	0.52	0.86	1.13		

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 48.4 — Intersection LOS: D
Intersection Capacity Utilization 92.7% — ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Route 25 & Tashua Road

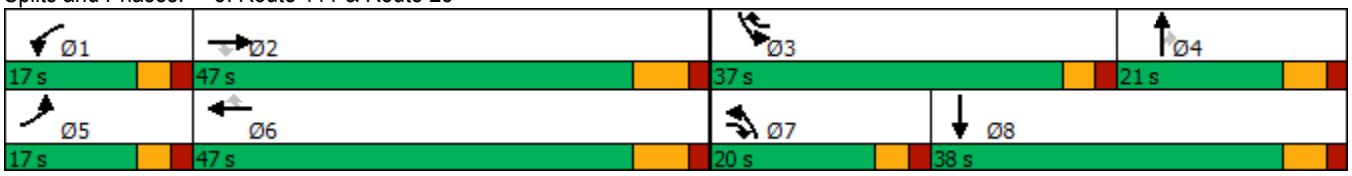
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	1056	214	158	959	698	153	386	102	846	361	114
Future Volume (vph)	109	1056	214	158	959	698	153	386	102	846	361	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1796	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			107			170		13	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			727	
Travel Time (s)		14.7			12.1			7.5			12.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	1148	233	172	1042	759	166	420	111	920	392	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1148	233	172	1042	759	166	420	111	920	516	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	17.0	47.0	20.0	17.0	47.0	37.0	20.0	21.0	21.0	37.0	38.0	
Total Split (%)	13.9%	38.5%	16.4%	13.9%	38.5%	30.3%	16.4%	17.2%	17.2%	30.3%	31.1%	
Maximum Green (s)	12.0	40.0	15.0	12.0	40.0	32.0	15.0	15.0	15.0	32.0	32.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	10.5	40.0	61.1	12.0	41.5	80.5	14.1	15.0	15.0	32.0	32.9	
Actuated g/C Ratio	0.09	0.33	0.50	0.10	0.34	0.66	0.12	0.12	0.12	0.26	0.27	
v/c Ratio	0.78	0.99	0.27	0.99	0.87	0.70	0.82	0.97	0.32	1.02	1.04	
Control Delay	86.0	65.1	7.6	120.5	46.8	15.7	82.0	88.7	3.7	80.2	95.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	86.0	65.1	7.6	120.5	46.8	15.7	82.0	88.7	3.7	80.2	95.3	
LOS	F	E	A	F	D	B	F	F	A	F	F	
Approach Delay		57.8			41.3			73.6			85.6	
Approach LOS		E			D			E			F	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	91	472	38	138	409	313	129	175	0	~396	~445	
Queue Length 95th (ft)	#175	#626	84	#284	#532	469	#236	#281	11	#525	#663	
Internal Link Dist (ft)		780			631			358			647	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	174	1160	872	174	1204	1080	217	435	343	900	494	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.68	0.99	0.27	0.99	0.87	0.70	0.76	0.97	0.32	1.02	1.04	

Intersection Summary

Area Type: Other
Cycle Length: 122
Actuated Cycle Length: 122
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 61.1 Intersection LOS: E
Intersection Capacity Utilization 91.9% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25



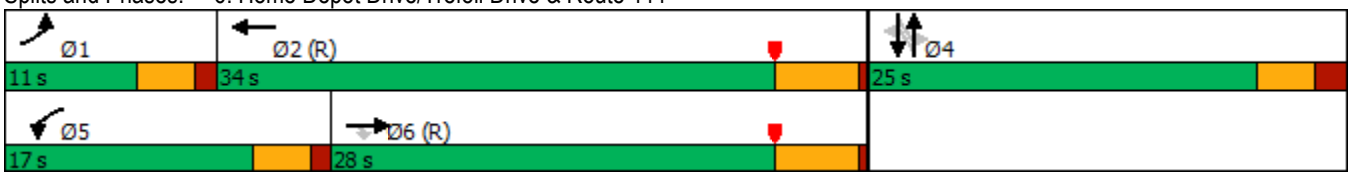
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	1056	77	77	1128	83	92	31	71	73	26	158
Future Volume (vph)	128	1056	77	77	1128	83	92	31	71	73	26	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.990			0.896			0.871	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3504	0	1770	1669	0	1770	1622	0
Flt Permitted	0.950			0.950			0.510			0.685		
Satd. Flow (perm)	1770	3539	1583	1770	3504	0	950	1669	0	1276	1622	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			156		13			77			172	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1532			302			288			263	
Travel Time (s)		26.1			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	139	1148	84	84	1226	90	100	34	77	79	28	172
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	1148	84	84	1316	0	100	111	0	79	200	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	11.0	28.0	28.0	17.0	34.0		25.0	25.0		25.0	25.0	
Total Split (%)	15.7%	40.0%	40.0%	24.3%	48.6%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	6.9	23.1	23.1	12.9	29.1		20.2	20.2		20.2	20.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	10.0	37.0	37.0	8.7	33.7		12.4	12.4		12.4	12.4	
Actuated g/C Ratio	0.14	0.53	0.53	0.12	0.48		0.18	0.18		0.18	0.18	
v/c Ratio	0.55	0.61	0.09	0.38	0.78		0.60	0.31		0.35	0.47	
Control Delay	38.4	16.7	0.6	32.4	20.7		39.7	11.5		27.7	9.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.4	16.7	0.6	32.4	20.7		39.7	11.5		27.7	9.4	
LOS	D	B	A	C	C		D	B		C	A	
Approach Delay		17.9			21.4			24.9			14.6	
Approach LOS		B			C			C			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	55	175	0	34	240		41	13		31	10	
Queue Length 95th (ft)	#135	#363	5	69	#404		77	46		60	55	
Internal Link Dist (ft)		1452			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	253	1868	909	326	1695		274	536		368	590	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.55	0.61	0.09	0.26	0.78		0.36	0.21		0.21	0.34	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 19.6 Intersection LOS: B
Intersection Capacity Utilization 73.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	92	51	56	77	0	56	0	82	0	0	0
Future Volume (vph)	5	92	51	56	77	0	56	0	82	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954						0.920				
Flt Protected		0.998			0.979			0.980				
Satd. Flow (prot)	0	1774	0	0	1824	0	0	1679	0	0	1863	0
Flt Permitted		0.998			0.979			0.980				
Satd. Flow (perm)	0	1774	0	0	1824	0	0	1679	0	0	1863	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1282			533			365			175	
Travel Time (s)		35.0			14.5			10.0			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	100	55	61	84	0	61	0	89	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	160	0	0	145	0	0	150	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.5%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	92	51	56	77	0	56	0	82	0	0	0
Future Vol, veh/h	5	92	51	56	77	0	56	0	82	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	100	55	61	84	0	61	0	89	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	155	0	0	344	344	128	388	371	84
Stage 1	-	-	-	-	-	-	138	138	-	206	206	-
Stage 2	-	-	-	-	-	-	206	206	-	182	165	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1513	-	-	1425	-	-	610	579	922	571	559	975
Stage 1	-	-	-	-	-	-	865	782	-	796	731	-
Stage 2	-	-	-	-	-	-	796	731	-	820	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1513	-	-	1425	-	-	587	551	922	497	532	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	587	551	-	497	532	-
Stage 1	-	-	-	-	-	-	862	779	-	793	698	-
Stage 2	-	-	-	-	-	-	760	698	-	738	759	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.2	11	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	749	1513	-	-	1425	-	-	-
HCM Lane V/C Ratio	0.2	0.004	-	-	0.043	-	-	-
HCM Control Delay (s)	11	7.4	0	-	7.6	0	-	0
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	-

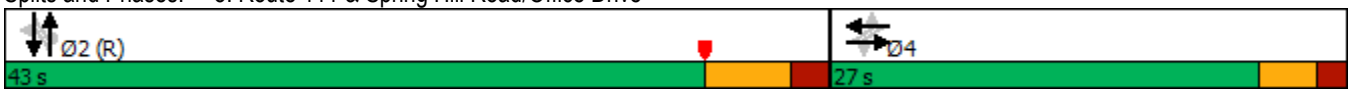
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	0	22	0	0	0	27	1187	0	0	818	36
Future Volume (vph)	56	0	22	0	0	0	27	1187	0	0	818	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.962									0.994	
Flt Protected		0.965						0.999				
Satd. Flow (prot)	0	1729	0	0	1863	0	0	3536	0	0	3518	0
Flt Permitted		0.787						0.919				
Satd. Flow (perm)	0	1410	0	0	1863	0	0	3253	0	0	3518	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55									9	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	0	24	0	0	0	29	1290	0	0	889	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	0	0	0	0	0	1319	0	0	928	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		7.8						54.6			54.6	
Actuated g/C Ratio		0.11						0.78			0.78	
v/c Ratio		0.41						0.52			0.34	
Control Delay		20.1						4.9			3.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		20.1						4.9			3.6	
LOS		C						A			A	
Approach Delay		20.1						4.9			3.6	
Approach LOS		C						A			A	
Queue Length 50th (ft)		12						98			55	
Queue Length 95th (ft)		49						172			96	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		486						2539			2748	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.17						0.52			0.34	

Intersection Summary

Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 4.9	Intersection LOS: A
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



BUILD

Map - Proposed Delivery Station Building Improvements
Levels of Service

Build
Timing Plan: AM Peak

BL Companies
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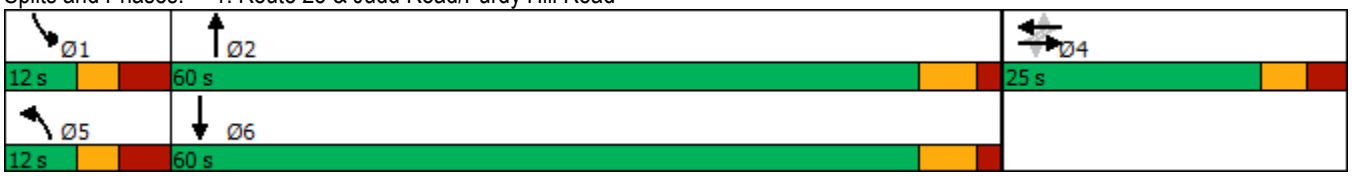
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	51	71	82	194	71	36	913	5	15	913	26
Future Volume (vph)	87	51	71	82	194	71	36	913	5	15	913	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.960			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1699	0	1770	1788	0	1770	1861	0	1770	1855	0
Flt Permitted	0.317			0.673			0.950			0.950		
Satd. Flow (perm)	590	1699	0	1254	1788	0	1770	1861	0	1770	1855	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		64										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			332	
Travel Time (s)		8.5			7.5			37.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	55	77	89	211	77	39	992	5	16	992	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	132	0	89	288	0	39	997	0	16	1020	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	60.0		12.0	60.0	
Total Split (%)	25.8%	25.8%		25.8%	25.8%		12.4%	61.9%		12.4%	61.9%	
Maximum Green (s)	18.6	18.6		18.6	18.6		5.2	54.0		5.2	54.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	17.4	17.4		17.4	17.4		5.2	54.2		5.2	52.0	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.06	0.61		0.06	0.59	
v/c Ratio	0.83	0.34		0.36	0.82		0.38	0.88		0.16	0.94	
Control Delay	86.6	21.3		38.4	56.5		54.7	27.0		47.4	35.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	86.6	21.3		38.4	56.5		54.7	27.0		47.4	35.8	
LOS	F	C		D	E		D	C		D	D	
Approach Delay		48.6			52.2			28.0			36.0	
Approach LOS		D			D			C			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	57	36		48	173		24	373		10	583	
Queue Length 95th (ft)	#152	88		96	#311		58	#858		31	#891	
Internal Link Dist (ft)		293			248			2130			252	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	126	413		268	382		105	1202		105	1152	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.75	0.32		0.33	0.75		0.37	0.83		0.15	0.89	

Intersection Summary	
Area Type:	Other
Cycle Length: 97	
Actuated Cycle Length: 88.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 36.3	Intersection LOS: D
Intersection Capacity Utilization 84.6%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	15	918	102	26	1030
Future Volume (vph)	10	15	918	102	26	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1837	0	1770	1863
Flt Permitted	0.950				0.137	
Satd. Flow (perm)	1770	1583	1837	0	255	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		16	10			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		1826			466
Travel Time (s)	14.3		31.1			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	16	998	111	28	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	16	1109	0	28	1120
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	7.0	7.0	52.6		51.9	52.6
Actuated g/C Ratio	0.11	0.11	0.84		0.83	0.84
v/c Ratio	0.06	0.08	0.72		0.08	0.71
Control Delay	27.0	15.1	12.6		2.3	12.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.0	15.1	12.6		2.3	12.6
LOS	C	B	B		A	B
Approach Delay	20.0		12.6			12.3
Approach LOS	B		B			B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	4	0	0		1	0
Queue Length 95th (ft)	17	16	#699		6	#698
Internal Link Dist (ft)	446		1746			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	497	456	1550		474	1571
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.02	0.04	0.72		0.06	0.71

Intersection Summary	
Area Type: Other	
Cycle Length: 82	
Actuated Cycle Length: 62.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

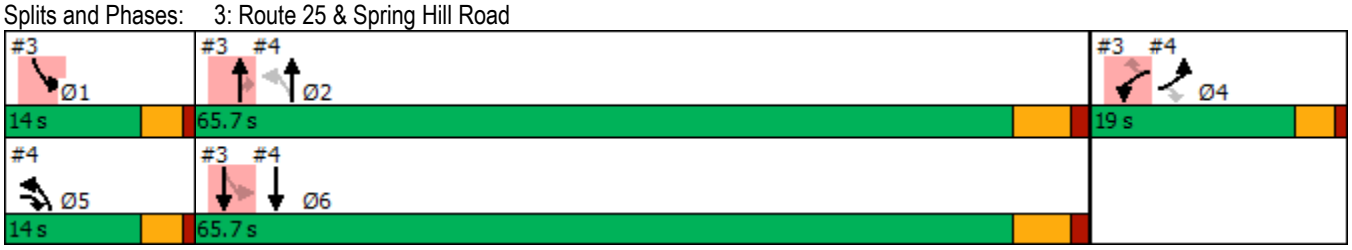
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	97	66	949	67	51	990	
Future Volume (vph)	97	66	949	67	51	990	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.136		
Satd. Flow (perm)	1770	1583	1863	1583	253	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		72		46			
Link Speed (mph)	25		40			40	
Link Distance (ft)	563		462			204	
Travel Time (s)	15.4		7.9			3.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	105	72	1032	73	55	1076	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	105	72	1032	73	55	1076	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	10.8	10.8	62.4	62.4	68.1	60.1	
Actuated g/C Ratio	0.12	0.12	0.68	0.68	0.75	0.66	
v/c Ratio	0.50	0.29	0.81	0.07	0.19	0.88	
Control Delay	46.2	12.4	8.4	1.4	4.0	23.6	
Queue Delay	0.0	0.0	0.4	0.0	0.0	0.0	
Total Delay	46.2	12.4	8.8	1.4	4.0	23.6	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	C	
Approach Delay	32.5		8.4			22.6	
Approach LOS	C		A			C	
Queue Length 50th (ft)	57	0	84	0	5	437	
Queue Length 95th (ft)	110	38	#801	m1	15	#889	
Internal Link Dist (ft)	483		382			124	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	291	320	1275	1098	366	1229	
Starvation Cap Reductn	0	0	40	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.36	0.23	0.84	0.07	0.15	0.88	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 16.8 Intersection LOS: B
Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	46	148	51	970	1066	21	
Future Volume (vph)	46	148	51	970	1066	21	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.997		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1857	0	
Flt Permitted	0.950		0.064				
Satd. Flow (perm)	1770	1583	119	1863	1857	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		86			2		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	50	161	55	1054	1159	23	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	50	161	55	1054	1182	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	10.8	21.2	69.3	62.4	60.1		
Actuated g/C Ratio	0.12	0.23	0.76	0.68	0.66		
v/c Ratio	0.24	0.37	0.27	0.83	0.96		
Control Delay	39.1	16.5	6.0	19.6	21.6		
Queue Delay	0.0	0.0	0.0	0.3	0.0		
Total Delay	39.1	16.5	6.0	19.9	21.6		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	B	A	B	C		
Approach Delay	21.9			19.3	21.6		
Approach LOS	C			B	C		
Queue Length 50th (ft)	26	35	5	417	125		
Queue Length 95th (ft)	61	87	16	#845	m#324		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	291	493	275	1275	1226		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	26	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.17	0.33	0.20	0.84	0.96		

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 20.6 Intersection LOS: C
Intersection Capacity Utilization 74.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Route 25 & Tashua Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1071	97	77	792	843	168	314	148	824	200	72
Future Volume (vph)	74	1071	97	77	792	843	168	314	148	824	200	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1788	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116			72			170		17	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			1769	
Travel Time (s)		14.7			12.1			7.5			30.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	1164	105	84	861	916	183	341	161	896	217	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	1164	105	84	861	916	183	341	161	896	295	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	12.0	47.0	12.0	12.0	47.0	42.0	12.0	21.0	21.0	42.0	51.0	
Total Split (%)	9.8%	38.5%	9.8%	9.8%	38.5%	34.4%	9.8%	17.2%	17.2%	34.4%	41.8%	
Maximum Green (s)	7.0	40.0	7.0	7.0	40.0	37.0	7.0	15.0	15.0	37.0	45.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	6.7	40.1	54.1	6.8	40.2	81.1	7.0	13.8	13.8	33.9	40.7	
Actuated g/C Ratio	0.06	0.34	0.46	0.06	0.34	0.69	0.06	0.12	0.12	0.29	0.35	
v/c Ratio	0.80	0.97	0.13	0.82	0.71	0.82	1.74	0.82	0.48	0.91	0.47	
Control Delay	103.3	58.0	3.3	107.1	38.5	20.1	403.6	68.0	11.4	54.0	30.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	103.3	58.0	3.3	107.1	38.5	20.1	403.6	68.0	11.4	54.0	30.7	
LOS	F	E	A	F	D	C	F	E	B	D	C	
Approach Delay		56.4			32.5			144.3			48.3	
Approach LOS		E			C			F			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	63	~484	0	67	316	439	~217	139	0	342	163	
Queue Length 95th (ft)	#153	#640	27	#161	393	670	#366	#204	57	#429	245	
Internal Link Dist (ft)		780			631			358			1689	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	105	1205	790	105	1209	1154	105	452	350	1082	696	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.76	0.97	0.13	0.80	0.71	0.79	1.74	0.75	0.46	0.83	0.42	

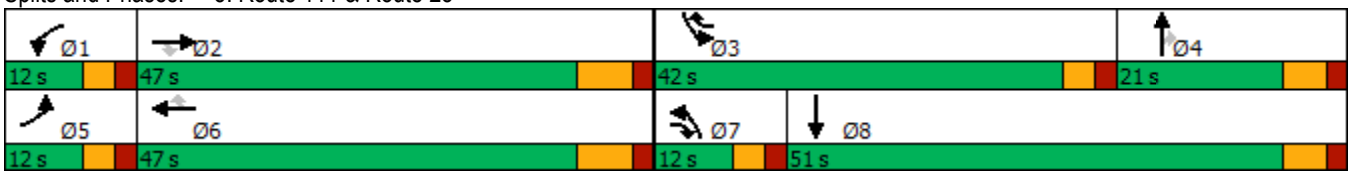
Intersection Summary

Area Type: Other
Cycle Length: 122
Actuated Cycle Length: 117.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.74
Intersection Signal Delay: 57.6 Intersection LOS: E
Intersection Capacity Utilization 85.2% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25



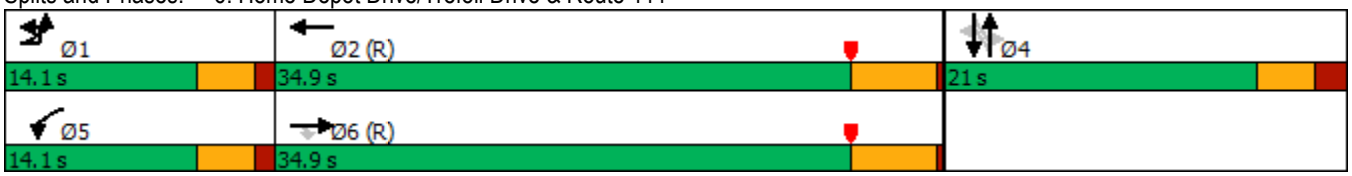
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	847	71	56	876	77	51	20	41	89	26	133
Future Volume (vph)	153	847	71	56	876	77	51	20	41	89	26	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.899			0.874	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3497	0	1770	1675	0	1770	1628	0
Flt Permitted	0.950			0.950			0.560			0.713		
Satd. Flow (perm)	1770	3539	1583	1770	3497	0	1043	1675	0	1328	1628	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92		16			45			145	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		481			302			288			263	
Travel Time (s)		8.2			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	921	77	61	952	84	55	22	45	97	28	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	921	77	61	1036	0	55	67	0	97	173	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	14.1	34.9	34.9	14.1	34.9		21.0	21.0		21.0	21.0	
Total Split (%)	20.1%	49.9%	49.9%	20.1%	49.9%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	10.0	30.0	30.0	10.0	30.0		16.2	16.2		16.2	16.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	10.8	41.5	41.5	7.9	34.5		10.9	10.9		10.9	10.9	
Actuated g/C Ratio	0.15	0.59	0.59	0.11	0.49		0.16	0.16		0.16	0.16	
v/c Ratio	0.61	0.44	0.08	0.30	0.60		0.34	0.22		0.47	0.46	
Control Delay	38.1	10.9	2.6	31.9	15.4		30.9	13.5		33.5	11.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.1	10.9	2.6	31.9	15.4		30.9	13.5		33.5	11.1	
LOS	D	B	A	C	B		C	B		C	B	
Approach Delay		14.2			16.3			21.3			19.2	
Approach LOS		B			B			C			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	66	119	0	25	160		22	8		39	11	
Queue Length 95th (ft)	#143	212	18	56	245		49	37		75	55	
Internal Link Dist (ft)		401			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	285	2099	976	254	1730		241	422		307	488	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.58	0.44	0.08	0.24	0.60		0.23	0.16		0.32	0.35	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	56	77	87	112	0	36	0	51	5	5	5
Future Volume (vph)	0	56	77	87	112	0	36	0	51	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.922						0.921			0.955	
Flt Protected					0.979			0.980			0.984	
Satd. Flow (prot)	0	1717	0	0	1824	0	0	1681	0	0	1750	0
Flt Permitted					0.979			0.980			0.984	
Satd. Flow (perm)	0	1717	0	0	1824	0	0	1681	0	0	1750	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1279			533			365			165	
Travel Time (s)		34.9			14.5			10.0			3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	61	84	95	122	0	39	0	55	5	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	0	0	217	0	0	94	0	0	15	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	56	77	87	112	0	36	0	51	5	5	5
Future Vol, veh/h	0	56	77	87	112	0	36	0	51	5	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	61	84	95	122	0	39	0	55	5	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	122	0	0	145	0	0	420	415	103	443	457	122
Stage 1	-	-	-	-	-	-	103	103	-	312	312	-
Stage 2	-	-	-	-	-	-	317	312	-	131	145	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1465	-	-	1437	-	-	544	528	952	525	500	929
Stage 1	-	-	-	-	-	-	903	810	-	699	658	-
Stage 2	-	-	-	-	-	-	694	658	-	873	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1465	-	-	1437	-	-	507	491	952	468	465	929
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	491	-	468	465	-
Stage 1	-	-	-	-	-	-	903	810	-	699	611	-
Stage 2	-	-	-	-	-	-	635	611	-	822	777	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	11	11.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	1465	-	-	1437	-	-	559
HCM Lane V/C Ratio	0.135	-	-	-	0.066	-	-	0.029
HCM Control Delay (s)	11	0	-	-	7.7	0	-	11.6
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.1

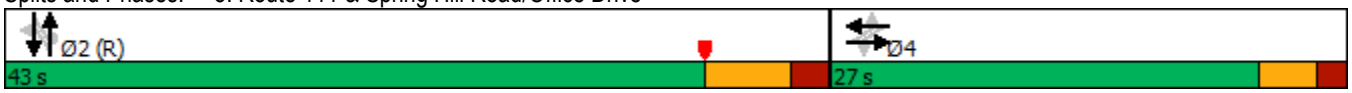
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	5	28	0	0	0	26	608	0	0	1147	61
Future Volume (vph)	26	5	28	0	0	0	26	608	0	0	1147	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.936									0.992	
Flt Protected		0.978						0.998				
Satd. Flow (prot)	0	1705	0	0	1863	0	0	3532	0	0	3511	0
Flt Permitted		0.857						0.868				
Satd. Flow (perm)	0	1494	0	0	1863	0	0	3072	0	0	3511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30									11	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	5	30	0	0	0	28	661	0	0	1247	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	0	0	0	689	0	0	1313	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		7.6						58.5			58.5	
Actuated g/C Ratio		0.11						0.84			0.84	
v/c Ratio		0.34						0.27			0.45	
Control Delay		22.9						2.8			3.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		22.9						2.8			3.6	
LOS		C						A			A	
Approach Delay		22.9						2.8			3.6	
Approach LOS		C						A			A	
Queue Length 50th (ft)		13						39			92	
Queue Length 95th (ft)		45						67			149	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		496						2568			2937	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.13						0.27			0.45	

Intersection Summary

Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 3.9	Intersection LOS: A
Intersection Capacity Utilization 51.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	117	163	0	0	0
Future Volume (vph)	1	117	163	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	1863	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		563	1279		166	
Travel Time (s)		12.8	29.1		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	127	177	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	128	177	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 11.9%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	117	163	0	0	0
Future Vol, veh/h	1	117	163	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	127	177	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	177	0	-	0	306	177
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	129	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1399	-	-	-	686	866
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	897	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1399	-	-	-	685	866
Mov Cap-2 Maneuver	-	-	-	-	685	-
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	897	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1399	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	7.6	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1015	0	0	1041
Future Volume (vph)	0	0	1015	0	0	1041
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1863	0	1863	0	0	1863
Link Speed (mph)	30		40			40
Link Distance (ft)	154		277			1826
Travel Time (s)	3.5		4.7			31.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1103	0	0	1132
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1103	0	0	1132
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1015	0	0	1041
Future Vol, veh/h	0	0	1015	0	0	1041
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1103	0	0	1132

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2235	1103	0	0	1103	0
Stage 1	1103	-	-	-	-	-
Stage 2	1132	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	47	257	-	-	633	-
Stage 1	318	-	-	-	-	-
Stage 2	308	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	47	257	-	-	633	-
Mov Cap-2 Maneuver	47	-	-	-	-	-
Stage 1	318	-	-	-	-	-
Stage 2	308	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	633	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1015	0	0	1041
Future Volume (vph)	0	0	1015	0	0	1041
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	0	1863
Link Speed (mph)	30		40			40
Link Distance (ft)	176		204			277
Travel Time (s)	4.0		3.5			4.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1103	0	0	1132
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1103	0	0	1132
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1015	0	0	1041
Future Vol, veh/h	0	0	1015	0	0	1041
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1103	0	0	1132

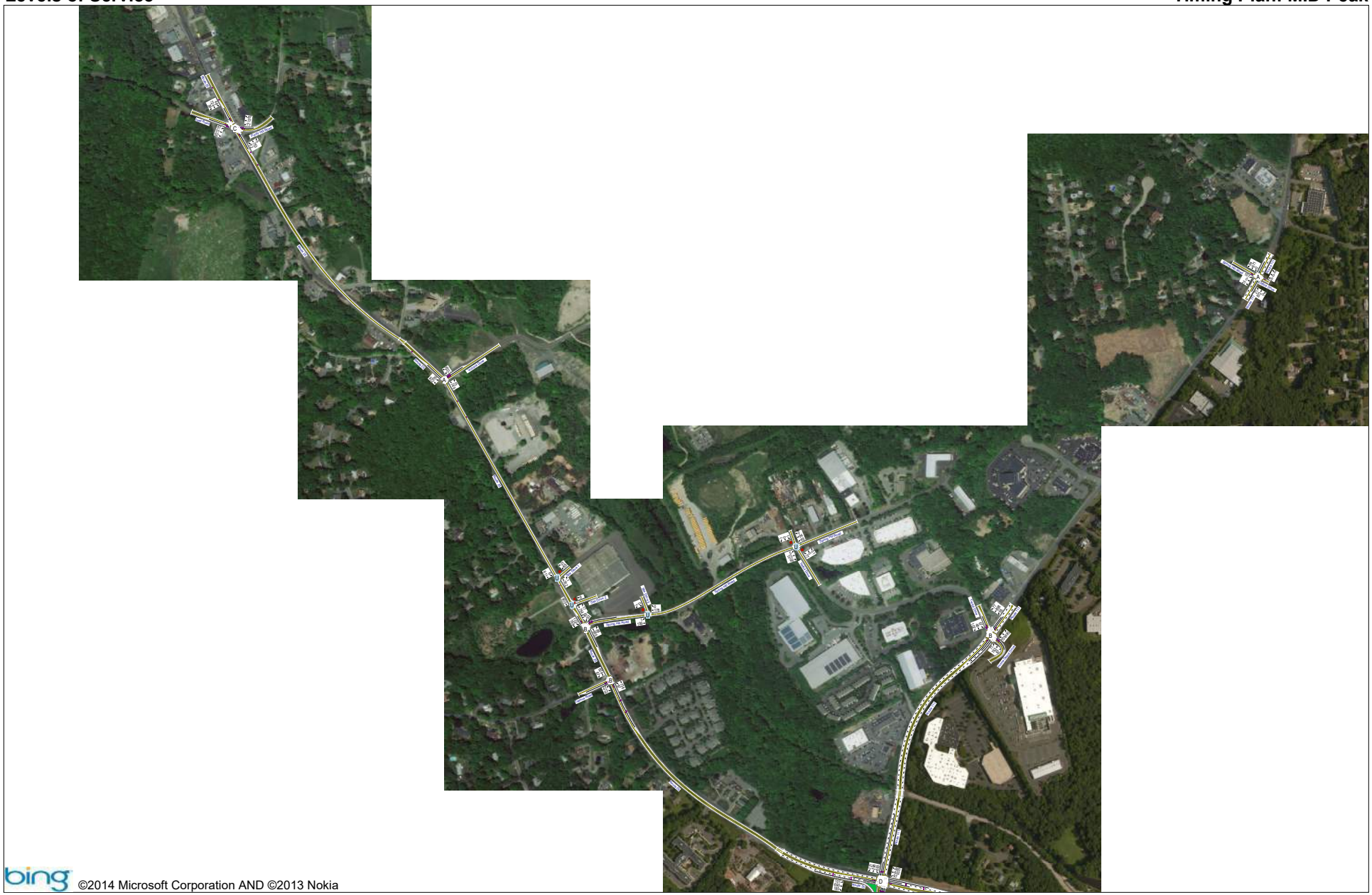
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1103	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	257	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	257	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

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

Map - Proposed Delivery Station Building Improvements
Levels of Service

Build
Timing Plan: MID Peak



BL Companies
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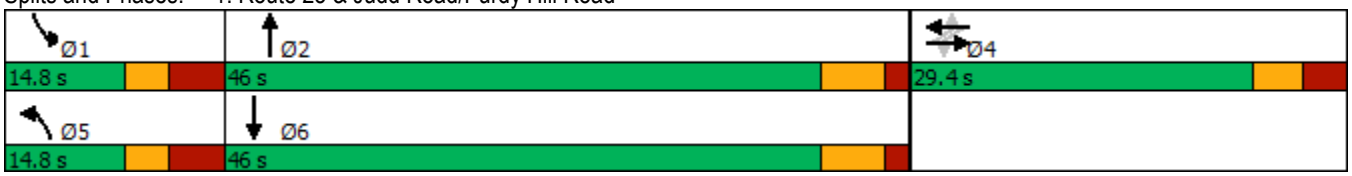
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	51	62	77	77	87	52	753	5	46	724	36
Future Volume (vph)	87	51	62	77	77	87	52	753	5	46	724	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.918			0.920			0.999			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1710	0	1770	1714	0	1770	1861	0	1770	1850	0
Flt Permitted	0.619			0.679			0.950			0.950		
Satd. Flow (perm)	1153	1710	0	1265	1714	0	1770	1861	0	1770	1850	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		65										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			483	
Travel Time (s)		8.5			7.5			37.7			8.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	55	67	84	84	95	57	818	5	50	787	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	122	0	84	179	0	57	823	0	50	826	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	29.4	29.4		29.4	29.4		14.8	46.0		14.8	46.0	
Total Split (%)	32.6%	32.6%		32.6%	32.6%		16.4%	51.0%		16.4%	51.0%	
Maximum Green (s)	23.0	23.0		23.0	23.0		8.0	40.0		8.0	40.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	12.5	12.5		12.5	12.5		6.5	39.5		6.4	39.4	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.09	0.55		0.09	0.55	
v/c Ratio	0.48	0.35		0.39	0.61		0.36	0.81		0.32	0.82	
Control Delay	37.8	18.3		34.2	38.6		41.4	24.8		40.7	25.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	37.8	18.3		34.2	38.6		41.4	24.8		40.7	25.6	
LOS	D	B		C	D		D	C		D	C	
Approach Delay		26.8			37.2			25.9			26.5	
Approach LOS		C			D			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	43	24		37	83		27	328		24	335	
Queue Length 95th (ft)	90	70		80	148		66	#663		60	#670	
Internal Link Dist (ft)		293			248			2130			403	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	380	608		417	565		203	1071		203	1062	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.25	0.20		0.20	0.32		0.28	0.77		0.25	0.78	

Intersection Summary	
Area Type: Other	
Cycle Length: 90.2	
Actuated Cycle Length: 72.2	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 27.5	Intersection LOS: C
Intersection Capacity Utilization 73.1%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	26	749	15	20	822
Future Volume (vph)	31	26	749	15	20	822
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1857	0	1770	1863
Flt Permitted	0.950				0.262	
Satd. Flow (perm)	1770	1583	1857	0	488	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		28	2			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		1834			466
Travel Time (s)	14.3		31.3			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	28	814	16	22	893
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	28	830	0	22	893
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	7.5	7.5	46.2		45.1	46.2
Actuated g/C Ratio	0.13	0.13	0.81		0.79	0.81
v/c Ratio	0.15	0.12	0.55		0.04	0.59
Control Delay	26.4	12.2	7.1		2.5	8.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	26.4	12.2	7.1		2.5	8.2
LOS	C	B	A		A	A
Approach Delay	20.0		7.1			8.0
Approach LOS	B		A			A

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	12	0	107		2	123
Queue Length 95th (ft)	37	21	368		6	#450
Internal Link Dist (ft)	446		1754			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	554	515	1502		632	1506
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.05	0.55		0.03	0.59

Intersection Summary	
Area Type: Other	
Cycle Length: 82	
Actuated Cycle Length: 57.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 8.0	Intersection LOS: A
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	93	89	685	98	102	798	
Future Volume (vph)	93	89	685	98	102	798	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.296		
Satd. Flow (perm)	1770	1583	1863	1583	551	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		97		94			
Link Speed (mph)	25		40			40	
Link Distance (ft)	520		462			222	
Travel Time (s)	14.2		7.9			3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	101	97	745	107	111	867	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	101	97	745	107	111	867	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	10.6	10.6	59.9	59.9	65.1	56.5	
Actuated g/C Ratio	0.12	0.12	0.67	0.67	0.73	0.64	
v/c Ratio	0.48	0.35	0.59	0.10	0.22	0.73	
Control Delay	46.0	12.0	5.1	0.4	3.6	16.2	
Queue Delay	0.0	0.0	0.1	0.0	0.0	0.0	
Total Delay	46.0	12.0	5.3	0.4	3.6	16.2	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	B	
Approach Delay	29.3		4.6			14.8	
Approach LOS	C		A			B	
Queue Length 50th (ft)	56	0	68	0	10	297	
Queue Length 95th (ft)	108	45	85	m1	26	532	
Internal Link Dist (ft)	440		382			142	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	303	351	1292	1126	562	1276	
Starvation Cap Reductn	0	0	78	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.33	0.28	0.61	0.10	0.20	0.68	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 88.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 12.0 Intersection LOS: B
Intersection Capacity Utilization 59.0% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	47	82	97	736	824	67	
Future Volume (vph)	47	82	97	736	824	67	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.990		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1844	0	
Flt Permitted	0.950		0.133				
Satd. Flow (perm)	1770	1583	248	1863	1844	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		89			8		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	51	89	105	800	896	73	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	51	89	105	800	969	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	10.6	22.6	67.9	59.9	56.5		
Actuated g/C Ratio	0.12	0.25	0.76	0.67	0.64		
v/c Ratio	0.24	0.19	0.32	0.64	0.83		
Control Delay	39.9	7.2	5.2	12.6	11.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	39.9	7.2	5.2	12.6	11.7		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	A	A	B	B		
Approach Delay	19.1			11.8	11.7		
Approach LOS	B			B	B		
Queue Length 50th (ft)	28	0	10	245	111		
Queue Length 95th (ft)	63	35	25	441	#164		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	303	506	366	1292	1265		
Starvation Cap Reductn	0	0	0	0	1		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.17	0.18	0.29	0.62	0.77		

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 88.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 12.3 — Intersection LOS: B
Intersection Capacity Utilization 70.1% — ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Route 25 & Tashua Road

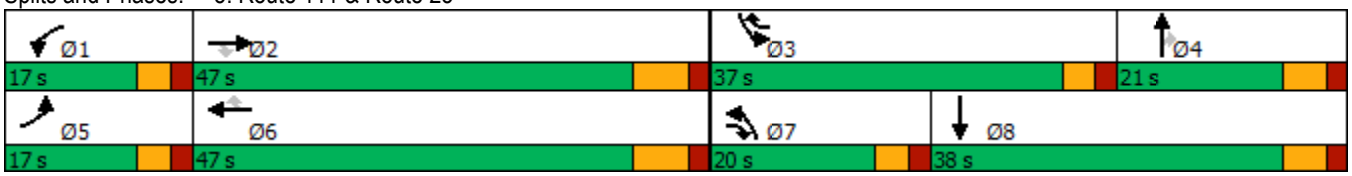
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	690	185	97	602	480	164	309	97	693	298	121
Future Volume (vph)	101	690	185	97	602	480	164	309	97	693	298	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.957	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1783	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			201			128			170		16	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			727	
Travel Time (s)		14.7			12.1			7.5			12.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	750	201	105	654	522	178	336	105	753	324	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	110	750	201	105	654	522	178	336	105	753	456	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	17.0	47.0	20.0	17.0	47.0	37.0	20.0	21.0	21.0	37.0	38.0	
Total Split (%)	13.9%	38.5%	16.4%	13.9%	38.5%	30.3%	16.4%	17.2%	17.2%	30.3%	31.1%	
Maximum Green (s)	12.0	40.0	15.0	12.0	40.0	32.0	15.0	15.0	15.0	32.0	32.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	9.4	26.6	47.6	9.2	26.4	60.0	13.9	17.3	17.3	26.4	29.8	
Actuated g/C Ratio	0.09	0.26	0.46	0.09	0.26	0.58	0.13	0.17	0.17	0.26	0.29	
v/c Ratio	0.68	0.82	0.24	0.66	0.72	0.54	0.74	0.57	0.26	0.86	0.87	
Control Delay	69.9	44.7	3.0	68.9	40.3	11.4	65.3	46.6	2.2	47.9	53.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	69.9	44.7	3.0	68.9	40.3	11.4	65.3	46.6	2.2	47.9	53.1	
LOS	E	D	A	E	D	B	E	D	A	D	D	
Approach Delay		39.4			30.9			44.4			49.9	
Approach LOS		D			C			D			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	74	256	0	70	217	153	118	110	0	251	281	
Queue Length 95th (ft)	#153	334	38	139	285	223	#252	#188	5	354	#534	
Internal Link Dist (ft)		780			631			358			647	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	211	1406	859	211	1406	1064	263	596	408	1091	577	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.52	0.53	0.23	0.50	0.47	0.49	0.68	0.56	0.26	0.69	0.79	

Intersection Summary	
Area Type: Other	
Cycle Length: 122	
Actuated Cycle Length: 103	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 40.6	Intersection LOS: D
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25



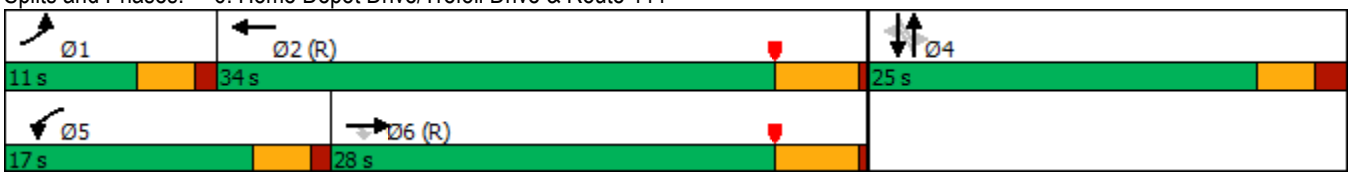
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	762	87	56	898	77	61	26	92	67	46	102
Future Volume (vph)	77	762	87	56	898	77	61	26	92	67	46	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.988			0.883			0.897	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3497	0	1770	1645	0	1770	1671	0
Flt Permitted	0.950			0.950			0.583			0.675		
Satd. Flow (perm)	1770	3539	1583	1770	3497	0	1086	1645	0	1257	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			156		16			100			111	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1534			302			288			263	
Travel Time (s)		26.1			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	828	95	61	976	84	66	28	100	73	50	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	828	95	61	1060	0	66	128	0	73	161	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	11.0	28.0	28.0	17.0	34.0		25.0	25.0		25.0	25.0	
Total Split (%)	15.7%	40.0%	40.0%	24.3%	48.6%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	6.9	23.1	23.1	12.9	29.1		20.2	20.2		20.2	20.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	8.7	42.3	42.3	8.0	39.4		10.0	10.0		10.0	10.0	
Actuated g/C Ratio	0.12	0.60	0.60	0.11	0.56		0.14	0.14		0.14	0.14	
v/c Ratio	0.38	0.39	0.09	0.30	0.54		0.43	0.40		0.41	0.48	
Control Delay	32.4	9.8	0.9	31.7	12.5		35.0	12.7		33.2	15.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.4	9.8	0.9	31.7	12.5		35.0	12.7		33.2	15.0	
LOS	C	A	A	C	B		C	B		C	B	
Approach Delay		10.9			13.6			20.3			20.7	
Approach LOS		B			B			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	34	100	0	25	142		27	11		29	20	
Queue Length 95th (ft)	69	180	8	56	255		58	51		62	64	
Internal Link Dist (ft)		1454			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	226	2140	1018	326	1976		313	545		362	561	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.39	0.09	0.19	0.54		0.21	0.23		0.20	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.54
Intersection Signal Delay: 13.7 Intersection LOS: B
Intersection Capacity Utilization 61.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	123	66	46	94	0	77	0	51	1	0	1
Future Volume (vph)	5	123	66	46	94	0	77	0	51	1	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954						0.947			0.932	
Flt Protected		0.999			0.984			0.971			0.976	
Satd. Flow (prot)	0	1775	0	0	1833	0	0	1713	0	0	1694	0
Flt Permitted		0.999			0.984			0.971			0.976	
Satd. Flow (perm)	0	1775	0	0	1833	0	0	1713	0	0	1694	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1325			533			365			137	
Travel Time (s)		36.1			14.5			10.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	134	72	50	102	0	84	0	55	1	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	211	0	0	152	0	0	139	0	0	2	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 38.2%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	123	66	46	94	0	77	0	51	1	0	1
Future Vol, veh/h	5	123	66	46	94	0	77	0	51	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	134	72	50	102	0	84	0	55	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	102	0	0	206	0	0	383	382	170	410	418	102
Stage 1	-	-	-	-	-	-	180	180	-	202	202	-
Stage 2	-	-	-	-	-	-	203	202	-	208	216	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1490	-	-	1365	-	-	575	551	874	552	526	953
Stage 1	-	-	-	-	-	-	822	750	-	800	734	-
Stage 2	-	-	-	-	-	-	799	734	-	794	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1365	-	-	555	527	874	500	503	953
Mov Cap-2 Maneuver	-	-	-	-	-	-	555	527	-	500	503	-
Stage 1	-	-	-	-	-	-	819	747	-	797	705	-
Stage 2	-	-	-	-	-	-	767	705	-	741	721	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.5	12.1	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	649	1490	-	-	1365	-	-	656
HCM Lane V/C Ratio	0.214	0.004	-	-	0.037	-	-	0.003
HCM Control Delay (s)	12.1	7.4	0	-	7.7	0	-	10.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0

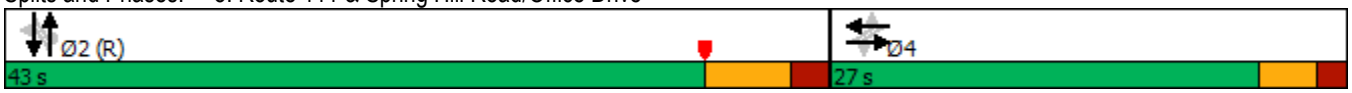
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	0	21	0	0	0	21	872	0	0	971	84
Future Volume (vph)	107	0	21	0	0	0	21	872	0	0	971	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.978									0.988	
Flt Protected		0.960						0.999				
Satd. Flow (prot)	0	1749	0	0	1863	0	0	3536	0	0	3497	0
Flt Permitted		0.761						0.910				
Satd. Flow (perm)	0	1386	0	0	1863	0	0	3221	0	0	3497	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55									19	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	0	23	0	0	0	23	948	0	0	1055	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	139	0	0	0	0	0	971	0	0	1146	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		9.8						52.7			52.7	
Actuated g/C Ratio		0.14						0.75			0.75	
v/c Ratio		0.58						0.40			0.43	
Control Delay		26.9						5.1			5.2	
Queue Delay		0.0						0.0			0.0	
Total Delay		26.9						5.1			5.2	
LOS		C						A			A	
Approach Delay		26.9						5.1			5.2	
Approach LOS		C						A			A	
Queue Length 50th (ft)		34						72			86	
Queue Length 95th (ft)		79						140			164	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		479						2423			2635	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.29						0.40			0.43	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 6.5 Intersection LOS: A
Intersection Capacity Utilization 55.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	199	178	0	0	1
Future Volume (vph)	1	199	178	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.865	
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	1611	0
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		520	1325		152	
Travel Time (s)		11.8	30.1		3.5	
Confl. Peds. (#/hr)	199					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	216	193	0	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	217	193	0	1	0
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	199	178	0	0	1
Future Vol, veh/h	1	199	178	0	0	1
Conflicting Peds, #/hr	199	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	216	193	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	392	0	-	0	610	392
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1167	-	-	-	458	657
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	946	-	-	-	300	532
Mov Cap-2 Maneuver	-	-	-	-	300	-
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	663	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	946	-	-	-	532
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s)	8.8	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	9	754	17	0	900
Future Volume (vph)	0	9	754	17	0	900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865	0.997			
Flt Protected						
Satd. Flow (prot)	0	1611	1857	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1611	1857	0	0	1863
Link Speed (mph)	30		40			40
Link Distance (ft)	213		222			251
Travel Time (s)	4.8		3.8			4.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	10	820	18	0	978
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	10	838	0	0	978
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	754	17	0	900
Future Vol, veh/h	0	9	754	17	0	900
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	820	18	0	978

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	829	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	370	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	370	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	370	-
HCM Lane V/C Ratio	-	-	0.026	-
HCM Control Delay (s)	-	-	15	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	89	21	762	1	6	811
Future Volume (vph)	89	21	762	1	6	811
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974					
Flt Protected	0.961					
Satd. Flow (prot)	1744	0	1863	0	0	1863
Flt Permitted	0.961					
Satd. Flow (perm)	1744	0	1863	0	0	1863
Link Speed (mph)	30		40			40
Link Distance (ft)	133		251			1834
Travel Time (s)	3.0		4.3			31.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	23	828	1	7	882
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	0	829	0	0	889
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 60.3%	ICU Level of Service B
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	11.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	89	21	762	1	6	811
Future Vol, veh/h	89	21	762	1	6	811
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	23	828	1	7	882

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1725	829	0	0	829	0
Stage 1	829	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	98	370	-	-	803	-
Stage 1	429	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 96	370	-	-	803	-
Mov Cap-2 Maneuver	~ 96	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	392	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	177.5	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	112	803	-
HCM Lane V/C Ratio	-	-	1.068	0.008	-
HCM Control Delay (s)	-	-	177.5	9.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.2	0	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Map - Proposed Delivery Station Building Improvements
Levels of Service

Build
Timing Plan: PM Peak

BL Companies
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	179	65	66	71	97	47	1041	5	56	1047	46
Future Volume (vph)	56	179	65	66	71	97	47	1041	5	56	1047	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	135		0	85		0	130		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	75			96			96			96		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.913			0.999			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1788	0	1770	1701	0	1770	1861	0	1770	1852	0
Flt Permitted	0.549			0.334			0.950			0.950		
Satd. Flow (perm)	1023	1788	0	622	1701	0	1770	1861	0	1770	1852	0
Right Turn on Red			Yes			No			Yes			No
Satd. Flow (RTOR)		17										
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		373			328			2210			332	
Travel Time (s)		8.5			7.5			37.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	195	71	72	77	105	51	1132	5	61	1138	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	266	0	72	182	0	51	1137	0	61	1188	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	25.0		5.0	25.0	
Minimum Split (s)	11.4	11.4		11.4	11.4		11.8	31.0		11.8	31.0	
Total Split (s)	25.0	25.0		25.0	25.0		12.0	60.0		12.0	60.0	
Total Split (%)	25.8%	25.8%		25.8%	25.8%		12.4%	61.9%		12.4%	61.9%	
Maximum Green (s)	18.6	18.6		18.6	18.6		5.2	54.0		5.2	54.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	4.2		3.0	4.2	
All-Red Time (s)	3.1	3.1		3.1	3.1		3.8	1.8		3.8	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.4	6.4		6.4	6.4		6.8	6.0		6.8	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	16.1	16.1		16.1	16.1		5.2	54.5		5.2	54.5	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.06	0.59		0.06	0.59	
v/c Ratio	0.34	0.82		0.67	0.61		0.52	1.04		0.62	1.09	
Control Delay	40.1	55.4		66.8	45.4		63.7	59.2		71.9	76.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.1	55.4		66.8	45.4		63.7	59.2		71.9	76.6	
LOS	D	E		E	D		E	E		E	E	
Approach Delay		52.6			51.5			59.4			76.4	
Approach LOS		D			D			E			E	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	33	146		41	102		31	~798		38	~868	
Queue Length 95th (ft)	72	#260		#105	172		#82	#1047		#100	#1117	
Internal Link Dist (ft)		293			248			2130			252	
Turn Bay Length (ft)	135			85			130			100		
Base Capacity (vph)	208	376		126	345		100	1098		100	1093	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.29	0.71		0.57	0.53		0.51	1.04		0.61	1.09	

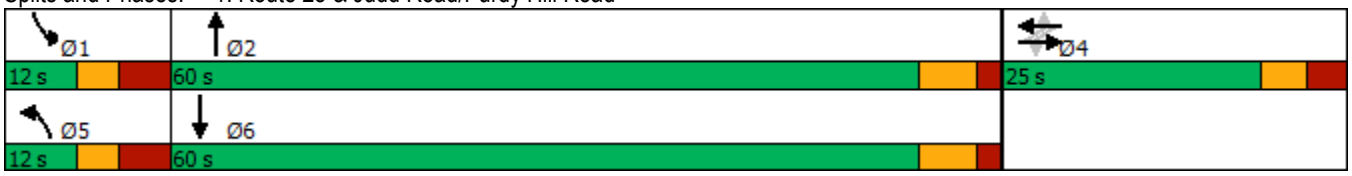
Intersection Summary

Area Type: Other
Cycle Length: 97
Actuated Cycle Length: 92.3
Natural Cycle: 120
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 65.0 Intersection LOS: E
Intersection Capacity Utilization 91.1% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 25 & Judd Road/Purdy Hill Road



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	82	36	1058	10	5	1174
Future Volume (vph)	82	36	1058	10	5	1174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210	145		0	150	
Storage Lanes	0	1		0	1	
Taper Length (ft)	120				96	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.999			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1861	0	1770	1863
Flt Permitted	0.950				0.088	
Satd. Flow (perm)	1770	1583	1861	0	164	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		39	1			
Link Speed (mph)	25		40			40
Link Distance (ft)	526		1826			466
Travel Time (s)	14.3		31.1			7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	39	1150	11	5	1276
Shared Lane Traffic (%)						
Lane Group Flow (vph)	89	39	1161	0	5	1276
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	2
Permitted Phases		4			2	
Detector Phase	4	4	2		1	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	18.0		5.0	18.0
Minimum Split (s)	11.5	11.5	22.8		9.5	22.8
Total Split (s)	22.0	22.0	45.0		15.0	45.0
Total Split (%)	26.8%	26.8%	54.9%		18.3%	54.9%
Maximum Green (s)	17.5	17.5	40.2		10.5	40.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.3		1.0	1.3
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.8		4.5	4.8
Lead/Lag			Lag		Lead	Lag
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	2.5		2.0	2.5
Recall Mode	None	None	Min		None	Min
Act Effct Green (s)	8.8	8.8	46.6		46.8	46.6
Actuated g/C Ratio	0.14	0.14	0.74		0.74	0.74
v/c Ratio	0.36	0.15	0.84		0.02	0.93
Control Delay	28.9	10.6	18.3		3.2	25.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	28.9	10.6	18.3		3.2	25.9
LOS	C	B	B		A	C
Approach Delay	23.3		18.3			25.8
Approach LOS	C		B			C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	28	0	249		1	327
Queue Length 95th (ft)	74	24	#826		3	#929
Internal Link Dist (ft)	446		1746			386
Turn Bay Length (ft)	210	145			150	
Base Capacity (vph)	494	470	1375		392	1376
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.18	0.08	0.84		0.01	0.93

Intersection Summary	
Area Type: Other	
Cycle Length: 82	
Actuated Cycle Length: 63.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 22.3	Intersection LOS: C
Intersection Capacity Utilization 75.4%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 25 & Victoria Drive

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations							
Traffic Volume (vph)	102	56	1005	121	81	1197	
Future Volume (vph)	102	56	1005	121	81	1197	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	220		150	145		
Storage Lanes	1	1		1	1		
Taper Length (ft)	25				205		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850		0.850			
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863	
Flt Permitted	0.950				0.114		
Satd. Flow (perm)	1770	1583	1863	1583	212	1863	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		61		79			
Link Speed (mph)	25		40			40	
Link Distance (ft)	534		462			221	
Travel Time (s)	14.6		7.9			3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	111	61	1092	132	88	1301	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	111	61	1092	132	88	1301	
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA	
Protected Phases	4		2		1	6	5
Permitted Phases		4		2	6		
Detector Phase	4	4	2	2	1	6	
Switch Phase							
Minimum Initial (s)	7.0	7.0	18.0	18.0	5.0	18.0	5.0
Minimum Split (s)	11.0	11.0	23.7	23.7	9.0	23.7	9.0
Total Split (s)	19.0	19.0	65.7	65.7	14.0	65.7	14.0
Total Split (%)	19.3%	19.3%	66.6%	66.6%	14.2%	66.6%	14%
Maximum Green (s)	15.0	15.0	60.0	60.0	10.0	60.0	10.0
Yellow Time (s)	3.0	3.0	4.3	4.3	3.0	4.3	3.0
All-Red Time (s)	1.0	1.0	1.4	1.4	1.0	1.4	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.7	5.7	4.0	5.7	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	3.0	3.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	Min	Min	None	Min	None
Act Effct Green (s)	11.0	11.0	65.4	65.4	69.4	60.5	
Actuated g/C Ratio	0.12	0.12	0.72	0.72	0.76	0.66	
v/c Ratio	0.52	0.25	0.82	0.11	0.31	1.05	
Control Delay	47.6	12.8	9.1	1.4	5.7	59.2	
Queue Delay	0.0	0.0	0.7	0.0	0.0	6.7	
Total Delay	47.6	12.8	9.9	1.4	5.7	65.9	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø5
LOS	D	B	A	A	A	E	
Approach Delay	35.3		9.0			62.1	
Approach LOS	D		A			E	
Queue Length 50th (ft)	63	0	86	1	9	~875	
Queue Length 95th (ft)	118	36	m#849	m2	21	#1220	
Internal Link Dist (ft)	454		382			141	
Turn Bay Length (ft)		220		150	145		
Base Capacity (vph)	294	314	1338	1159	341	1239	
Starvation Cap Reductn	0	0	67	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	20	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.38	0.19	0.86	0.11	0.26	1.07	

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 37.1 — Intersection LOS: D
Intersection Capacity Utilization 76.9% — ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 25 & Spring Hill Road

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	45	107	133	1081	1237	62	
Future Volume (vph)	45	107	133	1081	1237	62	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	185	390			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		90				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.850			0.994		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1852	0	
Flt Permitted	0.950		0.062				
Satd. Flow (perm)	1770	1583	115	1863	1852	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		56			5		
Link Speed (mph)	25			40	40		
Link Distance (ft)	287			1984	462		
Travel Time (s)	7.8			33.8	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	49	116	145	1175	1345	67	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	49	116	145	1175	1412	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		1
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	5.0	5.0	18.0	18.0		5.0
Minimum Split (s)	11.0	9.0	9.0	23.7	23.7		9.0
Total Split (s)	19.0	14.0	14.0	65.7	65.7		14.0
Total Split (%)	19.3%	14.2%	14.2%	66.6%	66.6%		14%
Maximum Green (s)	15.0	10.0	10.0	60.0	60.0		10.0
Yellow Time (s)	3.0	3.0	3.0	4.3	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.4	1.4		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.7	5.7		
Lead/Lag		Lead	Lead	Lag	Lag		Lead
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0
Time Before Reduce (s)	0.0	0.0	0.0	3.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Act Effct Green (s)	11.0	20.7	72.5	65.4	60.5		
Actuated g/C Ratio	0.12	0.23	0.80	0.72	0.66		
v/c Ratio	0.23	0.29	0.60	0.88	1.15		
Control Delay	39.9	17.1	26.8	24.6	79.9		
Queue Delay	0.0	0.0	0.0	0.8	0.0		
Total Delay	39.9	17.1	26.8	25.4	79.9		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
LOS	D	B	C	C	E		
Approach Delay	23.9			25.6	79.9		
Approach LOS	C			C	E		
Queue Length 50th (ft)	27	28	31	564	~328		
Queue Length 95th (ft)	61	71	102	#1049	m#342		
Internal Link Dist (ft)	207			1904	382		
Turn Bay Length (ft)		185	390				
Base Capacity (vph)	294	433	276	1338	1233		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	38	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.17	0.27	0.53	0.90	1.15		

Intersection Summary

Area Type: Other
Cycle Length: 98.7
Actuated Cycle Length: 91
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 52.0 Intersection LOS: D
Intersection Capacity Utilization 93.5% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Route 25 & Tashua Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	1068	215	158	990	698	157	386	102	846	361	114
Future Volume (vph)	109	1068	215	158	990	698	157	386	102	846	361	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		500	165		320	350		135	500		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	230			220			65			95		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt			0.850			0.850			0.850		0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1796	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3539	1583	3433	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			107			170		13	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		860			711			438			727	
Travel Time (s)		14.7			12.1			7.5			12.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	1161	234	172	1076	759	171	420	111	920	392	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1161	234	172	1076	759	171	420	111	920	516	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2	7	1	6	3	7	4		3	8	
Permitted Phases			2			6			4			
Detector Phase	5	2	7	1	6	3	7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	7.0	5.0	15.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	10.0	22.0	12.0	10.0	22.0	12.0	12.0	13.0	13.0	12.0	13.0	
Total Split (s)	17.0	47.0	20.0	17.0	47.0	37.0	20.0	21.0	21.0	37.0	38.0	
Total Split (%)	13.9%	38.5%	16.4%	13.9%	38.5%	30.3%	16.4%	17.2%	17.2%	30.3%	31.1%	
Maximum Green (s)	12.0	40.0	15.0	12.0	40.0	32.0	15.0	15.0	15.0	32.0	32.0	
Yellow Time (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	2.5	3.0	1.0	2.5	2.0	3.0	2.0	2.0	2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None	None	None	None	
Act Effct Green (s)	10.5	40.0	61.2	12.0	41.5	80.5	14.2	15.0	15.0	32.0	32.8	
Actuated g/C Ratio	0.09	0.33	0.50	0.10	0.34	0.66	0.12	0.12	0.12	0.26	0.27	
v/c Ratio	0.78	1.00	0.27	0.99	0.89	0.70	0.83	0.97	0.32	1.02	1.05	
Control Delay	86.0	67.8	7.6	120.5	49.2	15.7	83.4	88.7	3.7	80.2	97.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	86.0	67.8	7.6	120.5	49.2	15.7	83.4	88.7	3.7	80.2	97.0	
LOS	F	E	A	F	D	B	F	F	A	F	F	
Approach Delay		59.9			42.6			74.0			86.2	
Approach LOS		E			D			E			F	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	91	~481	38	138	428	313	133	175	0	~396	~445	
Queue Length 95th (ft)	#175	#637	85	#284	#562	469	#246	#281	11	#525	#663	
Internal Link Dist (ft)		780			631			358			647	
Turn Bay Length (ft)	190		500	165		320	350		135	500		
Base Capacity (vph)	174	1160	872	174	1204	1080	217	435	343	900	491	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.68	1.00	0.27	0.99	0.89	0.70	0.79	0.97	0.32	1.02	1.05	

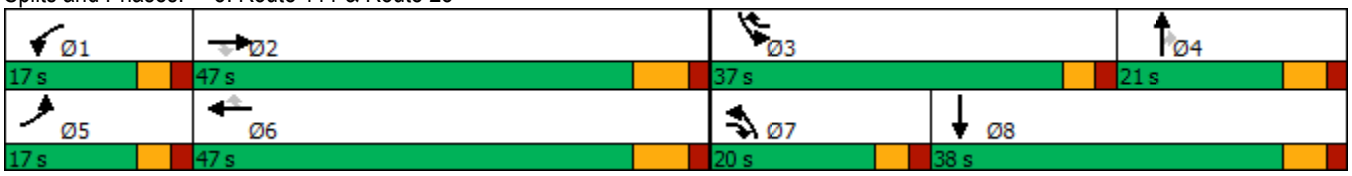
Intersection Summary

Area Type: Other
Cycle Length: 122
Actuated Cycle Length: 122
Natural Cycle: 120
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 62.2 Intersection LOS: E
Intersection Capacity Utilization 92.2% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Route 111 & Route 25



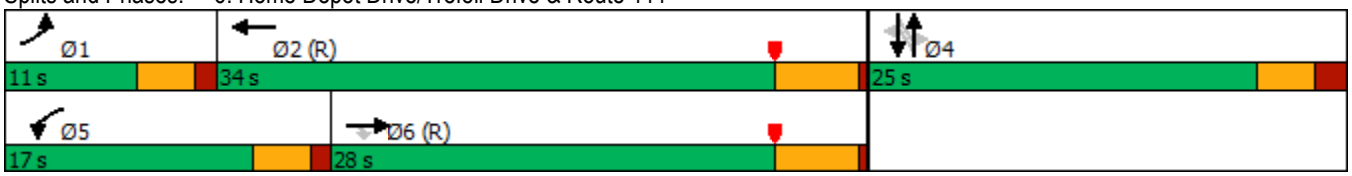
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	1056	77	77	1128	83	92	31	71	73	26	158
Future Volume (vph)	128	1056	77	77	1128	83	92	31	71	73	26	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		230	200		0	90		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	115			120			90			96		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.990			0.896			0.871	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3504	0	1770	1669	0	1770	1622	0
Flt Permitted	0.950			0.950			0.510			0.685		
Satd. Flow (perm)	1770	3539	1583	1770	3504	0	950	1669	0	1276	1622	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			156		13			77			172	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1532			302			288			263	
Travel Time (s)		26.1			5.1			7.9			7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	139	1148	84	84	1226	90	100	34	77	79	28	172
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	1148	84	84	1316	0	100	111	0	79	200	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases			6				4			4		
Detector Phase	1	6	6	5	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	9.1	19.9	19.9	9.1	19.9		11.8	11.8		11.8	11.8	
Total Split (s)	11.0	28.0	28.0	17.0	34.0		25.0	25.0		25.0	25.0	
Total Split (%)	15.7%	40.0%	40.0%	24.3%	48.6%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	6.9	23.1	23.1	12.9	29.1		20.2	20.2		20.2	20.2	
Yellow Time (s)	3.0	4.4	4.4	3.0	4.4		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.1	0.5	0.5	1.1	0.5		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.1	4.9	4.9	4.1	4.9		4.8	4.8		4.8	4.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	10.0	37.0	37.0	8.7	33.7		12.4	12.4		12.4	12.4	
Actuated g/C Ratio	0.14	0.53	0.53	0.12	0.48		0.18	0.18		0.18	0.18	
v/c Ratio	0.55	0.61	0.09	0.38	0.78		0.60	0.31		0.35	0.47	
Control Delay	38.4	16.7	0.6	32.4	20.7		39.7	11.5		27.7	9.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.4	16.7	0.6	32.4	20.7		39.7	11.5		27.7	9.4	
LOS	D	B	A	C	C		D	B		C	A	
Approach Delay		17.9			21.4			24.9			14.6	
Approach LOS		B			C			C			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	55	175	0	34	240		41	13		31	10	
Queue Length 95th (ft)	#135	#363	5	69	#404		77	46		60	55	
Internal Link Dist (ft)		1452			222			208			183	
Turn Bay Length (ft)	230		230	200			90			100		
Base Capacity (vph)	253	1868	909	326	1695		274	536		368	590	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.55	0.61	0.09	0.26	0.78		0.36	0.21		0.21	0.34	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 19.6 Intersection LOS: B
Intersection Capacity Utilization 73.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Home Depot Drive/Trefoil Drive & Route 111



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	101	51	56	102	0	56	0	82	0	0	0
Future Volume (vph)	5	101	51	56	102	0	56	0	82	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956						0.920				
Flt Protected		0.999			0.983			0.980				
Satd. Flow (prot)	0	1779	0	0	1831	0	0	1679	0	0	1863	0
Flt Permitted		0.999			0.983			0.980				
Satd. Flow (perm)	0	1779	0	0	1831	0	0	1679	0	0	1863	0
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		1315			533			365			175	
Travel Time (s)		35.9			14.5			10.0			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	110	55	61	111	0	61	0	89	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	170	0	0	172	0	0	150	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.3%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	101	51	56	102	0	56	0	82	0	0	0
Future Vol, veh/h	5	101	51	56	102	0	56	0	82	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	110	55	61	111	0	61	0	89	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	165	0	0	381	381	138	425	408	111
Stage 1	-	-	-	-	-	-	148	148	-	233	233	-
Stage 2	-	-	-	-	-	-	233	233	-	192	175	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1479	-	-	1413	-	-	577	552	910	540	533	942
Stage 1	-	-	-	-	-	-	855	775	-	770	712	-
Stage 2	-	-	-	-	-	-	770	712	-	810	754	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1479	-	-	1413	-	-	555	524	910	469	506	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	555	524	-	469	506	-
Stage 1	-	-	-	-	-	-	852	772	-	767	679	-
Stage 2	-	-	-	-	-	-	735	679	-	728	751	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.7	11.3	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	722	1479	-	-	1413	-	-	-
HCM Lane V/C Ratio	0.208	0.004	-	-	0.043	-	-	-
HCM Control Delay (s)	11.3	7.4	0	-	7.7	0	-	0
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	-

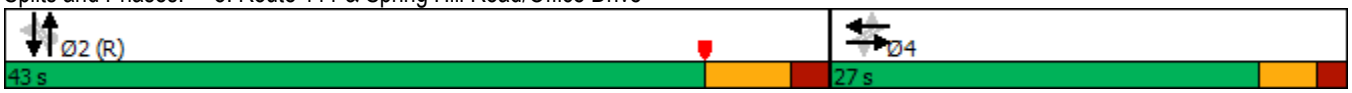
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	0	22	0	0	0	27	1187	0	0	818	61
Future Volume (vph)	65	0	22	0	0	0	27	1187	0	0	818	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.966									0.990	
Flt Protected		0.964						0.999				
Satd. Flow (prot)	0	1735	0	0	1863	0	0	3536	0	0	3504	0
Flt Permitted		0.780						0.918				
Satd. Flow (perm)	0	1404	0	0	1863	0	0	3249	0	0	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55									16	
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		238			96			211			211	
Travel Time (s)		6.5			2.2			3.6			3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	0	24	0	0	0	29	1290	0	0	889	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	95	0	0	0	0	0	1319	0	0	955	0
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		29.0	29.0		29.0	29.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Maximum Green (s)	22.3	22.3		22.3	22.3		36.5	36.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	1.7	1.7		1.7	1.7		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.7			4.7			6.5			6.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		8.1						54.4			54.4	
Actuated g/C Ratio		0.12						0.78			0.78	
v/c Ratio		0.45						0.52			0.35	
Control Delay		21.7						5.1			3.8	
Queue Delay		0.0						0.0			0.0	
Total Delay		21.7						5.1			3.8	
LOS		C						A			A	
Approach Delay		21.7						5.1			3.8	
Approach LOS		C						A			A	
Queue Length 50th (ft)		16						98			57	
Queue Length 95th (ft)		55						181			104	
Internal Link Dist (ft)		158			16			131			131	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		484						2523			2724	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.52			0.35	

Intersection Summary

Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 5.3	Intersection LOS: A
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Route 111 & Spring Hill Road/Office Drive



Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	60	142	158	25	0	0
Future Volume (vph)	60	142	158	25	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.982			
Flt Protected		0.985				
Satd. Flow (prot)	0	1835	1829	0	1863	0
Flt Permitted		0.985				
Satd. Flow (perm)	0	1835	1829	0	1863	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		534	1315		163	
Travel Time (s)		12.1	29.9		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	154	172	27	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	219	199	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 27.3%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1.2

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	60	142	158	25	0	0
Future Vol, veh/h	60	142	158	25	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	154	172	27	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	199	0	-	0	470	186
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1373	-	-	-	552	856
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1373	-	-	-	523	856
Mov Cap-2 Maneuver	-	-	-	-	523	-
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	764	-

Approach	NB	SB	SE
HCM Control Delay, s	2.3	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1373	-	-	-	-
HCM Lane V/C Ratio	0.047	-	-	-	-
HCM Control Delay (s)	7.8	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	23	5	1063	0	0	1255
Future Volume (vph)	23	5	1063	0	0	1255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.977					
Flt Protected	0.960					
Satd. Flow (prot)	1747	0	1863	0	0	1863
Flt Permitted	0.960					
Satd. Flow (perm)	1747	0	1863	0	0	1863
Link Speed (mph)	30		40			40
Link Distance (ft)	186		260			1826
Travel Time (s)	4.2		4.4			31.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	5	1155	0	0	1364
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	1155	0	0	1364
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	5	1063	0	0	1255
Future Vol, veh/h	23	5	1063	0	0	1255
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	5	1155	0	0	1364

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2519	1155	0	0	1155	0
Stage 1	1155	-	-	-	-	-
Stage 2	1364	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	31	240	-	-	605	-
Stage 1	300	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	31	240	-	-	605	-
Mov Cap-2 Maneuver	31	-	-	-	-	-
Stage 1	300	-	-	-	-	-
Stage 2	238	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	256.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	37	605	-
HCM Lane V/C Ratio	-	-	0.823	-	-
HCM Control Delay (s)	-	-	256.3	0	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	3	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	2	1061	0	0	1278
Future Volume (vph)	0	2	1061	0	0	1278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1611	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1611	1863	0	0	1863
Link Speed (mph)	30		40			40
Link Distance (ft)	188		221			260
Travel Time (s)	4.3		3.8			4.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2	1153	0	0	1389
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2	1153	0	0	1389
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 70.6%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1061	0	0	1278
Future Vol, veh/h	0	2	1061	0	0	1278
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	1153	0	0	1389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1153	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	240	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	240	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.1	0	0
HCM LOS	C		

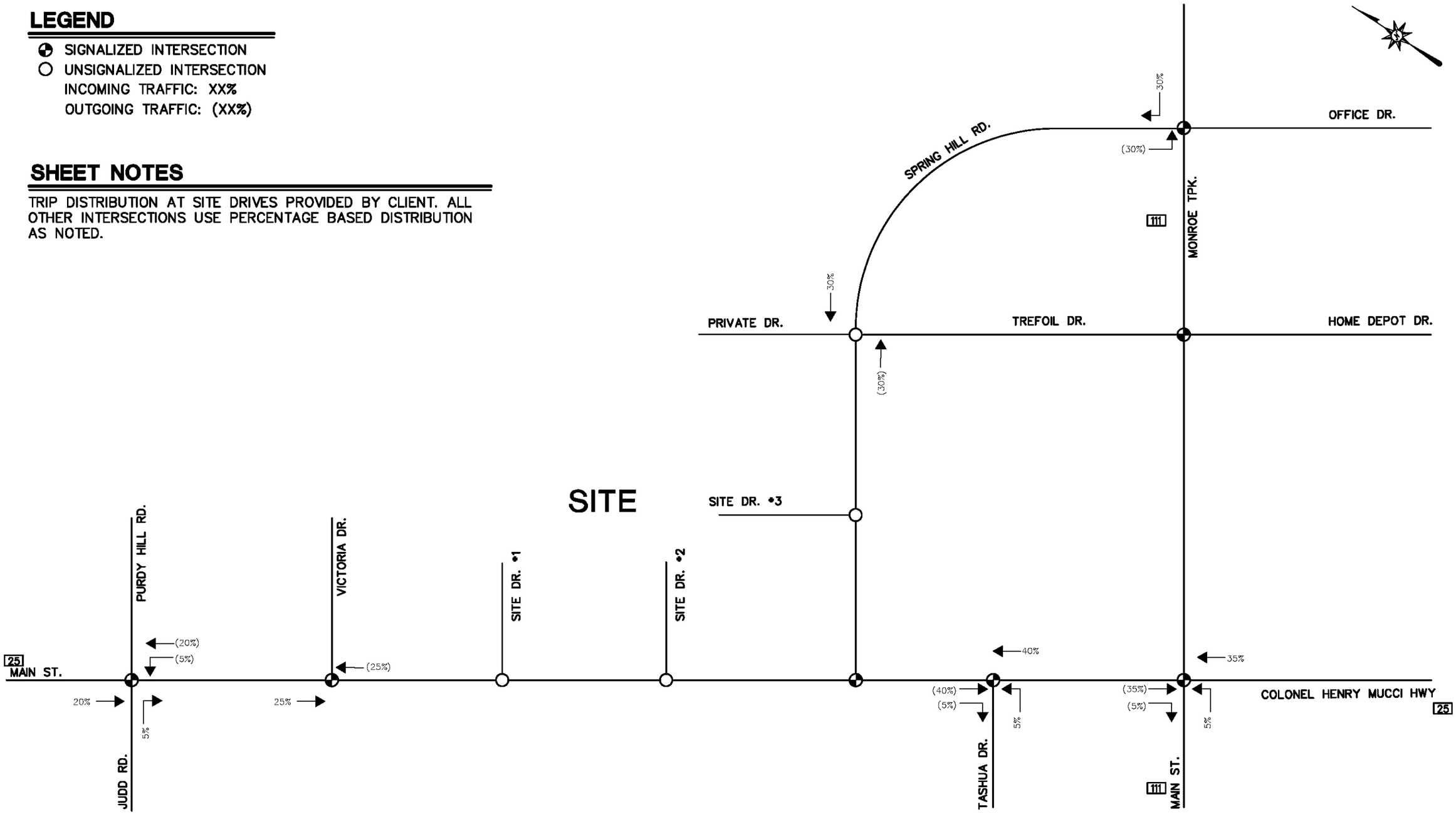
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	240	-
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	20.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
  INCOMING TRAFFIC: XX%
  OUTGOING TRAFFIC: (XX%)

SHEET NOTES

TRIP DISTRIBUTION AT SITE DRIVES PROVIDED BY CLIENT. ALL OTHER INTERSECTIONS USE PERCENTAGE BASED DISTRIBUTION AS NOTED.



6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOBS19\10\1901141\DWG\TFLO1901141-E1.DWG,FIGURE 4.

ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING
BL Companies

TRIP DISTRIBUTION
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 4

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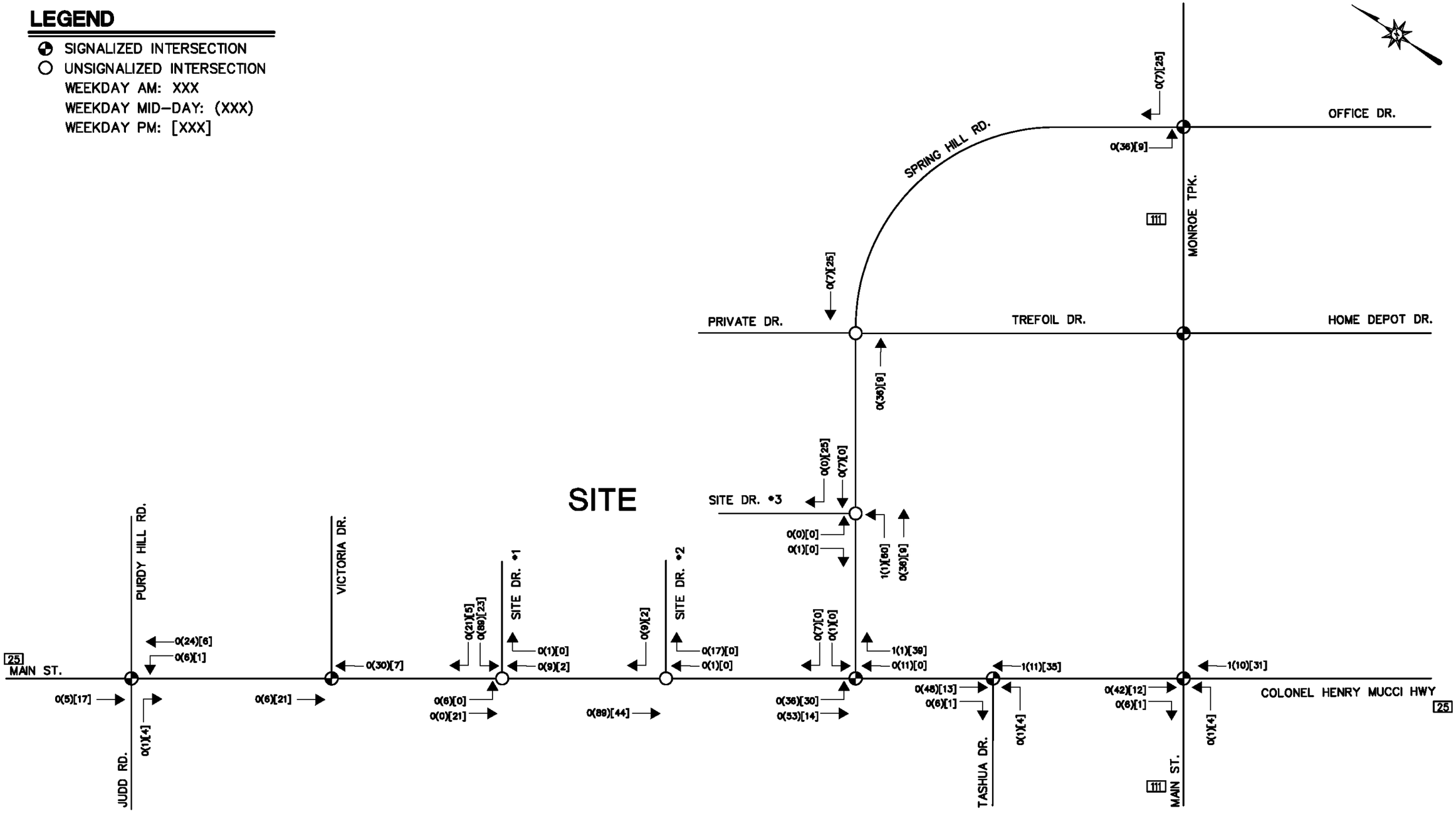
LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION

WEEKDAY AM: XXX
WEEKDAY MID-DAY: (XXX)
WEEKDAY PM: [XXX]



6/10/2020, SSEPERACK, \\BLCOMPANIES.COM\DFS\PROJ\JOB319\0\1901141\DWG\FIG\1901141-E1.DWG,FIGURE 5.

ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING
BL Companies

SITE GENERATION TRAFFIC VOLUMES
PROPOSED IMPROVEMENT
7120 MAIN STREET
TRUMBULL, CONNECTICUT
SCHEMATIC, NOT TO SCALE

JUNE 2020

FIGURE 5

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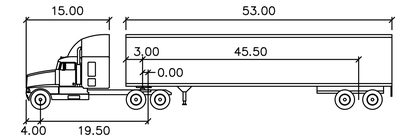
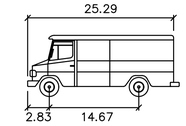
PARKING BREAKDOWN

PARKING	REQUIRED	PROPOSED ON-SITE	PROPOSED OFF-SITE	DELTA (+/-)
ASSOCIATE	89	91	0	+2
MANAGER/DSP MANAGER	20	20	0	0
CUSTOMER PICK-UP (HUB)	15	15	0	0
ADA SPACES	6	7	0	+1
VAN PERSONAL VEHICLE	24	18	293	+287
TOTAL AUTO SPACES (9'x18')	154	151	293	290
VAN PARKING	267	48	223	+4
VAN PERSONAL VEHICLE	72	6	0	-66
VAN BUFFER	15	0	15	0
TOTAL VAN SPACES (11'x27')	**354**	**54**	**238**	**-62**
TOTAL PARKING	**508**	**205**	**531**	**228**
UTR/ VAN LOADING	23	24	–	+1
VAN QUEUING	24	24	–	0
TRAILER/BOX TRUCK LOADING	6	6	–	0
53' TRAILER PARKING	0	0	–	0



WB-67 feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



Ford-E450 feet

Width	: 9.75
Track	: 9.75
Lock to Lock Time	: 6.0
Steering Angle	: 34.3

LEGEND

- ASSOCIATE TRAFFIC FLOW DIRECTION
- DSP/FLEX TRAFFIC FLOW DIRECTION
- TRUCK TRAFFIC FLOW DIRECTION
- INDICATES PAINTED ISLAND
- INDICATES ISLAND THAT NEEDS TO BE LANDSCAPED PER CODE. (TYPE AND QUANTITY TO BE DETERMINED DURING DETAILED DESIGN)

ZONING INFORMATION

LOCATION: TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT (<500 FEET FROM TOWN OF MONROE)

ZONE: I-L2 (LIGHT INDUSTRY-2 ACRES)

USE: WAREHOUSING (SPECIAL PERMITTED USE)

ITEM #	ITEM	REQUIREMENTS	PROPOSED	VARIANCE
1	MINIMUM LOT AREA	2 ACRES	442,922 S.F. (10.17 AC.)	NO
2	MINIMUM LOT FRONTAGE	250 FEET	927.45 FEET	NO
3	MINIMUM FRONT SETBACK	100 FEET[1]	99 FEET (EXISTING NON-CONFORMING)	NO
4	MINIMUM SIDE SETBACK	50 FEET[1]	51 FEET	NO
5	MINIMUM REAR SETBACK	50 FEET[1]	209 FEET	NO
6	MAXIMUM BUILDING HEIGHT	40 FEET	26 FEET	NO
7	MAXIMUM IMPERVIOUS COVERAGE	80 PERCENT	70 PERCENT	NO
8	MAXIMUM BUILDING COVERAGE	33.33 PERCENT	26 PERCENT	NO

PARKING INFORMATION

ITEM #	ITEM	REQUIREMENTS	PROPOSED	VARIANCE
1	BUILDING SIZE	NONE REQUIRED	114,492.2 S.F.	NO
2	PARKING REQUIRED	ASSEMBLY/FACTORY: 1 SPACE PER EVERY 1.5 EMPLOYEES (97 EMPLOYEES) REQUIRED = 65 SPACES BUSINESS/OFFICE 1 SPACE PER 250SF OFFICE AREA = 2,618SF REQUIRED = 11 SPACES TOTAL REQUIRED = 76 SPACES	206 SPACES	NO
3	MINIMUM HANDICAPPED PARKING SPACES REQUIRED	6 SPACES (FOR 160 SPACES) 7 SPACES (FOR 206 SPACES)	7 SPACES	NO
4	MINIMUM PARKING DIMENSIONS	9 FEET X 18 FEET	9 FEET X 18 FEET	NO
5	MINIMUM AISLE WIDTH	24 FEET – 2-WAY	24 FEET – 2-WAY 15 FEET – 1-WAY	NO
6	MINIMUM FRONT SETBACK	15 FEET (100 FEET)[2]	SPRING HILL ROAD: 9 FEET (EXISTING NON-CONFORMING)	NO
			MAIN STREET: 149 FEET	NO
7	MINIMUM SIDE SETBACK	20 FEET[2]	6 FEET (EXISTING NON-CONFORMING)	NO
8	MINIMUM REAR SETBACK	20 FEET[2]	70 FEET	NO
9	MINIMUM INTERIOR LANDSCAPING	ONE TREE PER 10 SPACES, 20 S.F. PER PARKING SPACE	>ONE TREE PER 10 SPACES, >20 S.F. PER PARKING SPACE	NO

SITE PLAN LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- LOD — LIMIT OF DISTURBANCE (LOD) AND CONTRACT LIMIT LINE
- BUILDING SETBACK LINE
- PROVIDE AND INSTALL HEAVY DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE
- PROVIDE AND INSTALL CONCRETE PAVEMENT STRUCTURE
- XX — PARKING STALL COUNT
- PROVIDE AND INSTALL STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE

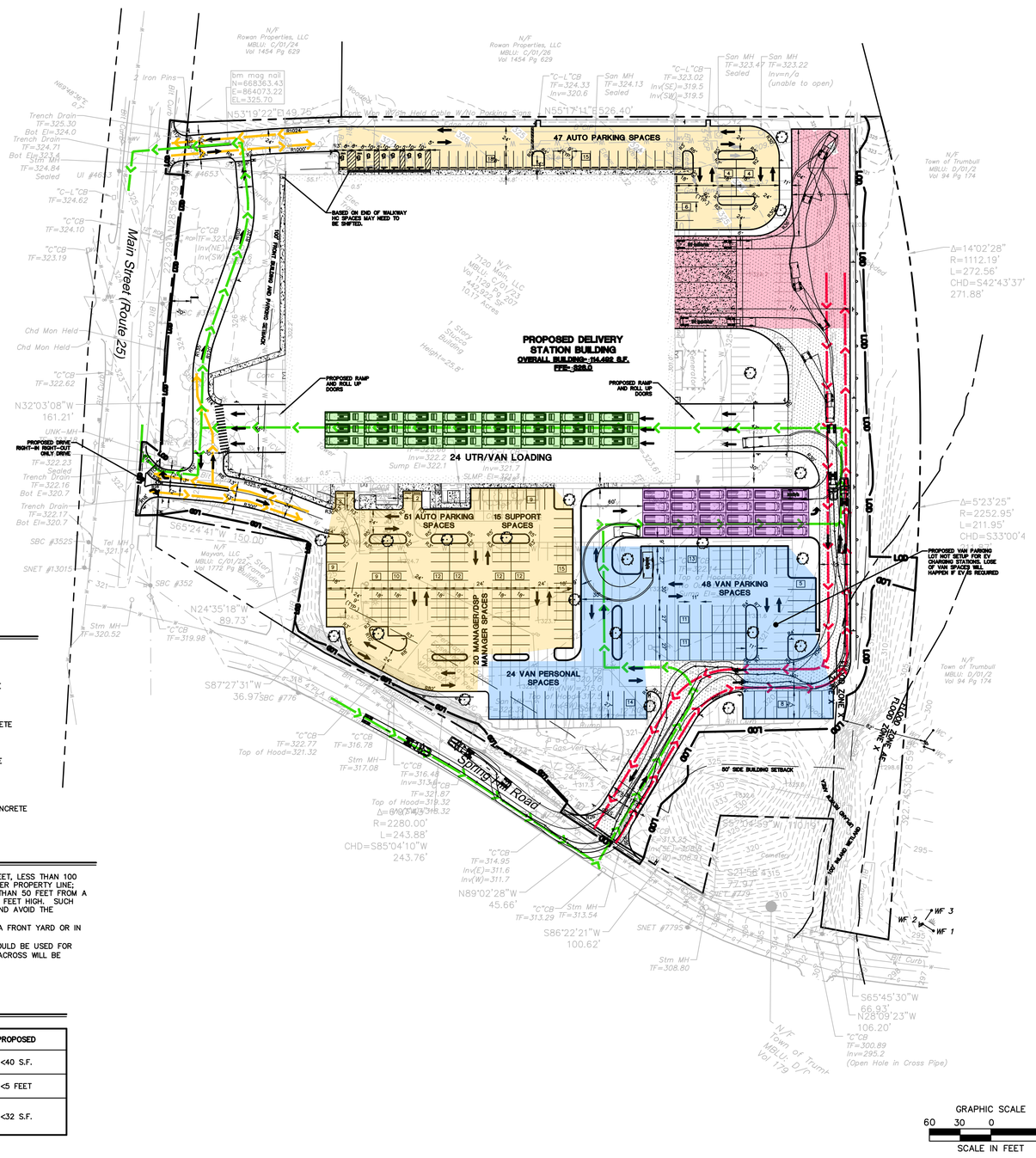
NOTES

1. SECTION II.4.2.5, "NO BUILDING SHALL BE LOCATED LESS THAN 100 FEET FROM A STREET, LESS THAN 100 FEET FROM A RESIDENTIAL ZONE BOUNDARY, NOR LESS THAN 50 FEET FROM ANY OTHER PROPERTY LINE; PROVIDED, HOWEVER, THAT THE COMMISSION MAY ALLOW A BUILDING TO BE NO LESS THAN 50 FEET FROM A STREET WHERE BUFFERING IS PROVIDED BY MEANS OF LANDSCAPED BERM AT LEAST 4 FEET HIGH. SUCH BERM SHALL CURVE WITHIN THE SETBACK SO AS TO REPLICATE NATURAL FEATURES AND AVOID THE APPEARANCE OF DIKE."
2. SECTION II.4.2.6, "PARKING, OTHER THAN FOR VISITORS, SHALL NOT BE PERMITTED IN A FRONT YARD OR IN ANY SIDE YARD THAT ABUTS A RESIDENTIAL ZONE"
3. SECTION IV.4.6.6, "A STANDARD OF ONE ISLAND FOR EVERY TEN PARKING SPACES SHOULD BE USED FOR DESIGN PURPOSES. NO MORE THAN FIFTEEN (15) SPACES IN A ROW OR FOUR ROWS ACROSS WILL BE PERMITTED WITHOUT AN INTERVENING INTERIOR LANDSCAPE AREA."
4. ALL PARKING SHALL BE DOUBLE STRIPED.

SIGN INFORMATION

ITEM #	ITEM	REQUIREMENT	PROPOSED
1	MAX. FREESTANDING SIGN AREA	0.5 S.F. PER 1,000 FEET G.F.A. (MAX. 40 S.F.) (1)	<40 S.F.
2	MAXIMUM GROUND SIGN HEIGHT	5 FEET ABOVE THE GROUND	<5 FEET
3	MAX. WALL SIGN AREA	MAX. 3 WALL SIGNS, MAX. 32 S.F. EACH	<32 S.F.

(1) GROUND SIGNS SHALL BE LOCATED AT LEAST 20 FEET BEHIND THE FRONT LOT LINE.



Architecture Engineering Environmental Land Surveying
BL Companies
355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.G.
Drawn	T.A.M.
Reviewed	
Scale	1"=60'
Project No.	1901141
Date	05/04/2020
CAD File: SC190114101	

Title

SITE CONCEPT - DYO5_E1

Sheet No.

SC (R0)

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5/5/2020, TAMARELL, G:\JOBS\19\01901141\DWG\SC190114101.DWG\DYO5_E1-SSA SITE CONCEPT-R0\DYO5_E1-SSA SITE CONCEPT-R0\DYO5_E1-SSA SITE CONCEPT-R0

Planning and Zoning
Department
Telephone (203) 452-5044
Fax (203) 452-5169

Town of Trumbull
CONNECTICUT

Town Hall
5866 Main Street
Trumbull, Connecticut 06611

PLANNING AND ZONING DEPARTMENT

APPLICATION FOR SPECIAL PERMIT OR SITE PLAN APPROVAL

☒ **SPECIAL PERMIT**

☒ **SITE PLAN REVIEW**

ZONE:

☐ **Commercial Zone B-C, B-C LH, TH Node, MDD**

☒ **Industrial Zone I-L, I-L2, I-L3**

☐ **Residential Zone A, AA, AAA**

☐ **Overlay Zone** _____

Location of Property: 7120 Main Street

Assessor's Map No.: C Parcel No.: 01 Lot No.: 00023/000

Trumbull Land Records: Volume: 1803 Page: 581

Applicant: Amazon.com Services, LLC

Address of Applicant: PO Box 80416, Seattle, WA 98108-0416

Telephone Number: Day 203-528-0590 Evening 203-528-0590

Email Address: Chris@russorizio

Owner of Record: Amazon.com Services, LLC

Address of Owner of Record: PO Box 80416, Seattle, WA 98108-0416

Telephone Number: 203-528-0590 Email Chris@russorizio.com

Party to be notified: Chris Russo, Russo & Rizio, LLC

Address of Attorney or Agent: 10 Sasco Hill Rd, Fairfield, CT 06824

Telephone Number: 203-528-0590 Email: Chris@russorizio.com

Site Engineer: BL Companies

Address of Owner of Record: 355 Research Parkway, Meriden, CT 06450

Telephone Number: 203-630-1406 Email: Chris@russorizio.com

Relevant Article(s) and Section(s) of the Regulations: (i.e. Art__, Sec __)
Art. II, Section 4.2; Art XV

Description of the proposed request, including specific use to be conducted:
See Attached

Is the property within 500 feet of another municipality?

☒ YES ☐ NO

Does this proposal involve a structure that was built before 1940?

☐ YES ☒ NO

Does this proposal require the approval of the Inland Wetlands Agency?

☐ YES ☒ NO

Are there any deed restrictions on this property that may affect this application?

☐ YES ☒ NO

Has a previous application been filed for this property?

☒ YES ☐ NO

If yes, when? 12/18/19 - Approved Attach a copy of decision letter.

Project is to be started on ASAP Completed on ASAP

List of Federal and State permits required and their status:
N/A

Certification

I/We certify that all of the above information and statements contained in any documentation submitted with the application are true to the best of my/our knowledge.

I/We fully understand that the Planning and Zoning Commission reserves the right to revoke any permit should the information contained herein not be true or that the information requested by the application has not been fully disclosed.

Signature of Owner	Signature of Applicant (if not property owner)
07/22/20	07/22/20
Date	Date

NOTICE: By signing this application, owner and applicant consent to site inspections by Town Staff and/or Commissioners.

A FEE IN ACCORDANCE WITH APPROVED FEE SCHEDULE MUST ACCOMPANY THIS APPLICATION. Make check payable to TOWN OF TRUMBULL.

FOR OFFICE USE ONLY

Date Application and Fee Received:_____ By:_____

Date of Public Hearing:_____ Date Action Taken:_____

List of Abutters Submitted:_____

Revised 2/25/2020

Russo & Rizio, LLC
ATTORNEYS AT LAW

Colin B. Connor
Elizabeth A. Falkoff*
Robert G. Golger
Michael C. Jankovsky
David K. Kurata
Katherine M. Macol
Leah M. Parisi
William M. Petroccio*
Raymond Rizio*
Christopher B. Russo
Robert D. Russo
John J. Ryan
Vanessa R. Wambolt
(*Also Admitted in NY)

July 29, 2020

Rob Librandi
Land Use Planner
Trumbull Planning & Zoning Department
5866 Main Street
Trumbull, CT 06611

Re: Special Permit and Site Plan Review Application to the Trumbull Planning and Zoning Commission for the property located at 7120 Main Street

Dear Mr. Librandi:

Please accept the following narrative as part of a modification of a previously approved Special Permit and Site Plan Review to the Trumbull Planning and Zoning Commission for the property located at 7120 Main Street (the "Site") in the Industrial I-L2 Zone to support the approved warehousing and distribution use.

Proposed Development

The Applicant was previously approved on December 18, 2019, for a warehousing and distribution use within the existing building located at the Site (the "Prior Approval"). The Applicant did not propose to increase the building footprint of the Site at that time and do not propose the same with this Application. As the Applicant has begun work on the Site, they have realized some slight modifications and restructuring of the parking area are necessary for a more safe and efficient use. The Site will serve as a package delivery warehouse and distribution for the "last mile" of package delivery for Amazon, which means distribution will be to residences and businesses within an approximate Sixty (60) minute driving time radius of the Site.

The Site itself is 10.17 ac. and contains an existing building with approximately 114,000 SF of usable floor area. The Site is located on the corner of Main Street (Rte. 25) and Spring Hill Road. The building is surrounded on three (3) sides by off-street parking areas and drive aisles. The Site features Two (2) curb cuts along Main Street and a single curb cut on Spring Hill Road.

The main modification under the Application from the Prior Approval is to change the side of the existing building where the delivery vans will enter. Under the Prior Approval, delivery vans entered the building on its west side and exited on its east side. The Application proposes to reverse this traffic flow so delivery vans will enter on the east side and will exit on the west side of the building. As a consequence of such change, the Applicant also proposes

1 Post Road
Fairfield, CT 06824

Tel 203-255-9928
Fax 203-255-6618

slight modifications to the interior traffic flow of the southern parking area, so it does not conflict with the proposed delivery vans circulation.

Under the Prior Approval, the traffic flow of the delivery vans crossed in one location. An "empty" delivery van entering the Site from Spring Hill Road to load the van would have to cross in front of a "loaded" delivery van exiting the Site onto Spring Hill Road near the Spring Hill Road curb cut. The Application eliminates this "crossing." Under the Application, the "empty" delivery vans will still enter the Site from Spring Hill Road, but they will then exit onto Main Street. In addition, delivery vans exiting the Site to head north on Main Street will only exit the Site via the southern curb cut on Main Street. This right-turn only exit will be the closest to the existing traffic signal at the intersection of Main Street and Spring Hill Road. Delivery vans exiting the Site to head south on Main Street, which will require crossing the northbound lane of Main Street, will only exit the Site via the northern curb cut on Main Street. This exit will give delivery vans enough space in between the curb cut and the above-described traffic signal. Operationally, the Applicant will be revising its schedule to reduce trips during the peak hour periods of the surrounding roadway network. Together, the above-stated revisions will improve the traffic flow and circulation within the Site and its surrounding roadways.

The Amazon tractor trailers, which will actually bring the consumer goods to the Site that are to be loaded on the delivery vans, will still utilize the same route as the Prior Approval. The vehicles of Amazon Employees will also enter and exit the same as the Prior Approval. The Application proposes a parking area of Two Hundred and Thirteen (213) off-street parking spaces, which still far exceeds the requirement under the Regulations.

For the reasons stated above, the Applicant respectfully requests approval of the modification to its Special Permit and Site Plan Review.

Sincerely,

Raymond Rizio

Properties within 250' of 7120 Main Street

Name	Address
Alan R. Stewart and Suzanne D. Skinn	7125 Old Turnpike Rd, Trumbull, CT 06611
The Baghdady Family Ltd Partnership	7090 Main St, Trumbull, CT 06611
Trumbull Properties LLC	1428 Monroe Turnpike, Monroe, CT 06468
Estate of David Preusser, c/o Eloise R. Johnson, Ancillary Executor	7100 Main Street, Trumbull, CT 06611
Town of Trumbull	5866 Main St, Trumbull, CT 06611
7120 Main LLC, c/o Ed Harsche	120 Oneida Drive, Greenwich, CT 06830
Rowan Properties LLC	7176 Main St, Trumbull, CT 06611
State of Connecticut, Office of the Attorney General	55 Elm Street, Hartford, CT 06106
Jacques Family LLC	62 Spring Hill Rd, Trumbull, CT 06611

3672

TOWN OF TRUMBULL
NOTICE

VOL 1802 PAGE 0431

VARIANCE [ ] SPECIAL EXCEPTION [ ] SPECIAL PERMIT [X]

GRANTED BY:
PLANNING AND ZONING COMMISSION [X] ZONING BOARD OF APPEALS [ ]

OWNER(S) OF RECORD: 7120 Main LLC c/o Raymond Rizio
120 Oneida Drive, Greenwich CT 06830

Doc ID: 004998410002 Type: LAN
Book 1802 Page 431 - 432
File# 3672

LOCATION OF PREMISES: 7120 Main Street, Trumbull CT 06611

Assessor's Map No.: C-01 Parcel No. 00023 Lot No. 0
Trumbull Land Records: Volume 1129 Page 207

ZONING REGULATIONS:

ARTICLE(S) II, XV SECTION(S) 4.2
PARAGRAPH(S) SUBPARAGRAPH(S)

NATURE OF APPLICATION: Special Permit/Site Plan to use the existing building in an IL-2 Zone for warehousing and distribution purposes with site improvements consisting of restructuring and expansion of the parking area and the addition of loading bays pursuant to Art II, Sec 4.2 and Art XV of the Town of Trumbull Zoning Regulations.

Special Conditions: Applicant must provide a snow removal plan to be approved by the Town Planner and adjusted by the Town Planner and applicant must provide a dark sky compliant plan to be approved by the Town Planner.

SPECIFIC CONDITIONS IMPOSED UPON THE GRANT OF SUCH APPLICATION MAY BE FOUND IN COPIES OF ACTION TAKEN ON FILE IN THE OFFICE OF THE TOWN CLERK.

DATE OF APPLICATION 11/27/19 DATE OF PUBLIC HEARING 12/18/19
DATE OF ACTION TAKEN 12/18/19 FIXED EFFECTIVE DATE 01/04/20

Larry LaConte, Sr
(Secretary)

CERTIFICATION

I, Linda Finger, Clerk of the Planning and Zoning Commission of the Town of Trumbull, do, hereby, certify this notice of decision to contain true accurate statements for Special Permit granted with respect to the application of 7120 Main LLC dated November 27, 2019 for premises owned by 7120 Main LLC and as more fully appears in the files of said Planning and Zoning Commission.

Linda Finger
(Clerk)

SCHEDULE A

All that certain piece or parcel of land, together with the buildings and improvements thereon, situated in the Town of Trumbull, County of Fairfield and State of Connecticut, and shown on that certain map entitled "Map of Survey of Property in Trumbull, CT for: Allied Stores, Inc." dated April 27, 1965 and on file in the Trumbull Town Clerk's Office as Map No. 1300, said parcel being bounded as follows:

Northwesterly:	by land now or formerly of Howard S. Rowan, 676.15 feet;
Northeasterly:	by land of the Town of Trumbull, 807.26 feet;
Southeasterly:	by Spring Hill Road, 58.98 feet;
Southwesterly:	by land of the Town of Trumbull, 106.20 feet;
Southeasterly again:	by land of the Town of Trumbull, 110.19 feet;
Northeasterly again:	by land of the Town of Trumbull; 77.97 feet;
Southerly:	by Spring Hill Road, 474.27 feet;
Southerly again:	by land now or formerly of Kenneth and Grace Farrar, 89.73 feet;
Southeasterly again:	by land now or formerly of Kenneth and Grace Farrar, 150.00 feet; and
Southwesterly again:	by Newtown Turnpike, 384.50 feet.

Being all and the same premises conveyed to Alstores Realty Corporation by that certain Warranty Deed recorded in Volume 175 at Page 34 of the Trumbull Land Records, less that small portion of property conveyed to the Town of Trumbull by that certain Quit Claim Deed recorded in Volume 179 at Page 211 of the Trumbull Land Records.

JAN 7 2020

TOWN CLERK OFFICE, TRUMBULL, CT

RECEIVED FOR RECORD

AT 11:26 A M. ATTEST

TOWN CLERK

7120 MAIN STREET

Location	7120 MAIN STREET	**Mblu**	C/01 / 00023/ 000/
Acct#		**Owner**	AMAZON.COM SERVICES LLC
Assessment	$4,036,620	**Appraisal**	$5,766,600
PID	10325	**Building Count**	1
Fire District	L		

Current Value

Appraisal	
Valuation Year	**Total**
2015	$5,766,600
Assessment	
Valuation Year	**Total**
2015	$4,036,620

Owner of Record

Owner	AMAZON.COM SERVICES LLC	**Sale Price**	$7,500,000
Co-Owner		**Book & Page**	1803/ 581
Address	P O BOX 80416 SEATTLE, WA 98108-0416	**Sale Date**	01/22/2020

Ownership History

Ownership History			
Owner	**Sale Price**	**Book & Page**	**Sale Date**
AMAZON.COM SERVICES LLC	$7,500,000	1803/ 581	01/22/2020
SEVENTY-ONE TWENTY MAIN LLC	$0	1129/ 207	05/09/2002

Building Information

Building 1 : Section 1

Year Built: 2004
Living Area: 114,000

Building Attributes

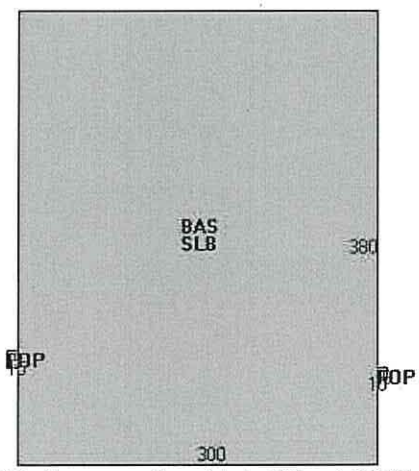
Field	Description
STYLE	Office/Warehs
Stories:	1 Story
Occupancy	1
Exterior Wall 1	Concrete
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minimum
Interior Wall 2	Drywall
Interior Floor 1	Concrete
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Hot Water
AC Type	Central
Bldg Use	Off/Whse
1st Floor Use:	
Heat/AC	Heat/AC Pkgs
Frame Type	Fireprf Steel
Baths/Plumbing	Average
Ceiling/Walls	Sus-Ceil & WL
Rooms/Prtns	Average
Wall Height	24
% Comn Wall	

Building Photo

C01-23 05/02/2015

(http://images.vgsi.com/photos2/TrumbullCTPhotos//\00\01\62/52.JPG)

Building Layout



(http://images.vgsi.com/photos2/TrumbullCTPhotos//Sketches/10325_1032

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	114,000	114,000
FOP	Open Porch	215	0
SLB	Slab	114,000	0
		228,215	114,000

Extra Features

Extra Features			Legend
Code	Description	Size	Bldg #
SPR	Sprinklers	114000 S.F.	1

Land

Land Use

Land Line Valuation

Use Code	407	**Size (Acres)**	10.1
Description	Off/Whse	**Frontage**	
Zone	IL2	**Depth**	
Neighborhood	255		
Alt Land Appr	No		
Category			

Outbuildings

Outbuildings					Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Bldg #**
PAV1	Paving Asph.			120000 S.F.	1

Valuation History

Appraisal	
Valuation Year	**Total**
2018	$5,766,600
2017	$5,766,600
2016	$5,766,600

Assessment	
Valuation Year	**Total**
2018	$4,036,620
2017	$4,036,620
2016	$4,036,620

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5735

Please record and return to:
Amazon.com Services LLC
P.O. Box 80416
Seattle, WA 98108-0416

Doc ID: 005007990004 Type: LAN
Book 1803 Page 581 - 584
File# 5735

STATUTORY FORM
WARRANTY DEED

TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, GREETING:

Know Ye That **7120 Main, LLC**, a Connecticut limited liability company with a business address of 120 Oneida Drive, Greenwich, Connecticut ("Grantor"), for the consideration of **Seven Million Five Hundred Thousand Dollars ($7,500,000.00)** received to its full satisfaction from **Amazon.com Services LLC**, a Delaware limited liability company with an of P.O. Box 80416, Seattle, Washington 98108-0416 (the "Grantee") does hereby give, grant, bargain, sell and confirm unto the Grantee, **WITH WARRANTY COVENANTS**, all that real property situated in the Town of Trumbull, County of Fairfield and State of Connecticut, commonly known as **7120 Main Street**, as more particularly described on **SCHEDULE A** attached hereto.

[Remainder of page intentionally left blank]

Conveyance Tax Received
Mary Markham
State Town Clerk of Trumbull Town

9375.00 18750.00

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal this 15th day January, 2020.

Signed and Delivered
in the presence of:

Christopher Russo

Ane Rio

7120 Main, LLC

By: _____
Joseph Pontoriero
Its Manager

STATE OF CONNECTICUT)
) **ss. Fairfield**
COUNTY OF FAIRFIELD)

On this 14th day of January, 2020, personally appeared, **Joseph Pontoriero,** Manager of 7120 Main, LLC, signer of the foregoing instrument and acknowledged to be his free act and deed, and the free act and deed of 7120 Main, LLC before me.

_____
Raymond Rizio
Commissioner of the Superior Court

SCHEDULE A

ALL THAT CERTAIN piece or parcel of land, together with the buildings and improvements thereon, situated in the Town of Trumbull, County of Fairfield, and State of Connecticut, and shown on that certain map entitled, "Map of Survey of Property in Trumbull, CT for: Allied Stores, Inc.", dated April 27, 1965, and on file in the Trumbull Town Clerk's Office as Map No. 1300, said parcel being bounded as follows:

NORTHWESTERLY: NORTHEASTERLY: SOUTHEASTERLY: SOUTHWESTERLY: SOUTHEASTERLY AGAIN: NORTHEASTERLY AGAIN: SOUTHERLY:
SOUTHERLY AGAIN: SOUTHEASTERLY AGAIN: SOUTHWESTERLY AGAIN:

by land now or formerly of Howard S. Rowan, 676.15 feet;
by land now or formerly of the Town of Trumbull, 807.26 feet;
by Spring Hill Road, 58.98 feet;
by land now or formerly of the Town of Trumbull, 106.20 feet;
by land now or formerly of the Town of Trumbull, 110.19 feet;
by land now or formerly of the Town of Trumbull, 77.97 feet;
by Spring Hill Road, 474.27 feet;
by land now or formerly of Kenneth and Grace Farrar, 89.73 feet;
by land now or formerly of Kenneth and Grace Farrar, 150.00 feet; and
by Newtown Turnpike, 384.50 feet.

LESS AND EXCEPTING THEREFROM that certain piece or parcel of land situated in the Town of Trumbull, County of Fairfield, and State of Connecticut, on the northwesterly side of Present Spring Hill Road, containing 1,387 square feet, more or less, as more particularly shown on a map filed in the Trumbull Town Clerk's Office as Map No. C-510 entitled: "TOWN OF TRUMBULL MAP SHOWING LAND ACQUIRED FROM 7120 MAIN, LLC BY THE STATE OF CONNECTICUT DEPT. OF TRANSPORTATION INTERSECTION IMPROVEMENTS ALONG ROUTE 25 SCALE: 1" = 20' DECEMBER, 2003 ARTHUR W. GRUHN, P.E. - TRANSPORTATION CHIEF ENGINEER DEPARTMENT OF TRANSPORTATION-BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS." Sheet 1 of 1, Last revised 2/2/05, (144181-7), and bounded and described as follows:
SOUTHEASTERLY: by Present Spring Hill Road, 266 feet, more or less;
SOUTHWESTERLY: running to a point;
NORTHWESTERLY: by Owner's remaining land, 219 feet, more or less, by a line designated "TAKING LINE," as shown on said map;
NORTHERLY: by said Owner's remaining land, 48 feet, more or less, by a line designated "TAKING LINE," as shown on said map;
NORTHEASTERLY: running to a point.

Subject to:

1. Real estate taxes on the Grand List of October 1, 2018, hereafter due and payable which the Grantee herein assumes and agrees to pay.

2. Any and all provisions of any statute, ordinance, municipal regulation, zoning planning and wetland laws and regulations, building lines, if established, or public or private law, local, state or federal.

3. Sewer use charges hereafter due and payable.

4. Sewer Assessment charges hereafter due and payable.

5. Long Hill Fire District Taxes hereafter due and payable.

6. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded October 7, 1977 in Volume 378 at Page 48 of the Trumbull Land Records.

7. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded November 5, 1979 in Volume 432 at Page 426 of the Trumbull Land Records.

8. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded June 15, 1993 in Volume 808 at Page 241 of the Trumbull Land Records.

9. Special Permit granted by the Town of Trumbull Planning and Zoning Commission recorded October 11, 1996 in Volume 907 at Page 532 of the Trumbull Land Records.

10. Easements in favor of the State of Connecticut set forth in a Certificate of Taking dated September 1, 2005 and recorded in Volume 1356 at Page 155 of the Trumbull Land Records.

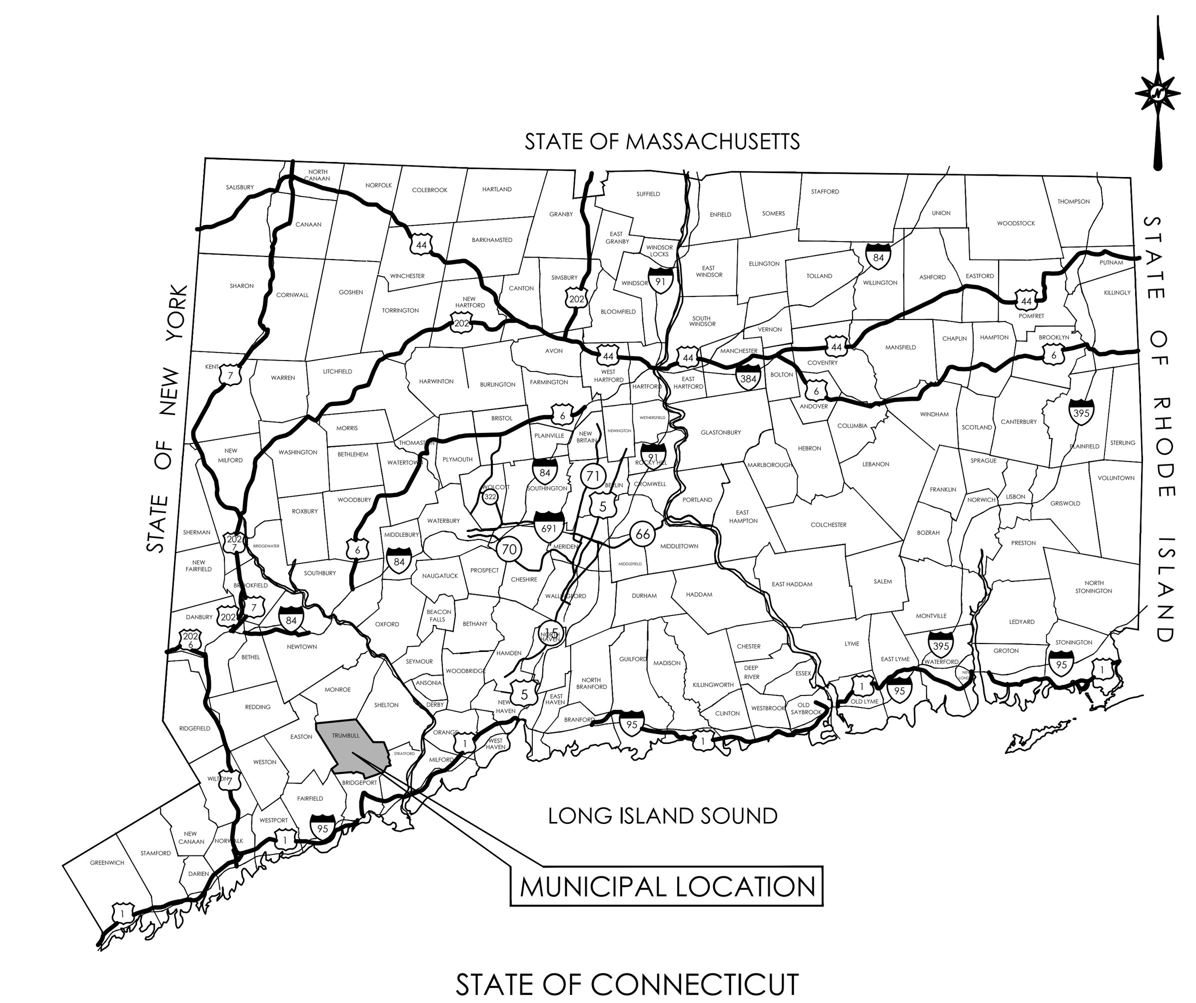
11. Planning and Zoning Commission Special Permit recorded January 7, 2020 in Volume 1802 at Page 431 of the Trumbull Land Records.

JAN 22 2020

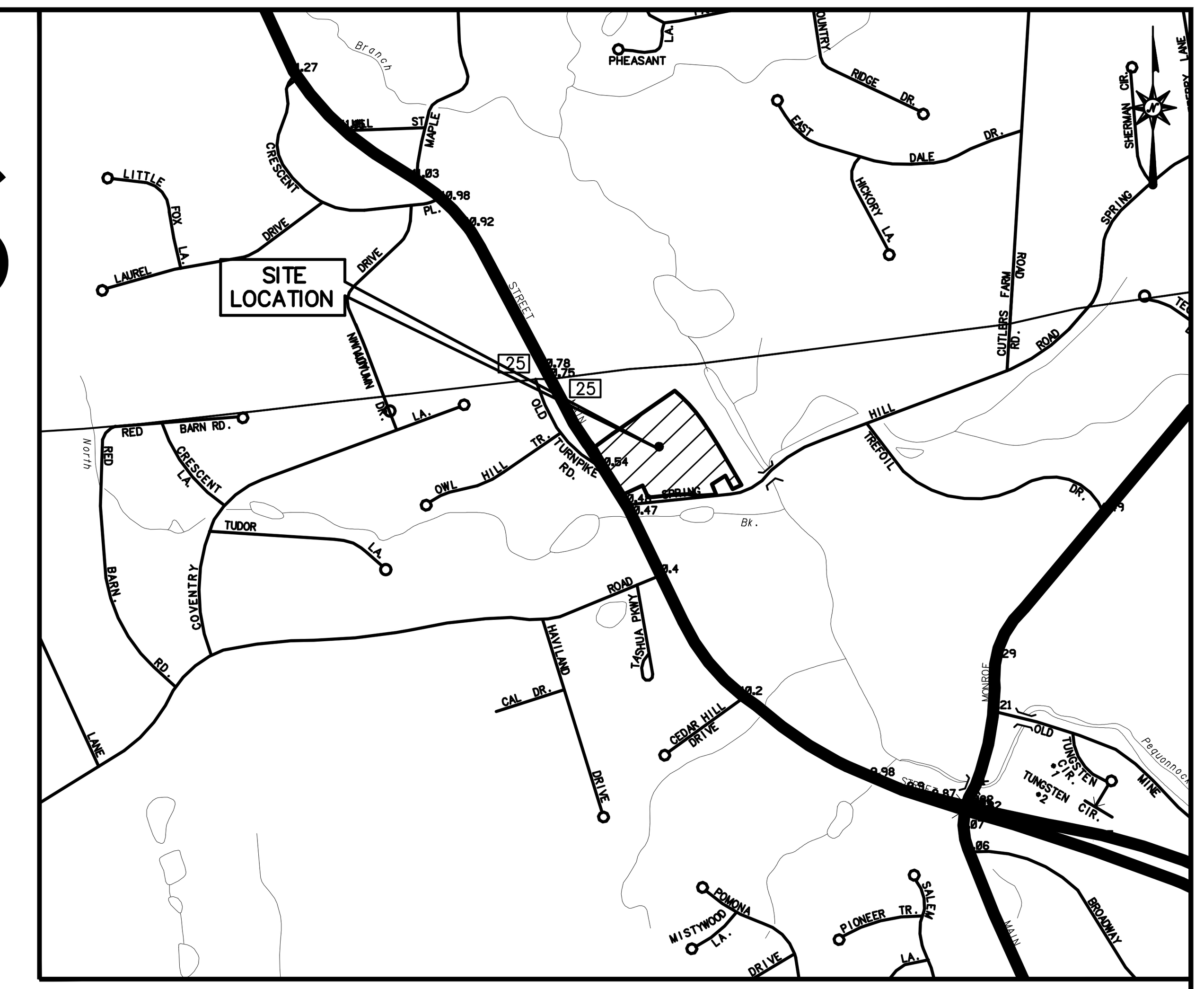
TOWN CLERK OFFICE, TRUMBULL, CT
RECEIVED FOR RECORD
AT 3:34 P M. ATTEST Gloria A Murphy
TOWN CLERK

LAND DEVELOPMENT PLANS ISSUED FOR PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, CONNECTICUT



LOCATION MAP
N.T.S.



VICINITY MAP
SCALE: 1"=1000'

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DM-1, 2	DEMOLITION PLAN
SP-0	OVERALL SITE PLAN
SP-1, 2	SITE PLAN
GD-0	OVERALL GRADING, DRAINAGE, AND SITE UTILITIES PLAN
GD-1, 2	GRADING, DRAINAGE, AND SITE UTILITIES PLAN
EC-0	OVERALL SEDIMENT AND EROSION CONTROL PLAN
EC-1, 2	SEDIMENT AND EROSION CONTROL PLAN
EC-3	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
LL-0	OVERALL LANDSCAPE PLAN
LL-1, 2	LANDSCAPE PLAN
LL-3	LANDSCAPE NOTES AND DETAILS
LP-0	OVERALL LIGHTING PLAN
LP-1,2	LIGHTING PLAN
GN-1	GENERAL NOTES
DN-1 THRU 2	DETAILS SHEETS

PREPARED BY:

BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

355 RESEARCH PARKWAY
MERIDEN, CONNECTICUT 06450
(203) 630-1406
(203) 630-2615 Fax

OWNER:

SEVENTY-ONE TWENTY MAIN LLC
120 ONEIDA DR
GREENWICH, CT 06830

DATES

ISSUE DATE: JUNE 24, 2020
REVISION:

CAD FILE: CV190114131

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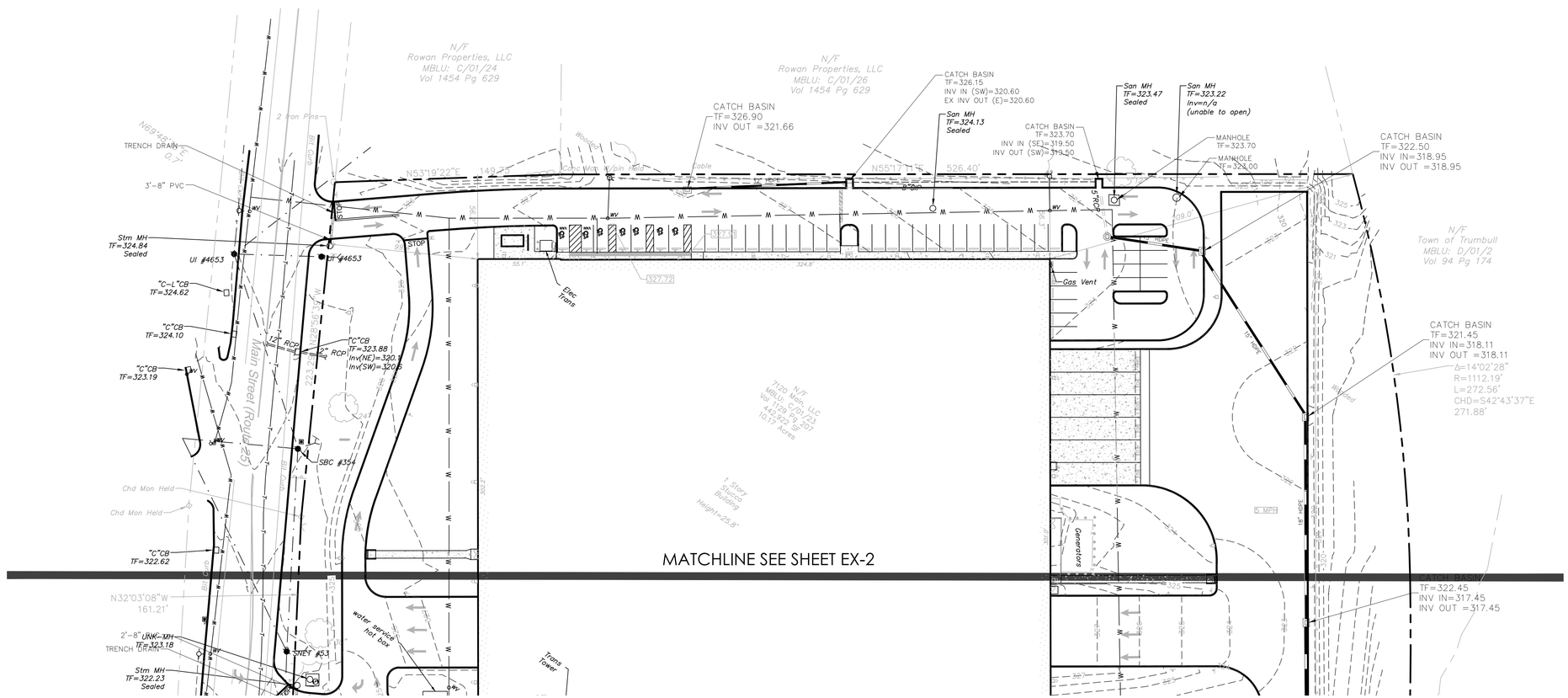
GENERAL NOTE

EXISTING CONDITIONS MAP IS COMPILED FROM ALL AVAILABLE MAPPING INCLUDING A LIMITED FIELD SURVEY CONDUCTED BY BL COMPANIES DATED JULY 29, 2019. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.



FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

BL Companies

355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	K.A.K.
Drawn	K.A.K.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019
CAD File: EX190114131	

Title

COMPILED EXISTING CONDITION PLAN

Sheet No.

EX-1

Xref (s): B0190114131 ; XC190114131 ; X2190114131

4/25/2020, KAK,GISS, G:\JOBS19\70\1901141\DWG\EX\1901141310WG,EX-1, 24X36, 40SC

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GENERAL NOTE

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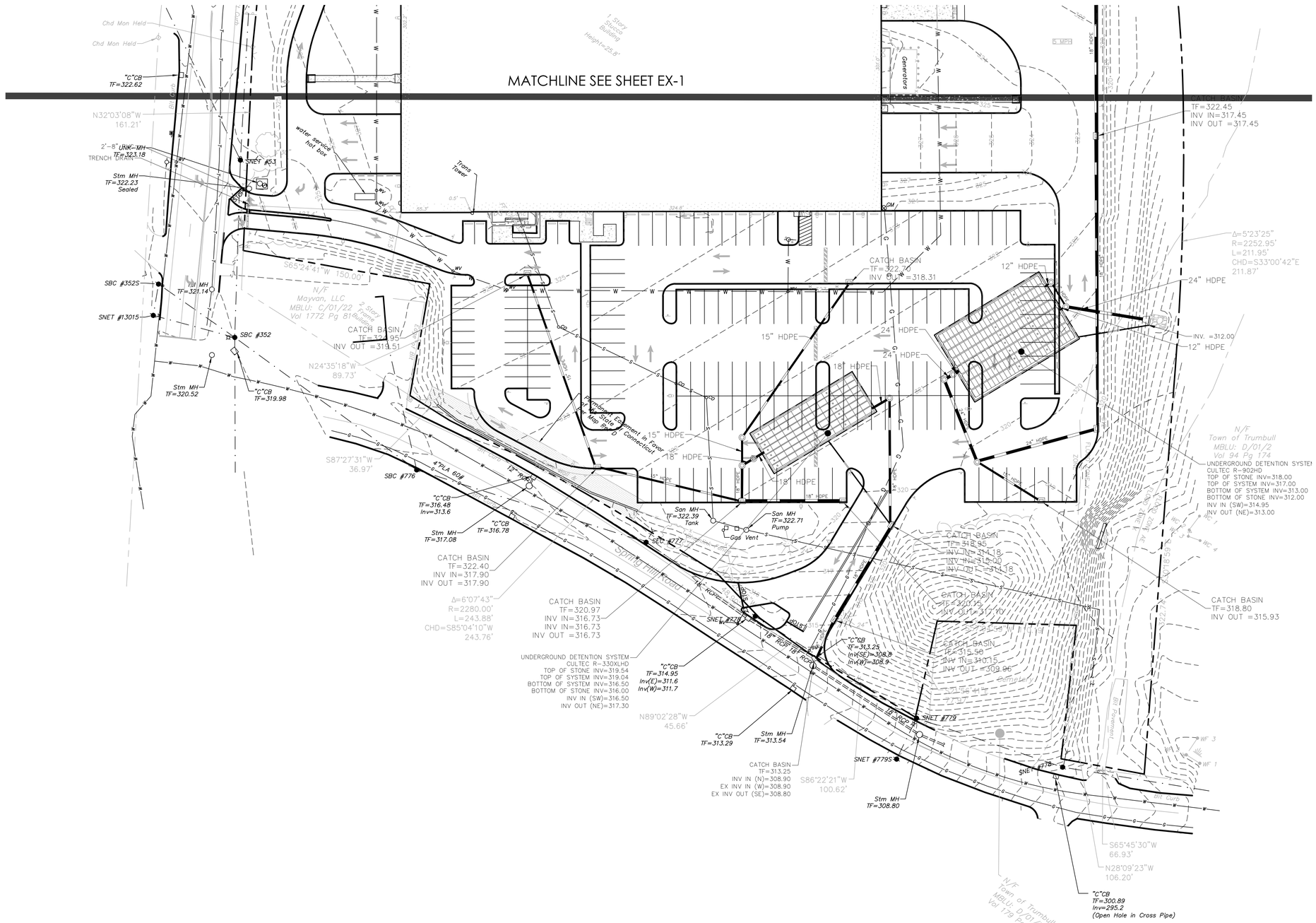

FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

BL Companies

355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	K.A.K.
Drawn	K.A.K.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019

CAD File: EX190114131

Title

COMPILED EXISTING CONDITION PLAN

Sheet No.

EX-2

Xref (s): BD190114131; XC190114131; X2190114131

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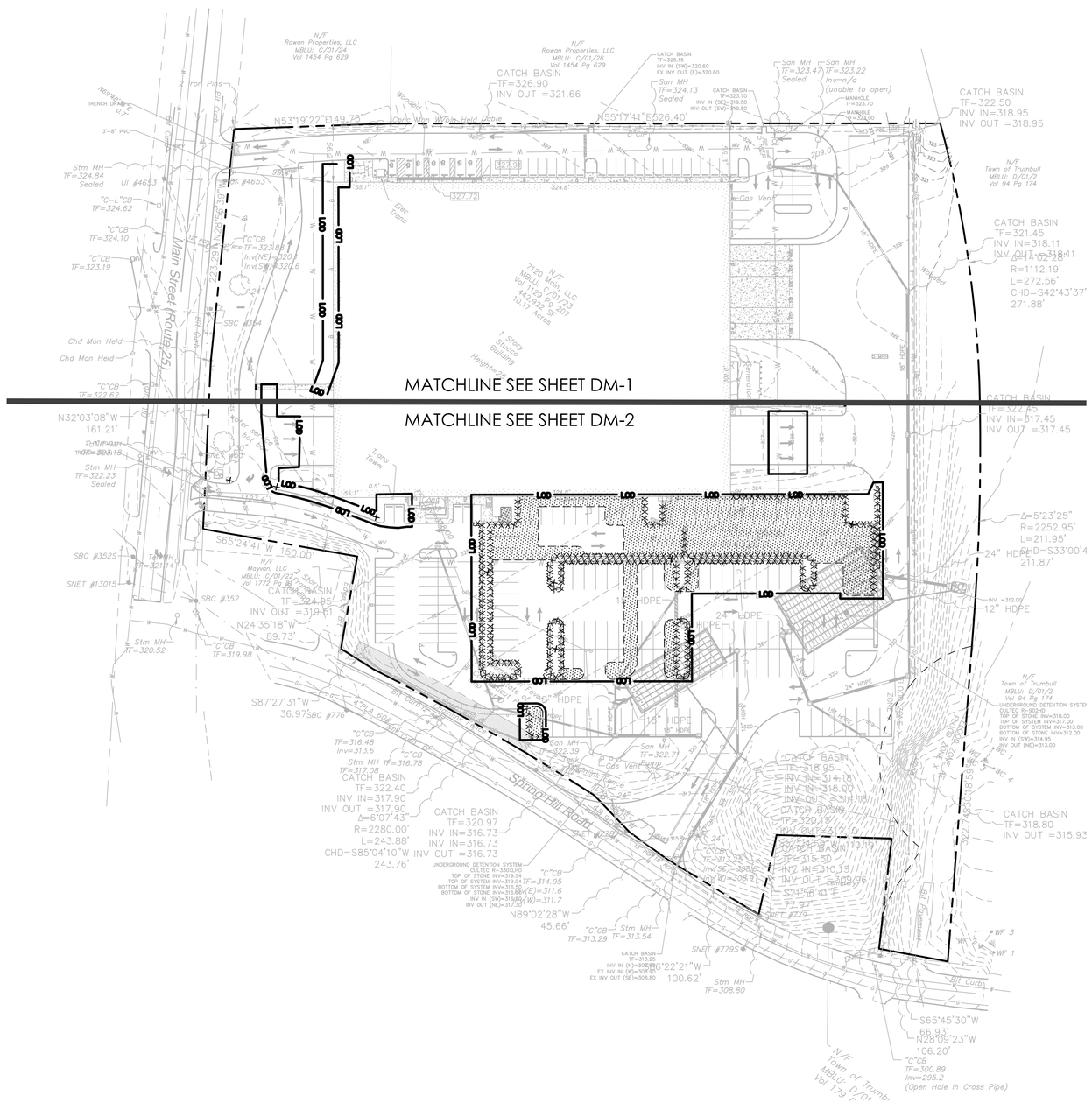
DEMOLITION LEGEND:

PROPERTY LINE	PROPERTY LINE
LOD	LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE
	SAWCUT LINE
XXXXXXXXXXXXXXXXXXXX	REMOVE AND DISPOSE OF UNDERGROUND STORMWATER OR UTILITY PIPE, CURB, FENCING, WALLS, OVERHEAD WIRES, ETC.
X	REMOVE AND DISPOSE OF SIGN, PIPING, UTILITY STRUCTURE, APPURTENANCE, FIXTURE, TREE, AND/OR TREE STUMP ETC.
	REMOVE AND DISPOSE OF EXISTING CONCRETE PADS AND/OR CONCRETE SIDEWALKS
	REMOVE AND DISPOSE OF EXISTING BITUMINOUS CONCRETE PAVEMENT STRUCTURE



REFER TO SHEET GN-1 FOR SITE WORK AND GENERAL NOTES

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GRAPHIC SCALE
60 30 0 60
SCALE IN FEET

Architecture Engineering Environmental Land Surveying
BL Companies
355 Research Parkway
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(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	1"=60'
Project No.	1901141
Date	06/24/2019
CAD File: DM190114131	

Title
OVERALL DEMOLITION PLAN

Sheet No.
DM-0

Xref (s): : BD190114131 ; X2190114131 ; XC190114131

4/25/2020, KEK/GJSS, C:\-DRIVE\X\1901141\DWG\DM190114131.DWG;DM-0 24X36.dcl;BC

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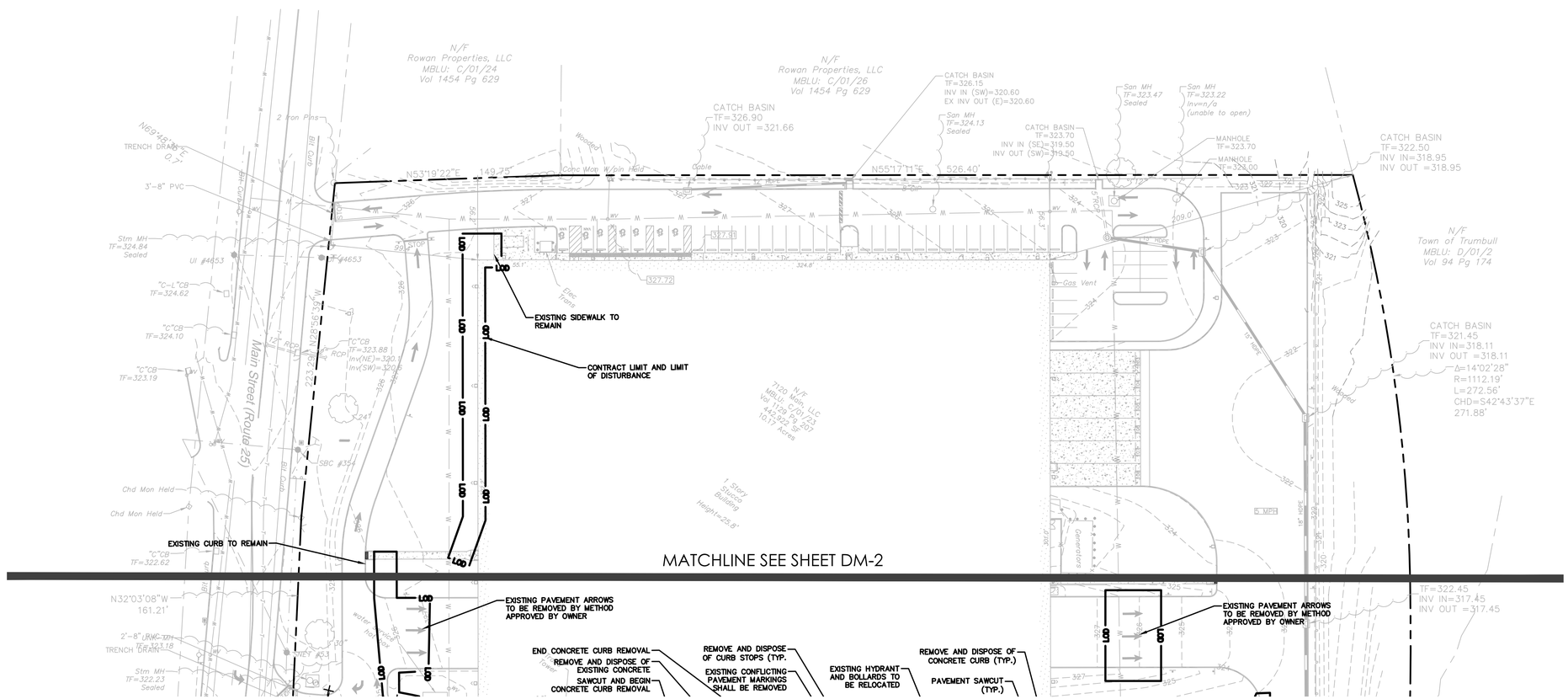
DEMOLITION LEGEND:

	PROPERTY LINE
LOD	LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE
	SAWCUT LINE
XXXXXXXXXXXXXXXXXX	REMOVE AND DISPOSE OF UNDERGROUND STORMWATER OR UTILITY PIPE, CURB, FENCING, WALLS, OVERHEAD WIRES, ETC.
X	REMOVE AND DISPOSE OF SIGN, PIPING, UTILITY STRUCTURE, APPURTENANCE, FIXTURE, TREE, AND/OR TREE STUMP ETC.
	REMOVE AND DISPOSE OF EXISTING CONCRETE PADS AND/OR CONCRETE SIDEWALKS
	REMOVE AND DISPOSE OF EXISTING BITUMINOUS CONCRETE PAVEMENT STRUCTURE



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GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019
CAD File: DM190114131	

Title

DEMOLITION PLAN

Sheet No.

DM-1

Xref (s): B3190114131; XC190114131; XC190114131

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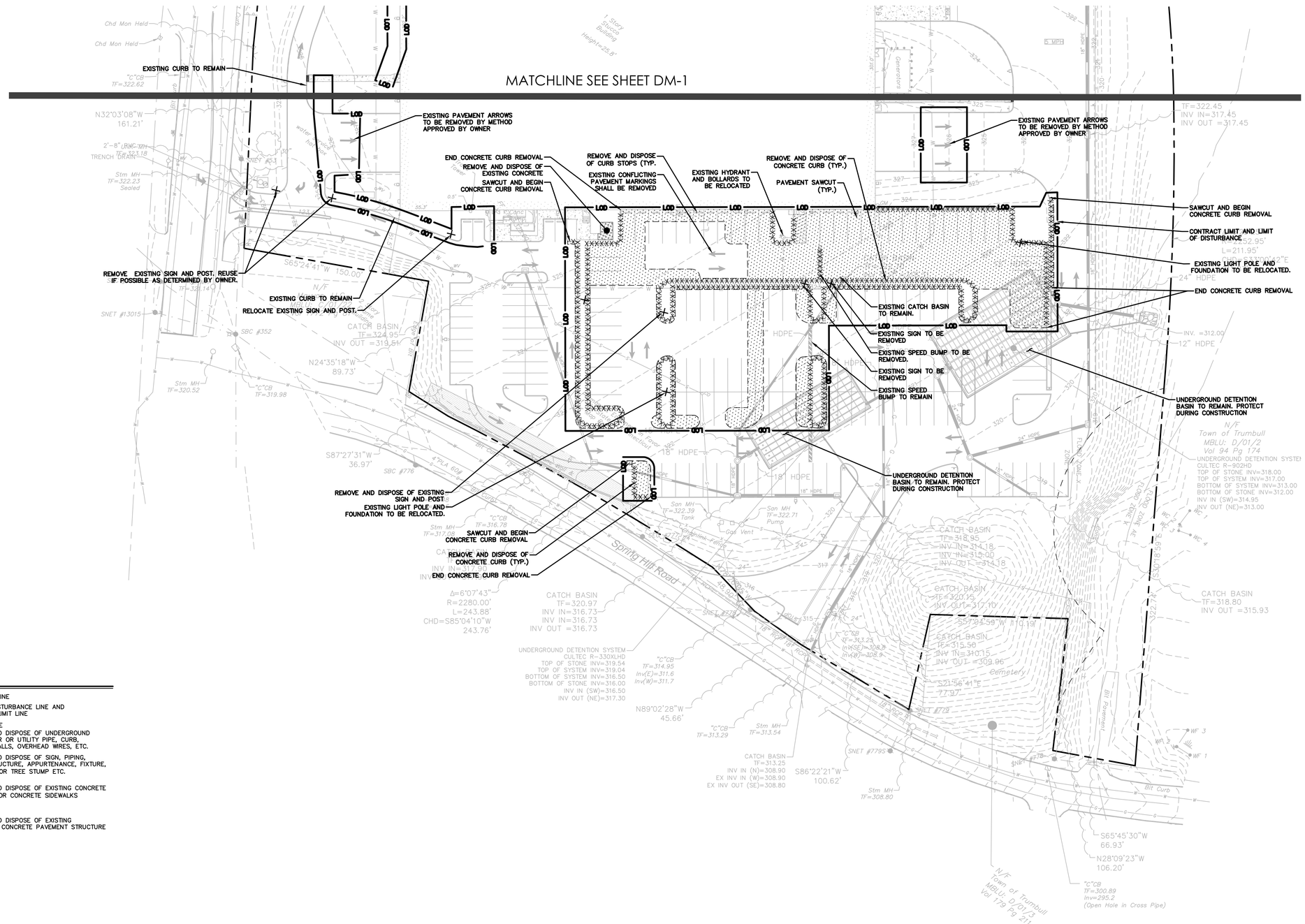

DEMOLITION LEGEND:

— — — —	PROPERTY LINE
LOD	LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE
— — — —	SAWCUT LINE
XXXXXXXXXXXXXXXXXXXX	REMOVE AND DISPOSE OF UNDERGROUND STORMWATER OR UTILITY PIPE, CURB, FENCING, WALLS, OVERHEAD WIRES, ETC.
X	REMOVE AND DISPOSE OF SIGN, PIPING, UTILITY STRUCTURE, APPURTENANCE, FIXTURE, TREE, AND/OR TREE STUMP ETC.
	REMOVE AND DISPOSE OF EXISTING CONCRETE PADS AND/OR CONCRETE SIDEWALKS
	REMOVE AND DISPOSE OF EXISTING BITUMINOUS CONCRETE PAVEMENT STRUCTURE

REFER TO SHEET GN-1 FOR SITE WORK AND GENERAL NOTES

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40 20 0 40
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PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

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Drawn	N.A.N.
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Scale	1"=40'
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Date	06/24/2019
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Title

DEMOLITION PLAN

Sheet No.

DM-2

Xref (s): BD190114131 ; XZ190114131 ; XC190114131

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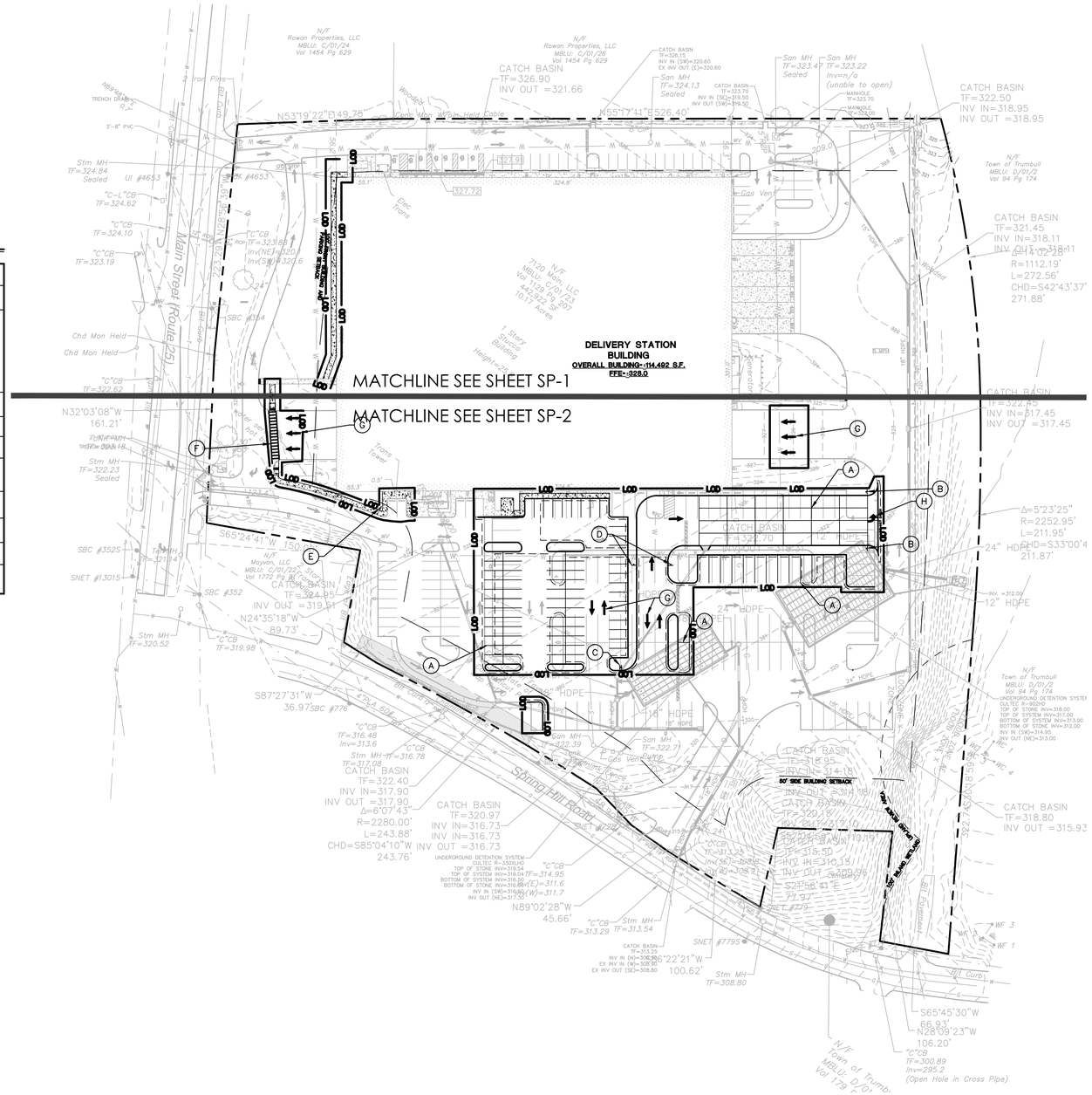
ZONING INFORMATION

LOCATION: TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT (<500 FEET FROM TOWN OF MONROE)				
ZONE: I-L2 (LIGHT INDUSTRY-2 ACRES)				
USE: WAREHOUSING (SPECIAL PERMITTED USE)				
ITEM #	ITEM	REQUIREMENTS	PROPOSED	VARIANCE
1	MINIMUM LOT AREA	2 ACRES	442,922 S.F. (10.17 AC.)	NO
2	MINIMUM LOT FRONTAGE	250 FEET	927.45 FEET	NO
3	MINIMUM FRONT SETBACK	100 FEET[1]	99 FEET (EXISTING NON-CONFORMING)	NO
4	MINIMUM SIDE SETBACK	50 FEET[1]	51 FEET	NO
5	MINIMUM REAR SETBACK	50 FEET[1]	209 FEET	NO
6	MAXIMUM BUILDING HEIGHT	40 FEET	26 FEET	NO
7	MAXIMUM IMPERVIOUS COVERAGE	80 PERCENT	70 PERCENT	NO
8	MAXIMUM BUILDING COVERAGE	33.33 PERCENT	26 PERCENT	NO

PARKING INFORMATION

ITEM #	ITEM	REQUIREMENTS	PROPOSED	VARIANCE
1	BUILDING SIZE	NONE REQUIRED	114,492.2 S.F.	NO
2	PARKING REQUIRED	ASSEMBLY/FACTORY: 1 SPACE PER EVERY 1.5 EMPLOYEES (97 EMPLOYEES) REQUIRED = 65 SPACES BUSINESS/OFFICE 1 SPACE PER 250SF OFFICE AREA = 2,618SF REQUIRED = 11 SPACES TOTAL REQUIRED = 76 SPACES	213 SPACES	NO
3	MINIMUM HANDICAPPED PARKING SPACES REQUIRED	6 SPACES (FOR 151 SPACES) 7 SPACES (FOR 213 SPACES)	7 SPACES	NO
4	MINIMUM PARKING DIMENSIONS	9 FEET X 18 FEET	9 FEET X 18 FEET	NO
5	MINIMUM AISLE WIDTH	24 FEET – 2-WAY	24 FEET – 2-WAY 15 FEET – 1-WAY	NO
6	MINIMUM FRONT SETBACK	15 FEET (100 FEET)[2]	SPRING HILL ROAD: 9 FEET (EXISTING NON-CONFORMING)	NO
			MAIN STREET: 149 FEET	NO
7	MINIMUM SIDE SETBACK	20 FEET[2]	6 FEET (EXISTING NON-CONFORMING)	NO
8	MINIMUM REAR SETBACK	20 FEET[2]	70 FEET	NO
9	MINIMUM INTERIOR LANDSCAPING	ONE TREE PER 10 SPACES, 20 S.F. PER PARKING SPACE	>ONE TREE PER 10 SPACES, >20 S.F. PER PARKING SPACE	NO



SITE PLAN LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- LOD — LIMIT OF DISTURBANCE (LOD) AND CONTRACT LIMIT LINE
- BUILDING SETBACK LINE
- PROVIDE AND INSTALL CONCRETE PAVEMENT STRUCTURE
- XX — PARKING STALL COUNT
- PROVIDE AND INSTALL STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE

SIGNAGE KEYNOTE LEGEND

- (A) PROVIDE AND INSTALL 4" WIDE WHITE STRIPE (TYP.)
- (B) PROVIDE AND INSTALL S-2 SIGN
- (C) PROVIDE AND INSTALL S-3 SIGN
- (D) PROVIDE AND INSTALL AS-53G SIGN
- (E) RELOCATED S-4 SIGN
- (F) PROVIDE AND INSTALL PAINTED CROSS WALK (PG-11)
- (G) PROVIDE AND INSTALL PAVEMENT ARROW (PG-5)
- (H) PROVIDE AND INSTALL PAVEMENT ARROW (PG-6)

REFER TO SHEET GN-1 FOR SITEWORK GENERAL NOTES

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60 30 0 60
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(203) 630-2615 Fax

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	1"=60'
Project No.	1901141
Date	06/24/2019
CAD File: SP190114131	

Title
OVERALL SITE PLAN

Sheet No.
SP-0

Xref (s): : BD190114131 ; X219011413 1 ; XC190114131

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SITE PLAN LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- LOD — LIMIT OF DISTURBANCE (LOD) AND CONTRACT LIMIT LINE
- BUILDING SETBACK LINE
- PROVIDE AND INSTALL CONCRETE PAVEMENT STRUCTURE
- XX — PARKING STALL COUNT
- PROVIDE AND INSTALL STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE

SIGNAGE KEYNOTE LEGEND

- (A) PROVIDE AND INSTALL 4" WIDE WHITE STRIPE (TYP.)
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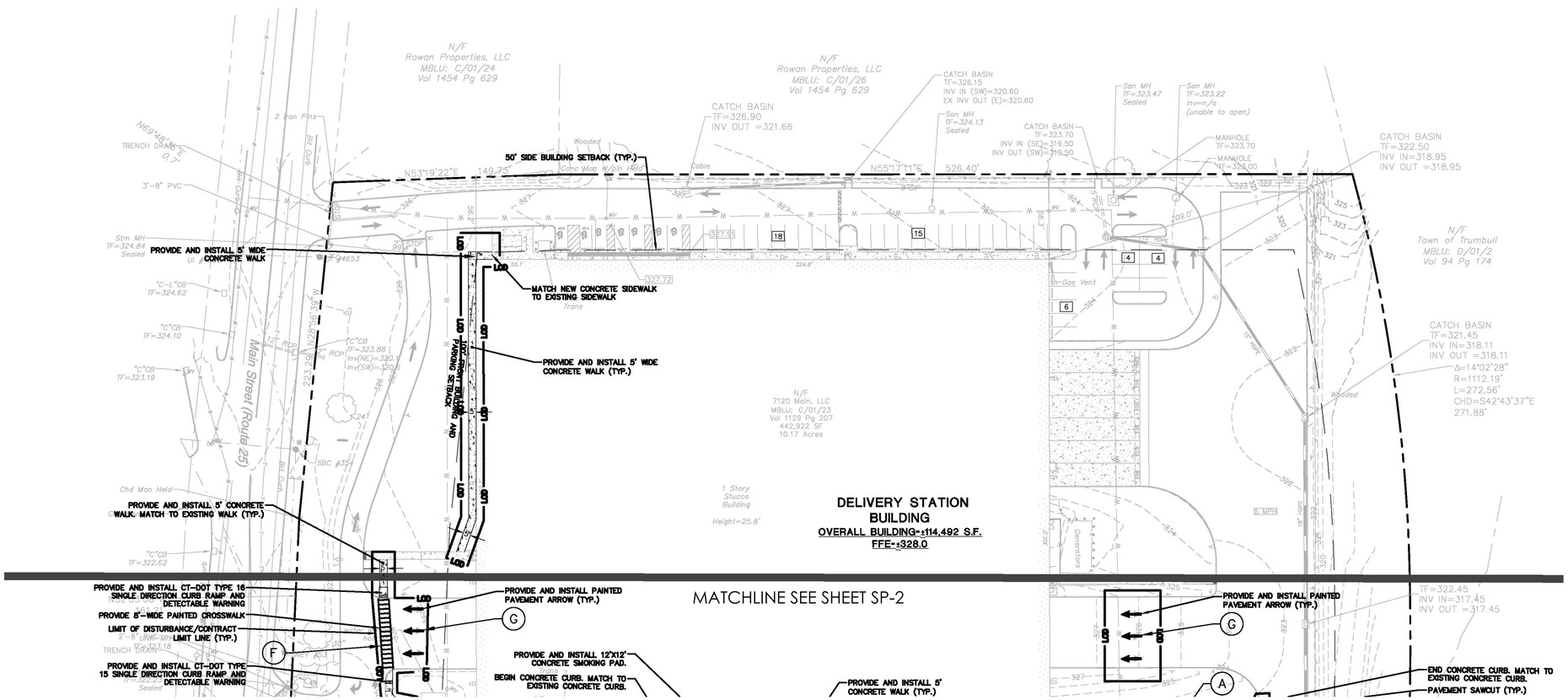
- (C) PROVIDE AND INSTALL S-3 SIGN
- (D) PROVIDE AND INSTALL AS-53G SIGN
- (E) RELOCATED S-4 SIGN
- (F) PROVIDE AND INSTALL PAINTED CROSS WALK (PG-11)
- (G) PROVIDE AND INSTALL PAVEMENT ARROW (PG-5)
- (H) PROVIDE AND INSTALL PAVEMENT ARROW (PG-6)



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40 20 0 40
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PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

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Scale	1"=40'
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Date	06/24/2019
CAD File: SP190114131	

Title
SITE PLAN

Sheet No.
SP-1

Xref (s): BD190114131; XC190114131; XC190114131

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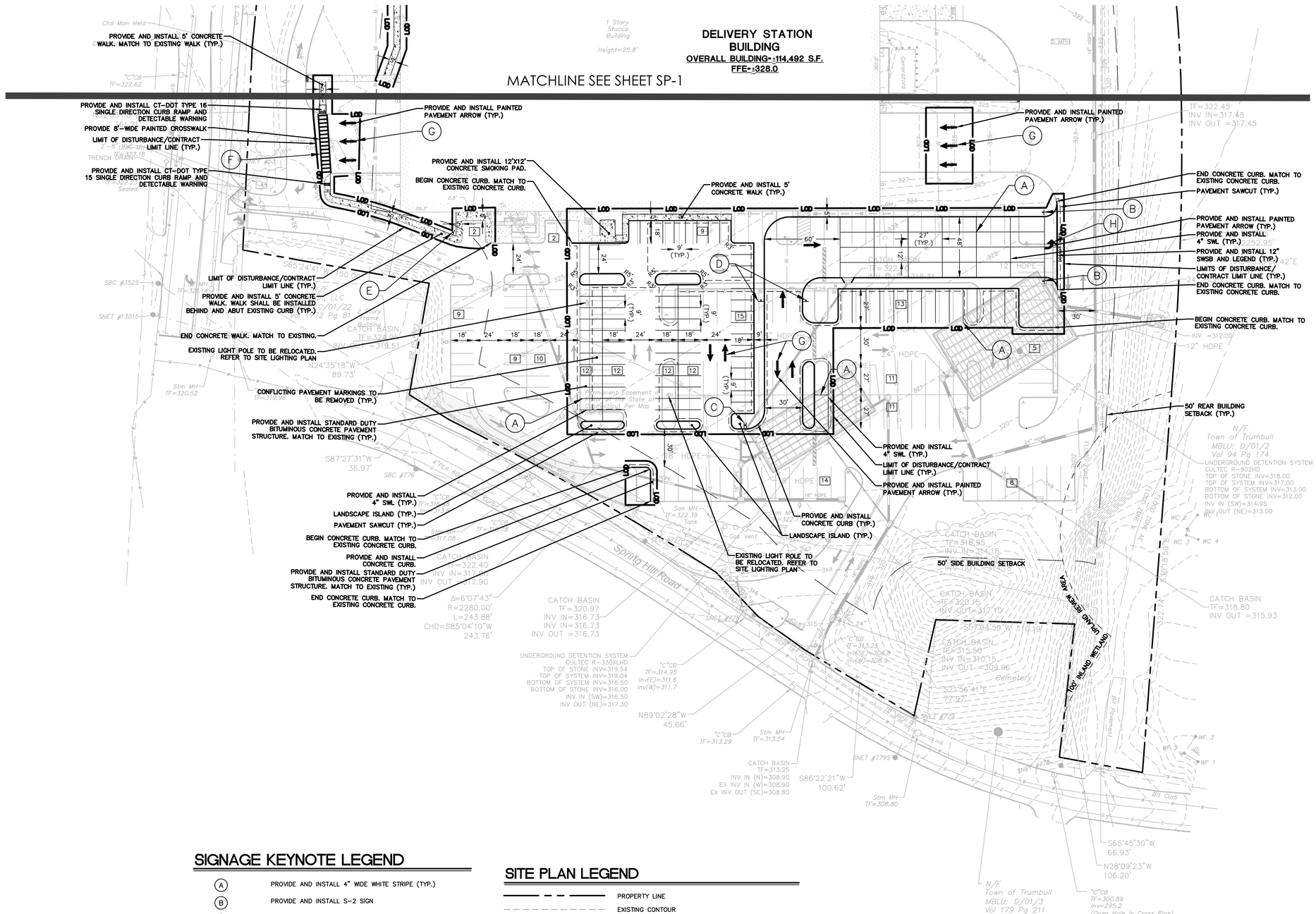

SIGNAGE KEYNOTE LEGEND

A	PROVIDE AND INSTALL 4" WIDE WHITE STRIPE (TYP.)
B	PROVIDE AND INSTALL S-2 SIGN
C	PROVIDE AND INSTALL S-3 SIGN
D	PROVIDE AND INSTALL AS-53G SIGN
E	RELOCATED S-4 SIGN
F	PROVIDE AND INSTALL PAINTED CROSS WALK (PG-11)
G	PROVIDE AND INSTALL PAVEMENT ARROW (PG-5)
H	PROVIDE AND INSTALL PAVEMENT ARROW (PG-6)

SITE PLAN LEGEND

	PROPERTY LINE
	EXISTING CONTOUR
LOD	LIMIT OF DISTURBANCE (LOD) AND CONTRACT LIMIT LINE
	BUILDING SETBACK LINE
	PROVIDE AND INSTALL CONCRETE PAVEMENT STRUCTURE
XX	PARKING STALL COUNT
	PROVIDE AND INSTALL STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE

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PROPOSED DEVELOPMENT
7120 MAIN STREET
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Title
SITE PLAN

Sheet No.
SP-2

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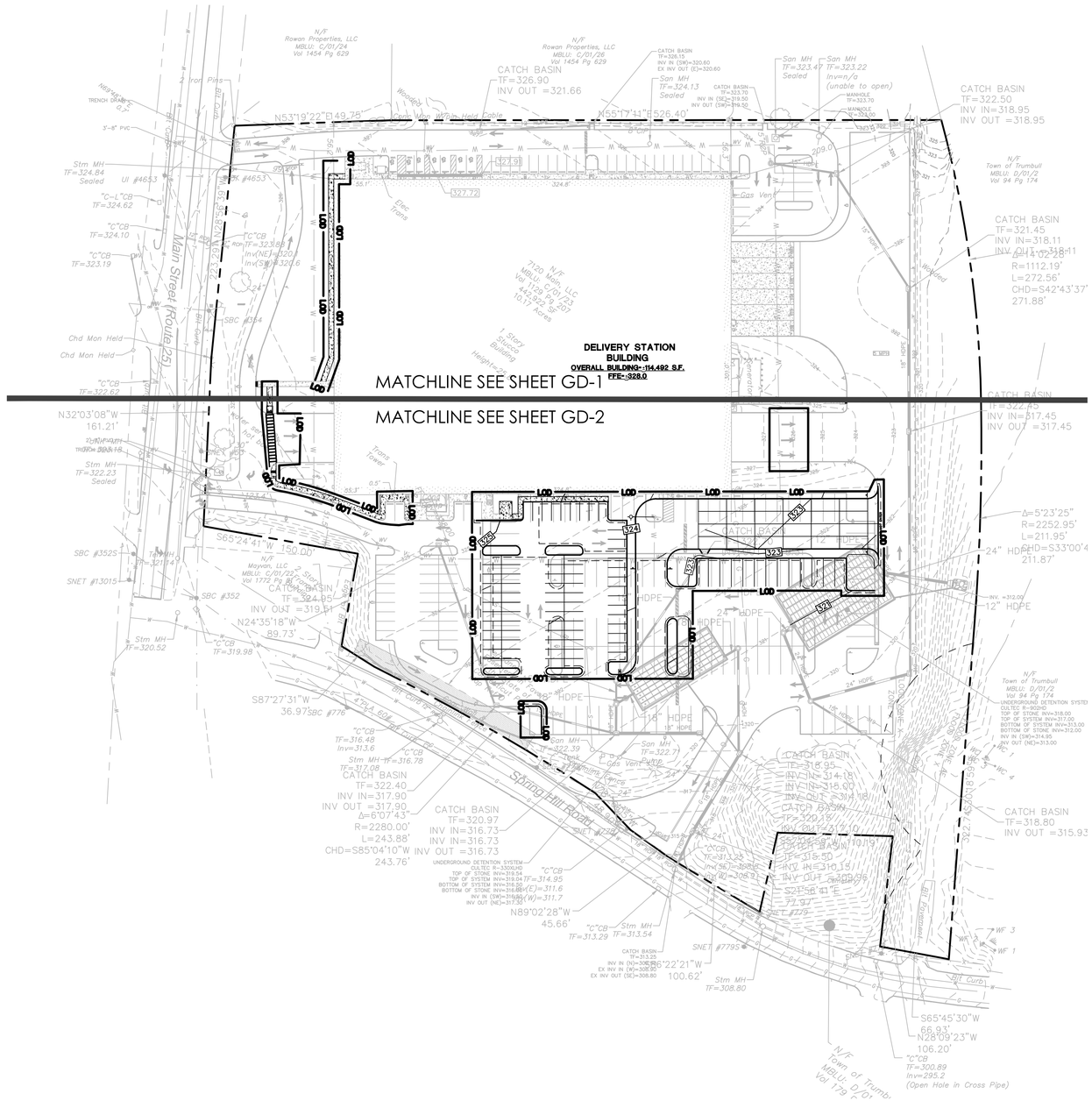
Xref (s): BD190114131; XZ190114131; XC190114131

GRADING AND DRAINAGE LEGEND

PROPERTY LINE	
LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE	LOD
PROPOSED STORM LINE	
PROPOSED CATCH BASIN	
PROPOSED STORM MANHOLE	
PROPOSED FLARED END	
PROPOSED END WALL OR HEADWALL	
PROPOSED OUTLET CONTROL STRUCTURE	
PROPOSED HYDRODYNAMIC SEPARATOR	
PROPOSED CONTOUR LINE	228
PROPOSED SPOT GRADE	x 100.00
ABBREVIATIONS – TC=TOP OF CURB – BC=BOTTOM OF CURB – TW=TOP OF WALL – BW=BOTTOM OF WALL	x TC=100.00 BC=99.50 x TW=108.00 BW=100.00
PROPOSED SURFACE SLOPE	2%
PROPOSED WATER LINE	W W
PROPOSED HYDRANT	
EXISTING TEST PIT LOCATION	
PERCOLATION TEST LOCATION	
EXISTING ELECTRIC LINE	E E
EXISTING ELECTRIC AND TELECOMMUNICATIONS LINES	E/T
EXISTING GAS LINE	G G
EXISTING SANITARY SEWER LINE	S
EXISTING SANITARY SEWER FORCE MAIN	SFM
EXISTING OVERHEAD LINE	OH OH
EXISTING TRANSFORMER	T
EXISTING UTILITY POLE	
EXISTING SANITARY/STORM MANHOLE	
EXISTING SANITARY/STORM CLEANOUT	CO
EXISTING WATER VALVE	WV
EXISTING GATE VALVE	GV
EXISTING THRUST BLOCK	
EXISTING GREASE TRAP	
EXISTING CONTOUR	



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60 30 0 60
SCALE IN FEET

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PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

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Reviewed	
Scale	1"=60'
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Title
OVERALL GRADING, DRAINAGE, AND SITE UTILITIES PLAN

Sheet No.
GD-0

Xref (s): : BD190114131 : X2190114131 : XC190114131 : XC190114132

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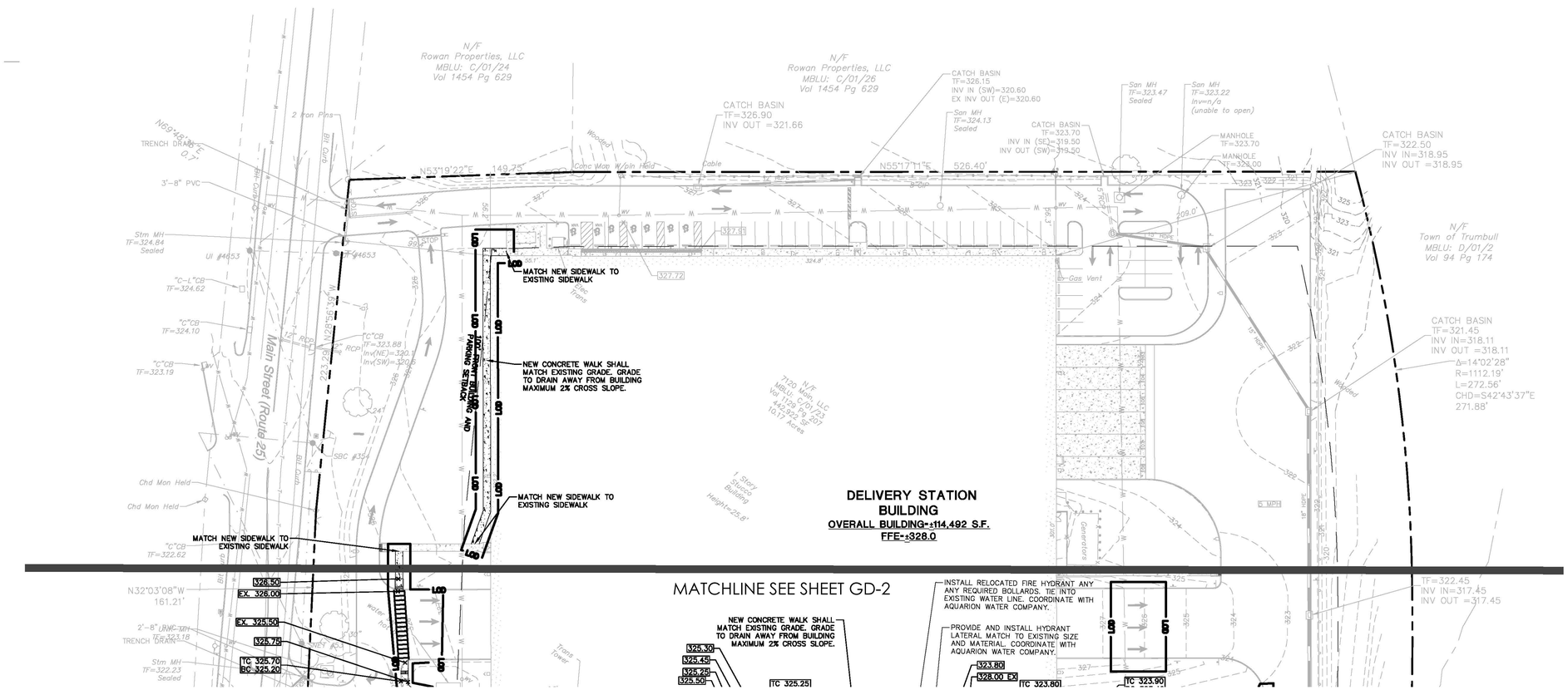
GRADING AND DRAINAGE LEGEND

PROPERTY LINE	
LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE	LOD
PROPOSED STORM LINE	
PROPOSED CATCH BASIN	
PROPOSED STORM MANHOLE	
PROPOSED FLARED END	
PROPOSED END WALL OR HEADWALL	
PROPOSED OUTLET CONTROL STRUCTURE	
PROPOSED HYDRODYNAMIC SEPARATOR	
PROPOSED CONTOUR LINE	228
PROPOSED SPOT GRADE	x 100.00
ABBREVIATIONS – TC=TOP OF CURB – BC=BOTTOM OF CURB – TW=TOP OF WALL – BW=BOTTOM OF WALL	x TC=100.00 BC=99.50 x TW=108.00 BW=100.00
PROPOSED SURFACE SLOPE	2%
PROPOSED WATER LINE	W W
PROPOSED HYDRANT	
EXISTING TEST PIT LOCATION	
PERCOLATION TEST LOCATION	
EXISTING ELECTRIC LINE	E E
EXISTING ELECTRIC AND TELECOMMUNICATIONS LINES	E/T
EXISTING GAS LINE	G G
EXISTING SANITARY SEWER LINE	S
EXISTING SANITARY SEWER FORCE MAIN	SFM
EXISTING OVERHEAD LINE	OH OH
EXISTING TRANSFORMER	T
EXISTING UTILITY POLE	
EXISTING SANITARY/STORM MANHOLE	
EXISTING SANITARY/STORM CLEANOUT	CO
EXISTING WATER VALVE	WV
EXISTING GATE VALVE	GV
EXISTING THRUST BLOCK	
EXISTING GREASE TRAP	
EXISTING CONTOUR	



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Title

GRADING, DRAINAGE, AND SITE UTILITIES PLAN

Sheet No.

GD-1

Xref (s): BD190114131 ; XZ190114131 ; XC190114131 ; XC190114132

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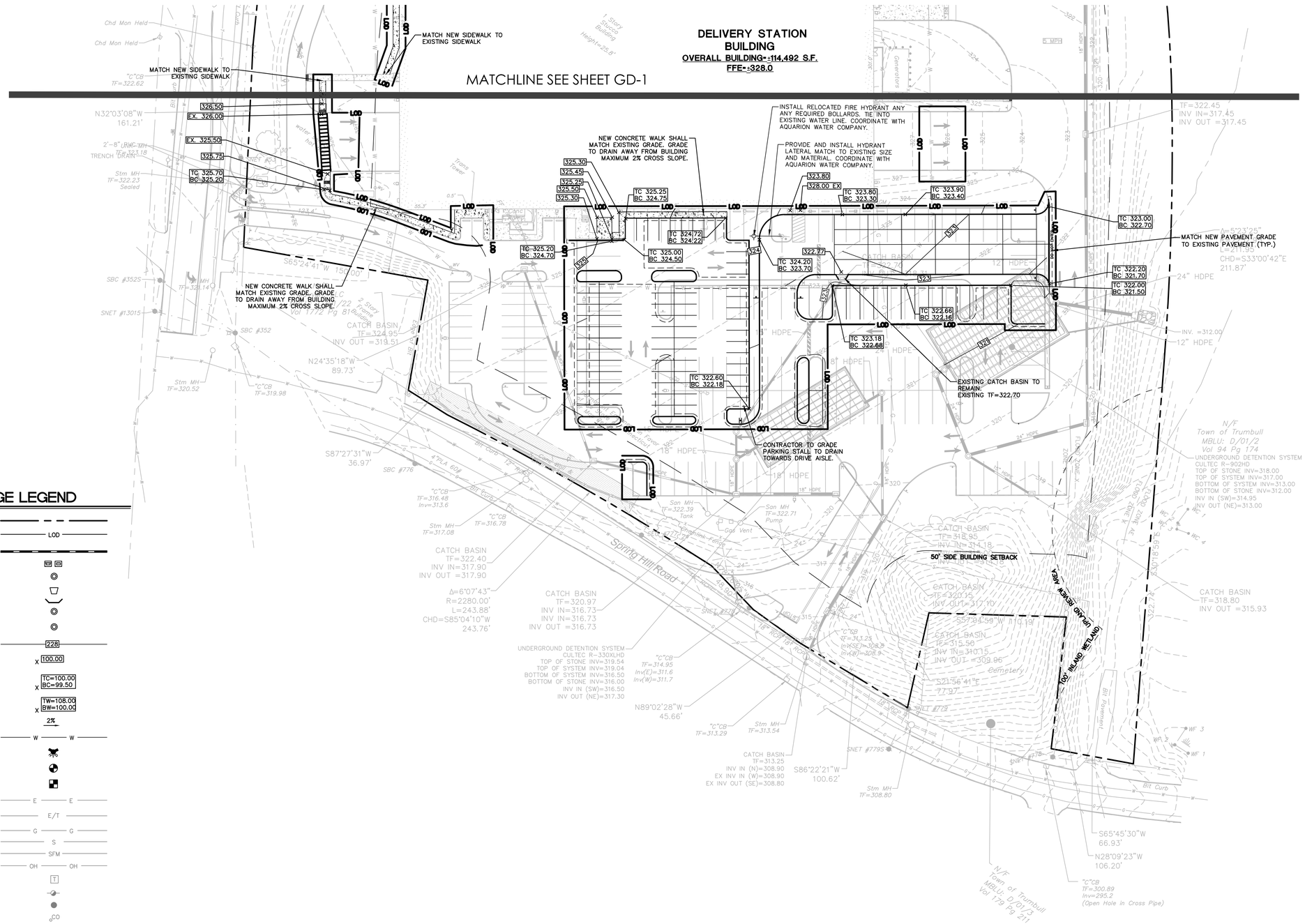

GRADING AND DRAINAGE LEGEND

PROPERTY LINE	
LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE	LOD
PROPOSED STORM LINE	
PROPOSED CATCH BASIN	
PROPOSED STORM MANHOLE	
PROPOSED FLARED END	
PROPOSED END WALL OR HEADWALL	
PROPOSED OUTLET CONTROL STRUCTURE	
PROPOSED HYDRODYNAMIC SEPARATOR	
PROPOSED CONTOUR LINE	228
PROPOSED SPOT GRADE	x 100.00
ABBREVIATIONS – TC=TOP OF CURB – BC=BOTTOM OF CURB – TW=TOP OF WALL – BW=BOTTOM OF WALL	x TC=100.00 BC=99.50 x TW=108.00 BW=100.00
PROPOSED SURFACE SLOPE	2%
PROPOSED WATER LINE	W W
PROPOSED HYDRANT	
EXISTING TEST PIT LOCATION	
PERCOLATION TEST LOCATION	
EXISTING ELECTRIC LINE	E E
EXISTING ELECTRIC AND TELECOMMUNICATIONS LINES	E/T
EXISTING GAS LINE	G G
EXISTING SANITARY SEWER LINE	S
EXISTING SANITARY SEWER FORCE MAIN	SFM
EXISTING OVERHEAD LINE	OH OH
EXISTING TRANSFORMER	T
EXISTING UTILITY POLE	
EXISTING SANITARY/STORM MANHOLE	
EXISTING SANITARY/STORM CLEANOUT	CO
EXISTING WATER VALVE	WV
EXISTING GATE VALVE	GV
EXISTING THRUST BLOCK	
EXISTING GREASE TRAP	
EXISTING CONTOUR	

REFER TO SHEET GN-1 FOR SITEWORK GENERAL NOTES

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PROPOSED DEVELOPMENT
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REVISIONS
No. Date Desc.

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Title
GRADING, DRAINAGE, AND SITE UTILITIES PLAN

Sheet No.
GD-2

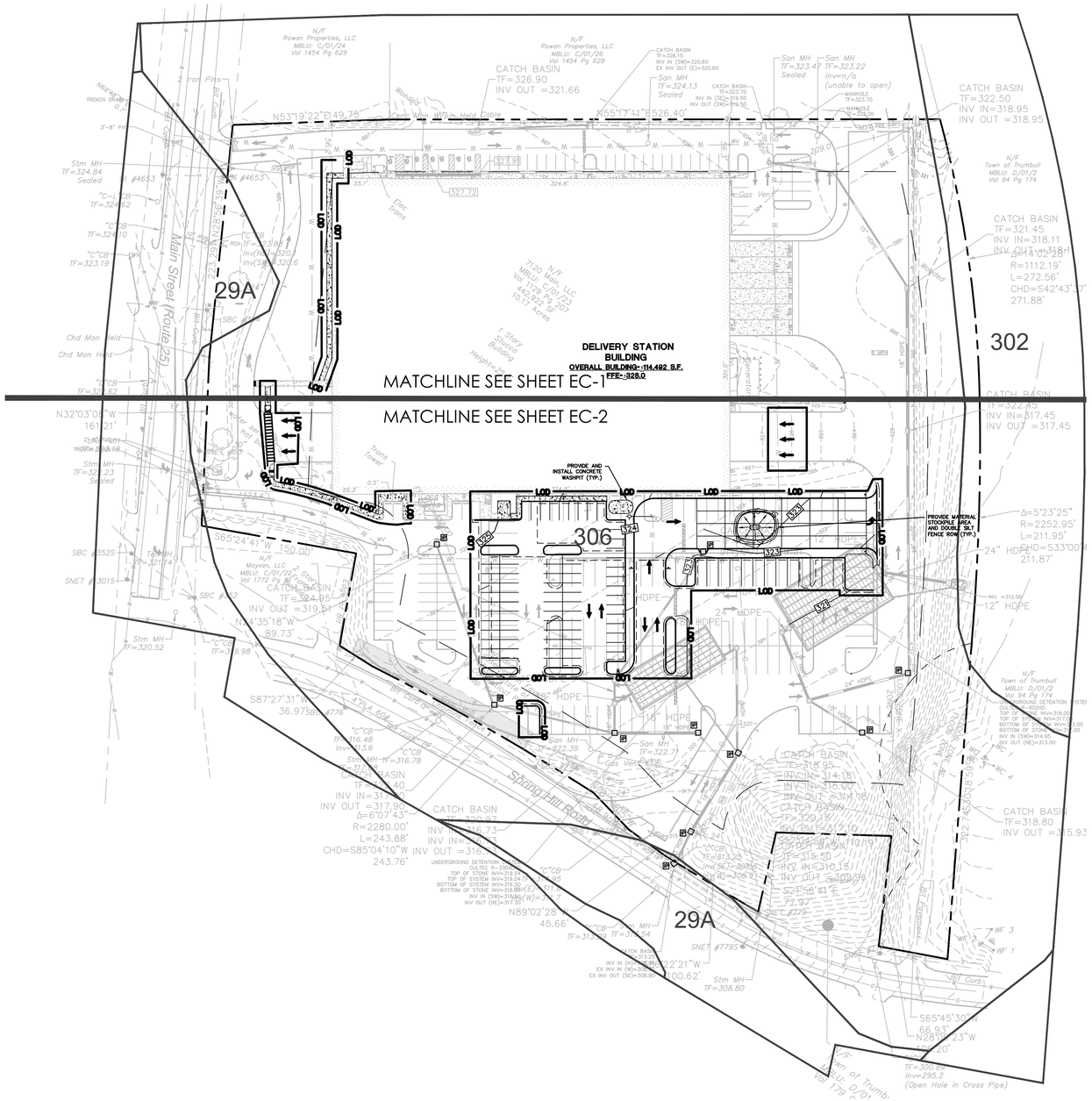
Xref (s): BD190114131; XZ190114131; XC190114132

EROSION CONTROL LEGEND:

CONTROL MEASURE	ILLUSTRATION
SILT SACKS AT CATCH BASINS	
LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE	LOD
CONCRETE WASH PIT	
STOCKPILE AREA WITH DOUBLE ROW OF SILT FENCE	

SOIL TYPE

29A	AGAWAM FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B)
302	DUMPS (NO HSG)
306	UDORTHENTS–URBAN LAND COMPLEX (HSG B/D)
	SOIL TYPE DELINEATION



REFER TO SHEET EC-3 FOR SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

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GRAPHIC SCALE
60 30 0 60
SCALE IN FEET

Architecture
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Land Surveying
BL Companies
355 Research Parkway
Meriden, CT 06450
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PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	1"=60'
Project No.	1901141
Date	06/24/2019
CAD File: EC190114131	

Title
OVERALL SEDIMENT AND EROSION CONTROL PLAN

Sheet No.
EC-0

Xref (s): : BD190114131 ; X219011413 1 ; XC190114131 ; XC190114132 ; XC190114134

4/25/2020, KEK GUSS, G:\-DRSTR\D\190141\DWG\EC190141X1.DWG EC-0 24X36.dwg

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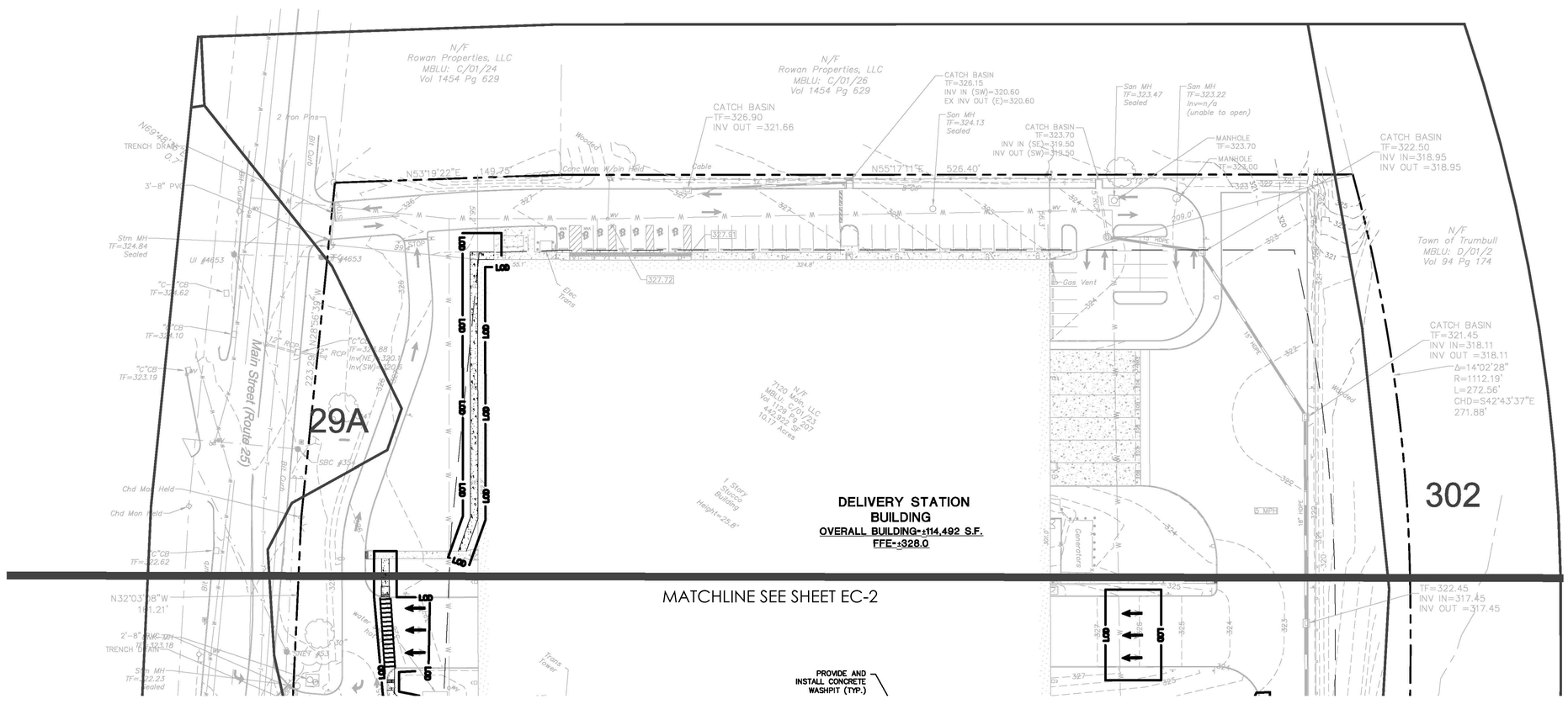
EROSION CONTROL LEGEND:

CONTROL MEASURE	ILLUSTRATION
SILT SACKS AT CATCH BASINS	
LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE	LOD
CONCRETE WASH PIT	
STOCKPILE AREA WITH DOUBLE ROW OF SILT FENCE	

SOIL TYPE

29A	AGAWAM FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B)
302	DUMPS (NO HSG)
306	UDORTHENTS–URBAN LAND COMPLEX (HSG B/D)
	SOIL TYPE DELINEATION



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GRAPHIC SCALE
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SCALE IN FEET

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PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019

CAD File: EC190114131

Title
SEDIMENT AND EROSION CONTROL PLAN

Sheet No.
EC-1

Xref (s): 1BD190114131; X2190114131; XC190114131; XC190114132; XC190114134

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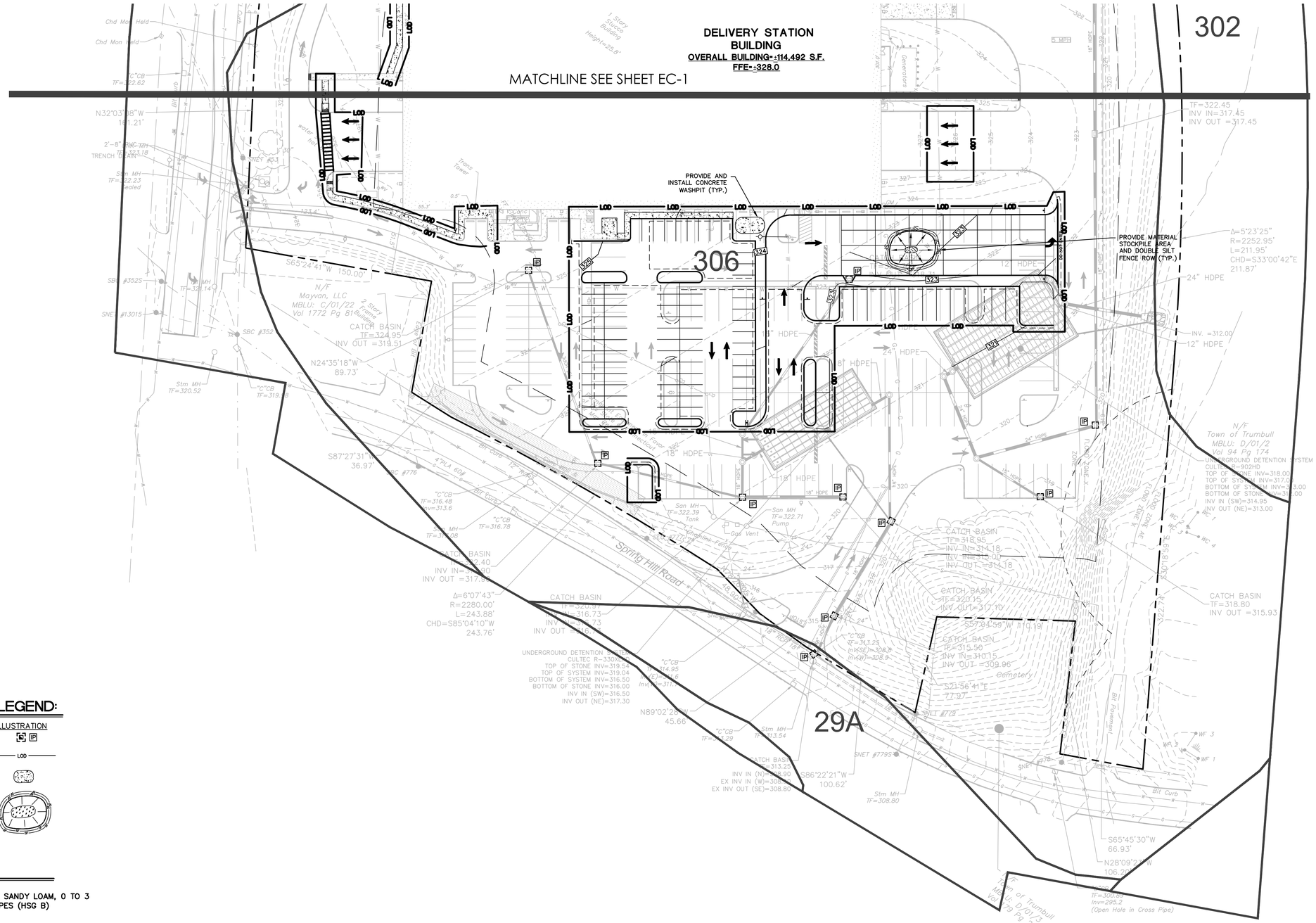

EROSION CONTROL LEGEND:

CONTROL MEASURE	ILLUSTRATION
SILT SACKS AT CATCH BASINS	SS IP
LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE	LOD
CONCRETE WASH PIT	
STOCKPILE AREA WITH DOUBLE ROW OF SILT FENCE	

SOIL TYPE

29A	AGAWAM FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B)
302	DUMPS (NO HSG)
306	UDORTHENTS–URBAN LAND COMPLEX (HSG B/D)
———	SOIL TYPE DELINEATION

REFER TO SHEET EC-3 FOR SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

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SCALE IN FEET

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PROPOSED DEVELOPMENT
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TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019
CAD File: EC190114131	

Title
SEDIMENT AND EROSION CONTROL PLAN

Sheet No.
EC-2

Xref (s): : 1901141 31 ; XC190114131 ; XC190114131 ; XC190114132 ; XC190114134

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SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL NOTES – CONNECTICUT

SEDIMENT & EROSION CONTROL NARRATIVE
THE SEDIMENT AND EROSION CONTROL PLAN WAS DEVELOPED TO PROTECT THE EXISTING ROADWAY AND STORM DRAINAGE SYSTEMS, ADJACENT PROPERTIES, AND ANY ADJACENT WETLAND AREA AND ANY ADJACENT WATER COURSE FROM SEDIMENT LADEN SURFACE RUNOFF AND EROSION. A CONSTRUCTION SEQUENCE IS PROVIDED TO PROVIDE SURFACE RUNOFF EROSION CONTROLS PRIOR TO THE BEGINNING OF PROJECT DEMOLITION AND/OR CONSTRUCTION.

CONSTRUCTION SCHEDULE
THE ANTICIPATED STARTING DATE FOR CONSTRUCTION IS SPRING 2020 WITH COMPLETION ANTICIPATED SPRING 2021. APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES AS DESCRIBED HEREIN SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ALL DEMOLITION OR CONSTRUCTION ACTIVITY. SCHEDULE WORK TO MINIMIZE THE LENGTH OF TIME THAT BARE SOIL WILL BE EXPOSED.

CONTINGENCY EROSION PLAN
THE CONTRACTOR SHALL INSTALL ALL SPECIFIED SEDIMENT AND EROSION CONTROL MEASURES AND WILL BE REQUIRED TO MAINTAIN THEM IN THEIR INTENDED FUNCTIONING CONDITION. THE AGENTS OF THE MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AND/OR CIVIL ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUPPLEMENTAL MAINTENANCE OR ADDITIONAL MEASURES IF FIELD CONDITIONS ARE ENCOUNTERED BEYOND WHAT WOULD NORMALLY BE ANTICIPATED.

CONSTRUCTION SEQUENCE
THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

1. CONTACT MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENT AT LEAST FORTY–EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY DEMOLITION, CONSTRUCTION OR REGULATED ACTIVITY ON THIS PROJECT.
2. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THE MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENT PRIOR TO THE START OF WORK ON THE SITE. INSTALL INLET PROTECTION.
3. SITE DEMOLITION AND REMOVAL. PAVEMENT REMOVAL.
4. CONSTRUCTION STAKING OF ALL SIDEWALKS, UTILITIES, ACCESS DRIVES, AND PARKING AREAS.
5. ROUGH GRADING AND FILLING OF SUBGRADES AND SLOPES.
6. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
7. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE CONTRACTOR MUST PROVIDE EVIDENCE THAT EACH SPOIL OR BORROW AREA HAS A SEDIMENT AND EROSION CONTROL PLAN APPROVED BY THE APPROPRIATE MUNICIPALITY AND/OR COUNTY SOILS CONSERVATION DISTRICT AND/OR INLAND WETLANDS COMMISSION AND WHICH IS BEING IMPLEMENTED AND MAINTAINED. THE CONTRACTOR SHALL ALSO NOTIFY THE MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN THEY HAVE BEEN IDENTIFIED.
8. THROUGHOUT CONSTRUCTION SEQUENCE, REMOVE SEDIMENT FROM BEHIND SILT FENCES, HAY BALES AND OTHER EROSION CONTROL DEVICES, AND FROM SEDIMENT BASINS AND SEDIMENT TRAPS AS REQUIRED. REMOVAL SHALL BE ON A PERIODIC BASIS (EVERY SIGNIFICANT RAINFALL OF 0.25 INCH OR GREATER). INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE ON A WEEKLY BASIS AND AFTER EACH RAINFALL OF 0.25 INCHES OR GREATER. SEDIMENT COLLECTED SHALL BE DEPOSITED AND SPREAD EVENLY UPLAND ON SLOPES DURING CONSTRUCTION.
9. INSTALL UTILITIES.
10. INSTALL SITE LIGHTING.
11. COMPLETE GRADING TO SUBGRADES AND CONSTRUCT PARKING AREA SUBGRADE.
12. CONSTRUCT CURBS, PAVEMENT STRUCTURE AND SIDEWALKS.
13. CONDUCT FINE GRADING.
14. PAVING OF PARKING AREAS AND DRIVEWAYS
15. FINAL FINE GRADING OF SLOPE AND NON–PAVED AREAS.
16. PLACE 4" TOPSOIL ON SLOPES AFTER FINAL GRADING IS COMPLETED. FERTILIZE SEED AND MULCH. SEED MIXTURE TO BE INSTALLED APRIL 15, 2020 – JUNE 30, 2020 AND AUGUST 15, 2020 – OCTOBER 1, 2020 USE EROSION CONTROL BLANKETS AS REQUIRED OR ORDERED FOR SLOPES GREATER THAN 3:1 AND AS SHOWN ON LANDSCAPE PLANS OR EROSION CONTROL PLANS. FOR TEMPORARY STABILIZATION BEYOND SEEDING DATES USE ANNUAL RYE AT 4.0 LBS/1,000 S.F. FERTILIZE WITH 10–10–10 AT 1.0 LBS. OF NITROGEN PER 1,000 S.F. AND LIME AT 100 LBS/1,000 S.F. (MAX.).
17. LANDSCAPE ISLANDS, INTERIOR NON–PAVED AREAS, AND PERIMETER AREAS.
18. INSTALL SIGNING AND PAVEMENT MARKINGS
19. CLEAN STORM DRAINAGE PIPE STRUCTURES, DETENTION SYSTEMS AND WATER QUALITY DEVICES OF DEBRIS AND SEDIMENT.
20. UPON DIRECTION OF THE MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENT, SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED FOLLOWING STABILIZATION OF THE SITE.

OPERATION REQUIREMENTS

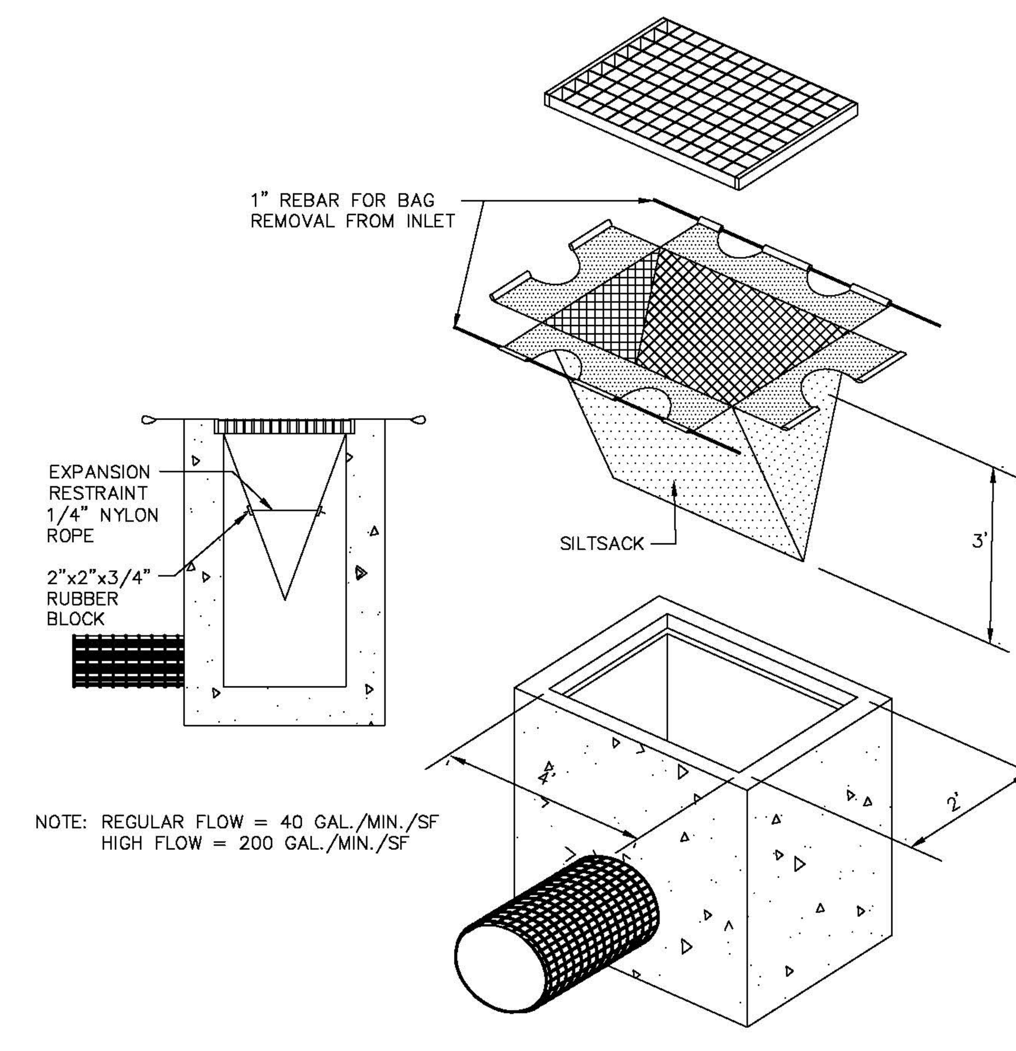
ROUGH GRADING OPERATIONS

1. DURING THE REMOVAL AND/OR PLACEMENT OF EARTH AS INDICATED ON THE GRADING PLAN, TOPSOIL SHALL BE STRIPPED AND APPROPRIATELY STOCKPILED FOR REUSE.
2. ALL STOCKPILED TOPSOIL SHALL BE SEEDED, MULCHED WITH HAY, AND ENCLOSED BY A SILTATION FENCE.

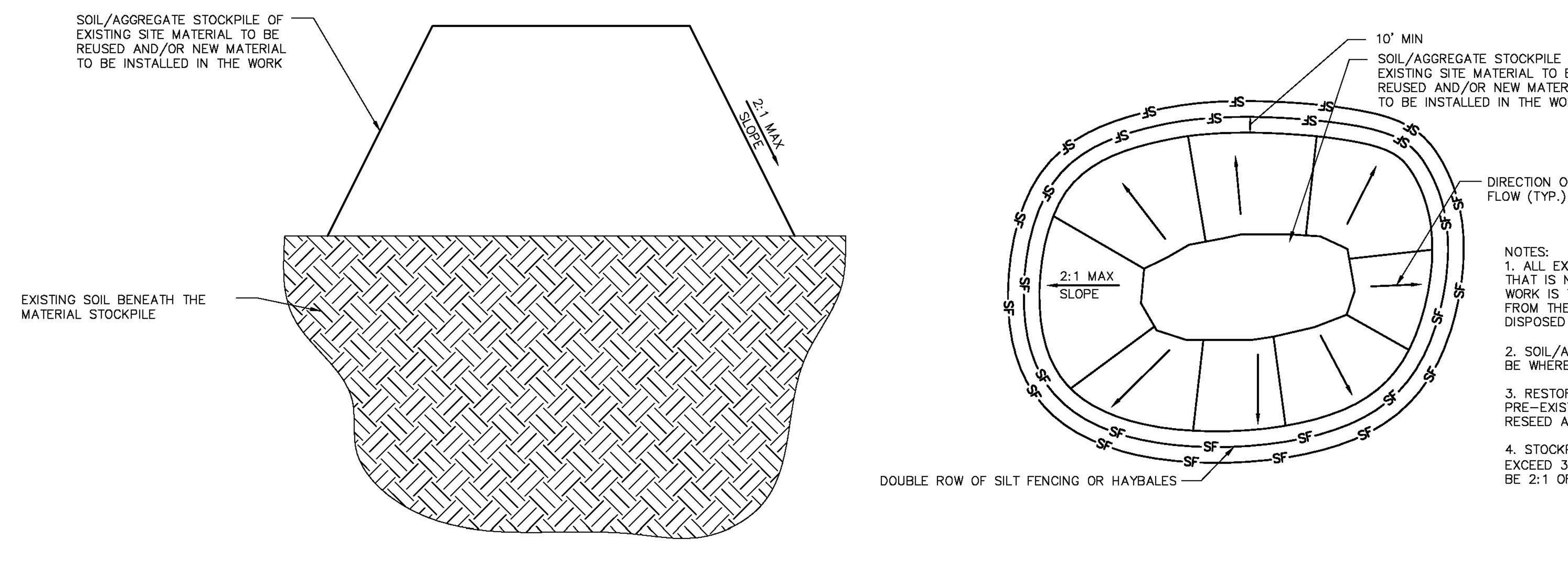
FINAL GRADING AND PAVING OPERATIONS

1. ALL INLET AND OUTLET PROTECTION SHALL BE PLACED AND MAINTAINED AS SHOWN ON SEDIMENT AND EROSION CONTROL PLANS AND DETAILS, AND AS DESCRIBED IN SPECIFICATIONS AND AS DESCRIBED HEREIN.
2. NO CUT OR FILL SLOPES SHALL EXCEED 3:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS, OR JUTE MESH AND VEGETATION. ALL SLOPES SHALL BE SEEDED, AND ANY ROAD OR DRIVEWAY SHOULDER AND BANKS SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
3. PAVEMENT SUB–BASE AND BASE COURSES SHALL BE INSTALLED OVER AREAS TO BE PAVED AS SOON AS FINAL SUB–GRADES ARE ESTABLISHED AND UNDERGROUND UTILITIES AND STORM DRAINAGE SYSTEMS HAVE BEEN INSTALLED.
4. AFTER CONSTRUCTION OF PAVEMENT, TOPSOIL, FINAL SEED, MULCH AND LANDSCAPING, REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ONLY AFTER ALL AREAS HAVE BEEN PAVED AND/OR GRASS HAS BEEN WELL ESTABLISHED AND THE SITE IS STABLE AND HAS BEEN INSPECTED AND APPROVED BY THE MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENT.

SEDIMENT AND EROSION CONTROL NOTES
1. THE SEDIMENT AND EROSION CONTROL PLAN IS ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL TREATMENT FOR THIS SITE. SEE SEDIMENT AND EROSION CONTROL DETAILS AND CONSTRUCTION SEQUENCE. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
2. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE PROPER INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED WITH CONSTRUCTION ON THE SITE OF THE REQUIREMENTS AND OBJECTIVES OF THIS PLAN, INFORMING THE AUTHORITY HAVING JURISDICTION OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE SEDIMENT & EROSION CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
3. AN EROSION CONTROL BOND MAY BE REQUIRED TO BE POSTED WITH THE TOWN OF TRUMBULL TO ENSURE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF THIS BOND AND FOR INQUIRIES TO THE TOWN OF TRUMBULL FOR INFORMATION ON THE METHOD, TYPE AND AMOUNT OF THE BOND POSTING UNLESS OTHERWISE DIRECTED BY THE OWNER.
4. VISUAL SITE INSPECTIONS SHALL BE CONDUCTED WEEKLY, AND AFTER EACH MEASURABLE PRECIPITATION EVENT OF 0.25 INCHES OR GREATER BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN SEDIMENT AND EROSION CONTROL, TO ASCERTAIN THAT THE SEDIMENT AND EROSION CONTROL (E&S) BMPS ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE:
A)A SUMMARY OF THE SITE CONDITIONS, E&S BMPS, AND COMPLIANCE; AND
B)THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION
5. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL LATEST EDITION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENT. THE CONTRACTOR SHALL KEEP A COPY OF THE GUIDELINES ON–SITE FOR REFERENCE DURING CONSTRUCTION.
6. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPALITY AND/OR INLAND WETLANDS AND WATERCOURSES COMMISSION AGENT, OR GOVERNING AGENCIES. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED.
7. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS BEFORE AND AFTER EACH STORM (0.25 INCHES OR GREATER RAINFALL), OR AT LEAST WEEKLY, TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS WHERE NECESSARY.
8. THE CONTRACTOR SHALL KEEP A SUPPLY OF SEDIMENT AND EROSION CONTROL MATERIAL (SILT SACKS) ON–SITE FOR MAINTENANCE AND EMERGENCY REPAIRS.
9. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING AT THE DRIP LINE OR AS SHOWN WITH SNOW FENCE, ORANGE SAFETY FENCE, OR EQUIVALENT FENCING. ANY LIMB TRIMMING SHOULD BE DONE BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
10. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING. ALL EARTH STOCKPILES SHALL HAVE HAY BALES OR SILT FENCE AROUND THE LIMIT OF PILE. PILES SHALL BE TEMPORARILY SEEDED IF PILE IS TO REMAIN IN PLACE FOR MORE THAN ONE (1) MONTH.
11. ANY SEDIMENT TRAPS SHALL PROVIDE 134 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE CONTRIBUTING TO THE BASIN. PROVIDE BASIN VOLUMES FOR ALL DISTURBANCE ON SITE.
12. COMPLY WITH REQUIREMENTS OF CGS SECTION 22A 430B, FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND WITH DEEP RECORD KEEPING AND INSPECTION REQUIREMENTS.
13. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (ONE WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.
14. MAINTAIN EXISTING PAVED AREAS FOR CONSTRUCTION STAGING FOR AS LONG AS POSSIBLE.
15. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE SUCH AS TEMPORARY PITS, SEDIMENT TRAP, SEDIMENT BASINS OR GRASS FILTERS WITHIN THE APPROVED LIMIT OF DISTURBANCE. DISCHARGE TO STORM DRAINAGE SYSTEM OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR.
16. BLOCK END OF STORM SEWERS IN EXPOSED TRENCHES WITH BOARDS AND SANDBAGS AT THE END OF EACH WORKING DAY WHEN RAIN IS EXPECTED.
17. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. OTHER DUST CONTROL MEASURES TO BE USED AS NECESSARY INCLUDE WATERING DOWN DISTURBED AREAS, USING CALCIUM CHLORIDE, AND COVERING LOADS ON DUMP TRUCKS.
18. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
19. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.
20. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF UTILITY AND STORM PIPE TRENCHES SO AS TO ALLOW THE TRENCH TO INTERCEPT ALL SILT LADEN RUNOFF.
21. CONTRACTOR SHALL ONLY EXCAVATE AS MUCH UTILITY AND STORM PIPE TRENCH WORK AS CAN BE COMPLETED, BACKFILLED AND STABILIZED IN ONE DAY SO AS TO LIMIT THE AMOUNT OF OPEN, DISTURBED TRENCHING.
22. ANY STOCKPILES OF STRIPPED MATERIALS ARE TO BE PERIODICALLY SPRAYED WITH WATER OR A CRUSTING AGENT TO STABILIZE POTENTIALLY WIND–BLOWN MATERIAL. HAUL ROADS BOTH INTO AND AROUND THE SITE ARE TO BE SPRAYED AS NEEDED TO SUPPRESS DUST. TRUCKS HAULING IMPORT FILL MATERIAL ARE TO BE TARPED TO AID IN THE CONTROL OF AIRBORNE DUST. DURING HIGH WIND EVENTS (20 TO 30 MPH SUSTAINED) CONSTRUCTION ACTIVITY SHALL BE LIMITED OR CEASED IF DUST CANNOT BE CONTROLLED BY WETTING.
23. INSTALL TEMPORARY DIVERSION DITCHES, PLUNGE POOLS, SEDIMENT BASIN, SEDIMENT TRAPS, CONCRETE WASH PITS, AND DEWATERING PITS AS SHOWN AS NECESSARY DURING VARIOUS PHASES OF CONSTRUCTION TO CONTROL RUNOFF UNTIL UPHILL AREAS ARE DETERMINED TO BE STABILIZED BY THE AUTHORITY HAVING JURISDICTION. LOCATION OF ANY TEMPORARY SEDIMENT BASINS WILL REQUIRE REVIEW AND APPROVAL BY THE CIVIL ENGINEER AND AUTHORITY HAVING JURISDICTION,
24. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS UNLESS OTHERWISE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
25. MAINTAIN ALL PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP PARKING LOT AND REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS WHEN AUTHORIZED BY AUTHORITY HAVING JURISDICTION. FILE NOT (NOTICE OF TERMINATION) WITH AUTHORITY HAVING JURISDICTION RESPONSIBLE FOR REGULATING STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES PER NPDES.



SILTSACK DETAIL
N.T.S. BLEC–005



NOTES:
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
2. SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS.
3. RESTORE STOCKPILE SITES TO PRE–EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
4. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

MATERIALS STOCKPILE DETAIL
N.T.S. BLEC–006

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TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.G.
Drawn	N.A.N.
Reviewed	
Scale	NONE
Project No.	1901141
Date	06/24/2019
CAD File: EC190114131	

Title
SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

Sheet No.
EC-3

Xref (s): : BD190114131 ; XZ190114131 ; XC190114131 ; XC190114132 ; XC190114134

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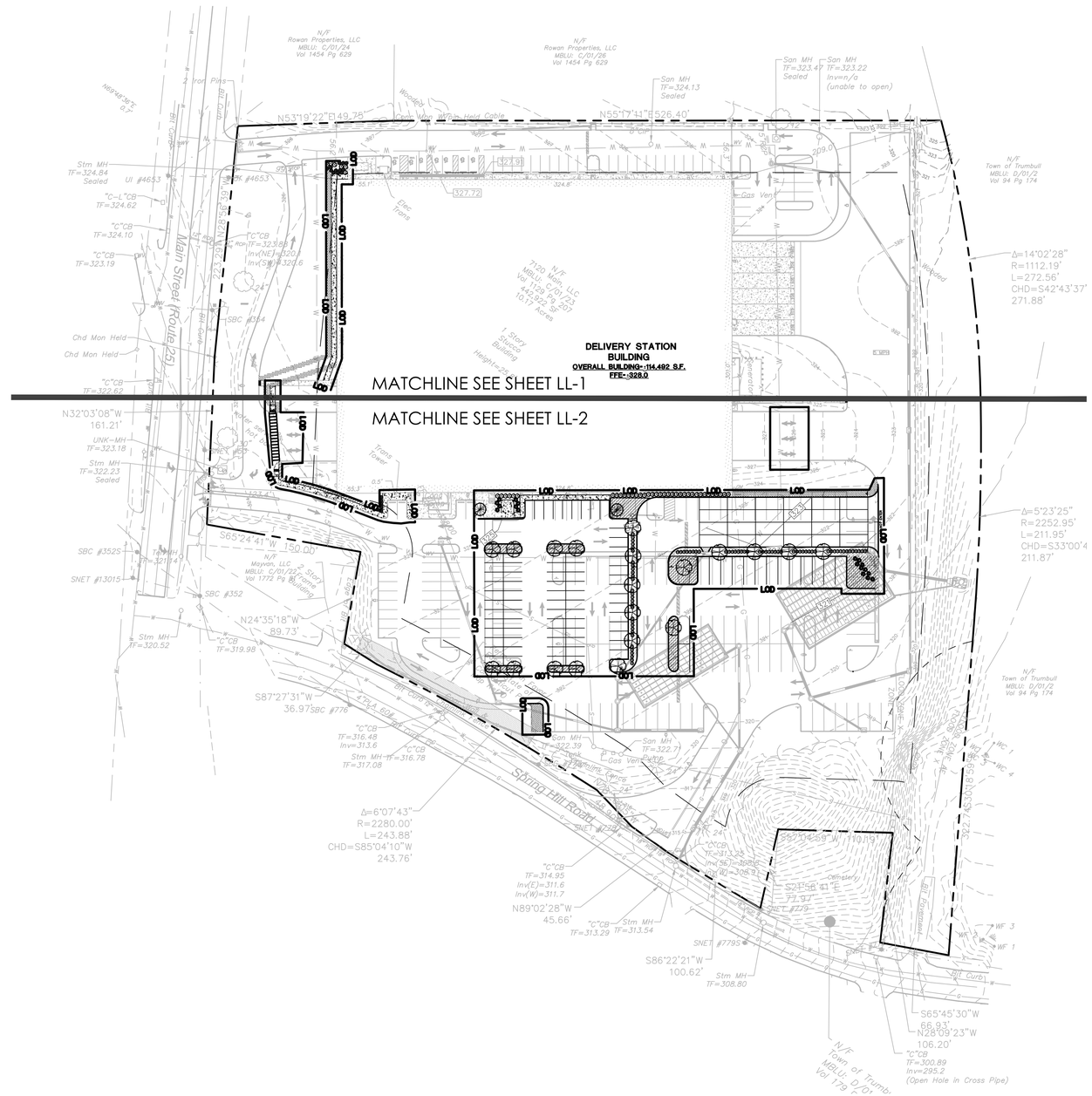
LANDSCAPE PLANT SCHEDULE						
SHADE TREES						
KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	COMMENTS
GT	9	Gleditsia triacanthos var. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST	B&B	2"–2.5" CAL.	MIN. 7' BRANCH HT.
PL	5	Platanus x acerifolia 'Morton's Circle'	EXCLAMATION! PLANETREE	B&B	2"–2.5" CAL.	MIN. 7' BRANCH HT.
QR	1	Quercus rubra	RED OAK	B&B	2"–2.5" CAL.	MIN. 7' BRANCH HT.
ORNAMENTAL TREES						
AA	5	Amelanchier arborea	DOWNY SERVICEBERRY	B&B	8' HT. MIN.	MULTI–STEM
PI	2	Prunus x incam	PRUNUS X INCAM 'OKAME'	B&B	1.5"–2" CAL.	
SHRUBS						
FG	18	Fothergilla gardenii	DWARF FOTHERGILLA	CONT.	30'–36" HT.	4' O.C.
IG	42	Ilex glabra 'Shamrock'	SHAMROCK INKBERRY	CONT.	30'–36" HT.	4' O.C.
GROUNDCOVERS, FLOWERING PERENNIALS & ORNAMENTAL GRASSES						
AM	76	Aronia melanocarpa 'UCONNAM165'	LOW SCAPE MOUND CHOKEBERRY	CONT.	12" HT. MIN.	3' O.C.
HM	20	Hemerocallis spp.	DAYLILY (BLEND OF THREE COLOR VARIETIES)	CONT.	12"–18" HT.	18" O.C.
JC	18	Juniperus chinensis 'Pfitzeriana Compacta'	COMPACT PFITZER JUNIPER	CONT.	12"–18" HT.	4' O.C.
JH	40	Juniperus horizontalis 'Plumosa Compacta'	COMPACT PLUMOSA JUNIPER	CONT.	12"–18" SPD.	4' O.C.
PA	20	Pennisetum alopecuroides	FOUNTAIN GRASS	CONT.	18"–24" HT.	36" O.C.
PV	75	Panicum virgatum 'Northwind'	NORTHWIND SWITCHGRASS	CONT.	18"–24" HT.	36" O.C.

NOTES:
1) ALL SUBSTITUTIONS MUST RECEIVE APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO SITE.

2) PROVIDE AND INSTALL ALL PLANTS SHOWN ON THE PLANTING PLAN DRAWINGS; THE QUANTITIES IN THE PLANT LIST ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF DISCREPANCIES OCCUR, THE LARGER QUANTITY SHALL APPLY.

3) IF THERE IS A DISCREPANCY BETWEEN BOTANICAL AND COMMON NAME, BOTANICAL NAME PREVAILS.



SEE SHEET LL-3 FOR LANDSCAPE NOTES AND DETAILS

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GRAPHIC SCALE
60 30 0 60
SCALE IN FEET

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(203) 630-1406
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PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	L.M.W.
Drawn	L.M.W.
Reviewed	
Scale	1"=60'
Project No.	1901141
Date	06/24/2019
CAD File: LL190114131	

Title
OVERALL LANDSCAPE PLAN

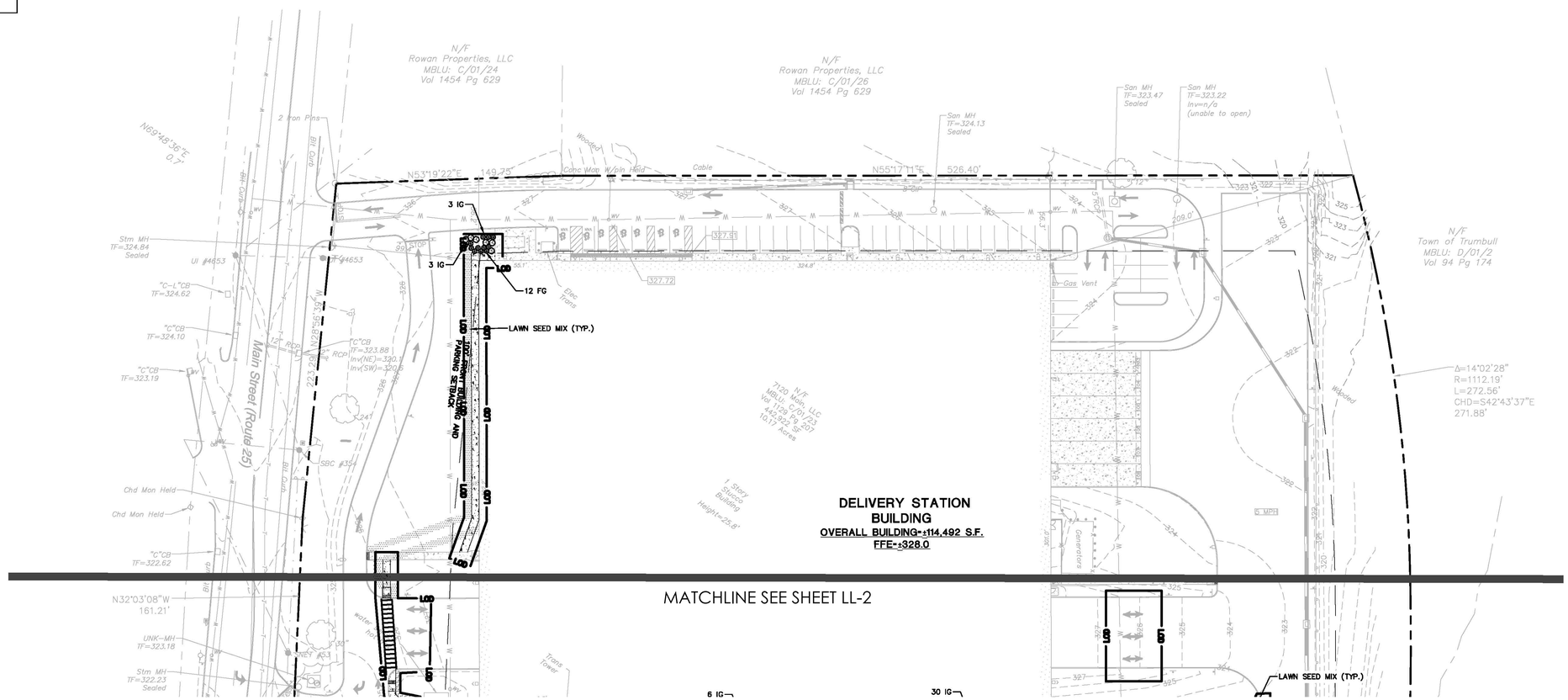
Sheet No.
LL-0

Xref (s): : X2190114131 ; XC190114131 ; XC190114132 ; XL190114131 ; BD190114131

LANDSCAPE PLANT SCHEDULE		
SHADE TREES		
KEY	BOTANICAL NAME	COMMON NAME
GT	Gleditsia triacanthos var. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST
PL	Platanus x acerifolia 'Morton's Circle'	EXCLAMATION! PLANETREE
QR	Quercus rubra	RED OAK
ORNAMENTAL TREES		
AA	Amelanchier arborea	DOWNY SERVICEBERRY
PI	Prunus x incam	PRUNUS X INCAM 'OKAME'
SHRUBS		
FG	Fothergilla gardenii	DWARF FOTHERGILLA
IG	Ilex glabra 'Shamrock'	SHAMROCK INKBERRY
GROUNDCOVERS, FLOWERING PERENNIALS & ORNAMENTAL GRASSES		
AM	Aronia melanocarpa 'UCONNAM165'	LOW SCAPE MOUND CHOKEBERRY
HM	Hemerocallis spp.	DAYLILY (BLEND OF THREE COLOR VARIETIES)
JC	Juniperus chinensis 'Pfitzeriana Compacta'	COMPACT PFITZER JUNIPER
JH	Juniperus horizontalis 'Plumosa Compacta'	COMPACT PLUMOSA JUNIPER
PA	Pennisetum alopecuroides	FOUNTAIN GRASS
PV	Panicum virgatum 'Northwind'	NORTHWIND SWITCHGRASS

LEGEND

PATTERN	DESCRIPTION
	LAWN SEED MIX (REFER TO SEED MIXES ON SHEET LL-3)
	PERENNIALS/GROUNDCOVERS (REFER TO PLANT SCHEDULE ON SHEET LL-0)



SEE SHEET LL-0 FOR LANDSCAPE SCHEDULE

SEE SHEET LL-3 FOR LANDSCAPE NOTES AND DETAILS

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GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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PROPOSED DEVELOPMENT

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TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	L.M.W.
Drawn	L.M.W.
Reviewed	
Scale	1"=40'
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Title

LANDSCAPE PLAN

Sheet No.

LL-1

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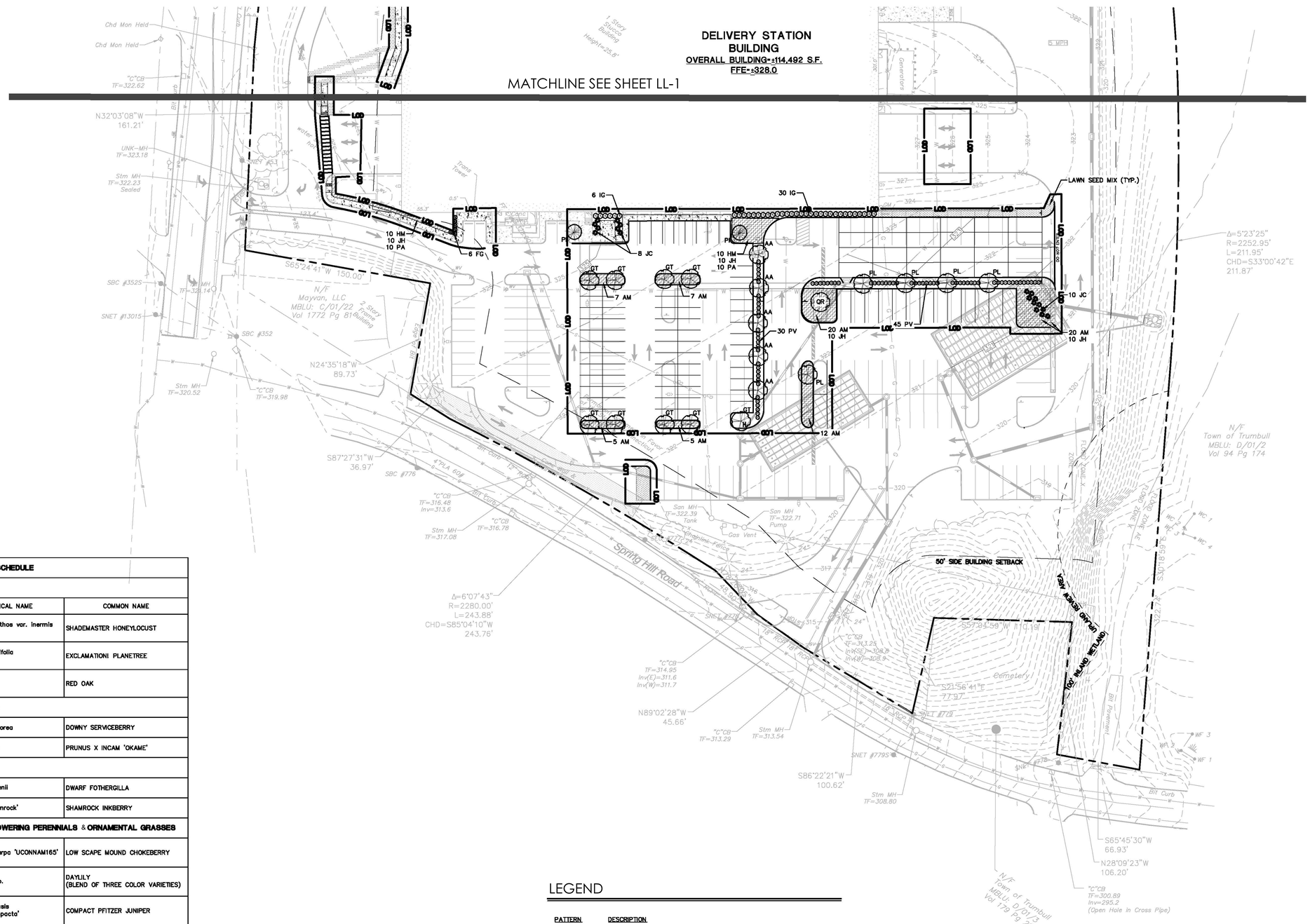
4/23/2020, KKB/GXS, G:\JOBS\19\1901141\DWG\LL190114131.DWG\LL1-24X36.4DSC

Xref (s): X219014131; XC190114131; XC190114132; XL190114131; BD190114131



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LEGEND

PATTERN	DESCRIPTION
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	PERENNIALS/GROUNDCOVERS (REFER TO PLANT SCHEDULE ON SHEET LL-0)

SEE SHEET LL-0 FOR LANDSCAPE SCHEDULE

SEE SHEET LL-3 FOR LANDSCAPE NOTES AND DETAILS

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Title
LANDSCAPE PLAN

Sheet No.
LL-2

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LANDSCAPE NOTES

1. THE LANDSCAPE PLAN AND DETAIL SHEET ARE FOR LANDSCAPING INFORMATION ONLY. REFER TO THE OTHER PLANS FOR ALL OTHER INFORMATION.

2. COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE. PRIOR TO DIGGING AND INSTALLATION OF PLANT MATERIAL, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "(800)922-4455" AND VERIFY ALL UTILITY SYSTEM LOCATIONS.

3. THE LOCATIONS FOR PLANT MATERIAL ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENT DUE TO UTILITY LOCATIONS AND SITE CONDITIONS. THE CONTRACTOR SHALL ACCURATELY STAKE OUT THE LOCATIONS FOR ALL PLANTS FOR THE REVIEW, ADJUSTMENT, AND APPROVAL BY OWNER OR LANDSCAPE ARCHITECT PRIOR TO PLANTING.

4. THE CONTRACTOR SHALL GUARANTEE THAT ALL PLANTS SHALL BE HEALTHY AND FREE OF DISEASE FOR A PERIOD OF ONE YEAR OR JUNE 1ST OF THE YEAR FOLLOWING INSTALLATION, WHICHEVER IS LONGER, AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE BY OWNER OR LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE ANY DEAD OR UNHEALTHY PLANTS AT CONTRACTOR'S EXPENSE. PLANT MATERIAL REPLACEMENTS SHALL BE GUARANTEED FOR ONE FULL YEAR FROM DATE OF REPLACEMENT. REPLACEMENT PLANTS SHALL BE THE SAME AS SPECIFIED FOR THE ORIGINAL PLANTING. REPLACEMENTS SHALL BE MADE AS MANY TIMES AS NECESSARY TO ENSURE HEALTHY PLANTS. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE. MAINTENANCE RESPONSIBILITIES INCLUDE CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL THE END OF THE GUARANTEE PERIOD. DURING THE LANDSCAPE MAINTENANCE PERIOD (GUARANTEE) THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF ANY SITE CONSTRAINTS (PHYSICAL, ENVIRONMENT, ETC.) OR MAINTENANCE DEFICIENCIES THAT MAY AFFECT LANDSCAPE VEGETATION ESTABLISHMENT.

5. THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND LISTED IN THE PLANT SCHEDULE. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER SHALL APPLY. ALL PLANTS SHALL BE ACCLIMATED BY THE SUPPLY NURSERY TO THE LOCAL HARDINESS ZONE AND BE CERTIFIED THAT THE PLANTING MATERIAL HAS BEEN GROWN FOR A MINIMUM OF TWO YEARS AT THE SOURCE AND OBTAINED WITHIN 200 MILES OF PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER OR LANDSCAPE ARCHITECT.

6. PLANTS SHALL HAVE TAGS THAT IDENTIFY PLANT GENUS, SPECIES, CULTIVAR (IF APPLICABLE), PLANT COMMON NAME, NAME OF SOURCE NURSERY, AND SIZE OF PLANT FOR REVIEW OF OWNER OR LANDSCAPE ARCHITECT.

7. NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER OR LANDSCAPE ARCHITECT.

8. FINAL GRADES SHALL BLEND SMOOTHLY WITH EXISTING GRADES, AND TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED.

9. ALL TREE AND SHRUB MASSINGS SHALL BE MULCHED TO A DEPTH OF 3". ANNUAL AND PERENNIAL BEDS SHALL BE MULCHED TO A DEPTH OF 2". MULCH SHALL BE UNCOLORED TRIPLE-SHREDDED HARDWOOD BARK MULCH, AGED AT LEAST 6 MONTHS.

10. IF TREE STAKING IS PROPOSED, TREE STAKING MUST BE COMPLETED THE SAME DAY AS THE TREE IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED PER DETAIL.

11. LANDSCAPE PLANTING AREAS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, DEAD OR DYING PLANT MATERIAL, BLASTED ROCK, STONES GREATER THAN 1" IN DIAMETER, AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT SHALL BE REMOVED FROM AREAS TO BE LANDSCAPED AS REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS.

12. PLANTING SOIL:

DEPTH: PLANTING SOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4" OR AS NOTED IN THE LANDSCAPE DETAILS. PLANTING SOIL SHALL BE UTILIZED IN ALL PLANTING AREAS INCLUDING SEEDED AREAS.

TESTING: CONTRACTOR SHALL SUBMIT (2) SOIL SAMPLES PER SOIL STOCKPILE TO A CERTIFIED TESTING LABORATORY TO DETERMINE ACIDITY, ORGANIC CONTENT, MECHANICAL ANALYSIS, AVAILABLE NUTRIENTS (N,P,K,Ca,Mg,S,Fe,Mn,Zn,Cu,B,Al,Pb) AND NECESSARY AMENDMENTS TO SOIL. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS TO THE OWNER OR LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. TEST RESULTS SHALL RECOMMEND AMENDMENTS THAT WILL ALTER THE SOIL CHARACTERISTICS SUCH THAT THE CHARACTERISTICS DESCRIBED BELOW ARE ACHIEVED AND THE SPECIFIED PLANTS (CONTRACTOR TO PROVIDE LIST TO TESTING LABORATORY) WILL ACHIEVE PROPER GROWTH THAT IS NEITHER DEFICIENT NOR EXCESSIVE. THE CONTRACTOR SHALL INCORPORATE THESE AMENDMENTS AT NO INCREASE IN CONTRACT PRICE.

CHARACTERISTICS: PLANTING SOIL MAY CONSIST OF EXISTING ON-SITE SOILS, AMENDED ON-SITE SOILS, OR IMPORTED SOILS MEETING THE FOLLOWING CRITERIA:

A. NOT TO CONTAIN MATERIALS HARMFUL TO PLANT LIFE, TO BE CLEAN, FERTILE, FRIABLE, AND WELL DRAINING. ALL PLANTING SOIL SHALL BE FREE OF ANY SUBSOIL EARTH CLODS, SODS, STONES OVER 1" IN ANY DIMENSION, STICKS, ROOTS, WEEDS, LITTER AND OTHER DELETERIOUS MATERIAL. PLANTING SOIL SHALL BE UNIFORM IN QUALITY AND TEXTURE.
B. PLANTING SOIL SHALL HAVE THE FOLLOWING OPTIMUM RANGES UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.

ORGANIC CONTENT	3% – 6% FOR LAWN OR GRASS AREAS.
	4% – 8% FOR TREE AND SHRUB PLANTERS.
	8%–16% FOR RETENTION OR DETENTION BASINS.
(BY LOSS OF IGNITION AT 375 C METHOD OF TESTING)	
PH	6.0 – 7.3

C. NUTRIENT LEVELS SHALL BE ACHIEVED BY THE CONTRACTOR'S ADDITION OF AMENDMENTS TO THE PLANTING SOIL TO MEET THE OPTIMUM NUTRIENT LEVELS SPECIFIED IN THE TESTING LABORATORY REPORT FOR EACH OF PLANTS TO BE INSTALLED.
D. SOIL SHALL BE COMPACTED TO A SURFACE PENETRATION RESISTANCE OF 75–125 LBS/SQ.IN.
E. SOIL MAY BE TREATED FOR WEEDS WITH PRE-EMERGENT OR POST-EMERGENT HERBICIDE, AS NEEDED AND AS APPROPRIATE FOR THE APPLICATION SEASON OR LOCATION, OR ELIMINATE GROWTH OF UNWANTED PLANT MATERIAL. APPLY HERBICIDES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. HERBICIDE APPLICATOR MUST BE LICENSED IN THE STATE OF CONNECTICUT, AND PERFORM APPLICATIONS IN ACCORDANCE WITH LOCAL REQUIREMENTS, PERMITTING STIPULATIONS, AND ANY OTHER RESTRICTIONS INCLUDING AND IN EXCESS OF STATE AND FEDERAL REGULATIONS.
F. PROPOSED TOPSOIL SHALL MEET THE USDA SOILS TEXTURAL PERCENTAGES OF SAND, SILT, AND CLAY FOR FOLLOWING CLASSIFICATIONS:
   - LOAM
   - SANDY LOAM WHERE SAND DOES NOT EXCEED 70% AND CLAY IS NOT LESS THAN 5%.
   - SANDY CLAY LOAM WHERE SAND DOES NOT EXCEED 70% AND CLAY IS LESS THAN 28%.
G. BIORETENTION SOILS: SOIL TO BE INSTALLED IN RETENTION BASINS, PONDS, OR OTHER STORMWATER MANAGEMENT ENVIRONS SHALL MEET THE ABOVE DESCRIBED CHARACTERISTICS AND AS FOLLOWS:
   - SOIL SHALL NOT CONTAIN MORE THAN 20% CLAY AND LESS THAN 40% SILT.
   - SOIL SHALL HAVE AN INFILTRATION RATE BETWEEN 1/2" AND 3" PER HOUR.
H. MODIFICATION TO THE PLANTING SOIL CHARACTERISTICS DESCRIBED ABOVE MAY BE SUBMITTED FOR APPROVAL BY THE LANDSCAPE ARCHITECT. CONTRACTOR MUST DEMONSTRATE PROPOSED CHARACTERISTICS ARE EQUAL TO OR SUPERIOR TO THE SPECIFIED CHARACTERISTICS WITH RESPECT TO SUPPORTING PLANT GROWTH, AND STORMWATER MANAGEMENT.

12. PLANTING AMENDMENTS:
APPLY FERTILIZER AND OTHER AMENDMENTS AS RECOMMENDED FOR EACH PLANTING AREA BY SOIL ANALYSIS. APPLY AMENDMENTS IN A MANNER CONSISTENT WITH MANUFACTURER'S RECOMMENDATIONS. ANY ORGANIC AMENDMENTS SHALL HAVE A pH BETWEEN 4.5 AND 5.5 UNLESS OTHERWISE RECOMMENDED.

13. PLANT REQUIREMENTS: ALL PLANTS SHALL CONFORM IN SIZE AND GRADE TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1 (LATEST EDITION). ALL PLANTS SHALL MEET THE ADDITIONAL REQUIREMENTS SET FORTH BELOW AND IN WRITTEN SPECIFICATIONS AS APPLICABLE. ALL TREES AND SHRUBS SHALL HAVE BEEN GROWN AT A COMMERCIAL NURSERY WITHIN 200 MILES OF THE PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER OR LANDSCAPE ARCHITECT. THEY SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY. THEY SHALL BE HEALTHY, SYMMETRICAL, EVENLY AND DENSELY BRANCHED, AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF BARK INJURY, DISEASE, AND INSECT PESTS. ALL TREES SHALL HAVE A STRAIGHT TRUNK WITH A SINGLE MAIN LEADER UNLESS OTHERWISE CHARACTERISTIC OF THE SPECIES OR VARIETY. THE OWNER OR LANDSCAPE ARCHITECT WILL ALLOW SUBSTITUTIONS ONLY UPON WRITTEN APPROVAL. SIZES SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE DRAWINGS. PLANTS LARGER THAN SPECIFIED MAY BE USED IF APPROVED, BUT THE USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. ALL OVERSTORY TREES PLANTED ALONG PARKING AREAS, SIDEWALKS AND PEDESTRIAN ACCESSES SHALL NOT BRANCH BELOW 7' FEET IF THE TREE CALIPER IS 3" INCHES OR GREATER. ALL PLANT MATERIALS ARE SUBJECT TO INSPECTION AND ACCEPTANCE BY THE OWNER OR LANDSCAPE ARCHITECT AT THE NURSERY SOURCE. THE CONTRACTOR SHALL COORDINATE SOURCE VISITS WITH THE LANDSCAPE ARCHITECT AND SHALL ACCOMPANY THE OWNER AND/OR LANDSCAPE ARCHITECT FOR ALL INSPECTIONS. CERTIFICATES OF COMPLIANCE WITH SPECIFICATIONS ARE REQUIRED FOR ALL PLANTS.

14. INSPECTION AND REVIEW:
ALL PLANT MATERIAL SHALL BE SUBJECT TO INSPECTION AND ACCEPTANCE BY THE OWNER OR LANDSCAPE ARCHITECT AT THE NURSERY SOURCE OR PLACE OF GROWTH. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT ON A SCHEDULE FOR SOURCE VISITS AND ACCOMPANY THE OWNER OR LANDSCAPE ARCHITECT FOR ALL SOURCE INSPECTIONS. CERTIFICATES OF COMPLIANCE ARE REQUIRED FOR ALL PLANT MATERIALS.
PHOTOGRAPHIC REVIEW OF PLANT MATERIAL IS ACCEPTABLE IF APPROVED BY LANDSCAPE ARCHITECT. PHOTOGRAPHS MUST BE PROVIDED IN QUANTITY AND VARIETY TO ALLOW LANDSCAPE ARCHITECT SUFFICIENT INFORMATION TO MAKE A REASONABLE DETERMINATION AS TO THE PLANTS' QUALITY. OWNER AND LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT PLANT MATERIAL DELIVERED TO THE SITE BUT PREVIOUSLY ACCEPTED IF DAMAGED OR NOT PROPERLY MAINTAINED DURING THE DELIVERY PROCESS.

15. PLANTING SEASONS (UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT)

	SPRING	FALL
EVERGREEN TREES AND SHRUBS	APRIL 1 TO JUNE 15	SEPTEMBER 1 TO OCTOBER 15
DECIDUOUS TREES AND SHRUBS	APRIL 1 TO JUNE 15	SEPTEMBER 15 TO NOVEMBER 15
GROUNDCOVERS	APRIL 1 TO JUNE 15	SEPTEMBER 1 TO OCTOBER 15
PERENNIALS	MAY 15 TO JUNE 15	SEPTEMBER 1 TO OCTOBER 15
BULBS	N/A	SEPTEMBER 15 TO NOVEMBER 15
SEED MIXES	PER MANUFACTURERS RECOMMENDATIONS OR AS LISTED IN SEED MIX NOTES	

16. SEEDING MIXTURES: REFER TO SEED MIX NOTES. SEEDED AREA SHALL BE ACCEPTED WHEN SEED AREA ACHIEVES 90% COVERAGE.

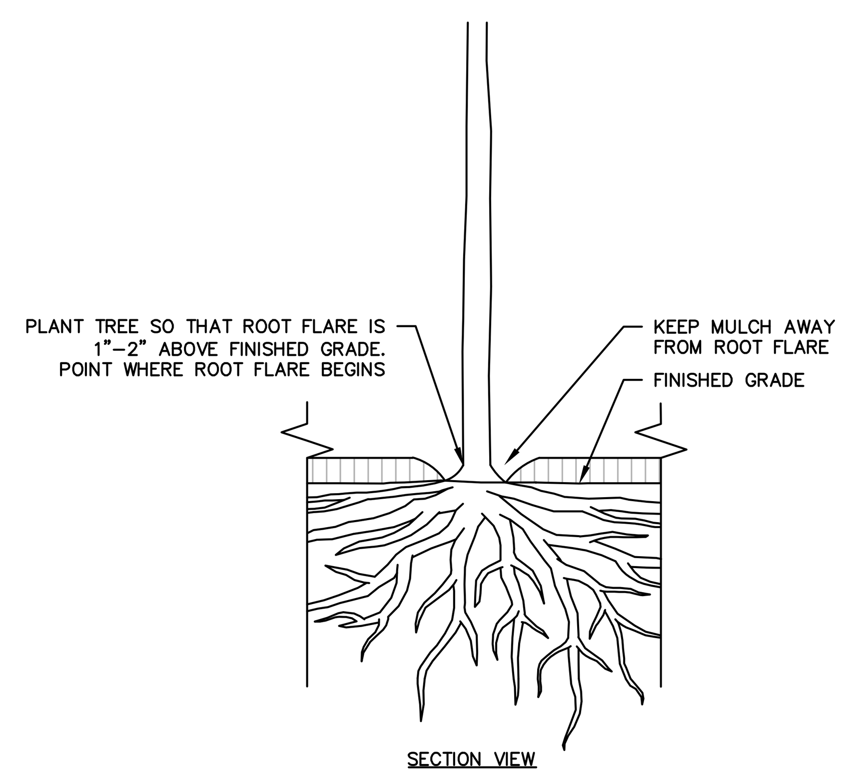
17. ALL SLOPES 3:1 OR STEEPER THAN 3:1 RECEIVING A SEED MIX SHALL BE COVERED WITH AN EROSION CONTROL BLANKET OF STRAW FIBER AND BIODEGRADABLE OR PHOTODEGRADABLE NETTING.

18. UNLESS OTHERWISE NOTED IN DRAWING SET, NEW TREELINES SHALL EQUAL CLEARING AND GRUBBING LIMIT FOR CONSTRUCTION.

19. ALL DISTURBED AREAS NOT OTHERWISE DEVELOPED SHALL BE SEEDED WITH THE LAWN SEED MIX.

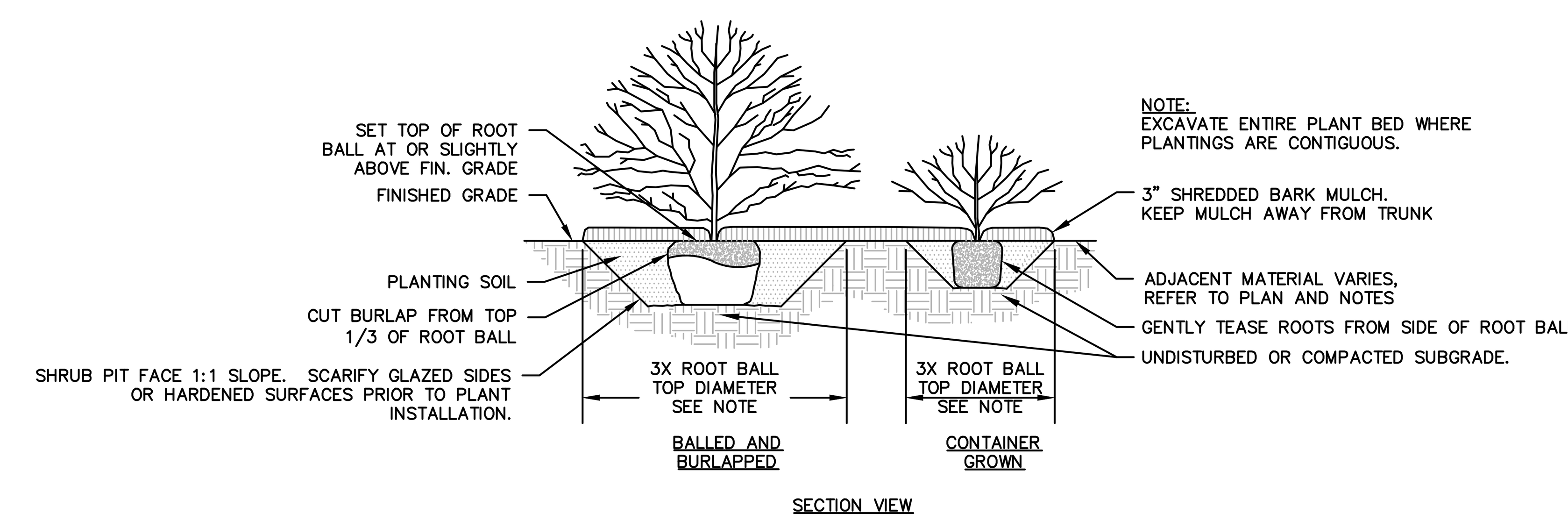
SEED MIX NOTES

A. LAWN SEEDING MIX:
   15 % PERENNIAL RYEGRASS (BLEND OF 3 IMPROVED HYBRIDS)
   25 % FINE LEAF OR CREEPING FESCUE (BLEND OF 3 IMPROVED HYBRIDS)
   60 % KENTUCKY BLUEGRASS (BLEND OF 3 IMPROVED HYBRIDS)
   SEEDING RATE: 5 LBS/1,000 S.F.
   SEEDING DATES: AUGUST 15 – OCTOBER 1 AND APRIL 15 – JUNE 30 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.



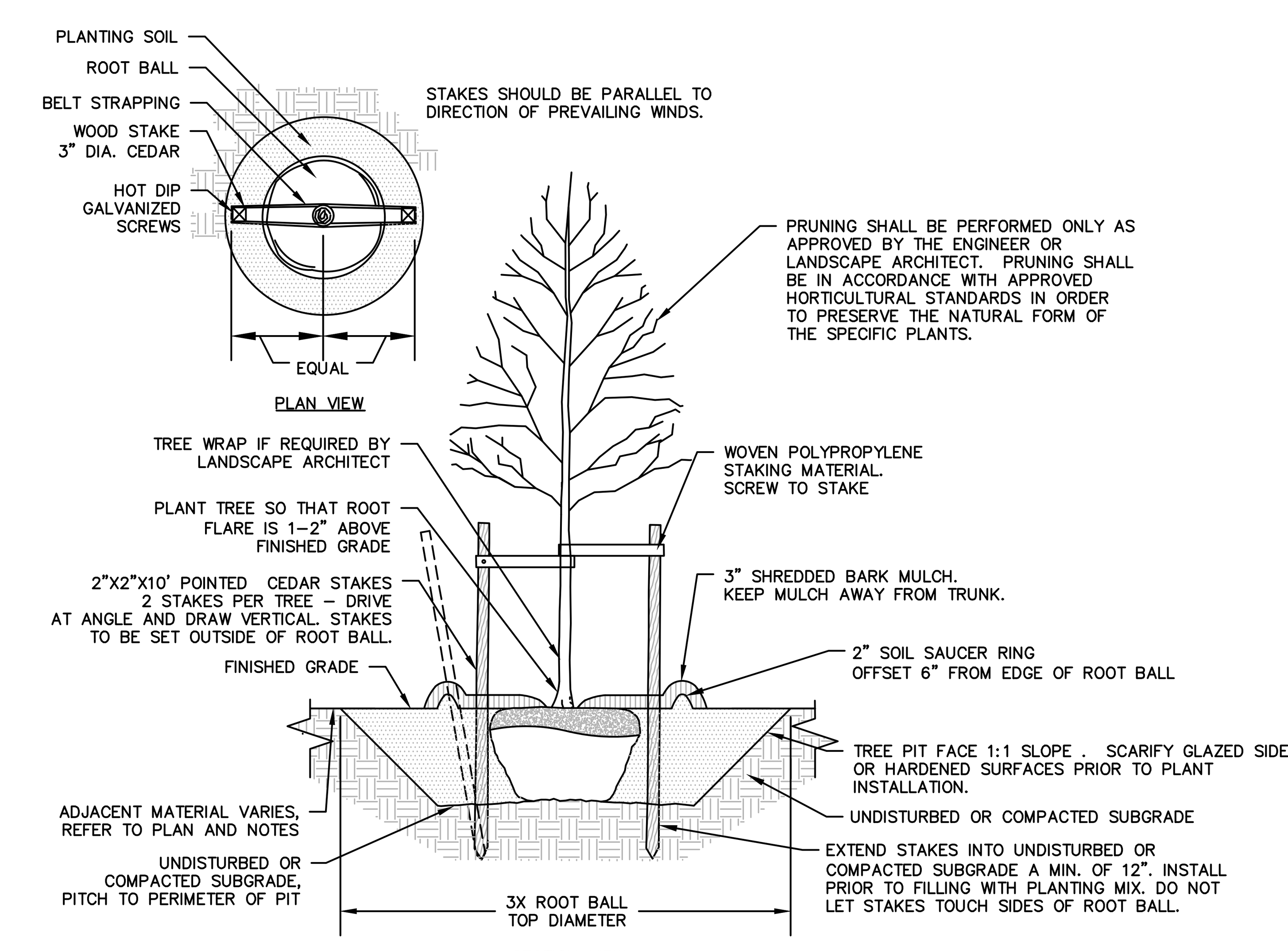
ROOT FLARE DIAGRAM

N.T.S



SHRUB PLANTING

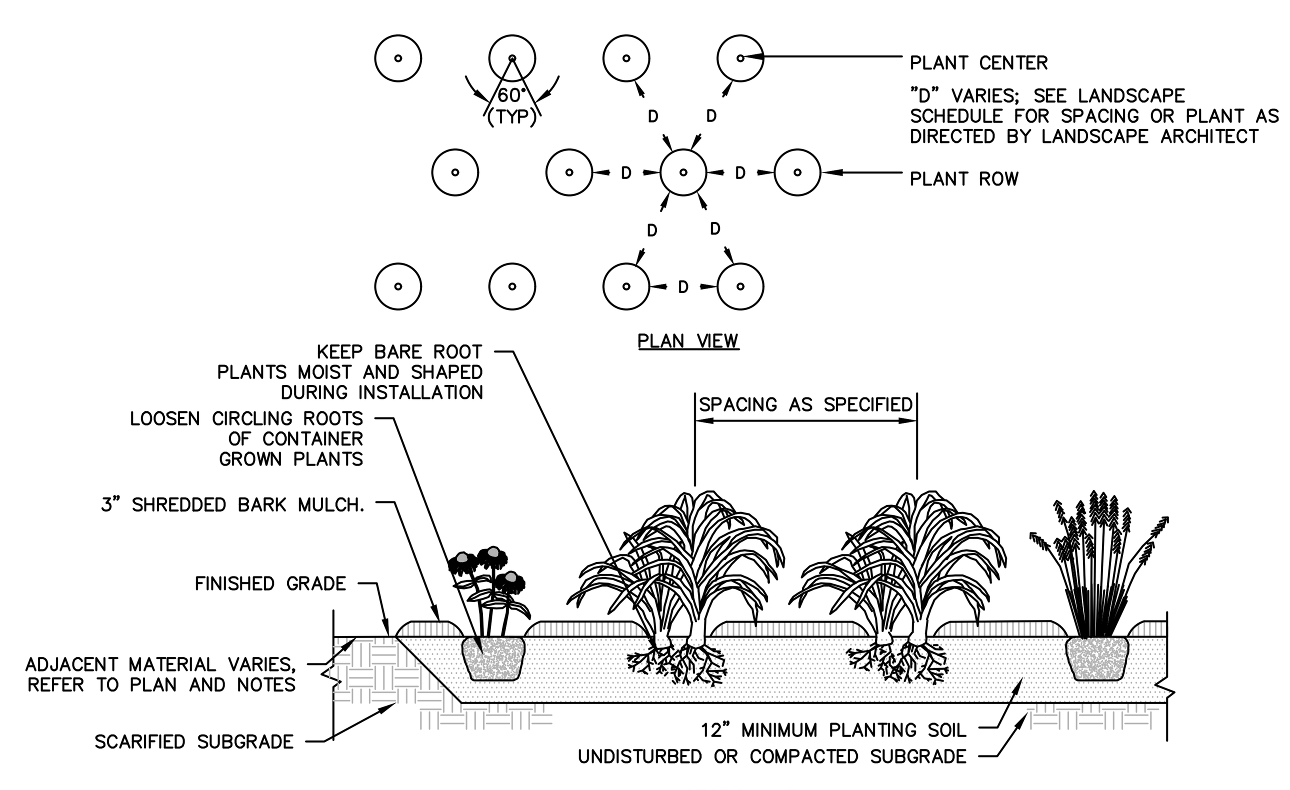
N.T.S



NOTES:
1. STAKING FOR TREES ON 4:1 SLOPES OR LESS THAN 3" CALIPER TO BE PERFORMED AT CONTRACTORS DISCRETION.
2. WOVEN POLYPROPYLENE STAKING MATERIAL SHALL BE DEEPROOT ARBORTIE (GREEN) OR APPROVED EQUIVALENT. MATERIAL SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER, TWISTED, AND SECURED TO THE STAKE. INSTALL SPECIFIED MATERIAL IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
3. BEFORE IN HOLE, REMOVE BOTTOM OF CAGE. ONCE IN HOLE, REMOVE REST OF CAGE FROM ROOT BALL. REMOVE TWINE AND BURLAP FROM TOP 1/3 OF ROOT BALL – SCORE REMAINING 2/3 OF BURLAP. IF BURLAP IS SYNTHETIC OR HAS BEEN TREATED WITH ANTI-DESSICANT, COMPLETELY REMOVE IT FROM ROOT BALL.

DECIDUOUS TREE PLANTING

N.T.S



GROUNDCOVER PLANTING

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Title
LANDSCAPE NOTES AND DETAILS

Sheet No.
LL-3

Xref (s): ; XZ190114131 ; XC190114131 ; XC190114132 ; XL190114131 ; BD190114131

6/25/2020, KKILGUSS, G:\JOBS19\10\1901141\DWG\LL190114131.DWG,LL-3 24X36 NTS.

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LIGHTING NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH ALL REQUIREMENTS OF ANY LOCAL APPLICABLE CODES OR ORDINANCES, PUBLIC UTILITY COMPANY REGULATIONS, STATE CODE, AND NATIONAL ELECTRICAL CODE WITH INTERIM AMENDMENTS THERETO.

2. ALL MATERIALS SHALL CONFORM TO THE LATEST ISSUE OF ALL APPLICABLE STANDARDS AS ESTABLISHED BY EEI, NEMA, ASTM, IPCEA, NATIONAL BOARD OF FIRE UNDERWRITERS, AND UNDERWRITERS LABORATORIES, INC.

3. THE CONTRACTOR SHALL TEST THE LIGHTING AFTER INSTALLATION WITH THE DEVELOPER/OWNER, AND PROVIDE TO DEVELOPER/OWNER WARRANTY AND MAINTENANCE INFORMATION. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AND/OR MODIFICATIONS AS REQUIRED BY THE DEVELOPER/OWNER TO OBTAIN EVEN LIGHT DISTRIBUTION.

4. CONTRACTOR SHALL LEAVE ENTIRE ELECTRICAL SYSTEM INSTALLED BY THE CONTRACTOR IN PROPER WORKING CONDITION AND REPLACE WITHOUT ADDITIONAL CHARGE ALL WORK OR MATERIALS WHICH MAY DEVELOP DEFECTS WITHIN A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER.

5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, BASES AND CONDUITS TO SITE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO DELIVERY OF MATERIAL TO SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW. IF ALTERNATIVE LIGHTING IS PROPOSED SUBMIT A PHOTOMETRIC FOOT-CANDLE LAYOUT ALONG WITH ANNUAL MAINTENANCE REQUIREMENTS AND ANTICIPATED COSTS.

6. LIGHTS ARE DESIGNED TO PROVIDE EVEN LEVELS OF ILLUMINATION AND AVOID GLARE ONTO NEIGHBORING PROPERTIES. FINAL DESIGN MAY VARY PENDING MANUFACTURER'S RECOMMENDATIONS.

7. ALL LIGHTING CONTROLS, PANELS, CIRCUIT BREAKERS ETC. ARE TO BE PROVIDED UNDER A SEPARATE CONTRACT BY BUILDING CONTRACTOR. CAREFUL COORDINATION IS REQUIRED BETWEEN SITE CONTRACTOR AND BUILDING CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION FOR SITE LIGHTING.

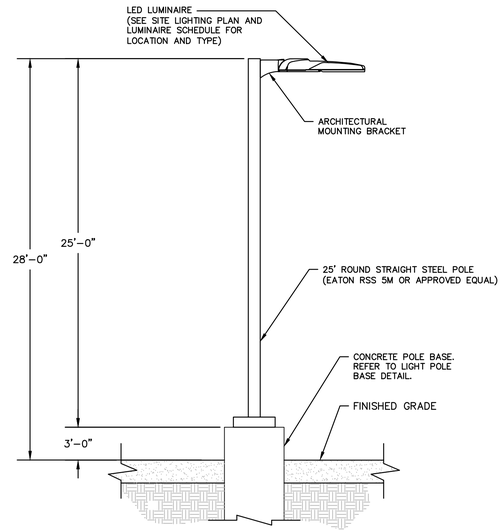
8. THE CONTRACTOR WILL PROVIDE AND INSTALL ALL MATERIAL NECESSARY TO COMPLETE THE SITE LIGHTING SYSTEM INCLUDING BUT NOT LIMITED TO CONDUIT, BASES, ANCHOR BOLTS, POLES, SITE LIGHTS AND LAMPS. THE CONTRACTOR WILL COORDINATE WIRING AND POWERING OF LIGHTS WITH OWNER, ARCHITECT, AND BUILDING CONTRACTOR IF DIFFERENT FROM THE SITE CONTRACTOR.

9. ALL LIGHTS TO BE AS LISTED IN SCHEDULE OR APPROVED EQUIVALENT. LIGHTS SHALL BE MOUNTED ON POLES ATOP 3' HIGH CONCRETE BASES THAT ARE SET 3' (CLEAR) BEHIND CURBS UNLESS OTHERWISE INDICATED ON CONTRACT DRAWINGS. ILLUMINATION ANALYSIS MODELED USING LIGHTING FIXTURES LISTED IN SCHEDULE.

10. LIGHT POLES AND BRACKETS TO BE AS SHOWN ON DETAILS OR APPROVED EQUIVALENT.

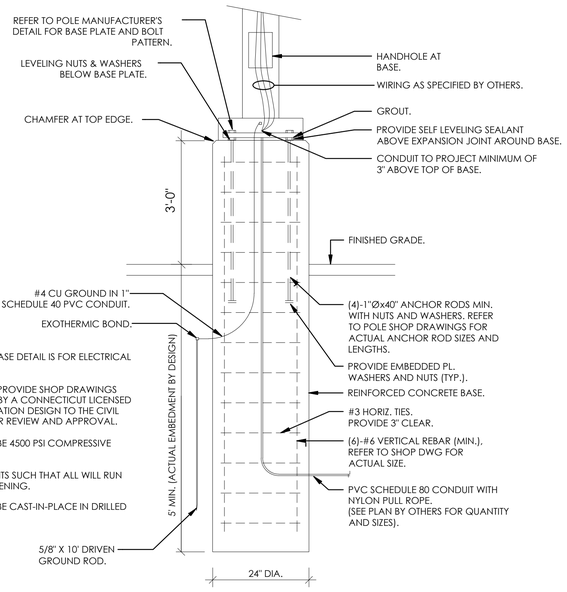
11. WIRE AND CABLE SHALL BE COPPER AND CONFORM TO THE FOLLOWING NEC TYPE THHN/THWN SOLID FOR NO. 12 AND NO. 10. NEC TYPE THHN/THWN STRANDED FOR NO. 8 AND LARGER. RIGID STEEL CONDUIT SHALL BE GALVANIZED. FITTINGS SHALL BE CAST FERROUS MATERIAL WITH A CADMIUM OR ZINC PLATED FINISH.

12. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE TO NEC.



TYPICAL LUMINAIRE MOUNTING DETAIL

N.T.S



NOTES:

1. CONCRETE POLE BASE DETAIL IS FOR ELECTRICAL FEATURES ONLY.

2. CONTRACTOR TO PROVIDE SHOP DRAWINGS SIGNED AND SEALED BY A CONNECTICUT LICENSED ENGINEER OF FOUNDATION DESIGN TO THE CIVIL DESIGN ENGINEER FOR REVIEW AND APPROVAL.

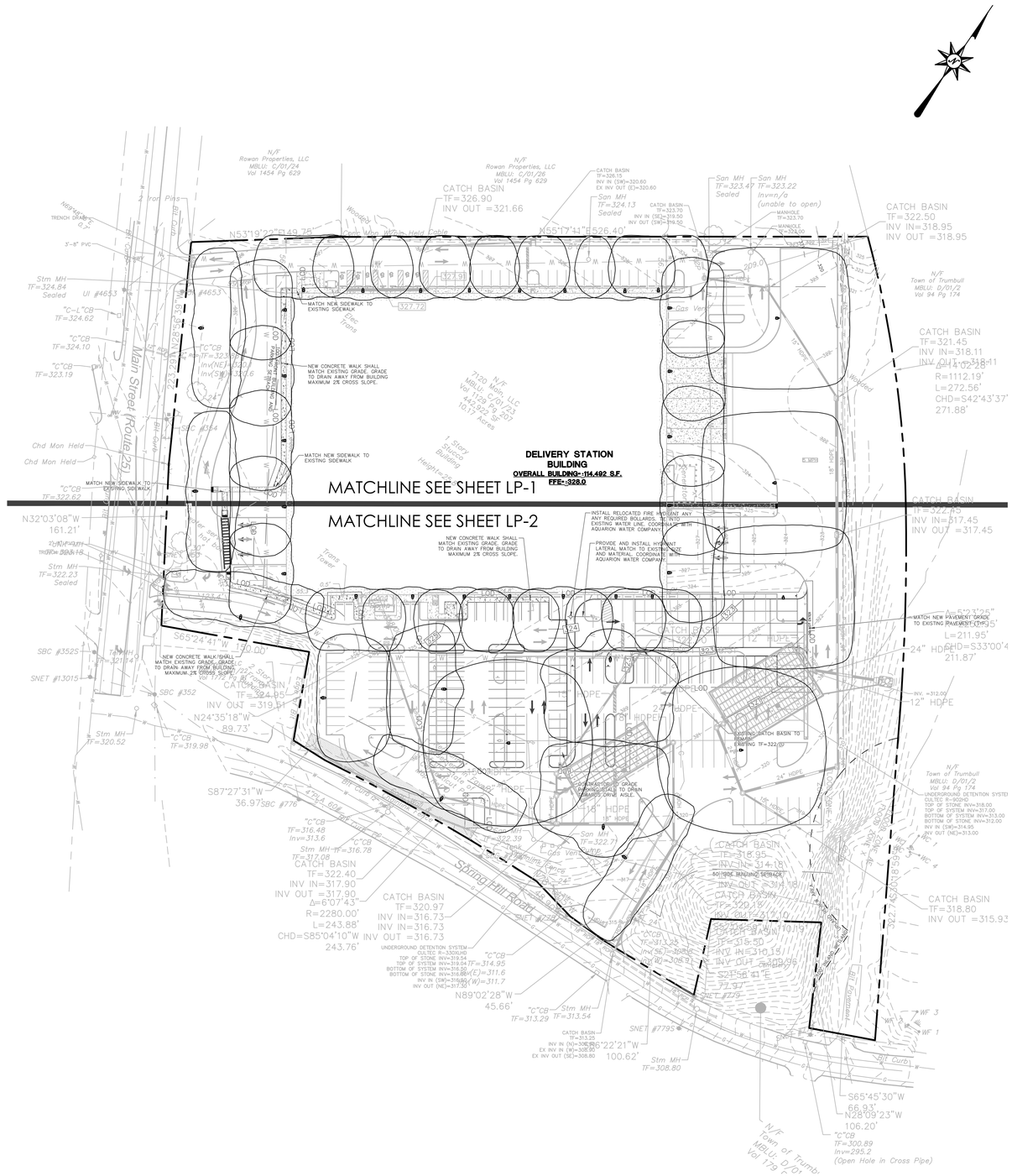
3. CONCRETE SHALL BE 4500 PSI COMPRESSIVE STRENGTH.

4. ARRANGE CONDUITS SUCH THAT ALL WILL RUN WITHIN POLE BASE OPENING.

5. CONCRETE SHALL BE CAST-IN-PLACE IN DRILLED EXCAVATION.

TYPICAL CONCRETE LIGHT POLE BASE DETAIL

N.T.S



SEE SHEET LP-1 FOR LIGHTING SCHEDULE AND STATISTICS

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

GRAPHIC SCALE
60 30 0 60
SCALE IN FEET

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PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	L.M.W.
Drawn	L.M.W.
Reviewed	
Scale	1"=60'
Project No.	1901141
Date	06/24/2019
CAD File: LP190114131	

Title

OVERALL LIGHTING PLAN

Sheet No.

LP-0

Xref (s): : XC190114131; XC190114132; XZ190114131; XE190114131; XB190114131

4/25/2020, KEK/GJSS, C:\-DRIVE\VOL190141\DWG\LP190114131.DWG LP-0 3-MONA.PDF

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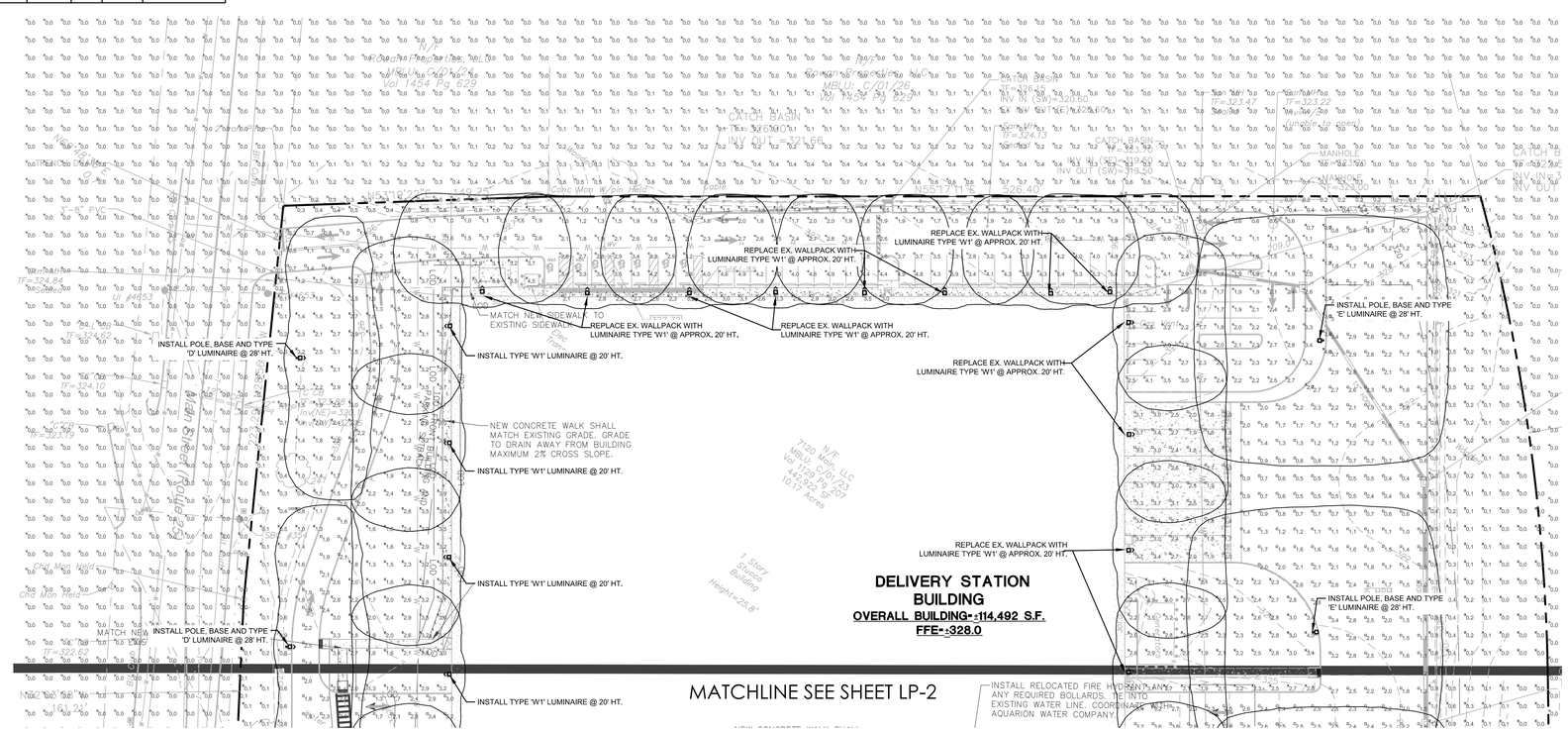
Schedule

Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Polar Plot
	W1	25	GLEON-AF-02-LED-E1-SL4 WALL MOUNT	GALLEON AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	32	362	0.9	113	Max: 9720cd
	B	2	GLEON-AF-07-LED-E1-5WQ	GALLEON AREA AND ROADWAY LUMINAIRE (7) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	112	396	0.9	391	Max: 17759cd
	C	1	GLEON-AF-03-LED-E1-SL4-HSS	GALLEON AREA AND ROADWAY LUMINAIRE (3) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	48	307	0.9	166	Max: 12120cd
	D	5	GLEON-AF-03-LED-E1-SL2-HSS	GALLEON AREA AND ROADWAY LUMINAIRE (3) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	48	313	0.9	166	Max: 20728cd
	E	3	GLEON-AF-06-LED-E1-5MQ	GALLEON AREA AND ROADWAY LUMINAIRE (6) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	96	390	0.9	333	Max: 22012cd
	F	1	GLEON-AF-02-LED-E1-T4W	GALLEON AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	32	378	0.9	113	Max: 9703cd
	G	2	GLEON-AF-04-LED-E1-T4FT	GALLEON AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	LED	64	377	0.9	225	Max: 22106cd

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DRIVEWAY #1		2.1 fc	4.7 fc	0.8 fc	5.9:1	2.6:1
DRIVEWAY #2		1.6 fc	3.7 fc	0.3 fc	12.3:1	5.3:1
ENTRANCE DRICE #2		1.1 fc	1.8 fc	0.6 fc	3.0:1	1.8:1
ENTRANCE DRIVE #1		1.0 fc	1.6 fc	0.3 fc	5.3:1	3.3:1
ENTRANCE DRIVE #3		1.9 fc	3.3 fc	0.2 fc	16.5:1	9.5:1
INTERIOR LANDSCAPING		1.0 fc	5.5 fc	0.0 fc	N/A	N/A
LOADING AREA		2.5 fc	3.7 fc	1.3 fc	2.8:1	1.9:1
PARKING LOT		2.2 fc	5.9 fc	0.6 fc	9.8:1	3.7:1
SPILL		0.0 fc	0.7 fc	0.0 fc	N/A	N/A
WALKWAYS		3.8 fc	6.0 fc	2.7 fc	2.2:1	1.4:1



SEE SHEET LP-0 FOR LIGHTING NOTES AND DETAILS

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	L.M.W.
Drawn	L.M.W.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019
CAD File: LP190114131	

Title
LIGHTING PLAN

Sheet No.
LP-1

4/23/2020, KEN GILSS, C:_JOBS\P\1901141\DWG\LP\190114131.DWG,LP-1 24X36 40PC.

Xref (s): - XC:1901141-31; XC:1901141-32; X2:1901141-31; X8:1901141-31; B3:1901141-31

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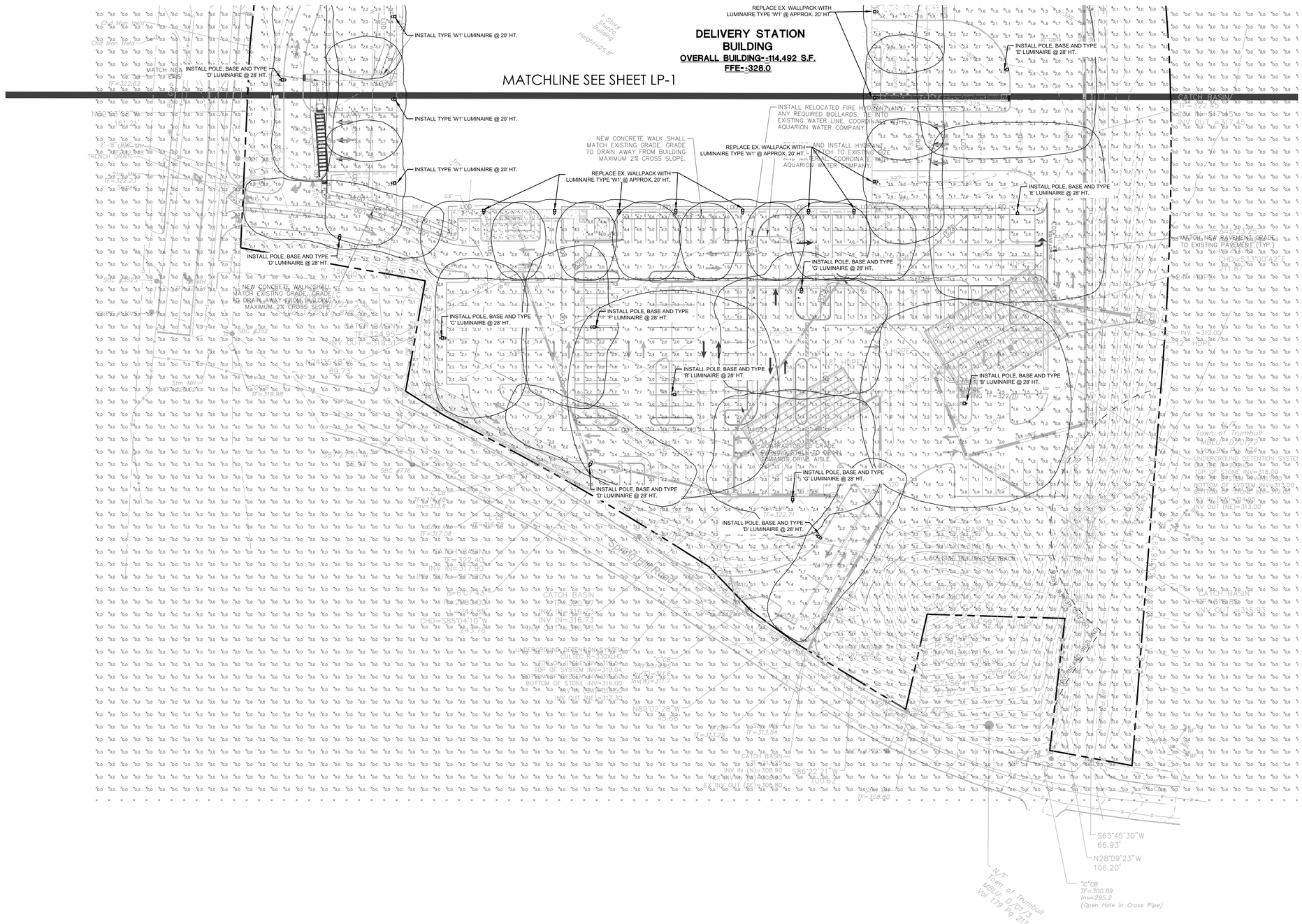

SEE SHEET LP-0 FOR LIGHTING NOTES AND DETAILS

SEE SHEET LP-1 FOR LIGHTING SCHEDULE AND STATISTICS

FOR PERMITTING PURPOSES ONLY
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GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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4/25/2020, KEILCASS, G:\JOBS19\70\1901141\DWG\LP1901141D.DWG;LP-2 24X36 ASSC.

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PROPOSED DEVELOPMENT

7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	L.M.W.
Drawn	L.M.W.
Reviewed	
Scale	1"=40'
Project No.	1901141
Date	06/24/2019
CAD File: LP190114131	

Title

LIGHTING PLAN

Sheet No.

LP-2

XREF(S): - XC190114131 - XC190114132 - XLP190114131 - XB190114131

SITE WORK GENERAL NOTES

1. THESE PLANS ARE FOR PERMITTING PROPOSES ONLY.

2. ALL CONSTRUCTION SHALL COMPLY WITH THE PROJECT SPECIFICATION MANUAL; TENANT STANDARDS, MUNICIPAL STANDARDS AND SPECIFICATIONS, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, 2010 ADA STANDARDS, AND STATE BUILDING CODE IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.

3. REFER TO OTHER PLANS BY OTHER DISCIPLINES, DETAILS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE AND BUILDING CONDITIONS IN THE FIELD AND CONTACT THE CIVIL ENGINEER AND ARCHITECT IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS, SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE OWNER'S CONSTRUCTION MANAGER PRIOR TO BIDDING.

4. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.

5. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.

6. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORD DRAWINGS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES AND STORMWATER SYSTEM) TO THE OWNER AT THE END OF CONSTRUCTION.

7. THE ARCHITECT OR ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ARCHITECT AND ENGINEER HAVE NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.

8. THE CONTRACTOR SHALL COMPLY WITH CFR 29 PART 1926 FOR EXCAVATION, TRENCHING, AND TRENCH PROTECTION REQUIREMENTS.

9. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL OR STATE RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG (CBYD) 72 HOURS BEFORE COMMENCEMENT OF WORK AT (800) 922-4455 OR AT 811 AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROPOSED UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.

10. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN OVER SCALED DIMENSIONS.

11. IF PLANS AND OR SPECIFICATIONS ARE IN CONFLICT, THE MOST COSTLY SHALL APPLY.

12. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN COMPLETE DRAWING PLAN SETS FOR BIDDING AND CONSTRUCTION. PLAN SETS OR PLAN SET ELECTRONIC POSTINGS SHALL NOT BE DISASSEMBLED INTO PARTIAL PLAN SETS FOR USE BY CONTRACTORS AND SUBCONTRACTORS OF INDIVIDUAL TRADES. IT SHALL BE THE CONTRACTOR'S AND SUBCONTRACTOR'S RESPONSIBILITY TO OBTAIN COMPLETE PLAN SETS OR COMPLETE PLAN SET ELECTRONIC POSTINGS FOR USE IN BIDDING AND CONSTRUCTION.

13. ALL NOTES AND DIMENSIONS DESIGNATED "TYPICAL" APPLY TO ALL LIKE OR SIMILAR CONDITIONS THROUGHOUT THE PROJECT.

14. CONTRACTOR(S) TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK AND BE RESPONSIBLE FOR COORDINATION OF SAME. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.

15. BL COMPANIES HAS PREPARED FINAL CONSTRUCTION DOCUMENTS SUITABLE FOR BIDDING AND CONSTRUCTION. PROGRESS AND PERMITTING SETS OF THESE DOCUMENTS ARE NOT SUITABLE FOR THOSE PURPOSES. IF CLIENT ELECTS TO SOLICIT BIDS OR ENTER INTO CONSTRUCTION CONTRACTS UTILIZING CONSTRUCTION DOCUMENTS THAT ARE NOT YET FINAL, CONSULTANT SHALL NOT BE RESPONSIBLE FOR ANY COSTS OR DELAY ARISING AS A RESULT.

16. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

17. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT AND OBTAIN FROM MUNICIPAL SOURCES AND STATE SOURCES ALL CONSTRUCTION PERMITS, INCLUDING ANY STATE DOT PERMITS, SEWER AND WATER CONNECTION PERMITS, AND ROADWAY CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK, EXCEPT CTDOT ENCROACHMENT PERMIT BOND.

18. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS AND MATERIALS PER PLANS AND SPECIFICATIONS TO THE OWNER AND CIVIL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.

19. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE SEDIMENT AND EROSION CONTROL NOTES SHEET.

20. THE CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND CONSTRUCTION DETAILS OF BUILDING, AND THE RAISED CONCRETE SIDEWALKS, LANDINGS, RAMPS, AND STAIRS.

21. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE CIVIL ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.

22. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING AS APPLICABLE UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.

23. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES, TEMPORARY WALKWAYS, TRAFFIC CONTROLLERS AND UNIFORMED TRAFFIC OFFICERS AS REQUIRED OR AS ORDERED BY THE ENGINEER OR AS REQUIRED BY THE LOCAL GOVERNING AUTHORITIES OR AS REQUIRED BY PERMIT STIPULATIONS OR AS REQUIRED BY THE OWNER. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS FOR USE AT ALL TIMES UNLESS WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY IS GRANTED.

24. TRAFFIC CONTROL SIGNAGE SHALL CONFORM TO THE STATE DOT STANDARD DETAIL SHEETS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. SIGNS SHALL BE INSTALLED PLUMB WITH THE EDGE OF THE SIGN 2' OFF THE FACE OF THE CURB, AND WITH 7' VERTICAL CLEARANCE UNLESS OTHERWISE DETAILED OR NOTED.

25. REFER TO DETAIL SHEETS FOR PAVEMENT, CURBING, AND SIDEWALK INFORMATION.

26. THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.

27. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING OF THE PAVEMENT MARKING PAINT MIXTURE PRIOR TO STRIPING.

28. PAVEMENT MARKING KEY:

    4" SYDL 4' SOLID YELLOW DOUBLE LINE
    4" SYL 4" SOLID YELLOW LINE
    4" SWL 4" SOLID WHITE LINE
    4" SBL 4" SOLID BLUE LINE
    12" SWSB 12" SOLID WHITE STOP BAR
    4" BWL 4" BROKEN WHITE LINE 10' STRIPE 30' SPACE

29. PARKING SPACES SHALL BE STRIPED FOR ASSOCIATE PARKING WITH 4" SWL ON ASPHALT; HATCHED AREA SHALL BE STRIPED AT A 45° ANGLE, 2' ON CENTER. HATCHING, SYMBOLS, AND STRIPING FOR HANDICAPPED SPACES SHALL BE PAINTED BLUE, WHITE, AND SBL. OTHER MARKINGS SHALL BE PAINTED WHITE ON ASPHALT AND YELLOW ON CONCRETE OR AS NOTED.

30. ALL PARKING SPACES AND HATCHED AREAS SHALL HAVE TWO COATS OF PAVEMENT MARKINGS APPLIED TO STRIPING.

31. ALL STRIPING SHALL BE LONG LIFE EPOXY RESIN AND 4" WIDE UNLESS OTHERWISE NOTED. ALL PAVEMENT GRAPHICS SHALL BE HOT APPLIED THERMOPLASTIC (REFLECTIVE). COLOR SHALL BE WHITE ON ASPHALT AND YELLOW ON CONCRETE. ALL PROPOSED SIGNAGE AND STRIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE TENANT FULFILLMENT WORLDWIDE REAL ESTATE SIGNAGE STANDARDS.

32. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, DRAINAGE STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, SWALE, PAVEMENT MARKINGS, OR SIGNAGE DISTURBED DURING DEMOLITION AND/OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE CIVIL ENGINEER, AND TO THE SATISFACTION OF THE OWNER AND THE TOWN OF TRUMBULL, AND STATE OF CONNECTICUT.

33. EXISTING BOUNDARY AND TOPOGRAPHY IS BASED ON DRAWING TITLED "LAND OF 7120 MAIN, LLC, 7120 MAIN STREET, TRUMBULL, FAIRFIELD COUNTY CONNECTICUT" SCALE 1"=50', DATED JULY 29, 2019, BY BL COMPANIES INC. AND ON COMPILED EXISTING CONDITIONS PLAN PROPOSED DEVELOPMENT 7120 MAIN STREET, TRUMBULL, FAIRFIELD COUNTY CONNECTICUT SCALE 1"=40', DATED JUNE 24, 2020 BY BL COMPANIES INC.

34. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, CIVIL ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING PROCESS.

35. AN EROSION CONTROL BOND IS REQUIRED TO BE POSTED BY THE CONTRACTOR BEFORE THE START OF ANY ACTIVITY ON OR OFF SITE. THE AMOUNT OF THE EROSION CONTROL BOND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.

36. A DEMOLITION PERMIT IS REQUIRED FOR EXISTING BUILDINGS.

37. THE PROJECT PARCEL IS LOCATED PARTLY WITHIN A FEMA DESIGNATED FLOOD HAZARD AREA.

38. THERE ARE NO WETLANDS LOCATED ON THE SITE AS INDICATED BY THE WETLANDS/WATERCOURSES AND SOIL REPORT DATED JULY 19, 2019 BY SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC..

39. THE EXISTING BUILDING IS TO REMAIN ACCESSIBLE THROUGH COMPLETION OF CONSTRUCTION.

40. FIRE LANES SHALL BE ESTABLISHED AND PROPERLY DESIGNATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FIRE DISTRICT FIRE MARSHAL.

41. THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS IN THE ROADWAY BY METHOD APPROVED BY THE AUTHORITY HAVING JURISDICTION, OWNER OR DOT AS APPLICABLE FOR THE LOCATION OF THE WORK.

42. ALL ADA DESIGNATED PARKING STALLS, ACCESS AISLES AND PEDESTRIAN WALKWAYS SHALL CONFORM TO THE CURRENT VERSION OF THE AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN AND ANSI STANDARDS AND AS MAY BE SUPERCEDED BY THE STATE BUILDING CODE.

43. CONSTRUCTION OCCURRING ON THIS SITE SHALL COMPLY WITH NFPA 241 STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS, AND NFPA 1 FIRE CODE.

44. CONTRACTOR SHALL SECURE ANY PERMITS, PAY ALL FEES AND PERFORM CLEARING AND GRUBBING AND DEBRIS REMOVAL PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.

45. SEDIMENT AND EROSION CONTROLS AS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN AND/OR DEMOLITION PLAN SHALL BE INSTALLED BY THE DEMOLITION CONTRACTOR PRIOR TO START OF DEMOLITION AND CLEARING AND GRUBBING OPERATIONS.

46. REMOVE AND DISPOSE OF ANY SIDEWALKS, FENCES, STAIRS, WALLS, DEBRIS AND RUBBISH REQUIRING REMOVAL FROM THE WORK AREA IN AN APPROVED OFF SITE LANDFILL, BY AN APPROVED HAULER. HAULER SHALL COMPLY WITH ALL REGULATORY REQUIREMENTS.

47. THE CONTRACTOR SHALL SECURE ALL PERMITS FOR HIS DEMOLITION AND DISPOSAL OF HIS DEMOLITION MATERIAL TO BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL POST BONDS AND PAY PERMIT FEES AS REQUIRED. BUILDING DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR PERMITS AND DISPOSAL OF ALL BUILDING DEMOLITION DEBRIS IN AN APPROVED OFF-SITE LANDFILL.

48. ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIAL ABATEMENT CONTRACTOR.

49. THE CONTRACTOR SHALL PREPARE ALL MANIFEST DOCUMENTS AS REQUIRED PRIOR TO COMMENCEMENT OF DEMOLITION.

50. CTDOT ENCROACHMENT PERMIT SHALL BE OBTAINED BY CONTRACTOR WHO SHALL PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC PROTECTION NECESSARY FOR THE WORK. THE OWNER SHALL POST CTDOT ENCROACHMENT BOND.

51. THE CONTRACTOR SHALL PROTECT ALL IRON PINS, MONUMENTS AND PROPERTY CORNERS DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. ANY CONTRACTOR DISTURBED PINS, MONUMENTS, AND OR PROPERTY CORNERS, ETC. SHALL BE RESET BY A LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

52. 12" SWSB (STOP BAR) AND 4" SYDL AND SWL PAVEMENT MARKINGS LOCATED IN DRIVEWAYS AND IN STATE HIGHWAY SHALL BE EPOXY RESIN TYPE ACCORDING TO CTDOT SPECIFICATIONS.

53. THE CONTRACTOR SHALL PUMP OUT BUILDING FUEL AND WASTE OIL TANKS (IF ANY ARE ENCOUNTERED) AND REMOVE FUEL TO AN APPROVED DISPOSAL AREA BY A LICENSED WASTE OIL HANDLING CONTRACTOR IN STRICT ACCORDANCE WITH STATE REQUIREMENTS.

54. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.

55. THE CONTRACTOR SHALL PROVIDE DISCONNECT NOTIFICATION TO THE TELECOMMUNICATIONS UTILITY PROVIDER, GAS UTILITY PROVIDER, ELECTRIC UTILITY PROVIDER, AT LEAST THREE WEEKS PRIOR TO BEGINNING DEMOLITION.

56. THE CONTRACTOR IS RESPONSIBLE FOR SECURING A DEMOLITION PERMIT FROM THE TOWN OF TRUMBULL BUILDING DEPARTMENT AND MUST FURNISH THE REQUIRED APPLICATION MATERIAL AND PAY ALL FEES.

57. BACK FILL DEPRESSIONS, FOUNDATION HOLES AND REMOVED DRIVEWAY AREAS IN LOCATIONS NOT SUBJECT TO FURTHER EXCAVATION WITH SOIL MATERIAL APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER AND COMPACT, FERTILIZE, SEED AND MULCH DISTURBED AREAS NOT SUBJECT TO FURTHER SITE CONSTRUCTION. ANY DEMOLISHED BUILDING FOUNDATION AREA AND BASEMENT IF PRESENT TO BE BACKFILLED WITH GRAVEL FILL OR MATERIAL SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT IN LIFT THICKNESS SPECIFIED IN THE GEOTECHNICAL REPORT. COMPACT TO 95% MAX. DRY DENSITY PER ASTM D1557 AT MOISTURE CONTENT SPECIFIED IN GEOTECHNICAL REPORT AND EARTHWORK SPECIFICATION. EMPLOY WATERING EQUIPMENT FOR DUST CONTROL.

58. THE CONTRACTOR SHALL REPAIR PAVEMENTS BY INSTALLING TEMPORARY AND PERMANENT PAVEMENTS IN PUBLIC RIGHTS OF WAYS AS REQUIRED BY LOCAL GOVERNING AUTHORITIES AND THE STATE AND MUNICIPALITY AND PER PERMIT REQUIREMENTS DUE TO DEMOLITION AND PIPE REMOVAL ACTIVITIES.

59. THE CONTRACTOR SHALL CUT AND REMOVE AT LUMINARE AND ANY SIGN LOCATIONS ANY PROTRUDING CONDUITS TO 24" BELOW GRADE. THE CONTRACTOR SHALL REMOVE ALL CABLE AND CONDUCTORS FROM REMAINING LIGHTING AND ANY SIGNING CONDUITS TO BE ABANDONED. ANY REMAINING LIGHTING TO REMAIN IN PLACE SHALL BE RECIRCUITED OR REWIRED AS NECESSARY TO REMAIN IN OPERATION.

60. NO WORK ON THIS SITE SHALL BE INITIATED BY THE CONTRACTOR UNTIL A PRE-CONSTRUCTION MEETING WITH OWNER AND THE CIVIL ENGINEER IS PERFORMED. THE CONTRACTOR SHOULD BE AWARE OF ANY SITE INFORMATION AVAILABLE SUCH AS GEOTECHNICAL AND ENVIRONMENTAL REPORTS. THE CONTRACTOR SHALL HAVE CBYD MARK OUTS OF EXISTING UTILITIES COMPLETED PRIOR TO MEETING.

61. THE CONTRACTOR SHALL ARRANGE FOR AND INSTALL TEMPORARY OR PERMANENT UTILITY CONNECTIONS WHERE INDICATED ON PLAN OR AS REQUIRED. MAINTAIN UTILITY SERVICES TO BUILDINGS OR TO SERVICES TO REMAIN. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDERS FOR INSTALLATION AND PAY UTILITY PROVIDER FEES.

62. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OR UTILITY DISCONNECTIONS UNTIL AUTHORIZED TO DO SO BY THE OWNER.

63. THE CONTRACTOR OR DEMOLITION CONTRACTOR SHALL INSTALL TEMPORARY SHEETING OR SHORING AS NECESSARY TO PROTECT EXISTING AND NEW BUILDINGS, STRUCTURES AND UTILITIES DURING CONSTRUCTION AND DEMOLITION. SHEETING OR SHORING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER, LICENSED IN THIS STATE AND EVIDENCE OF SUCH SUBMITTED TO THE OWNER PRIOR TO INSTALLATION.

64. NO SALVAGE SHALL BE PERMITTED UNLESS PAID TO THE OWNER AS A CREDIT.

65. ANY EXISTING POTABLE WELL AND ANY EXISTING SEPTIC TANKS/ABSORPTION AREAS SHALL BE ABANDONED AND REMOVED PER THE CT DEEP AND HEALTH CODE REQUIREMENTS, AND LOCAL SANITARIAN REQUIREMENTS.

66. THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO SEDIMENT AND EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND TO EROSION CONTROL NOTES SHEET.

67. TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR USE IN FINAL LANDSCAPING.

68. SUBGRADE SHALL BE FORMED WITH REMOVAL AND REPLACEMENT OF FILL AND REMOVAL AND REPLACEMENT OF UNSUITABLE AND SOFT SUBGRADE MATERIAL AS REQUIRED BY THE GEOTECHNICAL ENGINEER. SEE GEOTECHNICAL REPORT AND EARTHWORK SPECIFICATIONS FOR FURTHER DESCRIPTION.

69. THE CONTRACTOR SHALL COMPACT FILL IN LIFT THICKNESS PER THE GEOTECHNICAL REPORT UNDER ALL PARKING, BUILDING, DRIVE, AND STRUCTURE AREAS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 (MODIFIED PROCTOR TEST), OR AS REQUIRED BY THE GEOTECHNICAL ENGINEER.

70. UNDERDRAINS SHALL BE ADDED, IF DETERMINED NECESSARY IN THE FIELD BY THE OWNER/GEOTECHNICAL ENGINEER, AFTER SUBGRADE IS ROUGH GRADED.

71. VERTICAL DATUM IS NAVD 88.

72. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THE TOWN OF TRUMBULL AGENT PRIOR TO THE START OF WORK ON THE SITE.

73. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH THE REGULATIONS OF THE CT DEEP AND THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION. IN ADDITION, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE SEDIMENT AND EROSION CONTROL PLAN CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY THE LOCAL MUNICIPALITIES, OR SOIL CONSERVATION DISTRICT OR THE TOWN OF TRUMBULL WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.

74. ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL. OTHERWISE THIS WORK SHALL CONFORM TO THE STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN LIFT THICKNESSES PER THE PROJECT GEOTECHNICAL REPORT TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT MOISTURE CONTENT INDICATED IN PROJECT GEOTECHNICAL REPORT.

75. ALL DISTURBANCE INCURRED TO MUNICIPAL AND STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE MUNICIPALITY AND STATE AS APPLICABLE FOR THE LOCATION OF THE WORK.

76. ALL CONSTRUCTION WITHIN A DOT RIGHT OF WAY SHALL COMPLY WITH ALL DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

77. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR BUILDING CONNECTIONS. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT.

78. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROPOSED SANITARY SEWERS AND WHERE PROPOSED STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.

79. UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW.

80. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.

81. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT.

82. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT. AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE OWNER HAVING JURISDICTION.

83. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.

84. SANITARY LATERAL SHALL MAINTAIN (10' MIN. HORIZONTAL 1.5' VERTICAL MIN.) SEPARATION DISTANCE FROM WATER LINES, OR ADDITIONAL PROTECTION MEASURES WILL BE REQUIRED WHERE PERMITTED, WHICH SHALL INCLUDE CONCRETE ENCASEMENT OF PIPING UNLESS OTHERWISE DIRECTED BY THE UTILITY PROVIDERS AND CIVIL ENGINEER.

85. RELOCATION OF UTILITY PROVIDER FACILITIES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER.

86. THE CONTRACTOR SHALL COMPACT THE PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION.

87. CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS.

88. BUILDING UTILITY PENETRATIONS AND LOCATIONS MAY BE SHOWN FOR THE CONTRACTOR'S INFORMATION AND SHALL BE VERIFIED WITH THE BUILDING MEP, STRUCTURAL, AND ARCHITECTURAL DRAWINGS AND WITH THE OWNER'S CONSTRUCTION MANAGER.

89. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS.

90. A ONE-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELECOMMUNICATION LINES AND STORM PIPING SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER WITH A CONCRETE ENCASEMENT. AN 18-INCH TO 6-INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE PROPOSED PIPING.

91. GRAVITY SANITARY SEWER PIPING AND PRESSURIZED WATERLINES SHALL BE LOCATED IN SEPARATE TRENCHES AT LEAST 10 FEET APART WHENEVER POSSIBLE. WHEN INSTALLED IN THE SAME TRENCH, THE WATER PIPE SHALL BE LAID ON A TRENCH BENCH AT LEAST 18 INCHES ABOVE THE TOP OF THE SANITARY SEWER PIPE AND AT LEAST 12 INCHES (PREFERABLY 18 INCHES) FROM THE SIDE OF THE SANITARY SEWER PIPE TRENCH.

92. SITE CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC., AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING STUB OUTS, INCLUDING ANY ROOF DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM, AND FOOTING DRAIN CONNECTIONS TO STORM DRAINAGE SYSTEM AS APPLICABLE.

93. MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE RIMS AND VALVE COVERS TO BE RAISED OR LOWERED FLUSH WITH FINAL GRADE AS NECESSARY.

94. SITE CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND CABLES FOR SITE LIGHTING WITH THE BUILDING ELECTRICAL CONTRACTOR.

95. CONTRACTOR SHALL COORDINATE INSTALLATION FOR ANY ELECTRICAL SERVICES TO THE MONUMENT SIGN (IF APPLICABLE) AND SITE LIGHTING WITH THE BUILDING ELECTRICAL CONTRACTOR.

96. THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY.

97. THE EXISTING ELECTRIC, AND TELECOMMUNICATIONS SERVICES SHALL BE USED UNDERGROUND FROM SERVICE POLE #UI 4653.

98. ALL WATER LINES TO HAVE A MINIMUM COVER OF 4'-6". ALL LINES SHALL BE BEDDED IN 6" SAND AND INITIALLY BACKFILLED WITH 12" SAND.

99. ALL WATER MAINS, WATER SERVICES AND SANITARY SEWER LATERALS SHALL CONFORM TO THE APPLICABLE WATER UTILITY PROVIDER SPECIFICATIONS, AND TO THE APPLICABLE SANITARY SEWER PROVIDER SPECIFICATIONS, AS WELL AS TO OTHER APPLICABLE INDUSTRY CODES (AWWA) AND PROJECT SPECIFICATIONS FOR POTABLE WATER SYSTEMS, AND FOR SANITARY SEWER SYSTEMS.

100. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNERS, THE CIVIL ENGINEER, UTILITY PROVIDERS AND GOVERNING AUTHORITIES.

101. THE CONTRACTOR MAY SUBSTITUTE MASONRY STRUCTURES FOR PRECAST STRUCTURES IF APPROVED BY THE CIVIL ENGINEER AND ALLOWED BY THE GOVERNING AUTHORITY ENGINEER OR OTHER GOVERNING AUTHORITY.

102. PIPING SHALL BE LAID FROM DOWNGRADIENT END OF PIPE RUN IN AN UPGRADIENT DIRECTION WITH BELL END FACING UPGRADE IN THE DIRECTION OF PIPE LAYING.

103. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C151 FOR CLASS 52 WITH CEMENT LINING IN ACCORDANCE WITH ANSI A21.4 FOR WATER MAINS AND SERVICES 3" ID AND LARGER. JOINTS SHALL BE MADE WITH CONCRETE THRUST BLOCKS OR WITH MEGAULUG RETAINER GLANDS OR WITH RODDING IN ACCORDANCE WITH PROJECT MANUAL SPECIFICATIONS AND IN ACCORDANCE WITH WATER UTILITY PROVIDER REQUIREMENTS TO EXTEND A MINIMUM OF 2 PIPE LENGTHS IN EITHER DIRECTION FROM FITTINGS AND ELBOWS (40 FT MINIMUM). ALL OTHER JOINTS SHALL BE PUSH-ON WITH RUBBER GASKETS (TYTON). USE OF OTHER TYPES OF RETAINER GLANDS SHALL REQUIRE USE WITH CLASS 53 OR GREATER DUCTILE IRON PIPE.

104. CONTRACTOR SHALL VERIFY LOCATION OF ROOF LEADERS OUTFALL PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER OF ANY ADDITIONAL DRAINAGE STRUCTURES AND PIPES ENCOUNTERED DURING CONSTRUCTION.

105. CONTRACTOR SHALL VERIFY EXISTING SANITARY PUMP, VALVES, ALARMS AND OTHER ASSOCIATED EQUIPMENT ARE IN WORKING CONDITION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL SANITARY PUMP FLOW, ALARM AND FUNCTION TEST RESULTS.

FORM 817 CONSTRUCTION NOTES

ALL WORK WITHIN THE STATE RIGHT-OF-WAY WILL COMPLY WITH FORM 817, "THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION " WITH THE LATEST SPECIAL PROVISIONS AND TYPICAL STATE STANDARD DETAILS. IN ANY CASE WHERE THE CONSTRUCTION IS NOT SPECIFICALLY DETAILED IN THE FORM 817, THE WORK WILL BE COMPLETED AS DIRECTED BY THE ENGINEER OR DISTRICT PERMIT SECTION REPRESENTATIVE.

REMOVAL OF PAVEMENT MARKINGS ALONG STATE ROADWAYS SHALL BE COMPLETED BY A NON-DESTRUCTIVE METHOD IN COMPLIANCE WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.11 AS REVISED.

NEW PAVEMENT MARKINGS SHALL BE PAINTED WITH EPOXY RESIN PAINT IN COMPLIANCE WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.10 AS REVISED.

NEW SIGN MATERIAL AND SHEETING SHALL BE MADE OF REFLECTIVE MATERIAL IN COMPLIANCE WITH STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.08 AS REVISED. TYPE 1 REFLECTIVE SHEETING SHALL BE USED FOR SIGNS WITH WHITE BACKGROUND , TYPE 3 REFLECTIVE SHEETING SHALL BE USED FOR SIGNS WITH COLORED BACKGROUND EXCEPT FOR SIGNS WITH RED BACKGROUND THAT SHALL BE TYPE 8 OR 9 REFLECTIVE SHEETING.

ALL SIGNS AND PAVEMENT MARKINGS INSTALLED WITHIN THE STATE RIGHT OF WAY MUST CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE LATEST STATE OF CONNECTICUT CATALOG OF SIGNS AS REVISED.

ANY DAMAGE TO THE EXISTING CURB, SIDEWALK OR ANY OTHER HIGHWAY APPURTENANCES DURING THE DEVELOPMENT OF THE PERMITTED SITE WILL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE DISTRICT 3 PERMIT SECTION AT NO COST TO THE STATE.

DEFINITIONS

MUNICIPALITY SHALL MEAN TOWN OF TRUMBULL

STATE SHALL MEAN: CONNECTICUT

WATER UTILITY PROVIDER SHALL MEAN: AQUARION WATER COMPANY OF CONNECTICUT

SANITARY UTILITY PROVIDER SHALL MEAN: BRIDGEPORT WATER POLLUTION CONTROL AUTHORITY

GAS UTILITY PROVIDER SHALL MEAN: SOUTHERN CONNECTICUT GAS COMPANY

TELECOMMUNICATIONS UTILITY PROVIDER SHALL MEAN: FRONTIER COMMUNICATIONS

ELECTRIC UTILITY PROVIDER SHALL MEAN: UNITED ILLUMINATING COMPANY

FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

Architecture
Engineering
Environmental
Land Surveying

BL Companies

355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed C.G.
Drawn N.A.N.
Reviewed
Scale NONE
Project No. 1901141
Date 06/24/2019
CAD File: GN190114131

Title
GENERAL NOTES

Sheet No.
GN-1

Xref (s): ; BD190114131

6/25/2020, KKILGUSS, G:\JOBS19\10\1901141\DWG\GN190114131.DWG,GN-1 24X36 NTS.

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WHITE TEXT W/ RED GRAPHIC ON WHITE BACKGROUND

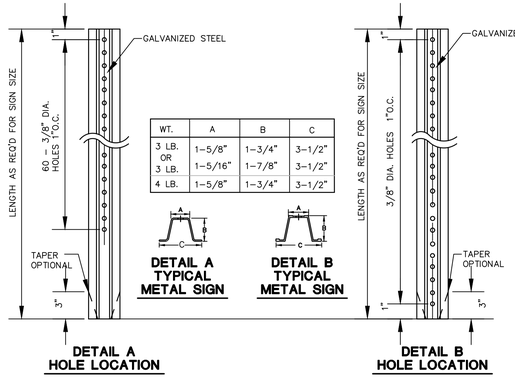
S-2
30" X 30"
DOT STANDARD "DO NOT ENTER" SIGN. USE TO PROHIBIT TRAVEL IN THE WRONG DIRECTION. TYPICAL AT ONE-WAY ROADS. POST AND PANEL MOUNT.

BLACK TEXT ON WHITE BACKGROUND

S-3
30" X 36"
DOT STANDARD "SPEED LIMIT 5 MPH" SIGN. USE TO CONTROL SPEED ALONG DRIVE AISLES WITHOUT ADJACENT PARKING SPOTS. POST AND PANEL MOUNT.

S-4
30" X 36"
DOT STANDARD "SPEED LIMIT 10 MPH" SIGN. USE TO CONTROL SPEED ALONG DRIVE AISLES WITHOUT ADJACENT PARKING SPOTS. POST AND PANEL MOUNT.

3 DIRECTIONAL SIGNS
1/2" = 1'-0"



WT.	A	B	C
3 LB. OR 3 LB.	1-5/8"	1-3/4"	3-1/2"
	1-5/16"	1-7/8"	3-1/2"
4 LB.	1-5/8"	1-3/4"	3-1/2"

NOTES:
1.STEEL FOR POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499-81 GRADE 60 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1-76 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT OF "30 LBS OR GREATER PER LINEAR FOOT.

2.AFTER FABRICATION ALL STEEL POSTS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A-123.

3.SIGN MOUNTING HEIGHT TO BE PER MUTCD REQUIREMENTS.

4.ALL SIGN POSTS SHALL HAVE "BREAK AWAY" FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS". THE "BREAK AWAY" FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGN SHOWN ON THE PLANS AT 60 MPH WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

6 TYPICAL SIGN POST
NTS

SITE SIGNAGE COLOR GENERAL NOTES

ALL SIGNS INDICATED "DOT" SHALL CONFORM TO COLOR AND REFLECTANCE SPECIFICATIONS OF THE MUTCD

MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES)
HTTP://MUTCD.FHWA.DOT.GOV/KNO-COLORSPEC.HTM

MUTCD COLOR SPECIFICATIONS
COLOR SPECIFICATIONS (23 CFR 655)
THE COLOR SPECIFICATIONS ARE USED TO DETERMINE THE COLOR OF SIGN SHEETING AND PAVEMENT MARKING MATERIALS FOR DESIGN PURPOSES. MOST OF THE COLOR SPECIFICATIONS WERE LAST REVISED BY THE FINAL RULE; AMENDMENT DATED NOVEMBER 21, 2002. HOWEVER, SOME COLOR SPECIFICATIONS WERE REVISED AND SPECIFICATIONS FOR SOME NEW COLORS WERE ADDED BY THE FINAL RULE DATED DECEMBER 16, 2009. VISIT THE ABOVE LINK FOR MORE INFO.

PANTONE MATCHING COLORS
THE FOLLOWING ARE PANTONE SPECIFICATIONS, FOR PRINTING PURPOSES. THEY PROVIDE A GUIDE FOR SELECTING APPROPRIATE LINK COLORS TO CLOSELY MATCH THE STANDARD COLORS OF TRAFFIC CONTROL SIGNS. NOTE: THERE ARE NO PANTONES AVAILABLE FOR FLUORESCENT COLOR SIGNS.

PANTONE SPECIFICATIONS FOR PRINTING
BROWN - 469, RED - 187, YELLOW - 116, PURPLE - 259, GREEN - 342, BLUE - 294, ORANGE - 152

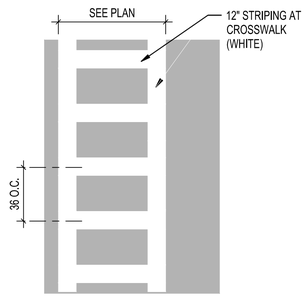
CUSTOM SIGNAGE COLORS

	Gloss Vinyl	Reflective Vinyl	Paint
C1 White	Scotchcal White 230-20	Scotchcal 280 White 280-10	Gloss White Two part catalyst hardened acrylic enamel
C2 Black	Scotchcal Black 230-22 (Pantone Black/C)	Scotchcal Black 280-85	
C3 Yellow	Oracal OPAQUE 020 GOLDEN YELLOW TRANSLUCENT 615 YELLOW ORANGE (Color to match tenant branding guidelines. Tenant orange= Pantone 137 U, Pantone 1375 C)		
C4 Gray	Scotchcal Medium Gray 230-31		Satin Finish Two part catalyst hardened acrylic enamel
C5 Red	Scotchcal Red 230-33 (Pantone 485C2X)	Scotchcal Red 280-72	
C6 Blue	Scotchcal Cobalt Blue (Pantone 288C)	Scotchcal Blue 230-75	
C7 Blue	Scotchcal Blue (Pantone 2995C)(RAL 5012)		

TENANT LOGO
ALL DSP
NO VISITORS & ASSOCIATES

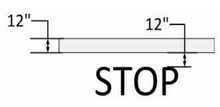
AS-53G
36" X 24"
TENANT SIGNAGE - SORTATION WAYFINDING USE AT SORTATION SITES AS NECESSARY FOR WAYFINDING. POST AND PANEL MOUNT. WHITE TEXT (ARIAL) ON BLACK BACKGROUND. ADJUST TEXT AND ARROW(S) DIRECTION BASED ON SITE LOCATION.

2 WAYFINDING SIGNS
1/2" = 1'-0"



PG-11
WHITE 12" STRIPING OUTLINE AND HATCH FILL AT 36" O.C. PAVEMENT GRAPHICS -PEDESTRIAN CROSSWALK. USE TO INDICATE PEDESTRIAN CROSSING. SEE PLAN FOR WIDTH OF CROSSWALK (BLACK INDICATES ASPHALT)

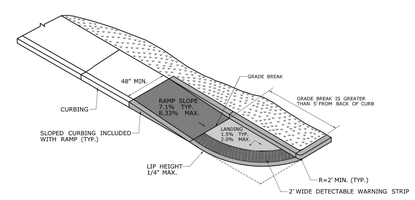
2 PAVEMENT STRIPING
1/4" = 1'-0"



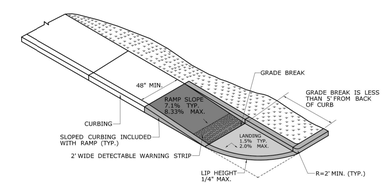
WHITE STOP LINE
USED WHEN LEAVING TENANT PROPERTY AT ANY INTERSECTION, WHEN MAKING A TURN LESS THAN 90 DEGREES, WHEN CROSSING DIRECTIONAL TRAFFIC, AND WHEN AN OVERFLOW SECONDARY TRAILER PARKING AREA INTERSECTS WITH THE TRAILER YARD. WHITE LINE AND 4' TALL PAINTED WHITE GRAPHIC TEXT "STOP"

VEHICLE STOP LINE
12" WIDE VEHICLE STOP LINE USED TO DESIGNATE WHEN A VEHICLE MUST COME TO A FULL COMPLETE STOP BEFORE MOVING FORWARD AND/OR MAKING A TURN.

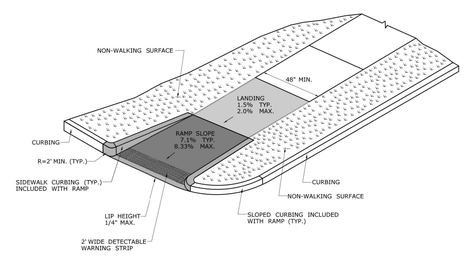
4 VEHICLE STOP LINE
1" = 1'-0"



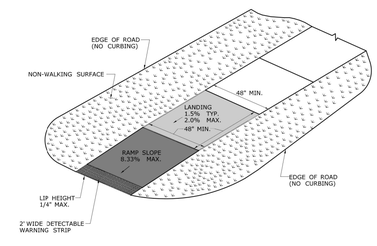
SINGLE DIRECTION RAMP WITHOUT NON-WALKING SURFACE GRADE BREAK GREATER THAN 5' (TYPE 14)



SINGLE DIRECTION RAMP WITHOUT NON-WALKING SURFACE GRADE BREAK LESS THAN 5' (TYPE 15)



SINGLE DIRECTION - RETURN CURB WITH NON-WALKING SURFACE (TYPE 16)



SINGLE DIRECTION - NO CURB WITH NON-WALKING SURFACE (TYPE 17)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE PLANS WAS OBTAINED FROM INVESTIGATIONS BY THE STATE AND IS PRESENTED TO ACCURATELY REPRESENT THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: -
CHECKED BY: -
Plotted Date: 5/30/2019
Filename: U:\TOOT_HIGHWAY_GD_01-39-192.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE: CONCRETE SIDEWALK RAMPS SHEET 6

PROJECT NO.: -
DRAWING NO.:
SHEET NO.:

NOT RELEASED FOR CONSTRUCTION

Architecture
Engineering
Environmental
Land Surveying
BL Companies
355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	K.A.K.
Drawn	K.A.K.
Reviewed	
Scale	NONE
Project No.	1901141
Date	06/24/2019

CAD File: DN190114131

Title
DETAILS SHEET

Sheet No.
DN-1

Xref (s): - BD190114131

6/25/2020, KKLOUS, C:\JOBS\PA1\N190114131\DWG\DN190114131.DWG(DN-1 24 X 36 H.T.S.

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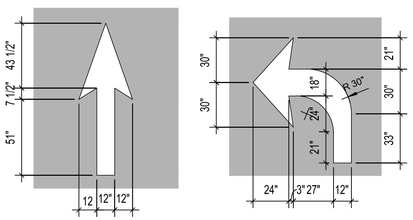
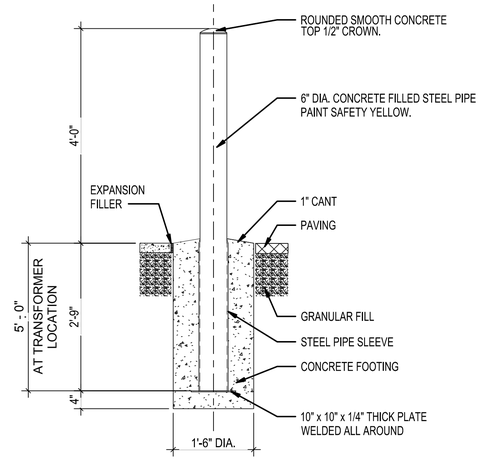


PG-5
8'-0" X 10'-0"
WHITE PAVEMENT GRAPHICS -STRAIGHT ARROW. USE TO DIRECT TRAFFIC AT ONE-WAY DRIVE AISLES. (BLACK INDICATES ASPHALT)

PG-6L (PG-6R OPP.)
8'-0" X 8'-0"
WHITE PAVEMENT GRAPHICS - LEFT TURN ARROW. USE TO INDICATE TURNING LANES. (BLACK INDICATES ASPHALT)

1 PAVEMENT ARROWS
1/4" = 1'-0"



9 TYPICAL SITE PROTECTIVE BOLLARD DETAIL
3/4" = 1'-0"

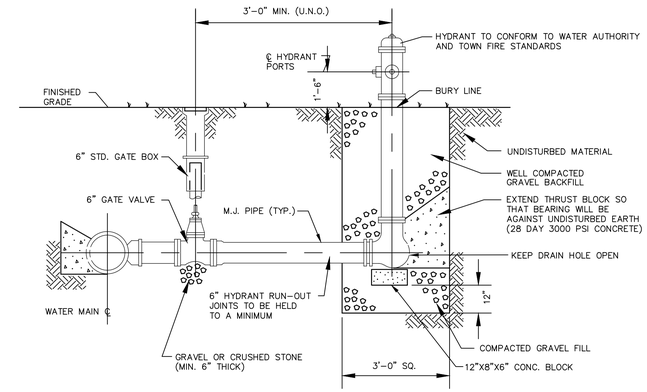
PAVEMENT GRAPHIC NOTES:

1. TWO COAT APPLICATION REQUIRED FOR ALL PAVEMENT GRAPHICS.
2. REFER TO CIVIL FOR PAINTED GRAPHIC ARROWS AND ADDITIONAL PAVEMENT GRAPHIC CRITERIA.

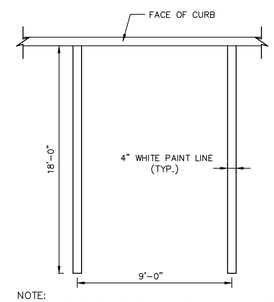
PAVEMENT PAINT

TA1/PP1	WHITE	
TA2/PP2	RED	(PANTONE 485C)
TA3/PP3	BLUE	(PANTONE 294)
TA4/PP4	GREEN	(PANTONE 342)
TA5/PP5	YELLOW	(PANTONE 116)

NOTE: TWO COAT APPLICATION REQUIRED FOR ALL PAVEMENT GRAPHICS.

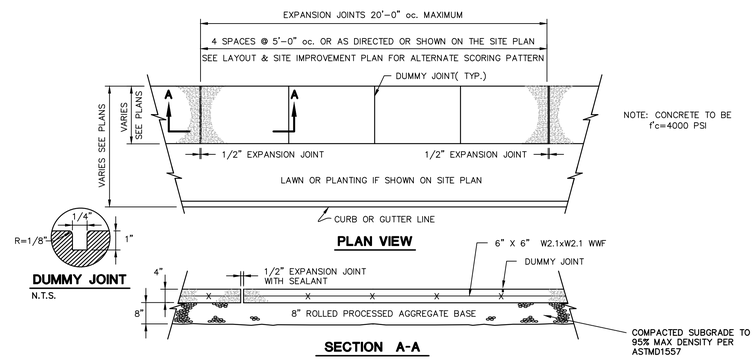


HYDRANT ASSEMBLY DETAIL
N.T.S. BLWD-003

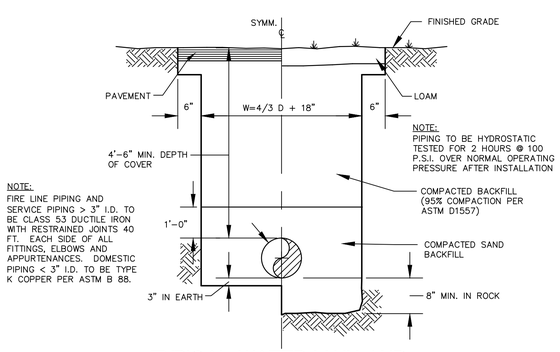


NOTE:
1. PROVIDE 2 COATS OF PAINT ON ALL SURFACES.
2. SEE PLAN FOR ACTUAL SPACE LOCATION AND DIMENSIONS.
3. STALL STRIPING SHALL HAVE 2 COATS OF PAINT.

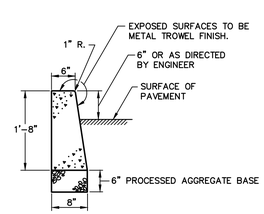
TYPICAL PARKING SPACE DETAIL
N.T.S.



CONCRETE SIDEWALK DETAIL
N.T.S. BLSR-001

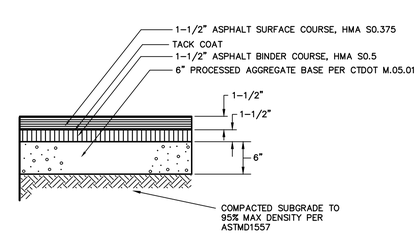


TYPICAL WATER MAIN AND SERVICE TRENCH DETAIL
N.T.S.

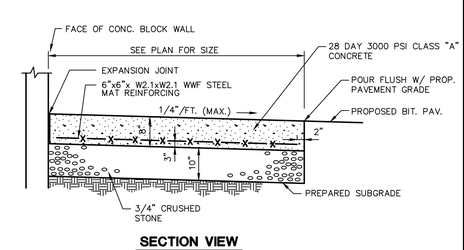


NOTES:
1. CONSTRUCTION JOINTS SHALL BE SPACED APPROXIMATELY EVERY 10 FEET BUT NOT LESS THAN 6 FEET. 1/4" THICK PREFORMED EXPANSION JOINT FILLER SHALL BE INSTALLED EVERY OTHER JOINT.
2. FORMWORK SHALL REMAIN INPLACE FOR 24 HOURS FOLLOWING CONCRETE POURING.

CONCRETE CURB
N.T.S.



STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE
N.T.S. ZPC-029



CONCRETE SMOKING PAD
N.T.S. BLPC-002

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

Architecture
Engineering
Environmental
Land Surveying
BL Companies
355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED DEVELOPMENT
7120 MAIN STREET
TRUMBULL, FAIRFIELD COUNTY, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	K.A.K.
Drawn	K.A.K.
Reviewed	
Scale	NONE
Project No.	1901141
Date	06/24/2019
CAD File: DN190114131	

Title
DETAILS SHEET

Sheet No.
DN-2

6/25/2020, KKLEGUS, G:\JOBS\P\TOWN\1901141\DWG\DN\1901141DWG\DN2-2X4-3X4.T.S.
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Xref (s): - BD190114131

NEW BUSINESS

- Discussion and Approval of Cooper Surgical – Stairs and Crosswalk at 50 Corporate Drive – Barry Unger, Barry Unger Associates Inc.

Vivian Munoz

From: Barry Unger Associates <UNGERASSOC@EARTHLINK.NET>
Sent: Thursday, July 9, 2020 3:49 PM
To: Vivian Munoz; Kyle Siljamaki
Subject: Cooper Surgical Stairs

Follow Up Flag: Follow up
Flag Status: Flagged

Vivian, Kyle,

The following drawings are for the police commissioners for next Tuesday's meeting per your request.

What Cooper Surgical was looking to do is to connect the 3 buildings that they're in: 50 Corporate, 75 Corporate, and 95 Corporate Drive. So what I came up with was a set of stairs that are more of an architectural feature on the outside and not just a basic run of straight steps. The stairs will go to the street, Corporate Drive, and it ends up virtually between the 3 buildings.

The sidewalk will be finished off correctly. There will be railings; we will do nothing that makes it unsafe. If you allow it, the road will be striped at the crosswalk and there will be a sidewalk at the 75 Corporate building to take it to the sidewalks that connect 75 and 95.

The stair will have lights shining on it and the light will be mounted on one of the light poles in the parking lot of 50 Corporate. We will make sure that no one trips because of a lack of light.

You will note from the design that we are not attaching the stairs to the stone wall. The stairs are on actual footings that are engineered and designed correctly.

I will be on my computer on Tuesday if you could please send me the invitation link for the meeting.

Thank you,

Barry Unger

https://drive.google.com/file/d/1kvCg6JvbdmgsPPfynOGH9YtHqgt2uAEa/view?usp=sharing

Barry Unger Associates Inc.
631 Main Street
Monroe, CT 06468
Tel: 203-459-8686
Fax: 203-459-8292
ungerassoc@earthlink.net

Trumbull Police Department

158 Edison Road, Trumbull CT 06611
(203) 261-3665

CASE/INCIDENT REPORT

SUPPLEMENTARY ☐

CFS NO	DAY	INCIDENT DATE	TIME	DATE OF RPT	TIME OF RPT	TYPE OF INCIDENT	INCIDENT CD	INVESTIGATING OFFICER	BADGE NO
2000007704	2	05/11/2020 05/11/2020	18:43	05/11/2020	18:48	POLICE ADMIN / INFORMATION	810	Officer Siljamaki, Kyle	74

DIVISION	DIVISION NO	REFERENCE DIVISION	REFERENCE DIVISION NO	CASE X-REFERENCE	UNIT ID	TYPIST	DATE TYPED	TIME TYPED
Traffic					74	KSILJAMAKI	05/11/2020	18:48

STREET NO	STREET NAME AND TYPE	APT NO.	INTERSECTING STREET NAME AND TYPE	PREMISE NAME	STATUS	TOWN CD
00050	CORPORATE Dr TRUMBULL			50 CORPORATE DR		T144

STATUS CODE C=COMPLAINANT V=VICTIM A=ARRESTEE J=JUVENILE H=OTHER M=MISSING W=WITNESS O=OFFENDER D=DRIVER S=SUSPECT P=POLICE OFFICER T=TOT

STATUS	NAME	SEX	RACE	D.O.B.	TELEPHONE		ADDRESS	OP STATE & NO.
H	COOPER SURGICAL				Hom	(203) 601 - 5200	75 Corporate Dr Trumbull CT	
H	RD SCINTO				Bus	(203) 395 - 2305	1 Corporate Dr Shelton CT	
H	Lewis Associates				Bus	(203) 261 - 8648	260 Main St Monroe CT	
					Hom	(203) 261 - 8648		
H	Unger, Barry	M			Cel	(203) 394 - 3946	631 Main St Monroe CT	CT

The Traffic Division received a request from Architect Barry Unger for Cooper Surgical. Barry is in the process of applying for a permit to install an exterior staircase and crosswalk that would be used to connect 50 Corporate Dr. to the other Cooper facilities at 75 and 95 Corporate Dr. The crosswalk would not be at an intersection but would be a mid-block crosswalk. A mid-block crosswalk provides pedestrians a safer and more visible way to cross a street than crossing at a random and often dangerous location. Drivers do not expect to see pedestrians crossing at mid-block locations. Because of this, it is important to have adequate lighting and signage to ensure drivers have the necessary time to stop. Barry stated the project would include advance crosswalk warning signs for vehicle traffic but would not include button activated flashing lights. Lewis Assoc. surveyed the area and measured sight line distances of 265 feet for southwest bound traffic and 500 feet for northeast bound traffic, which are adequate sight distances for both pedestrians and motorists. Corporate Dr. is a two lane roadway ending in a cul-de-sac with a speed limit of 25 mph. I advised Barry that I would recommend the installation of the crosswalk and that my report would be forwarded to the Police Commission for final approval.

THE UNDERSIGNED, AN INVESTIGATOR HAVING BEEN DULY SWORN DEPOSES AND SAYS THAT: I AM THE WRITER OF THE ATTACHED POLICE REPORT PERTAINING TO THIS INCIDENT NUMBER. THAT THE INFORMATION CONTAINED THEREIN WAS SECURED AS A RESULT OF (1)MY PERSONAL OBSERVATION AND KNOWLEDGE: OR (2)INFORMATION RELAYED TO ME BY OTHER MEMBERS OF MY POLICE DEPARTMENT OR OF ANOTHER POLICE DEPARTMENT OR (3)INFORMATION SECURED BY MYSELF OR ANOTHER MEMBER OF A POLICE DEPARTMENT FROM THE PERSON OR PERSONS NAMED OR IDENTIFIED THEREIN, AS INDICATED IN THE ATTACHED REPORT. THAT THE REPORT IS AN ACCURATE STATEMENT OF THE INFORMATION SO RECEIVED BY ME.

INVESTIGATOR SIGNATURE:	INVESTIGATOR I.D.#:	SIGNED DATE:	SUPERVISOR SIGNATURE	SUPERVISOR I.D.#:
/OFC. Kyle Siljamaki/	74	05/11/2020	/SGT. Paul Coutinho/	27

TRUMBULL BUILDING DEPARTMENT

buildinginfo@trumbull-ct.gov
Phone:203.452.5020
Fax: 203.452.5093

Town of Trumbull
Connecticut

Town Hall
5866 Main Street
Trumbull, Connecticut 06611

Office Hours 7:30 AM – 4:00 PM
Permit Hours 7:30 - 10:00 AM

Please fill out in ink

APPLICATION FOR BUILDING PERMIT

Date: 5-4-2020

House Number: 50 **Lot Number:** _____ **Street:** CORPORATE DRIVE

Owner: R-D SCINTO **Phone:** 203-929-6300

Owner's Address: 1 CORPORATE DRIVE (Street) SHELTON (City) CT (State)

Email address: BOB@SCINTO.COM

Construction: Residential: ___ **Commercial:** ___ **New:** ___ **Addition:** ___ **Remodel:** ___ **Pre-existing:** ___ **Foundation Only:** ___

Use Group: _____ **Type of Construction:** _____ **Edition of Code:** _____ **Design occupant load:** _____

Size of Building _____ **Number of Floors** _____ **Floor Area** _____ **Structure: Frame:** ___ **Masonry:** ___

Automatic Sprinkler: Yes ___ **No:** ___

Description: INSTALL EXTERIOR STAIR ALONG STONE WALL. STAIRS ARE NOT ATTACHED TO STONE. THERE ARE (3) FOUNDATIONS THAT THE STAIR IS SUPPORTED FROM

I estimate the value of this work will be: $ 90,000.— **Permit Fee $** _____

Contractor's Name: EASTERN METAL WORKS, INC AND VAZ QUALITY WORKS **License #:** _____ **Type:** _____

Address: _____ **Email:** _____

Phone: _____ **Cell Phone:** _____ **Fax:** _____

EASTERN 203-878-6795 FAX 203-878-9512 / VAZ 203-336-527 FAX

Architect's Name: BARONE ENGINEERING **License #:** 14849

Address: 281 BEARDLY ROAD **Email:** GBARONE@IESLLC.BIZ

Phone: _____ **Cell Phone:** 203-929-8765 **Fax:** _____

I HEREBY MAKE APPLICATION FOR A PERMIT TO DO WORK IN ACCORDANCE WITH THE CONNECTICUT STATE BUILDING CODE IN EFFECT AT THE TIME OF APPLICATION AND WITH ANY AND ALL REGULATIONS OF THE TOWN OF TRUMBULL.

Applicant's Signature: Barry Unger **Applicant's Printed Name:** BARRY UNGER

Address: 631 MAIN STREET **Phone:** 203-452-8686

THE PROPOSED WORK IS AUTHORIZED BY THE OWNER-IN-FEE AND THE UNDERSIGNED IS AUTHORIZED BY THE OWNER-IN-FEE TO MAKE THE APPLICATION FOR BUILDING PERMIT.

Agent of owner's signature: _____ **Agent of Owner's Printed Name:** _____

- R.D SCINTO GAVE APPROVAL TO BUILD STAIR
- THERE WILL BE LIGHTS ON POLE THAT WILL SHINE ON TREADS AT NIGHT

DATE:

PERMIT:

William C. Maurer, PE, LS
Town Engineer

TOWN OF TRUMBULL
CONNECTICUT

Town Hall
5866 Main Street
Trumbull, Connecticut 06611
Phone: 203.452.5050
Fax: 203.452.5061

Applicant: Cooper Surgical **Project:** Stairs @ 50 Corporate Dr	**TOWN OF TRUMBULL** **ENGINEERING DEPARTMENT** **REVIEW COMMENTS**	**Designer:** Pereira Engineering LLC Barry Unger Associates Inc.	
		Review # 1	**Date: 5/4/2020**

Based on the review of the proposed Site Plans and Drainage Report, submitted on5/4/2020, the Engineering Department offers the following comments (**please provide written responses in the space below**):

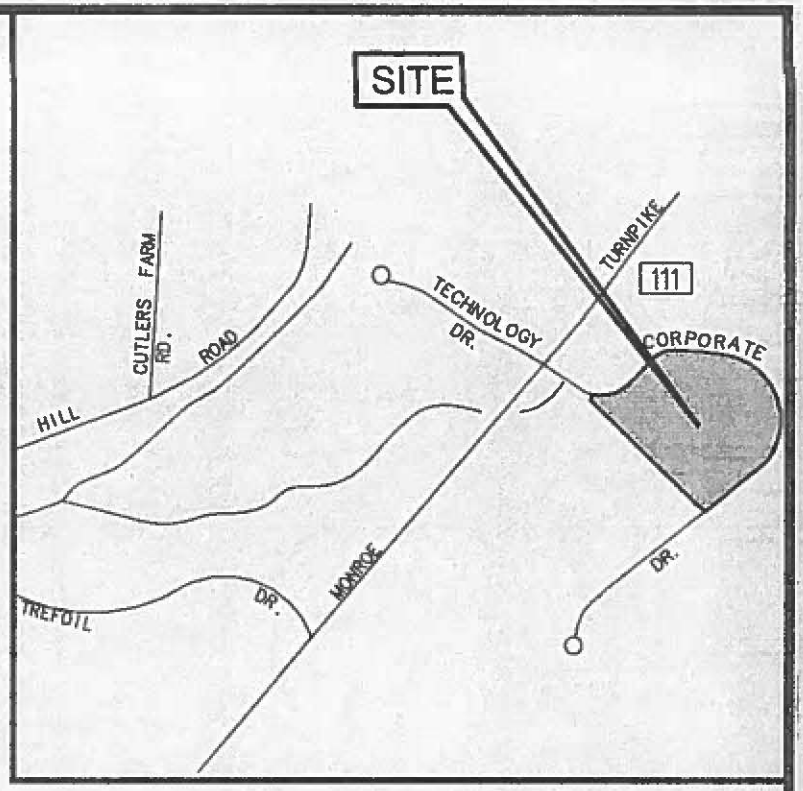
PROJECT COMMENTS

Comment Number	Page or Sheet #	Review Comments – General Comments	Designer Response
1		Please provide Traffic Authority approval for midblock crosswalk prior to engineering sign-off.	
2		Street opening permit is required prior to any work within Town Right-of-Way.	
3		Gaps between proposed crosswalk and existing fence are not safe. Existing fence should be adjacent to the crosswalk rails.	
4		No debris & stumps to be buried on site.	
5		A certification letter and as-built plan will be required upon project completion.	

The Engineering Department may issue further comments based on the responses to the above mentioned items and/or design modifications. If you have any questions or concerns please contact us.

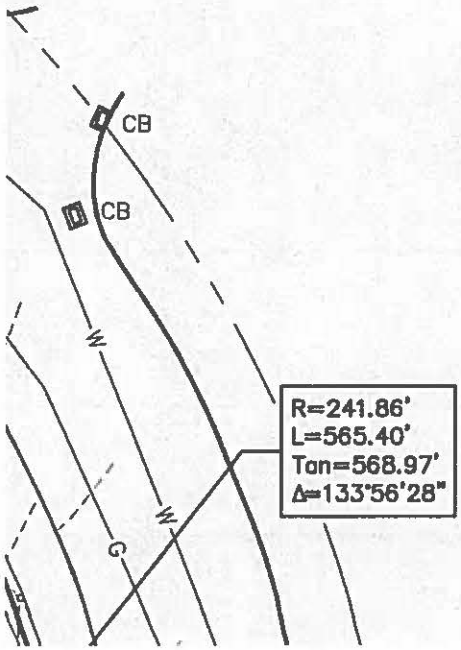
Sincerely,

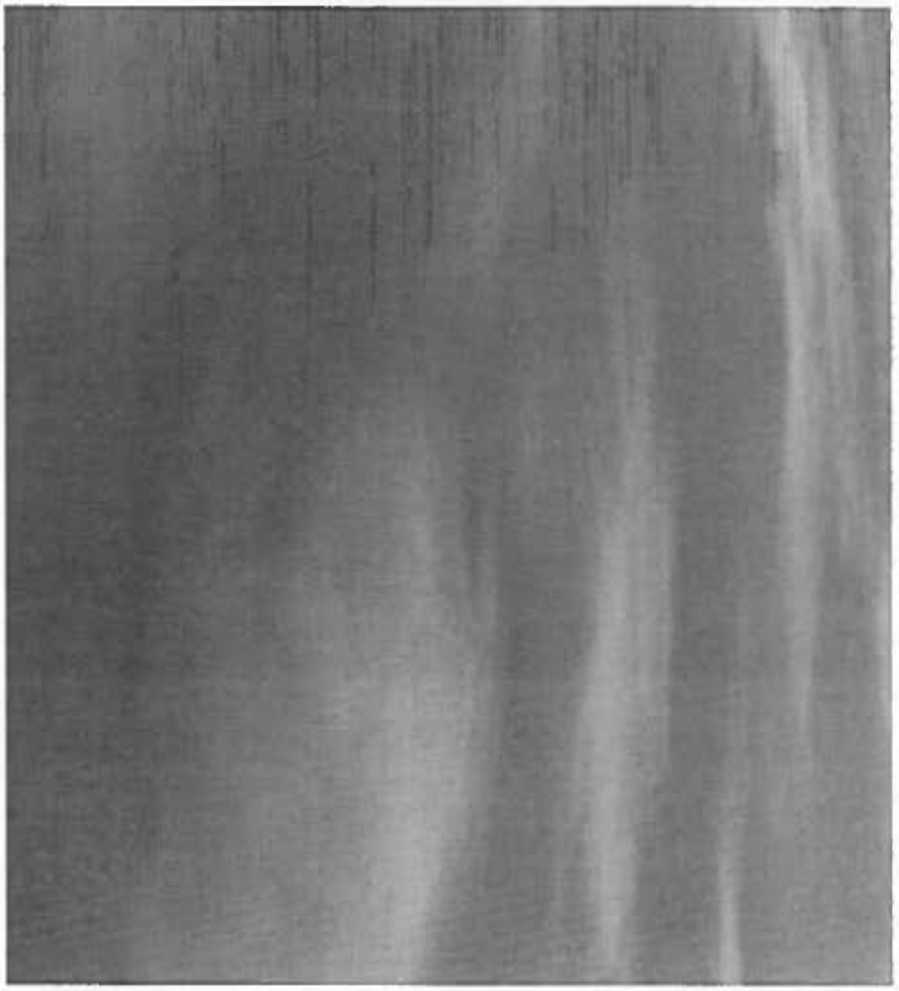
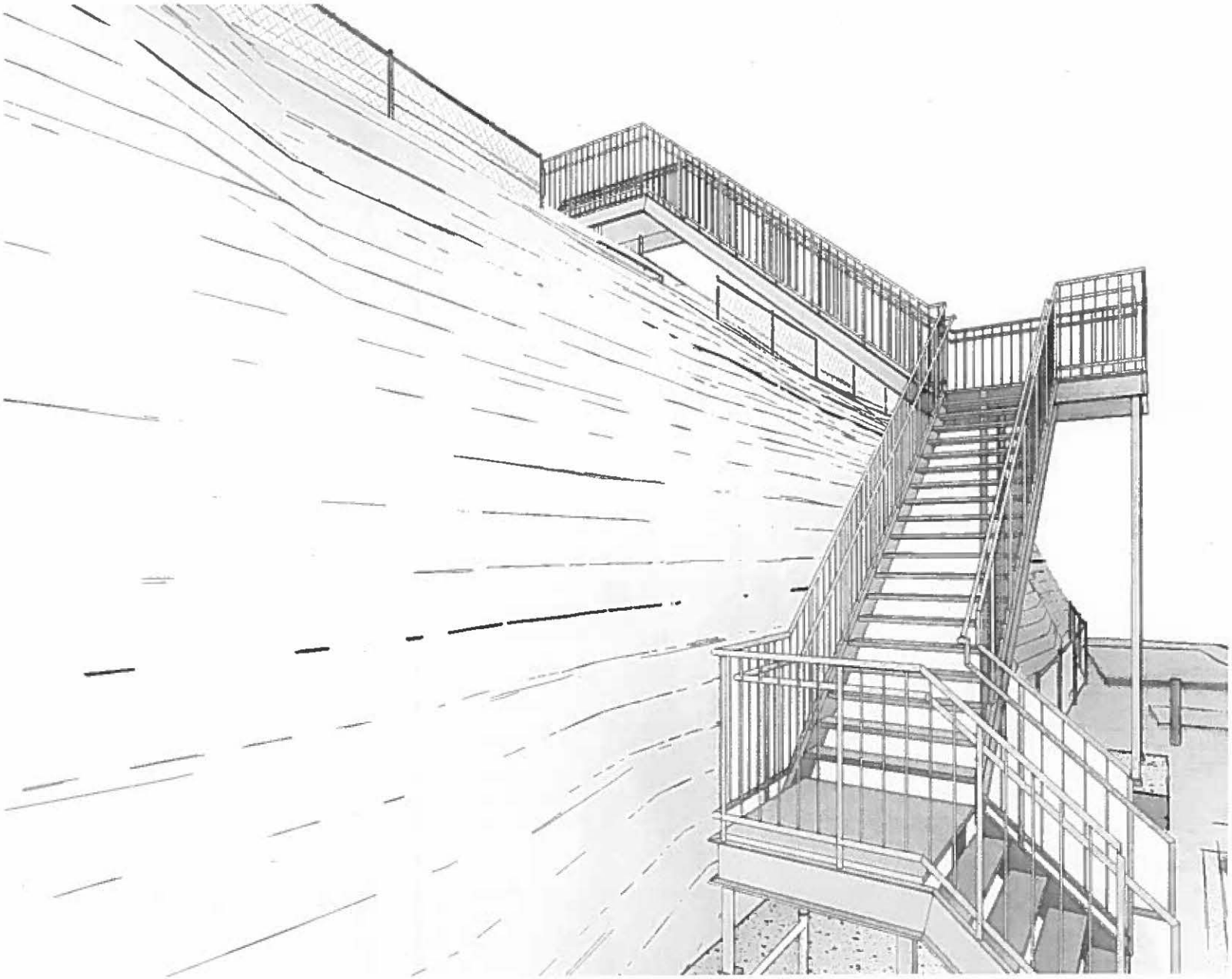
Tatiana Solovey, PE
Assistant Town Engineer



LOCATION MAP

NOT TO SCALE



NOTES:

1. THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
2. THE TYPE OF SURVEY PERFORMED IS AN IMPROVEMENT LOCATION SURVEY INTENDED TO DEPICT THE AS-BUILT CONDITIONS.
3. THE BOUNDARY DETERMINATION/OPINION IS BASED UPON A RESURVEY OF MAP REFERENCE 1.
4. THIS SURVEY CONFORMS TO HORIZONTAL ACCURACY CLASS A-2, VERTICAL ACCURACY CLASS V-3, AND TOPOGRAPHIC ACCURACY CLASS T-2.
5. THE ELEVATIONS DEPICTED HEREON ARE BASED UPON N.A.V.D. 1988 DERIVED FROM VRS GNSS SURVEY OF MARCH 2011.