#### **MEETING NOTICE**

**NOTICE IS HEREBY GIVEN** that the Regular Meeting of the President and Board of Trustees of the Village of Tinley Park, Cook and Will Counties, Illinois will be held on Tuesday, January 21, 2020, beginning at 7:30 PM in the Council Chambers at the Village Hall of Tinley Park, 16250 South Oak Park Avenue, Tinley Park, Illinois.

7:30 PM	CALL TO ORDER
	PLEDGE OF ALLEGIANCE
	ROLL CALL
<u>ITEM #1</u>	
SUBJECT:	CONSIDER APPROVAL OF AGENDA
ACTION:	Discussion - Consider approval of agenda as written or amended.
COMMENTS:	
-	
<u>ITEM #2</u>	
SUBJECT:	CONSIDER APPROVAL OF MINUTES OF THE REGULAR VILLAGE BOARD MEETING HELD ON JANUARY 7, 2020.
ACTION:	Discussion: Consider approval of minutes as written or amended.
COMMENTS:	
- ITEM #3	
SUBJECT:	CONSIDER ADOPTING RESOLUTION 2020-R-001 RECOGNIZING THE TINLEY PARK BULLDOGS CHEERLEADING TEAM ON THEIR ACHIEVEMENTS - Clerk Thirion
ACTION:	Discussion: The Tinley Park Bulldogs Cheer Recreational Fifth Grade Cheerleading Team closed out their season winning placing second at the 2019 Illinois Recreational Cheer Association State Competition on December 8th.
COMMENTS:	This Resolution is eligible for adoption.

ITEM #4

SUBJECT: CONSIDER ADOPTING RESOLUTION 2020-R-004 RECOGNIZING THE

KOWALCZYK FAMILY ON WINNING ABC-7 CHICAGO'S 2019

CHRISTMAS "GREAT CHICAGO LIGHT FIGHT" - President Vandenberg

ACTION: Discussion: This resolution celebrates the Kowalcyzk family, Village residents

> whose home Christmas lights display on Avon Lane was voted the best in the Chicagoland area for the 2019 ABC-7 Chicago "Great Chicago Light Fight". The Kowalcyzks' display was chosen from six (6) finalists in the Chicagoland area and represented the Village nationally. This Resolution is eligible for

adoption.

**COMMENTS:** 

**ITEM #5** 

SUBJECT: CONSIDER RECEIVING A PRESENTATION FROM PETER DUMON OF

THE HARP GROUP UPDATING ACTIVITIES AT THE TINLEY PARK

CONVENTION CENTER AND HOTEL - President Vandenberg

ACTION: Discussion: Peter Dumon will present an update of the activities at the Tinley

Park Convention Center and Hotel. No specific action required.

**COMMENTS:** 

**ITEM #6** 

CONSIDER RECEIVING A PRESENTATION OF A TECHNICAL SUBJECT:

> INNOVATION AWARD FROM THE SOUTHWEST BRANCH OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) FOR THE NORTH

STREET RECONSTRUCTION PROJECT - Trustee Glotz

Discussion: The Southwest Branch of the American Public Works Association ACTION:

> (APWA) recently presented the Village with a Technical Innovation award for its North Street Reconstruction Project. The APWA cited the project's use of permeable interlocking paver stones as a major factor in its decision to select North Street as the award recipient. The interlocking paver stones help to capture almost 60,000 gallons of water at the front-end of any storm, which prevents runoff within the North Street right of way. This \$1.3 million project

was completed in 2019 and was funded in part by a \$200,000 Green

Infrastructure Grant from the Metropolitan Water Reclamation District of Greater Chicago. Work included reconstruction and beautification, including new paver stones and crosswalks that resemble piano keys. In addition to Public Works Director Kevin Workowski and his team, the North Street Project included Robinson Engineering, Austin-Tyler Construction and LPS Pavement

COMMENTS:	

#### **ITEM #7**

SUBJECT: CONSIDER THE APPOINTMENT OF ANDREW BROWN TO THE

POSITON OF ASSISTANT FINANCE DIRECTOR/ASSISTANT

TREASURER - Trustee Galante

**ACTION:** 

Discussion: The Village recently conducted recruitment for the position of Assistant Finance Director/Assistant Treasurer. Twelve applications were received and quickly shortlisted to three candidates. Two candidates were requested to participate in a second interview with our panel, and Andrew Brown was identified as the most qualified to fill this vacancy. Mr. Brown earned a Bachelor of Business Administration from Western Michigan University and a Master of Professional Accountancy from Elmhurst College. He previously served the town of Cicero as Senior Accountant and most recently the Village of Buffalo Grove as Deputy Director of Finance, where he has direct involvement in community and economic development, as well as government finance. Mr. Brown has served on the Illinois Government Finance Officers Association (IGFOA) Executive Board, Continuing Professional Education Committee and as Chair of the Growth and Engagement network. In his free time, he is the Head Coach for the Orland Park Vikings Hockey Club and Park Ridge Express Hockey Club. Consider the appointment of Andrew **Brown to the position of Assistant Finance Director / Treasurer, effective** January 22, 2020.

COMMENTS:

#### **ITEM #8**

SUBJECT: CONSIDER APPROVAL OF THE FOLLOWING CONSENT AGENDA ITEMS:

- A. CONSIDER REQUEST FROM THE KNIGHTS OF COLUMBUS TO CONDUCT A TAG DAY FUNDRAISER ON FRIDAY, SEPTEMBER 18, AND SATURDAY, SEPTEMBER 19, 2020, AT CERTAIN INTERSECTIONS IN THE VILLAGE OF TINLEY PARK
- B. CONSIDER REQUEST FROM PARK LAWN TO CONDUCT A TAG DAY FUNDRAISER ON FRIDAY AND SATURDAY APRIL 10 AND 11 AND FRIDAY, APRIL 17, 2020, AT CERTAIN INTERSECTIONS IN THE VILLAGE OF TINLEY PARK

- C. CONSIDER REQUEST FROM THE KNIGHTS OF COLUMBUS, TO CONDUCT A RAFFLE ON SATURDAY, APRIL 4, 2020, AT ST. GEORGE CHURCH, 6707 W. 175TH STREET, WITH THE MAXIMUM VALUE OF THE PRIZE NOT TO EXCEED \$12,025. WINNERS WILL BE DRAWN AT THE CHURCH.
- D. CONSIDER PAYMENT OF IMPACT FEES IN THE AMOUNT OF \$7,600 TO KIRBY SCHOOL DISTRICT 140 FROM THE ESCROW FUND.
- E. CONSIDER ADOPTING A RESOLUTION 2020-R-002 RELEASING THE LETTER OF CREDIT ISSUED IN RELATION TO 179 OPA, LLC'S FOUNDATION ONLY PERMIT FOR UNION SQUARE TOWNHOMES DEVELOPMENT
- F. CONSIDER PAYMENT OF OUTSTANDING BILLS IN THE AMOUNT OF \$2,803,521.86 AS LISTED ON THE VENDOR BOARD APPROVAL REPORTS DATED JANUARY 10 AND JANUARY 17, 2020.

ACTION:	Discussion: Consider approval of consent agenda items.
COMMENTS:	
<u>ITEM #9</u>	
SUBJECT:	CONSIDER ORDINANCE NUMBER 2020-O-003 GRANTING A MAP AMENDMENT (REZONING) FOR TWO (2) PROPERTIES LOCATED AT 17100 AND 17110 HARLEM AVENUE FROM THEIR EXISTING B-4 (OFFICE AND SERVICE BUSINESS) AND R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICTS TO THE B-1 (NEIGHBORHOOD SHOPPING) ZONING DISTRICT - Trustee Mueller
ACTION:	Discussion: The Petitioner, Vequity LLC, is seeking to rezone the two properties located at the Southwest Corner of Harlem Avenue and 171st Street from their current zoning to the B-1, Neighborhood Shopping zoning district. The purpose of the rezoning is to allow for the construction of an automotive service (gas) station. The proposed gas station site includes ten (10) vehicle fueling stations and a 3,511 sq. ft. convenience store building.
	The Plan Commission held a Public Hearing on January 2, 2020 and voted 5-0 to recommend approval of the Map Amendment (Rezoning) in accordance with the plans as listed in the "Listed Reviewed Plans" and Findings of Fact in the

COMMENTS:

January 2, 2020, Staff Report. This Ordinance is eligible for first reading.

#### ITEM #10

SUBJECT:

CONSIDER ORDINANCE NUMBER 2020-O-006 APPROVING AND ACCEPTING A FINAL PLAT OF RESUBDIVISION FOR SOUTHLANDS FIRST CONSOLIDATION LOCATED AT 17100-17110 HARLEM AVENUE

- Trustee Mueller

ACTION:

Discussion: The Petitioner, Vequity LLC (contract purchaser/developer), has requested Final Plat approval for the Southlands First Consolidation associated with the proposed 7-Eleven gas station and convenience store at 17100 and 17110 Harlem Avenue. The Plat will consolidate two (2) parcels along Harlem Ave resulting in a single .961-acre parcel. The Plat also includes all existing utility easements, cross-access easements to neighboring properties, and a sidewalk easement for installation of a public sidewalk on a portion of the property.

The Plan Commission reviewed the Final Plat of Resubdivision with a recommended condition that the approval is subject to Final Engineering Plan approval by the Village Engineer on January 2, 2020, and voted 5-0 to recommend approval. This Resolution is eligible for first reading.

COMMENTS:

#### **ITEM #11**

SUBJECT:

CONSIDER ORDINANCE NUMBER 2020-O-004 GRANTING A SPECIAL USE FOR AN AUTOMOBILE SERVICE (GAS) STATION TO PERMIT THE CONSTRUCTION OF A 7-ELEVEN GAS STATION AT 17100 HARLEM AVENUE IN THE B-1 (NEIGHBORHOOD SHOPPING) ZONING DISTRICT - Trustee Mueller

ACTION:

Discussion: The Petitioner, Vequity LLC, is seeking a Special Use Permit for an automobile service (gas) at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District. The proposed gas station site includes ten (10) vehicle fueling stations and a 3,511 sq. ft. convenience store building.

The Plan Commission held a Public Hearing on January 2, 2020, and voted 5-0 to recommend approval of the Special Use with recommended conditions in accordance with the plans as listed in the "Listed Reviewed Plans" and Findings of Fact in the January 2, 2020, Staff Report. **This Ordinance is eligible for first reading.** 

COMMENTS:

#### **ITEM #12**

SUBJECT: CONSIDER ORDINANCE NUMBER 2020-O-005 GRANTING

VARIATIONS FROM THE ZONING ORDINANCE RELATED TO THE LOT SIZE, LOT WIDTH, LOT DEPTH, DRIVE AISLE WIDTH AND FREESTANDING SIGN SETBACK FOR THE PROPOSED 7-ELEVEN GAS STATION AND CONVENIENCE STORE SITE LOCATED AT 17100 HARLEM AVENUE IN THE B-1 (NEIGHBORHOOD SHOPPING) ZONING

**DISTRICT** - Trustee Mueller

ACTION: Discussion: The Petitioner, Vequity LLC (contract purchaser/developer), is

seeking the five (5) variations related to lot size, lot width, lot depth, drive aisle width and freestanding sign setback as part of their proposal to redevelop the properties at 17100 and 17110 Harlem Avenue for a 7-Eleven gas station site that includes ten (10) vehicle fueling stations and a 3,511 sq. ft. convenience

store building.

The Plan Commission held a Public Hearing on January 2, 2020 and voted 5-0 to recommend approval of the five Variations and adopt the Findings of Fact in accordance with the plans as listed in the "Listed Reviewed Plans" as indicated in the January 2, 2020 Staff Report. This Ordinance is eligible for first reading.

COMMENTS:

#### **ITEM #13**

SUBJECT: CONSIDER ADOPTING RESOLUTION 2020-R-005 AUTHORIZING A

CONTRACT WITH AQUAMIST PLUMBING AND LAWN SPRINKLING,

CO. FOR IRRIGATION MAINTENANCE - Trustee Glotz

ACTION: Discussion: The proposed irrigation contract entails winterization, spring start

up and repairs to the system at seven (7) locations (LaGrange Road, Harlem Avenue, 171st Street median, Fire Station #4 at 191st Street, Oak Park Avenue Metra Station, Village Hall, and the Police Station.) **This Resolution is eligible** 

for adoption.

		TS:

<u>ITEM #14</u>	
SUBJECT:	RECEIVE COMMENTS FROM STAFF -
COMMENTS:	
<u>ITEM #15</u>	
SUBJECT:	RECEIVE COMMENTS FROM THE BOARD -
COMMENTS:	
<u>ITEM #16</u>	
SUBJECT:	RECEIVE COMMENTS FROM THE PUBLIC -
COMMENTS:	

# <u>ITEM #17</u>

SUBJECT: ADJOURN TO EXECUTIVE SESSION TO DISCUSS:

- A. THE APPOINTMENT, EMPLOYMENT, COMPENSATION, DISCIPLINE, PERFORMANCE, OR DISMISSAL OF SPECIFIC EMPLOYEES OF THE PUBLIC BODY OR LEGAL COUNSEL FOR THE PUBLIC BODY, INCLUDING HEARING TESTIMONY ON A COMPLAINT LODGED AGAINST AN EMPLOYEE OF THE PUBLIC BODY OR AGAINST LEGAL COUNSEL FOR THE PUBLIC BODY TO DETERMINE ITS VALIDITY.
- B. COLLECTIVE NEGOTIATING MATTERS BETWEEN THE PUBLIC BODY AND ITS EMPLOYEES OR THEIR REPRESENTATIVES, OR DELIBERATIONS CONCERNING SALARY SCHEDULES FOR ONE OR MORE CLASSES OF EMPLOYEES.
- C. LITIGATION, WHEN AN ACTION AGAINST, AFFECTING OR ON BEHALF OF THE PARTICULAR PUBLIC BODY HAS BEEN FILED AND IS PENDING BEFORE A COURT OR ADMINISTRATIVE TRIBUNAL, OR WHEN THE PUBLIC BODY FINDS THAT AN ACTION IS PROBABLE OR IMMINENT, IN WHICH CASE THE BASIS FOR THE FINDINGS SHALL BE RECORDED AND ENTERED INTO THE MINUTES OF THE CLOSED MEETING.

#### **ADJOURNMENT**

#### MINUTES OF THE REGULAR BOARD MEETING OF THE TRUSTEES, VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS, HELD JANUARY 7, 2020

The Regular meeting of the Board of Trustees, Village of Tinley Park, Illinois, was held in the Council Chambers located in the Village Hall of Tinley Park, 16250 S. Oak Park Avenue, Tinley Park, IL on January 7, 2020. President Vandenberg called this meeting to order at 7:53 p.m. and led the Board and audience in the Pledge of Allegiance.

At this time President Vandenberg as for a moment of silence for U.S. Army Specialist Henry Mayfield Jr., of Hazel Crest, Illinois, was among three (3) Americans killed in an early morning attack January 5, 2020, in Kenya after their military base was overrun by al-Shabab fighters.

Clerk Thirion asked all present to keep U.S. Military personnel serving in Iraq in our thoughts.

Present and responding to roll call were the following:

Village President: Jacob C. Vandenberg Village Clerk: Kristin A. Thirion

Trustees: William P. Brady

William A. Brennan Diane M. Galante Michael W. Glotz Michael G. Mueller

Absent: Cynthia A. Berg

Also Present:

Village Manager: David Niemeyer
Asst. Village Manager: Patrick Carr
Village Attorney: Patrick Connelly

Motion was made by Trustee Brennan, seconded by Trustee Mueller, to approve the agenda as written or amended for this meeting. Vote by voice call. President Vandenberg declared the motion carried.

Motion was made by Trustee Brennan, seconded by Trustee Mueller, to approve and place on file the minutes of the Special Village Board Meeting held on December 17, 2019. Vote by voice call. President Vandenberg declared the motion carried.

Motion was made by Trustee Brennan, seconded by Trustee Brady, to consider approving the following Consent Agenda items:

The following Consent Agenda items were read by the Village Clerk:

A. CONSIDER REQUEST FROM AMERICAN LEGION POST 615, 17423 67TH COURT, TO CONDUCT A QUEEN OF HEARTS RAFFLE THROUGH DECEMBER 31, 2020, OR UNTIL A WINNER IS DRAWN, WITH THE MAXIMUM VALUE OF THE PRIZE NOT

2

**January 7, 2020** 

\_\_\_\_\_

TO EXCEED \$250,000. WINNERS WILL BE DRAWN WEEKLY AT THE AMERICAN LEGION POST.

B. CONSIDER PAYMENT OF OUTSTANDING BILLS IN THE AMOUNT OF \$1,879,333.96 AS LISTED ON THE VENDOR BOARD APPROVAL REPORTS DATED DECEMBER 20, DECEMBER 27, 2019, AND JANUARY 3, 2020.

President Vandenberg asked if anyone from the Board would like to remove or discuss any items from the Consent Agenda. No items were removed or discussed. Vote on roll call: Ayes: Brady, Brennan, Galante, Glotz, Mueller. Nays: None. Absent: Berg. President Vandenberg declared the motion carried.

Motion was made by Trustee Mueller, seconded by Trustee Brennan, to postpone **ORDINANCE NUMBER 2019-O-052 GRANTING CERTAIN VARIATIONS TO PERMIT THE CONSTRUCTION OF A ONE-STORY BUILDING ADDITION ON THE PARK OAKS BUILDING AT 17322 OAK PARK AVENUE (JAMES VROEGH).** Village Attorney O'Grady stated that he will be reviewing this item with Staff and bring it back before the Village Board at the February 4, 2020, Village Board meeting. Vote by voice call. President Vandenberg declared the motion carried.

Motion was made by Trustee Mueller, seconded by Trustee Brennan, to ADOPT ORDINANCE NUMBER 2019-O-081 APPROVING TEXT AMENDMENTS TO VARIOUS CODE SECTIONS OF THE CODE OF ORDINANCES, SUBDIVISION CODE, AND ZONING ORDINANCE TO IMPLEMENT FEE CHANGES AND CREATE A COMPREHENSIVE FEE SCHEDULE. The proposed fee changes will predominately affect commercial and new development projects. The fee levels were chosen to help protect the general fund from any "hard" or "up-front" costs, while also ensuring Tinley Park remains a competitive and attractive community for developers and businesses to operate. The new comprehensive fee schedule will allow all fees to be located in one place and help increase future customer and staff clarity. The comprehensive fee schedule will be located in the Code of Ordinances, Table of Special Ordinances, Table XI. The fee increases are proposed to become effective on March 1, 2020 to allow time for implementation; they will not apply to projects that have applied prior to that date.

The Plan Commission held a Public Hearing on August 15, 2019, related to the Zoning Ordinance changes and unanimously recommended approval of the proposed text amendments. The Committee of the Whole reviewed all fee changes on October 1, 2019 and directed staff to draft the appropriate text amendments. President Vandenberg stated that this item was in its final adoption stage and asked if anyone cared to address the Board. No one came forward. Vote on roll call: Ayes: Brady, Brennan, Galante, Glotz, Mueller. Nays: None. Absent: Berg. President Vandenberg declared the motion carried.

Motion was made by Trustee Brady, seconded by Trustee Mueller, to ADOPT ORDINANCE 2020-O-001 AUTHORIZING AMENDMENTS TO ORDINANCE 70-O-002 TO PROVIDE NEW EMPLOYEES WITH A SPECIFIED AMOUNT OF SICK TIME. This Ordinance amends the Village's current Sick and Disability Ordinance (70-O-002) to provide new employees with a specified amount of sick time. As Human Resources amends the Personnel Manual, this was a policy identified for revision. The current policy allows staff to use sick time as earned based on years of service, ranging from (2) weeks to (52) weeks of full compensation. The amended policy will only impact eligible, new hires beginning January 1, 2020, and allows those employees to use up to 80 hours (10 days) per anniversary year. Time does not accrue and does not bank or carry over. This item was discussed at Administration and Legal Committee on September 9, 2019, and Committee of the Whole on December 3, 2019. President Vandenberg stated that this item was in its final adoption stage and asked if anyone cared to address the Board. No one came

forward. Vote on roll call: Ayes: Brady, Brennan, Galante, Glotz, Mueller. Nays: None. Absent: Berg. President Vandenberg declared the motion carried.

Motion was made by Trustee Brady, seconded by Trustee Glotz, to **ADOPT ORDINANCE 2020-O-002 AUTHORIZING AMENDMENTS TO THE VILLAGE PERSONNEL MANUAL.** This action amends four existing policies contained within the Personnel Manual including:

- 1) Holidays: Continue to recognize 11 holidays. However, beginning January 1, 2020, change Good Friday to a half-day holiday and make Christmas Eve a full day holiday. Impacts current, eligible staff.
- 2) Tuition Reimbursement: Continue practice which requires approval by Department Head & Village Manager. However, for classes beginning after January 1, 2020 (that have not already been approved by the Village Manager), the Village will reimburse 80% for coursework completed and receiving a grade equivalent to an 'A'; 70% for 'B'; 50% for 'C'. Individuals must remain employed for two (2) years or employee reimburses the Village 100%. Impacts current, eligible staff, that have had already received an approval tuition reimbursement plan.
- 3) Vacation: Only impacting eligible, new hires prior to or beginning January 1, 2020, as directed, the schedule would be as follows. Borrow in advance request is eliminated. Employee can accumulate time on a prorated basis.
  - a. Executive Level Management: 20 days for 1-14 years of service; 25 days for 15+ years of service
  - b. Civil Service and full-time Appointed staff: 10 days for 1-6 years of service; 15 days for 7-10 years of service; 20 days for 11-14 years of service; 25 days for 15+ years of service
- 4) Sick and Disability: Only impacting eligible, new hires beginning January 1, 2020, allow to use up to 80 hours (10 days) per anniversary year. Time does not accrue and does not bank or carry over.

This item was discussed at Committee of the Whole on December 3, 2019. President Vandenberg stated that this item was in its final adoption stage and asked if anyone cared to address the Board. No one came forward. Vote on roll call: Ayes: Brady, Brennan, Galante, Glotz, Mueller. Nays: None. Absent: Berg. President Vandenberg declared the motion carried.

At this time, President Vandenberg asked if anyone from the Staff would care to address the Board. No one came forward.

Village Manager Niemeyer stated that a Committee of the Whole meeting will take place on Tuesday, January 14, 2019 to present the first draft of the strategic plan to the Village Board. Village Board priorities for the 2021 Fiscal Year Budget will also be discussed at this Committee of the Whole meeting.

Fire Chief Forest Reeder presented an update on a structure fire at the 9300 block of Pleasant Avenue. Chief Reeder acknowledged the hard work of the firefighters at the incident and thanked the community, elected officials, and staff for their support. Two (2) firefighters received minor injuries, were treated and released, and returned to their regular duties. President Vandenberg noted that he spoke to the firefighters and they stated that their training was what assisted them in the process. President Vandenberg congratulated the Fire Chief and his staff for all their efforts now and in the future.

1

At this time, President Vandenberg asked if anyone from the Board would care to address the Board. No one came forward.

Trustee Glotz presented an update on ethics complaints. He thanked the attorneys at Peterson, Johnson, and Murray for amending the language of the Village Ethics Code. He noted that the Village has spent over \$37,000 in the past two (2) years on seven (7) unfounded ethics complaints. Six (6) of these complaints were filed by one (1) person. He also presented an update on lawsuits received by the Village. He noted that in the past two (2) years attorneys from Peterson, Johnson, and Murray, and the Intergovernmental Risk Management Agency (IRMA) have done an outstanding job of successfully defending these lawsuits, most of these lawsuits have been dismissed. He noted that there are still a couple of lawsuits outstanding.

Trustee Brady stated that he would like to ask staff to draft a proclamation recognizing the Kowalczyk Family of Tinley Park for winning the Great Chicago Light Fight. President Vandenberg asked Trustee Brady to work with Dominic Sanfilippo on a proclamation for this family.

Trustee Galante asked that the Marketing Department be made aware of these type of events as they come up, in order to communicate this the Village Board and residents

Village President Vandenberg stated that his Executive Assistant, Dominic Sanfilippo, will be leaving his position at the Village and moving on to teach high school. President Vandenberg thanked Mr. Sanfilippo for his hard work.

At this time, President Vandenberg asked if anyone from the Public would care to address the Board. No one came forward.

A citizen stated his concerns about amendments adopted by the Village Board to the Ethics Code that were at the December 3, 2019, Village Board meeting. He feels citizens have lost a tool in ensuring officials act honestly and with integrity.

A citizen stated her concerns about public comment procedures and the cost to Tinley Park citizens of Freedom of Information Act requests, lawsuits, and ethics complaints. She commended the Village Board for amending the ethics code.

A citizen asked for an update of the Magnuson project. Community Development Director Kimberly Clarke stated that the developer has picked up his foundation-only permit and intends engage his contractors this week, weather permitting. The citizen stated concerns about when the sewer lines would be put in and where the water runoff would go to without sewer lines. Ms. Clarke stated that the citizen could speak with the Village Engineer regarding this development. Trustee Galante stated concerns about foundation only policies and would like to see a timeline for this development.

Motion was made by Trustee Mueller, seconded by Trustee Brady, at 8:31 p.m. to adjourn to Executive Session to discuss the following:

A. LITIGATION, WHEN AN ACTION AGAINST, AFFECTING OR ON BEHALF OF THE PARTICULAR PUBLIC BODY HAS BEEN FILED AND IS PENDING BEFORE A COURT OR ADMINISTRATIVE TRIBUNAL, OR WHEN THE PUBLIC BODY FINDS THAT AN ACTION IS PROBABLE OR IMMINENT, IN WHICH CASE THE BASIS FOR THE FINDING SHALL BE RECORDED AND ENTERED INTO THE MINUTES OF THE CLOSED MEETING.

- B. THE APPOINTMENT, EMPLOYMENT, COMPENSATION, DISCIPLINE, PERFORMANCE, OR DISMISSAL OF SPECIFIC EMPLOYEES OF THE PUBLIC BODY OR LEGAL COUNSEL FOR THE PUBLIC BODY, INCLUDING HEARING TESTIMONY ON A COMPLAINT LODGED AGAINST AN EMPLOYEE OF THE PUBLIC BODY OR AGAINST LEGAL COUNSEL FOR THE PUBLIC BODY TO DETERMINE ITS VALIDITY.
- C. THE PURCHASE OR LEASE OF REAL PROPERTY FOR THE USE OF THE PUBLIC BODY, INCLUDING MEETINGS HELD FOR THE PURPOSE OF DISCUSSING WHETHER A PARTICULAR PARCEL SHOULD BE ACQUIRED.
- D. THE SETTING OF A PRICE FOR SALE OR LEASE OF PROPERTY OWNED BY THE PUBLIC BODY.

Vote on roll call: Ayes: Brady, Brennan, Galante, Glotz, Mueller. Nays: None. Absent: Berg. President Vandenberg declared the motion carried.

Motion was made by Trustee Brennan, seconded by Trustee Brady, to adjourn the Executive Session and reconvene the special Board meeting. Vote by voice call. President Vandenberg declared the motion carried and reconvened the special Board meeting at 9:56 p.m.

Motion was made by Trustee Brady, seconded by Trustee Mueller, to adjourn the special Board meeting. Vote by voice call. President Vandenberg declared the motion carried and adjourned the special Board meeting at 9:56 p.m.

PLEASE NOTE: Where there is no summary of discussion on any items in the minutes, this reflects that no discussion occurred other than the introduction of the item.

APPROVED.

	THING VED.
	Village President
ATTEST:	
Village Clerk	

#### TINLEY PARK



#### RESOLUTION 2020-R-001

# A RESOLUTION RECOGNIZING THE TINLEY PARK BULLDOGS CHEERLEADING TEAM ON THEIR ACHIEVEMENTS.

**WHEREAS,** the Fifth Grade Competition Team finished their spectacular year closing the season winning second place at the 2019 Illinois Recreational Cheer Association State Competition on December 8; and

**NOW, THEREFORE, BE IT RESOLVED,** by the President and Board of Trustees of the Village of Tinley Park, Cook and Will Counties, Illinois that January 21, 2020, be designated Tinley Park Bulldog Cheerleading day in the Village of Tinley Park, in recognition of the Cheer Recreational Division C Fifth Grade (CREC5) Bulldog Cheerleading Team and urge all citizens to join together and congratulate this Bulldog Cheerleading Team on their achievements.

**BE IT FURTHER RESOLVED,** that the following CREC5 Bulldog Cheerleading Team members be recognized:

#### **CREC5 Cheerleading Team**

Kim Allison

Leah Bartgen

Gianna Cozzolino

Gigi Creegan

Hope Fazekas

Grace Garrity

Nicole Gluch

Gianna Goodwin

Abby Harris

Maddie Jurgens

Ellie Martino

Samantha Muys

Brooklyn O'Reilly Eleanor Poncin

Malia Randle

Nora Ryan

Lyla Stewart

Katie Bartgen, Coach

Carrie Fazekas, Coach

Lindsey Beck, Coach

Erin Stewart, Cheer Director

Linsay Creegan, Asst. Cheer Director

#### ADOPTING THIS 21st DAY OF JANUARY, 2020.

Ja	acob C. Vandenberg, Village Presid	lent
	Kristin A. Thirion, Village Clerk	_
Trustee Cynthia A. Berg		Trustee William P. Brady
Trustee William A. Brennan		Trustee Diane M. Galante
Trustee Michael W. Glotz		Trustee Michael G. Mueller

# TINLEY PARK



# **RESOLUTION 2020-R-004**

# RECOGNIZING THE KOWALCZYK FAMILY'S AWARD-WINNING CHRISTMAS LIGHT DISPLAY

**WHEREAS,** on December 20th, 2019, the Kowalczyk family—residents of Avon Lane in Tinley Park—was recognized by ABC-7 Chicago as the overall winner of their annual "Great Chicago Light Fight", and;

**WHEREAS,** their display achieved national recognition, and brought holiday cheer to our Village community, and;

**WHEREAS,** the Kowalczyk family raised funds for charity from visitors to the display, totaling almost \$21,000 that will be donated to local non-profit Together We Cope;

**NOW, THEREFORE, BE IT RESOLVED**, by the President and Board of Trustees of the Village of Tinley Park, Cook and Will Counties, Illinois, that the Kowalczyk family be celebrated for their accomplishment and community-building spirit.

APPROVED this 21st day of January 2020.

JACOB C. VANDENBERG, VILLAGE PRESIDENT

ATTEST: KRISTIN A. THIRION, CLERK

TRUSTEE CYNTHIA A. BERG

TRUSTEE WILLIAM P. BRADY

TRUSTEE WILLIAM A. BRENNAN

TRUSTEE DIANE M. GALANTE

TRUSTEE MICHAEL W. GLOTZ

TRUSTEE MICHAEL G. MUELLER

# THE NEW EVEN HOTEL AT THE TINLEY PARK CONVENTION CENTER



#### **WHY WELLNESS?**

- \* Surveys say more than 60% of people between the ages of 23 38 list their health as the most important thing in their lives[1]
- At home, keeping a healthy routine and staying in control is easy.
- When traveling, wellness routines are lost, leading to feelings of guilt and stress.
- Never before has there been a hotel at a mainstream price where wellness is offered as the core experience for the active, on-the-go traveler.
- EVEN® Hotels is here to solve this unmet need.



Source: Global Wellness Institute, "Global Wellness Economy Monitor, Full Report", 2018

#### **BRAND POSITIONING**

Even's distinctive position allows the brand to compete across price and service categories.



#### THE "NEW" UPSCALE

- Even Hotels are positioned between the Upper Upscale and Luxury Brand Segments.
- The Upscale Brand Segments are becoming crowded by new brands.
  - Of the 17 brands included in the Upscale Segment, 10 were created within the past 4 years<sup>(1)</sup>
  - Sheraton and DoubleTree have predominantly become conversion brands with very few new developments over the past year.



#### TIMING - THE RIGHT BRAND AT THE RIGHT TIME

- New brand of almost exclusively new-builds with superior product quality.
- Globally, wellness travel is now nearly a \$600 billion marketplace. It grew 14 percent over the past two years, and forecasts are for global wellness revenues to jump another 17 percent by 2023.
- There are currently 14 Even Hotels opened in the US with another 18 expected to open within the next twelve months.
- Even is the fastest growing brand within the InterContinental Hotels Group family.













#### FREEDOM TO CREATE A CHEF DRIVEN FOOD & BEVERAGE FACILITY

- Even Hotels food and beverage concept, Cork & Kale has a small footprint.
- With the Even brand, Harp will be able to up-brand the restaurant whereas Sheraton and Double Tree would require their standard 3-meal Restaurant in the Hotel.
- Harp has a preliminary plans to convert the current restaurant to an exciting new concept that will support the Convention Center and serve the public.









# LARGE CONFERENCE BOOKINGS SIGNED IN Q-4 2019

Conference	Frequency	Sleeping Rooms	Square Footage Usage TPCC is 70,000 sq.ft respectively	Attendees
North American Reptile Breeders	2 times per year booked through 2025	200	Entire convention center	10,000
Illinois State Veterinary Medicine Association	Annual booked through 2022	280	Entire convention center	1500
Illinois Funeral Directors Association	Gained back due to change of Brand	220	40,500	1500
llinois School Counselors Association	NEW due to change of Brand	150	32,250	1600
In10Sity	NEW due change of Brand	500	41,092	1800
Wings of Stength	Annual booked through 2022	375	30,862	1500
Illinois Arborists Association	Annual booked through 2022	125	41,162	1600
Christian Reformed Church	NEW due to Change of Brand	320	Entire Convention Center	2000
Coldwell Banker	Annual booked through 2022 Annual	150	Entire Convention Center	825
Dutch Farms	Annual booked through 2022	135	33,909	1250
Storm Water Solutions	Annual booked through 2021	165	40,912	1350

# TPCC ECONOMIC IMPACT STUDY

Note- Economic impact measures the expenditures by attendees for the conferences at the TPCC.
 These purchases are made at businesses all over the immediate area.

Room Rate:	s <u>135.00</u>
Additional Attender Spend:	\$ 85.00
Food & Beverage:	\$ 49.00
Tours & Sightsening:	s <u>3.00</u>
Attraction Admissions	\$ 1.00
Recreational Expenses:	\$ 1.00
Sporting Events:	\$ 1.00
Retall Shopping:	\$ 16.00
Local Transportation:	\$ 2.00
Auto Rental:	\$ 5.00
Gas, Tolls, Parking	\$ 3.00
Other	S 4.00
	\$ 85.00

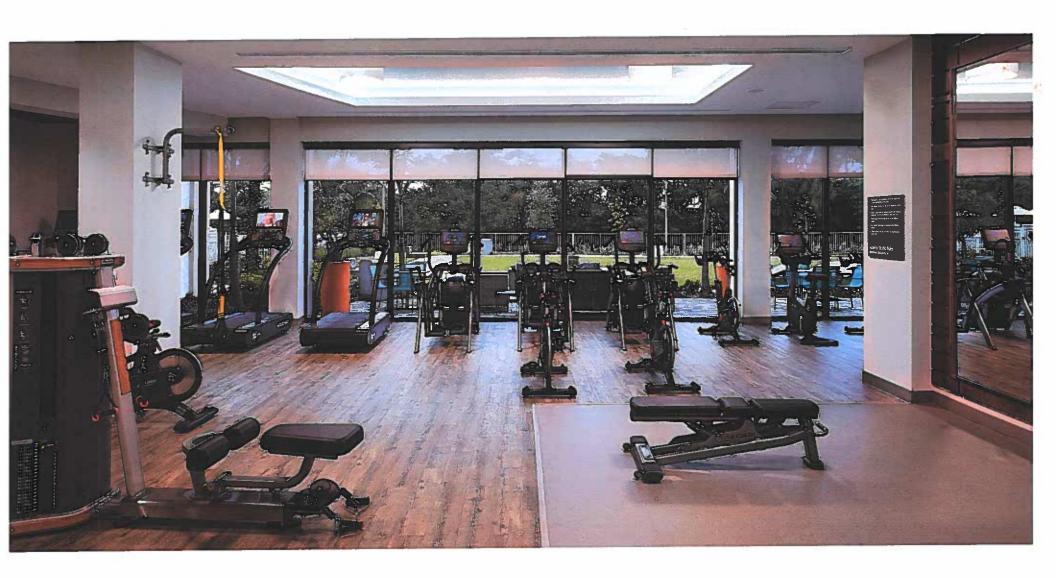
Total Number of Motel Rooms Utilized:

Total Number of Attendees:

Total Number of Event Days:

Total Number of Rooms \* \$135 \$ 353,700.00 \* 14% Cook County Hotel Tax= \$49,518

Attendees \* Total Number of Event Days \* 585 \$ 2,647,750.00 \* 9.75% Sales Tax Tinley Park Tax= \$258,155



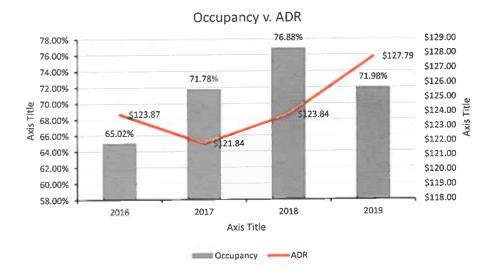
# TINLEY PARK CONVENTION CENTER GROWTH POST 2011 EXPANSION

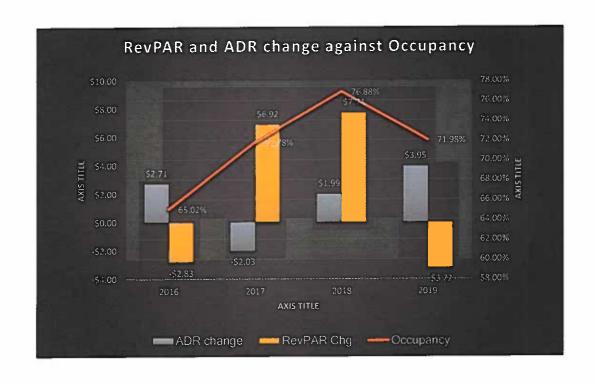
	2012	2013	2014	2015	2016	2017	2018	2019
MONTH	ACTUAL							
DECEMBER	\$ 172,568.10	\$ 287,978.53	\$ 239,280.99	\$ 442,141.62	\$ 348,176.92	\$ 385,593.83	\$ 221,003.42	\$ 251,928.00
JANUARY	\$ 122,336.84	\$ 172,650.55	\$ 264,536.78	\$ 268,778.34	\$ 293,538.85	\$ 216,610.27	\$ 362,104.28	\$ 383,791.00
FEBRUARY	\$ 270,243.74	\$ 312,527.48	\$ 350,884.43	\$ 414,483.70	\$ 330,018.49	\$ 369,417.70	\$ 631,606.82	\$ 646,310.00
MARCH	\$ 446,158.16	\$ 470,563.23	\$ 809,982.82	\$ 646,363.82	\$ 742,097.12	\$ 808,951.93	\$ 679,206.66	\$ 354,137.00
APRIL	\$ 272,316.94	\$ 411,681.24	\$ 476,397.38	\$ 315,341.79	\$ 497,623.30	\$ 577,414.53	\$ 498,604.52	\$ 473,260.00
MAY	\$ 380,029.55	\$ 467,296.45	\$ 609,735.60	\$ 649,529.29	\$ 529,498.07	\$ 450,567.98	\$ 545,003.30	\$ 750,735.00
JUNE	\$ 414,638.43	\$ 448,216.87	\$ 502,989.14	\$ 466,038.21	\$ 589,291.89	\$ 760,892.13	\$ 263,472.87	\$ 257,644.00
JULY	\$ 163,081.06	\$ 316,807.61	\$ 338,353.00	\$ 409,340.23	\$ 612,850.11	\$ 286,225.25	\$ 436,539.58	\$ 418,377.00
AUGUST	\$ 246,650.76	\$ 373,087.21	\$ 433,535.55	\$ 301,987.06	\$ 413,951.93	\$ 441,071.67	\$ 402,481.41	\$ 640,355.00
SEPTEMBER	\$ 479,315.43	\$ 495,061.81	\$ 596,139.45	\$ 506,100.42	\$ 544,980.86	\$ 469,773.34	\$ 723,081.20	\$ 826,979.00
OCTOBER	\$ 497,952.49	\$ 654,591.96	\$ 706,230.58	\$ 678,885.66	\$ 567,482.39	\$ 903,875.92	\$ 562,559.00	\$ 697,129.00
NOVEMBER	\$ 310,734.04	\$ 405,552.82	\$ 309,180.44	\$ 377,394.32	\$ 433,867.50	\$ 365,561.38	\$ 635,482.08	\$ 493,386.00
YTO TOTAL	\$ 3,776,025.54	\$ 4,816,015.76	\$ 5,637,246.16	\$ 5,476,384.46	\$ 5,903,377.43	\$ 5,670,394.55	\$ 5,961,145.14	\$ 6,194,031.0
TOTAL	\$ 3,776,025.54	\$ 4,816,015.76	\$ 5,637,246.16	\$ 5,476,384.46	\$ 5,903,377.43	\$ 6,035,955.93	\$ 5,961,145.14	\$ 6,194,031.00
AR OVER YEAR	% CHANGE	21.59%	14.67%	-2.94%	7.23%	2.20%	-1.25%	3.76

NOTE: REVENUE INCREASE 39% AGGREGATE OVER THE PERIOD

#### Revenue to ADR







VILLAGE OF TINLEY.

RECEIVE A PRESENTATION OF A
TECHNICAL INNOVATION
AWARD FROM THE SOUTHWEST
BRANCH OF THE AMERICAN
PUBLIC WORKS ASSOCIATION
(APWA) FOR ITS NORTH STREET
RECONSTRUCTION PROJECT

Trustee Glotz

# CONSIDER THE APPOINTMENT OF ANDREW BROWN TO THE POSITON OF ASSISTANT FINANCE DIRECTOR/ASSISTANT TREASURER

Trustee Galante



Fr. C.C. Boyle Council 4698

Tinley Park, IL 60477

#### Serving the parishes of:

- St. George
- St. Julie
- St. Stephen
- St. Emeric
- St. Elizabeth Seton
- St. Gerard Majella
- St. Damian

January 7, 2020

Village Clerk Village of Tinley Park 16200 S. Oak Park Ave. Tinley Park, Illinois 60477

#### Dear Village Clerk

The annual Tootsie Roll Drive for the Intellectually disabled will be on Friday and Saturday, September 18 & 19 of 2020. This is a noteworthy cause benefiting the special population in our community. We are therefore, asking for your permission in this endeavor by allowing the Knights of Columbus volunteers to stand on the street corners in your city for the solicitation of funds for these special people. Please acknowledge your agreement by returning a signed copy of this letter. On behalf of the Knights of Columbus and our special needs population we say THANK YOU.

Respectfully	
Joseph Siuda	
Approved	
Ву	
Date	Ī



Administrative Office | 19 Business Office 10833 S. LaPorte Oak Lawn, IL 60453

Phone: (708) 425-3344 Fax: (708) 425-3530

January, 2020

Ms. Diane Melone Village of Tinley Park 16250 Oak Park Ave Tinley Park, IL 60477

Dear Ms. Melone:

As you know, Park Lawn is a non-profit agency that provides programs for individuals with intellectual and developmental disabilities. Our facilities are throughout the South Suburbs of Chicago and include an adult training center, workshop, supporte employment, residential centers and community living. Although our facilities are local, Park Lawn's outreach is beyond the Southwest Suburbs, assisting families locally and throughout Illinois.

Park Lawn is gearing up for its annual Tag and Candy Day Fundraiser: This major event is scheduled for Friday & Saturday, April 10<sup>th</sup>, 11<sup>th</sup> and 17<sup>th</sup>, and 18<sup>th</sup> 2020. Community volunteers will be soliciting for donations on street corners from 6:00 a.n until 8:00 p.m. or dusk. We provide them with a bright orange safety vest with Park Lawn's logo, a bucket with Park Lawn's log and a tag with information about Park Lawn.

We are asking for your permission to solicit donations for Park Lawn. Please fax the signed form to me at 708-229-9325 or sc and email it to *mdynia@parklawn.com*. If faxing is not available, please call me at (708) 425-6867 or mail it to Park Lawn, 10833 S. LaPorte Ave. Oak Lawn, IL 60453.

Once again, thank you for your continued support.

Sincerely,

Mark Dynia

Mark Dynia

Marketing Manager

Please check the most appropriate date for your schedule. Permission is granted to Park Lawn to tag within the «COMPANY» o the following dates:

	April 10	April 11	April 17April 18
Authorized Signature:			Date:
Name in Print:		Tit	le:

#### RAFFLE LICENSE APPLICATION

#### VILLAGE OF TINLEY PARK 16250 South Oak Park Avenue

	DATE:
1.	NAME OF ORGANIZATION: KNIGHTS OF COLUMBUS # 4698
2.	ADDRESS: 6707 W. 175th St. Tinley Park, IL. 60477
	MAILING ADDRESS IF DIFFERENT FROM ABOVE:
4.	ADDRESS OF PLACE FOR RAFFLE DRAWING 6707 W. 175th St Tinley Park, IL 60477
5.	CHECK TYPE OF NOT-FOR-PROFIT ORGANIZATION: (MUST BE IN EXISTENCE FOR A PERIOD OF FIVE (5) YEARS AND ATTACHED DOCUMENTARY EVIDENCE)
	RELIGIOUS CHARITABLE LABOR FRATERNAL X
	EDUCATIONAL VETERANS BUSINESS
	HOW LONG HAS THE ORGANIZATION BEEN IN EXISTENCE: 6/ years
7.	PLACE AND DATE OF INCORPORATION: St. George Church - 1959
8.	NUMBER OF MEMBERS IN GOOD STANDING: 300
9.	PRESIDENT/CHAIRPERSON: Jim Newtoff
	ADDRESS:
10	RAFFLE MANAGER: Jim Newtoff
	ADDRESS
	PHONE:Email:
11	. DESIGNATED MEMBER(S) RESPONSIBLE FOR CONDUCT & OPERATION OF RAFFLE:
	NAME: Jim Newtoff
	ADDRESS:
	NAME:
	ADDRESS: PHONE:

(ATTACHED ADDITIONAL SHEET IF NECESSARY)

#### RAFFLE APPLICATION | 2

#### **RAFFLE INFORMATION**

12. DATE(S) FOR RAFFLE TICKET SALES (INCLUDE DAYS OF THE WEEK)
Saturday, April 4, 2020
13. LOCATION OF TICKET SALES:
St George - Cahill Hall
14. LOCATION FOR DETERMINING WINNERS:
St. George - Cahill Hall
15. DATE(S) FOR DETERMINING WINNERS: (INCLUDE DAYS OF THE WEEK)
Saturday, April 4, 2020
16. TOTAL RETAIL VALUE OF ALL PRIZES:  \$\frac{12,025.00}{(MAXIMUM PRIZE AMOUNT \$250,000)}\$
17. MAXIMUM RETAIL VALUE OF EACH PRIZE: \$\[ \langle O \rangle O \cdot O \cdot \cdot O \cdot \cdot \cdot \cdot O \cdot \c
18. MAXIMUM PRICE CHARGED OF EACH TICKET(CHANCE) SOLD \$ 125.00
19. § 132.38 FIDELITY BOND REQUIRED
All operations of and the conduct of raffles as provided for in this subchapter shall be under the supervision of a single manager designated by the organization. Such manager shall give a fidelity bond in the sum of \$165,000 or two times the aggregate value of prizes, whichever is less, in favor of the licensee conditioned upon his honesty in the performance of his duties. The bond shall provide that notice shall be given in writing to the Village of Tinley Park not less than 30 days prior to cancellation. Bonds as provided for in this section may be waived provided the license issued for such raffle shall contain a waiver provision and shall be approved only by unanimous vote of the members of the licensed organization.
FIDELTITY BOND WAIVER OF BOND STATEMENT BY ORGANIZATION_X
"The undersigned attest that the above named organization is an organized not-for-profit under the law of the State of Illinois and has been continuously in existence for five (5) years, preceding date of this application, and that during this entire five (5) year period preceding date of application, it has maintained a bona fide membership actively engaged in carrying out its objectives. The undersigned do hereby state under penalties of perjury that all statements in the foregoing application are true and correct; that the officers, operators and workers of the game are bona fide members of the sponsoring organization and are all of good moral character and have not been convicted of a felony; that if a license is granted hereunder, the undersigned will be responsible for the conduct of the games in accordance with the provisions of the laws of the State of Illinois and this jurisdiction governing the conduct of such games."
NAME OF ORGANIZATION: Knights of Columbus #4698
EXECUTIVE DIRECTOR: Jim Newtoff



#### KNIGHTS OF COLUMBUS FR CC BOYLE COUNCIL 4698

Village of Tinley Park 16250 S. Oak Park Ave. Tinley Park, Illinois 60477

December 20,2019

To Whom It May Concern:

We are writing this letter to inform you that the Father CC Boyle Knights of Columbus #4698 board members have decided to waive the fidelity bond requirement for our 225 Club Raffle. The raffle will be held on Saturday, April 4, 2020 at the St. George Cahill Center.

Best Regards,

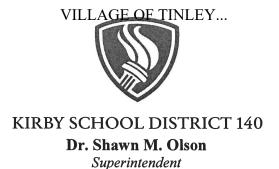
William Krueger Trustee

John Brett, Financial Secretary

"OFFICIAL SEAL"
JOHN F. CONCANNON
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 12/28/2020

**Dr. Kristine L. Roth**Assistant Superintendent
of Curriculum and Instruction

Michael L. Andreshak
Director of
Business Services/CSBO



Mary T. Dwyer
Director of
Special Services

Brian E. Nemeth
Director of
Technology

January 8, 2020

Mr. Brad L. Bettenhausen, Treasurer Village of Tinley Park 16250 Oak Park Avenue Tinley Park, IL 60477

Dear Mr. Bettenhausen:

We are aware of the limited construction activities that generate impact fees. However, periodically we will request payout of impact fees collected on behalf of the School District. Our last request was in July 2019.

Thank you for your attention regarding this matter.

Sincerely,

Michael L. Andreshak

Director of Business Services

MLA:tm

84 %-2310 lg 14 lan 2010 A Jan 2010 A Jan 2010 Olich de haura de cover de la cover de



**Date:** January 21, 2020

**To:** Mayor and Board of Trustees

Dave Niemeyer, Village Manager

From: Kimberly Clarke, AICP

Community Development Director

**Subject:** Release of Letter of Credit (Union Square Subdivision)

In August of 2019, the Village adopted a Foundation Only Permit Policy per Resolution No. 2019-R-079, which outlined when such permit may be considered. A condition of that approval is a letter of credit is required for the removal of all foundations in the event the developer does not complete the project.

Union Square Subdivision is the first development to fall under the new foundation only policy. The foundation work has been completed and the Village Engineer and Building department have approved the work and therefore the attached letter of credit may be released in its entirety.



# THE VILLAGE OF TINLEY PARK

**Cook County, Illinois Will County, Illinois** 

# RESOLUTION NO. 2020-R-002

A RESOLUTION RELEASING THE LETTER OF CREDIT ISSUED IN RELATION TO 179 OPA, LLC'S FOUNDATION ONLY PERMIT FOR UNION SQUARE TOWNHOMES DEVELOPMENT

JACOB C. VANDENBERG, PRESIDENT KRISTIN A. THIRION, VILLAGE CLERK

CYNTHIA A. BERG
WILLIAM P. BRADY
WILLIAM A. BRENNAN
DIANE M. GALANTE
MICHAEL W. GLOTZ
MICHAEL G. MUELLER
Board of Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tinley Park
Peterson, Johnson, & Murray Chicago, LLC, Village Attorneys
200 W. Adams, Suite 2125 Chicago, IL 60606

#### VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

#### RESOLUTION NO. 2020-R-002

# A RESOLUTION RELEASING THE LETTER OF CREDIT ISSUED IN RELATION TO 179 OPA, LLC'S FOUNDATION ONLY PERMIT FOR UNION SQUARE TOWNHOMES DEVELOPMENT

WHEREAS, Section 6(a) of Article VII of the 1970 Constitution of the State of Illinois provides that any municipality which has a population of more than 25,000 is a home rule unit, and the Village of Tinley Park, Cook and Will Counties, Illinois, with a population in excess of 25,000 is, therefore, a home rule unit and, pursuant to the provisions of said Section 6(a) of Article VII, may exercise any power and perform any function pertaining to its government and affairs, including, but not limited to, the power to tax and to incur debt; and

**WHEREAS**, the Village of Tinley Park ("Village") has previously granted Kevin Halleran & Mike Halleran, on behalf of 179 OPA, LLC ("179 OPA") a foundation only permit ("FOP") in relation to 179 OPA's development of the Union Square Town Homes; and

**WHEREAS**, pursuant to the issuance of the FOP, 179 OPA was required to submit a letter of credit ("LOC") for public improvements and removal of the foundation in the instance that the development of Union Square Town Homes was not completed; and

**WHEREAS**, 179 OPA has completed the foundation as described in their FOP and the Village now desires to release the LOC provided by 179 OPA; and

**WHEREAS**, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interest of the Village of Tinley Park and its residents to release said LOC submitted by 179 OPA; and

**NOW, THEREFORE, BE IT ORDAINED** BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS, STATE AS FOLLOWS:

**SECTION 1**: The foregoing recitals shall be and are hereby incorporated as findings of fact as if said recitals were fully set forth herein.

**SECTION 2**: That the President and Board of Trustees of the Village of Tinley Park, hereby approve and release said LOC submitted by 179 OPA, attached hereto as <u>Exhibit 1</u>, pursuant to the terms and conditions provided in the FOP issued to 179 OPA, subject to review and revision as to form by the Village Attorney and Village staff.

**SECTION 3:** Any policy, resolution, or ordinance of the Village that conflicts with the provisions of this Ordinance shall be and is hereby repealed to the extent of such conflict.

**SECTION 4:** That this Resolution shall be in full force and effect from and after its adoption and approval.

**SECTION 5:** That the Village Clerk is hereby ordered and directed to publish this Resolution in pamphlet form, and this Resolution shall be in full force and effect from and after its passage, approval, and publication as required by law.

PASSED THIS 21st day of January, 2020.	
AYES:	
NAYS:	
ABSENT:	
APPROVED THIS 21st day of January, 2020.	
A TOTAL OF	VILLAGE PRESIDENT
ATTEST:	
VILLAGE CLERK	

STATE OF ILLINOIS	)	
COUNTY OF COOK	)	S
COUNTY OF WILL	ĺ	

#### CERTIFICATE

I, KRISTIN A. THIRION, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 2020-R-002, "A RESOLUTION RELEASING THE LETTER OF CREDIT ISSUED IN RELATION TO 179 OPA, LLC'S FOUNDATION ONLY PERMIT FOR UNION SQUARE TOWNHOMES DEVELOPMENT," which was adopted by the President and Board of Trustees of the Village of Tinley Park on January 21, 2020.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 21st day of January, 2020.

KRISTIN A. THIRION, VILLAGE CLERK



November 5, 2019

Village of Tinley Park 16250 Oak Park Avenue Tinley Park, IL 60477

#### Guarantee of Material and Workmanship Irrevocable Letter of Credit No. 1043

Beneficiary:

Village of Tinley Park, an Illinois Municipal Corporation

Applicant:

179 Opa, LLC; Kevin Halleran & Michael Halleran

Amount:

\$14,125

**Expiration:** 

February 5, 2020

Village Board:

Village of Tinley Park

We hereby establish our Irrevocable Letter of Credit No. 1043 in your favor for the account of 179 Opa, LLC; Kevin Halleran & Michael Halleran for a sum or sums not to exceed Fourteen Thousand One Hundred Twenty-five DOLLARS (U.S. \$14,125) available by your drafts at sight in form attached hereto as Exhibit A, accompanied by the following documents:

Certificate in the form attached hereto as Exhibit B, executed by an agent or official of the Village of Tinley Park

Forty-five (45) days prior to the expiration of this Irrevocable Letter of Credit, we shall notify the Village of Tinley Park, 16250 Oak Park Avenue, Tinley Park, IL 60477, Attention: Village Clerk by Certified Mail, Return Receipt Requested, of the impending expiration date. In no event shall this Irrevocable Letter of Credit or the commitment evidenced by it expire without such 45 days notice.

The work or improvements covered by this Irrevocable Letter of Credit are: the public improvements for Union Square Townhomes, Illinois, consisting specifically of the foundation removal. This Irrevocable Letter of Credit is established to insure against defective materials and workmanship in the construction of the above described improvements and to replenish the retained personnel account of 179 Opa, LLC; Kevin Halleran & Michael Halleran.

228 N. Dixie Highway Momence, Illinois 60954 (815) 472-6444 MAIN OFFICE: 720 Main St., NW Bourbonnais, Illinois 60914 (815) 935-8000 Member FDIC

www.municipalbank.com

110 Marquette Place S. Manteno, Illinois 60950 (815) 468-8100 We expressly agree that our obligations under this Irrevocable Letter of Credit will not be impaired, modified or affected by any extension of time with respect to, or alteration in the work or improvements covered by this Irrevocable Letter of Credit, as described above. We hereby waive notice of any and all such extensions of time and alterations.

We hereby agree with the drawers, endorsers and bona fide holders of all drafts drawn and documents presented under and in compliance with the terms of this Irrevocable Letter of Credit, that such drafts will be duly honored upon presentation to us. If, within 5 days of the date any draft drawn in conformity with this Irrevocable Letter of Credit, is presented, we fail to honor same, we agree to pay all attorneys fees, court costs and other expenses incurred by the Village of Tinley Park in enforcing the terms of this Letter of Credit.

This Letter of Credit shall be deemed a contract made under the laws of the State of Illinois and shall be governed by and construed in accordance with such laws. The undersigned agrees that venue for any actions brought with respect to this letter of credit shall be in the 22<sup>nd</sup> Judicial Circuit, McHenry County, Illinois.

The undersigned represents and warrants that the undersigned has full power and authority to issue this Letter of Credit, and that all conditions precedent to the issuance of the Letter of Credit have been satisfied.

Municipal Bank

By: Catherine Boicken

President

1

vchlist

01/10/2020

8:57:04AM

## Voucher List Village of Tinley Park

Page:

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amoun
185684	1/10/2020	014341 AFTERMATH, INC.	JC2019-4523		BIO-HAZARD CLEANING CELL 1 & 4	
					01-17-205-72750	105.00
					Total :	105.00
185685	1/10/2020	011466 ALBERTSONS/SAFEWAY	432908-123019-3165		**** 0410 SENIOR CENTER	
					01-41-056-72937	75.00
			437458-121119-3165		**** 0415 WATER,SOLO CUPS,CRE/	
					60-00-000-73115	5.60
					64-00-000-73115	2.40
					01-26-023-73115	8.00
					01-26-024-73115	4.00
					60-00-000-73115	1.68
				64-00-000-73115	0.72	
					01-26-023-73115	2.40
					01-26-024-73115	1.20
					01-14-000-73115	15.47
					60-00-000-73115	3.50
					64-00-000-73115	1.50
					01-33-300-73115	5.00
					01-33-310-73115	5.00
			729844-121819-3165		**** 0415 SODA,COOKIE TRAYS,BR	
					01-26-023-73115	47.54
			804824-123019-3165		**** 0410 SENIOR CENTER	
					01-41-056-72937	50.00
			809213-121719-3165		**** 0415 BRAWNY,COOKIE TRAY, E	
					01-26-025-73580	17.98
					01-14-000-73115	20.48
					Total :	267.47
185686	1/10/2020	002756 APCO INTERNATIONAL INC.	675614		APCO EMD RECERTIFICATION	
				VTP-017556	01-21-210-72140	180.00
			675812		APCO EMD RECERTIFICATION	
				VTP-017556	01-21-210-72140	30.00
					Total :	210.00
185687	1/10/2020	002665 APPLE CHEVROLET	CTCS427951		IGNSK3EC9FR273831 REPAIRS	

2

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page:

Bank coac .	арванк					
Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185687	1/10/2020	002665 APPLE CHEVROLET	(Continued)		01-19-000-72540 <b>Total</b> :	778.90 <b>778.90</b>
185688	1/10/2020	019318 ARDAGH, PAMELA	112119		REIM. EXP. EMBROID ON SHIRTS 01-17-205-73610 <b>Total :</b>	94.00 <b>94.00</b>
185689	1/10/2020	017815 ARENA EVENT SERVICES INC.	261798		HOLIDAY MARKET DIGGER DONE L 01-35-000-72954 <b>Total</b> :	293.00 <b>293.00</b>
185690	1/10/2020	018847 AVEPOINT, INC.	1901291020B	VTP-017558	<it> - SHAREPOINT BACKUP &amp; RE( 30-00-000-74159 <b>Total</b> :</it>	4,284.00 <b>4,284.00</b>
185691	1/10/2020	003166 B & J TOWING AND AUTO REPAIR	16423		TRUCK SAFETY INSPECTIONS 60-00-000-72266 63-00-000-72266 64-00-000-72266 01-26-023-72266 Total:	29.40 29.40 25.20 140.00 <b>224.00</b>
185692	1/10/2020	003359 BACKFLOW SOLUTIONS INC	4211		CROSS CONNECTION CONTROL 60-00-000-72790 Total :	2,945.58 <b>2,945.58</b>
185693	1/10/2020	002938 BEST TECHNOLOGY SYSTEMS INC.	BTL-19042-4		BASIC CLEAN/PRE-FILTERS/INTER 01-26-025-72779 <b>Total</b> :	3,030.00 <b>3,030.00</b>
185694	1/10/2020	015212 BETTENHAUSEN AUTOMOTIVE	90524DOW 91034DOW		PAN,GASKET 01-26-024-72540 FILTERS 01-26-024-72540 01-17-205-72540 Total:	107.67 67.90 37.36 <b>212.93</b>

#### VILLAGE OF TINLEY...

Page | 34

Page:

vchlist

01/10/2020

8:57:04AM

# **Voucher List**

Village of Tinley Park

\/b	D-4-	Manufact	lavoria a	DO #	Decembra (Accessed	A
Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185695	1/10/2020	012966 BOLING, THOMAS	06-19		SHAREPOINT 6/1/19-6/30/19	
					01-16-000-72650	2,306.25
			12-19		SHAREPOINT	
					01-16-000-72650	1,500.00
					Total :	3,806.25
185696	1/10/2020	003153 BRETT SUPPLY COMPANY	308930		SOCKET,PLUG	
					01-26-023-72540	62.15
					60-00-000-72540	32.63
					63-00-000-72540	10.88
					64-00-000-72540	18.65
			309342		LED BEACON CLI LP PULSE 8	
					01-26-023-72540	116.44
					Total :	240.75
185697	1/10/2020	018503 CARDNO INC	285435		7698 NAT STORMWATER AREAS MA	
					65-00-000-72591	33,004.99
					Total :	33,004.99
185698	1/10/2020	003396 CASE LOTS INC	1621		TOWELS, TOILET PAPER	
					01-26-025-73580	273.20
					Total :	273.20
185699	1/10/2020	003328 CATCHING FLUIDPOWER INC	D26234-001		CREDIT HOSE REEL	
100000	17 10/2020	000020 OATOTHING LOID! OWER ING	D20204 001		01-26-025-73870	-218.33
			D68721-001		HOSE FITTINGS	210.00
			200721 001		01-26-023-72540	41.77
			E18470-001		DIXON STD PROD	
					01-26-023-73410	86.26
			E22920-001		HOSE	
					01-26-025-72530	125.41
					Total :	35.11
185700	1/10/2020	003229 CED/EFENGEE	5025-529525		PHIL	
					01-26-025-73570	48.25
					Total :	48.25

Page:

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

	-						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185701	1/10/2020	013991	CHICAGO OFFICE PRODUCTS CO.	982514-0		OFFICE SUPPLIES	
						01-19-000-73110	258.98
						Total :	258.98
185702	1/10/2020	015199	CHICAGO PARTS & SOUNDS LLC	2-0000512		AMBER LED	
						01-26-023-72540	405.00
						Total :	405.00
185703	1/10/2020	013820	CINTAS CORPORATION	5015635167		MEDICAL SUPPLIES	
						01-19-000-73115	314.25
				5015635168		MEDICAL SUPPLIES	00
						01-19-000-73115	44.06
				5015635169		MEDICAL SUPPLIES	
						01-19-000-73115	303.75
				5015635170		MEDICAL SUPPLIES	
						01-19-000-73115	337.41
						Total :	999.47
185704	1/10/2020	013878	COMED - COMMONWEALTH EDISON	2777112019		ACCT#2777112019 0 175TH ST & S/	
						01-26-023-72510	102.51
				3214011009		ACCT#3214011009 16853 LAKEWO(	
						64-00-000-72510	291.97
				6483053261		ACCT#6483053261 IRRIGATION 174	
						01-26-023-72510	29.36
				8363023007		ACCT#8363023007 0 179TH ST & 82	
						60-00-000-72510	138.99
						63-00-000-72510	138.99
						Total :	701.82
185705	1/10/2020	018311	CONNECTION	57379251		HP 2-PACK HIGH	
						01-19-000-73110	341.91
						Total :	341.91
185706	1/10/2020	012826	CONSTELLATION NEWENERGY, INC.	16440222901		ACCT#8061886 UTIL#6771163043 #	
						01-26-024-72510	3,454.87
						Total :	3,454.87

Page:

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185707	1/10/2020	003635	CROSSMARK PRINTING, INC	77243		BUSINESS CARDS HANNAH LIPMA 01-12-000-73110 Total :	33.00 <b>33.00</b>
185708	1/10/2020	017603	DANDAN, RICK TARIQ	123119		DEC'19 PLAN REVIEW/INSPECTION 01-33-300-72790 <b>Total</b> :	15,648.40 <b>15,648.40</b>
185709	1/10/2020	019276	DAVEY RESOURCE GROUP INC	92486		8323 APPLE POND SHORELINE RE 30-00-000-73681 <b>Total</b> :	7,609.60 <b>7,609.60</b>
185710	1/10/2020	018743	DON'S WORLD OF SPORTS INC.	46955		EMBROID ON GARMENTS 01-19-020-73610 <b>Total</b> :	16.00 <b>16.00</b>
185711	1/10/2020	003770	DUSTCATCHERS INC	60973 69282		CREDIT OFFICE ADJ DUSTCATCHE 01-26-025-72790 MATS/VH	-3.92
				69283		01-26-025-72790 MATS/PD	65.93
				69284		01-26-025-72790 MATS/ PW GARAGE	85.41
						01-26-025-72790 <b>Total</b> :	99.08 <b>246.50</b>
185712	1/10/2020	017073	DYNEGY ENERGY SERVICES LLC	146561320011		ACCT#GMCTIN1000 11/25/19-12/29/ 64-00-000-72510 60-00-000-72510 63-00-000-72510 60-00-000-72510 63-00-000-72510 64-00-000-72510	674.82 4,798.63 4,798.63 1,882.62 1,882.62 5,265.08 <b>19,302.40</b>
185713	1/10/2020	004009	EAGLE UNIFORM CO INC	285061		WATCHCAPS W/EMBROID 01-19-020-73610	43.00

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page:

Bank code	: 8	apbank
-----------	-----	--------

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185713	1/10/2020	004009 004009 EAGLE UNIFORM CO IN	(Continued)		Total :	43.00
185714	1/10/2020	004111 EJ USA. INC	110190110518		HYD,VALVE BOX,LID,MEGALUG,GA 60-00-000-75710 64-00-000-75710 60-00-000-73632 64-00-000-73632 Total:	1,943.20 832.80 441.00 189.00 <b>3,406.00</b>
185715	1/10/2020	015404 FBINAA INC	33160		DUES MATTHEW WALSH 01-17-205-72720 <b>Total</b> :	120.00 <b>120.00</b>
185716	1/10/2020	012941 FMP	52-444962 52-445339		SPARK PLUGS 01-17-205-72540 ELEMENT ASY-AIR CLEANER	13.86
			52-445696		01-26-023-72540 SENSOR 01-17-205-72540 <b>Total</b> :	47.05 101.64 <b>162.5</b> 5
185717	1/10/2020	011611 FOX VALLEY FIRE & SAFETY CO.	IN00323461		PUBLIC WORKS GARAGE/INSPCTN 01-26-025-72122	133.00
			IN00324537		RADIO INSTALLATION FOOD N FUE	1,009.00
			IN00324560		RADIO INSTALLATION/ SIP WINE B/ 14-00-000-72800 <b>Total</b> :	1,009.00 <b>2,151.00</b>
185718	1/10/2020	018931 GALATI, PIERO	010220		REIM. EXP. CDL LICENSE 01-26-023-72860	61.35
185719	1/10/2020	004538 GOLDY LOCKS	678506		Total :  KEY BY CODE, DUPL KEY	61.35
1037 19	17 10/2020	004330 GOLDT LOCKS	070300		01-26-025-73840 Total :	22.95 <b>22.95</b>
185720	1/10/2020	018696 HENRY'S HOUSE OF DECORATED	8075		HOODIES,BEANIES/LOGOS & FLAG	

7

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page:

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185720	1/10/2020	018696 HENRY'S HOUSE OF DECORATED	(Continued)		-	
			,		01-26-023-73610	133.76
					01-26-024-73610	21.28
					01-26-025-73610	48.64
					60-00-000-73610	57.76
					63-00-000-73610	12.16
					64-00-000-73610	30.40
			8075.		T-SHIRTS, HOODIES (ADDED TO OF	
					01-26-023-73610	167.64
					01-26-024-73610	26.67
					01-26-025-73610	60.96
					60-00-000-73610	72.39
					63-00-000-73610	15.24
					64-00-000-73610	38.10
					Total :	685.00
185721	1/10/2020	012281 HINCKLEY SPRINGS	5977593 122819		WATER COOLER RENTAL	
					01-21-210-73110	151.92
					Total:	151.92
185722	1/10/2020	014528 ILL. ASSOC. OF PROPERTY AND	57638		2020 INDIV ACTIVE MEMBERSHIP [	
100722	17 1072020	011020 122.7.0000. 01 1 1.01 2.11 17.11 B	0.000		01-17-205-72720	35.00
					Total :	35.00
405700	4/40/0000	004070 H. INIOIO 40000 OF OUE DOLLOE	5507		OTANII EV TENIOZA - 4/7/00 IMPLEME	
185723	1/10/2020	004978 ILLINOIS ASSOC.OF CHF POLICE	5537		STANLEY TENCZA 1/7/20 IMPLEME	
					01-17-220-72140	57.00
			5538		ANTHONY CAMPBELL 1/7/20 IMPLE	
					01-17-220-72140	57.00
			5539		CHARLES FARICELLI 1/7/20 IMPLEN	== 00
			55.40		01-17-220-72140	57.00
			5540		DARREN PERSHA 1/7/20 IMPLEMEN	== 00
			==		01-17-220-72140	57.00
			5541		BILL DEVINE 1/7/20 IMPLEMENTIN	== 00
					01-17-220-72140	57.00
					Total :	285.00
185724	1/10/2020	017381 ILLINOIS DARE OFFICERS ASSOC	010620		MEMBERSHIP MELISSA BONAREK	

Page:

vchlist

8:57:04AM

### **Voucher List** Village of Tinley Park

01/10/2020

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185724	1/10/2020	017381	ILLINOIS DARE OFFICERS ASSOC	(Continued)			
				010620.		01-17-205-72720 MEMBERSHIP SAMANTHA BISHOP 01-17-205-72720	20.00
				010620		MEMBERSHIP ROBERT SHERVINO	
						01-17-205-72720 <b>Total</b> :	30.00 <b>70.00</b>
185725	1/10/2020	015497	ILLINOIS SECRETARY OF STATE	010220.		RENEW PLATES 2C4RDGBG5FR68 01-17-205-72860	151.00
						Total :	151.00
185726	1/10/2020	015497	ILLINOIS SECRETARY OF STATE	010220		ADDT'L CONFID PLATE IFM5K8B82I 01-17-205-72860	50.00
						Total :	50.00
185727	1/10/2020	015545	IMAGING SYSTEMS, INC.	SS191202941	VTP-017414	<pre><hr/> - ONBASE CSS FOR HR - PH/</pre>	2 227 50
					V1P-017414	01-12-000-72790 <b>Total</b> :	3,237.50 <b>3,237.50</b>
185728	1/10/2020	018232	INTERNAT'L ASSOC OF ARSON	2892		DAN RIORDAN 2020 NO ILL FIRE &	405.00
						01-19-020-72140 <b>Total</b> :	125.00 <b>125.00</b>
185729	1/10/2020	015410	J.P. COOKE CO.	604596		STAMPER	
						01-15-000-73110 <b>Total</b> :	21.22 <b>21.22</b>
185730	1/10/2020	010377	JIMMY JOHN'S GOURMET SANDWICH	2228481		SUBS/CHIPS	45.00
						01-12-000-72220 <b>Total</b> :	45.00 <b>45.00</b>
185731	1/10/2020	018427	KERESTES MARTIN ASSOC INC	1911.04-01		WAYFINDING PROGRAM	
						30-00-000-72987 <b>Total</b> :	3,475.00 <b>3,475.00</b>
185732	1/10/2020	018793	KJAS INC	11052019-12		ETHICAL ADVOCATE WEB&PHONE	
						01-14-000-72750	1,450.00

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page:

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amoun
185732	1/10/2020	018793	018793 KJAS INC	(Continued)		Total	: 1,450.00
185733	1/10/2020	016616	KURTZ AMBULANCE SERVICE INC.	10421		EMS SERVICE AGREEMENT 12/1/19 01-21-000-72856 <b>Total</b>	36,477.83
185734	1/10/2020	017336	LAW ENFORCEMENT SEMINARS, LLC	84721574710950		KROTSER,MONDT/BACKGRD INVE 01-17-220-72140 <b>Total</b>	700.00
185735	1/10/2020	014402	LEXISNEXIS RISK DATA MNGMNT	1038013-20191130		NOV'19 MINIMUM COMMITMENT R 01-17-225-72852 <b>Total</b>	150.00
185736	1/10/2020	003440	M. COOPER WINSUPPLY CO.	S2068354.001 S2068807.001		PLUGS 01-26-025-73630 TEST PLUGS W/WING NUT 01-26-025-73630 <b>Total</b>	8.96 8.68 : <b>17.6</b> 4
185737	1/10/2020	019320	MANGALAPALLIL & SALY K ANTONY, BI	J <sup>I</sup> Ref001386516		UBRfnd Cst#00506306 duplicate pmt 60-00-000-20599 <b>Total</b>	130.89
185738	1/10/2020	005765	MARTIN WHALEN O.S. INC.	IN2215901		XER/XXC702 12/15/19-12/14/20 01-17-205-72750 <b>Total</b>	7,619.70 : <b>7,619.70</b>
185739	1/10/2020	012631	MASTER AUTO SUPPLY, LTD.	15030-82326		OIL 01-19-000-73535 <b>Total</b>	27.8 <sup>2</sup> : <b>27.8</b> <sup>2</sup>
185740	1/10/2020	005844	MCDONALD'S	123119		CELL MEALS DEC'19 01-17-220-72230 <b>Total</b>	345.24 : <b>345.2</b> 4
185741	1/10/2020	005645	MEADE ELECTRIC COMPANY INC.	690883		TRAFFIC SIGNAL MAINT 171,173 O	F 495.00

Page:

10

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

1/10/2020 1/10/2020	005645	005645 MEADE ELECTRIC COMP					
1/10/2020			PANY INC.	(Continued)		Total :	495.00
185742 1/10/2020 C	006074	MENARDS	78168			HOLE SAW KIT, DRYWALL CUTTER,	
						01-26-024-73410	67.35
			78233			LYSOL,PAPER TOWELS	
						01-26-025-73580	27.37
			78295			CLOTHS,CANDY	
						01-26-025-73580	17.97
						01-14-000-73115	14.98
			78300			FLIPTOGGLE, BIT	
						01-26-025-73840	8.95
			78480			SHOWERHEAD	
						01-26-025-73630	19.48
			78599			FABU,LYSOL	
						01-26-025-73580	39.34
			78605			TAPE,3V BATTERY,ROD	
						64-00-000-72525	67.06
			78606			AIR HOSE	
						60-00-000-72530	26.24
						63-00-000-72530	8.75
						64-00-000-72530	14.99
			78625			PAINT	
							11.98
						Total :	324.46
1/10/2020	005856	MONROE TRUCK EQUIPMENT, INC.	328092			SALT/ LIQUID CONTROLLER UNIT 6	
					VTP-017566	01-26-023-72540	879.32
						Total :	879.32
1/10/2020	015386	MUNICIPAL GIS PARTNERS, INC	4829			GIS STAFFING	
						01-16-000-72652	8,475.89
						60-00-000-72652	5,085.51
						63-00-000-72652	593.30
						64-00-000-72652	2,797.04
						Total :	16,951.74
1/10/2020	010810	MUNICIPAL SERV. CONSULTING INC	TPCN-1	2-19		CIMP DEC'19	
,	1/10/2020	1/10/2020 015386	1/10/2020 005856 MONROE TRUCK EQUIPMENT,INC. 1/10/2020 015386 MUNICIPAL GIS PARTNERS, INC 1/10/2020 010810 MUNICIPAL SERV. CONSULTING INC	78300 78480 78599 78605 78606  78625  1/10/2020 005856 MONROE TRUCK EQUIPMENT,INC. 328092  1/10/2020 015386 MUNICIPAL GIS PARTNERS, INC 4829	78300 78480 78599 78605 78606  78625  1/10/2020 005856 MONROE TRUCK EQUIPMENT, INC. 328092  1/10/2020 015386 MUNICIPAL GIS PARTNERS, INC 4829	78300 78480 78599 78605 78606  78625  1/10/2020 005856 MONROE TRUCK EQUIPMENT, INC. 328092  VTP-017566  1/10/2020 015386 MUNICIPAL GIS PARTNERS, INC 4829	01-26-025-73580

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page: 11

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185745	1/10/2020	010810 MUNIO	CIPAL SERV. CONSULTING INC	(Continued)			
						30-00-000-75812	3,255.00
						60-00-000-75812	3,419.85
						63-00-000-75812	3,419.85
						64-00-000-75812	2,931.30
				TPCS-12-19		COMM & TECH PROJ REPAIR/UPGF	
						11-00-000-72750	8,631.00
						Total :	21,657.00
185746	1/10/2020	014443 MURP	PHY & MILLER, INC	mc00007672		PREV MAINT 80TH AVE METRA STA	
					VTP-017213	01-26-025-72790	855.06
				MC00007681		PREVENTATIVE MAINTENANCE-FO	
				VTP-017212	01-26-025-72790	4,196.61	
			SVC00024654		POLICE ST CHECKED BOILER LEAF		
					01-26-025-72530	270.91	
						Total :	5,322.58
185747	1/10/2020	011827 NAT'L	1827 NAT'L ASSOC. OF TOWN WATCH	10786		NATW MEMBERSHIP DINA NAVAS	
					01-17-215-72720	35.00	
						Total :	35.00
185748	1/10/2020	008534 NAVAS	8534 NAVAS, DINA	010720		REIM.EXP.EMBROID OF GARMENT	
						01-17-205-73610	30.00
						Total:	30.00
185749	1/10/2020	015723 NICOF	3	01981510009		ACCT#01-98-15-1000 9 7780 W 183I	
						01-26-025-72511	316.84
				06821610000		ACCT#06-82-16-1000 0 6640 167TH	0.0.0.
				0002.0.0000		60-00-000-72511	101.81
						63-00-000-72511	101.81
						64-00-000-72511	87.26
				09977410001		ACCT#09-97-74-1000 1 7801 W 1915	
						01-26-025-72511	433.30
				53463710003		ACCT#54-46-37-1000 3 18241 S 80T	
						01-26-025-72511	85.86
				54072310003		ACCT#54-07-23-1000 3 16250 OAK F	
						01-26-025-72511	1,604.72

12

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page:

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185749	1/10/2020	015723 NICOR	(Continued)			
			73675410002		ACCT#73-67-54-1000 2 7800 183RD	
			74433410003		01-26-025-72511 ACCT#74-43-34-1000 3 7700 W 183I	1,127.05
			74433410003		01-26-025-72511	37.52
			83523710008		ACCT#83-52-37-1000 8 7980 183RD	07.02
					01-26-025-72511	1,210.28
			96019958527		ACCT#96-01-99-5852 7 7999 W TIMI	
					01-26-025-72511	247.49
					Total :	5,353.94
185750	1/10/2020	006178 NORMAN'S	36118		BONKOWSKI: SHIRT, PANTS	
					01-21-000-73610	24.00
					Total :	24.00
185751	1/10/2020	006216 NORTH EAST MULTI-REG TRAINING	267625		RONALD FUGGER/40 HR JUV SPEC	
					01-17-220-72140	75.00
					Total :	75.00
185752	1/10/2020	015811 NSN EMPLOYER SERVICES, INC.	4413		MANAGEMENT SERVICES JAN-MAF	
				01-14-000-72445	500.00	
					Total :	500.00
185753	1/10/2020	006640 P.A.W.S.	010220		IMPOUND FEES 2019, CONTRIBUTI	
					01-17-220-72240	11,120.00
					Total :	11,120.00
185754	1/10/2020	006475 PARK ACE HARDWARE	062661/1		O-RINGS	
					60-00-000-73630	9.52
					63-00-000-73630	1.06
					64-00-000-73630	4.54
			062695/1		WATER	22.04
					01-19-000-72220 <b>Total</b> :	23.94 <b>39.06</b>
					iotai .	33.00
185755	1/10/2020	014682 PITNEY BOWES	3103651397		ACCT#0010611388 10/30/19-1/29/20	
					01-17-205-72750	540.87

Page:

13

vchlist

01/10/2020

8:57:04AM

# Voucher List llage of Tinley Park

Village of Tinley Park

Dank	coue .	appank	

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185755	1/10/2020	014682	014682 PITNEY BOWES	(Continued)		Total :	540.87
185756	1/10/2020	006499	PITNEY BOWES INC	1014652339		ACCT#0012198182 1/16/20-4/15/20 01-14-000-72750 60-00-000-72750 <b>Total</b> :	75.00 75.00 <b>150.00</b>
185757	1/10/2020	006656	PITNEY BOWES RESERVE ACCOUNT	010720		REFILL POSTAGE METER 01-17-205-72110 <b>Total</b> :	2,500.00 <b>2,500.00</b>
185758	1/10/2020	010793	POLICE CHIEF'S ASSOC OF	010820		MEMBERSHIP MATT WALSH,FARIC 01-17-205-72720 <b>Total</b> :	200.00 <b>200.00</b>
185759	1/10/2020	014850	POP'S ITALIAN BEEF AND SAUSAGE	120319		SENIOR CENTER LUNCHEON 01-41-056-72937 <b>Total</b> :	459.95 <b>459.95</b>
185760	1/10/2020	006635	POWER EQUIPMENT LEASING CO.	S 842	VTP-017454	WELDMENT STEP TO ELLIOTT QUO 01-26-024-72540 01-26-024-72540 Total :	585.12 117.38 <b>702.50</b>
185761	1/10/2020	006850	QUILL CORPORATION	3583204		REPORT CVR,TAPE 01-33-300-73110 <b>Total</b> :	42.53 <b>42.53</b>
185762	1/10/2020	006361	RAY O' HERRON CO INC	1972565-IN 1972566-IN		UNIFORMS / J HICKEY 01-17-220-73610 UNIFORMS/ ALLAN AHMAD	1,119.85
				2001093-IN		01-17-220-73610 UNIFORMS/J HICKEY	1,478.85
				2001094-IN		01-17-220-73610 UNIFORMS/ALLAN AHMAD	183.07
				2001095-IN		01-17-220-73610 UNIFORMS/J HICKEY	230.38
				2001000 114		01-17-220-73610	610.00

Page:

14

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Voucher	Date	Vendor		Invoice	PO#	Description/Account	Amount
							,
185762	1/10/2020	006361	006361 RAY O' HERRON CO INC	(Continued)		Total :	3,622.15
185763	1/10/2020	019246	REACH MEDIA NETWORK	64478		REACH MEDIA NETWORK QUOTE #	
					VTP-017487	30-00-000-74128	1,588.00
						Total :	1,588.00
185764	1/10/2020	006974	RINGHOFER, WILLIAM	010620		HEALTH INSURANCE REIM JAN'20	
						01-17-205-72435	601.70
						Total :	601.70
185765	1/10/2020	019322	RONEY, KEVIN G	Ref001386518		UBRfnd Cst#00464396 noncomplianc	
						60-00-000-20599	200.00
						Total :	200.00
185766	1/10/2020	019092	RORY GROUP, LLC	3284		BUSINESS CONSULTING FEE JAN'2	
						01-11-000-72790	3,000.00
						Total :	3,000.00
185767	1/10/2020	016334	RUSH TRUCK CENTERS	3017825965		TANK AIR QUALITY, CABLE TANK M	
						01-26-023-72540	749.52
				3017825968		MOTOR KIT	
				637867		01-26-023-72540 CREDIT OFFICE ADJ RUSH	114.69
				03/00/		01-26-023-72540	-172.58
						Total :	691.63
185768	1/10/2020	007316	SALINA'S PASTA & PIZZA INC	260719		PIZZAS - 'A' DIVISION PIZZA LUNCH	
100700	17 10/2020	007010	OALINA O LAOTA & LIZZA INO	200713		01-17-205-72220	161.19
						Total :	161.19
185769	1/10/2020	007620	SAM'S CLUB DIRECT	1109		MUFFINS,FRUIT TRAY	
103703	1/10/2020	007023	OAM O GLOB BINLEGT	1103		01-26-025-73115	26.36
				5991		KITCHEN KNIFE	20.00
						60-00-000-73115	3.07
						64-00-000-73115	1.32
						01-26-023-73115	4.39
				0055			2.20
				9300		WATER, EASER, LYSUL, WIR CLEAN, I'	
				9355		01-26-024-73115 WATER,EASER,LYSOL,MR CLEAN,N	

vchlist

01/10/2020 8:57:04AM

### Voucher List Village of Tinley Park

Page: 15

oucher	Date	Vendor	Invoice	PO #	Description/Account	Amoun
85769	1/10/2020	007629 SAM'S CLUB DIRECT	(Continued)			
					60-00-000-73115	9.55
					64-00-000-73115	4.09
					01-26-023-73115	13.64
					01-26-025-73580	119.74
					01-26-024-73115	6.82
					Total :	191.18
5770	1/10/2020	018104 SBA STEEL,LLC	IN14038117		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	157.50
					63-00-000-72631	157.50
					64-00-000-72631	157.50
					01-17-205-72631	315.00
					01-19-000-72631	262.50
			IN14038968		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	157.50
					63-00-000-72631	157.50
					64-00-000-72631	157.50
					01-17-205-72631	315.00
					01-19-000-72631	262.50
			IN14039397		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	165.38
					63-00-000-72631	165.38
					64-00-000-72631	165.38
					01-17-205-72631	330.75
					01-19-000-72631	275.61
			IN14040241		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	165.38
					63-00-000-72631	165.38
					64-00-000-72631	165.38
					01-17-205-72631	330.75
					01-19-000-72631	275.61
			IN14040673		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	165.38
					63-00-000-72631	165.38
					64-00-000-72631	165.38
					01-17-205-72631	330.75

vchlist

01/10/2020 8:57:04AM

### Voucher List Village of Tinley Park

Page: 16

/oucher	Date	Vendor	Invoice	PO #	Description/Account	Amoun
185770	1/10/2020	018104 SBA STEEL,LLC	(Continued)			
					01-19-000-72631	275.61
			IN14041098		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	165.38
					63-00-000-72631	165.38
					64-00-000-72631	165.38
					01-17-205-72631	330.75
					01-19-000-72631	275.61
			IN14041532		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	165.38
					63-00-000-72631	165.38
					64-00-000-72631	165.38
					01-17-205-72631	330.75
					01-19-000-72631	275.61
			IN14044989		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	173.65
					63-00-000-72631	173.65
					64-00-000-72631	173.65
					01-17-205-72631	347.29
					01-19-000-72631	289.39
			IN14046240		TOWER SITE RENT #IL46494-A-03 I	
					60-00-000-72631	173.65
					63-00-000-72631	173.65
					64-00-000-72631	173.65
					01-17-205-72631	347.29
					01-19-000-72631	289.39
			IN14047078		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	173.65
					63-00-000-72631	173.65
					64-00-000-72631	173.65
					01-17-205-72631	347.29
					01-19-000-72631	289.39
			IN14047509		TOWER SITE RENT #IL46494-A-03	
					60-00-000-72631	173.65
					63-00-000-72631	173.65
					64-00-000-72631	173.65
					01-17-205-72631	347.29

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page: 17

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185770	1/10/2020	018104	SBA STEEL,LLC	(Continued)			
						01-19-000-72631 <b>Total</b> :	289.39 <b>12,243.02</b>
185771	1/10/2020	019319	SCHMIDT, JOSEPH	Ref001386513		UB Refund Cst #00509808	
						60-00-000-20599	29.41
						Total :	29.41
185772	1/10/2020	007453	SERVICE SANITATION, INC.	7866606		VTP-016993 RESTROOM FIREMAN	
					VTP-016993	01-19-000-72750	153.04 <b>153.04</b>
						Total :	153.04
185773	1/10/2020	019321	19321 SHELBY, CRYSTAL	Ref001386517		UBRfnd Cst#00506047 noncomplianc	
						60-00-000-20599 <b>Total</b> :	200.00 <b>200.00</b>
							200.00
185774 1/10/2020	007109	09 SIRCHIE FINGER PRINT LABS	0428433-IN	\/TD 047500	EVIDENCE SUPPLIES	004.04	
					VTP-017539	01-17-225-73550 <b>Total</b> :	681.94 <b>681.94</b>
							001.04
185775	1/10/2020	020 007424 SPARTAN MOTORS USA, INC	SPARTAN MOTORS USA, INC	2466947		CABLE LATCH	44.00
						60-00-000-72540 63-00-000-72540	14.98 5.00
						64-00-000-72540	8.56
						60-00-000-72540	7.28
						63-00-000-72540	2.42
						64-00-000-72540	4.16
						Total :	42.40
185776	1/10/2020	015405	SSACOP	010820		DUES STANLEY TENCZA	
						01-17-205-72720	50.00
				010820.		DUES ANTHONY CAMPBELL	
				010820		01-17-205-72720 DUES CHARLES FARICELLI	50.00
			010020		01-17-205-72720	50.00	
				010820		DUES MATT WALSH	- 3.00
						01-17-205-72720	75.00

18

vchlist

01/10/2020

8:57:04AM

### **Voucher List** Village of Tinley Park

Page:

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185776	1/10/2020	015405	015405 SSACOP	(Continued)		Total :	225.00
185777	1/10/2020	007224	STANDARD EQUIPMENT COMPANY	P19294		WATER PUMP FOR SWEEPER 10	
					VTP-017561	01-26-023-72530	693.14
						Total :	693.14
185778	1/10/2020	012238	STAPLES BUSINESS ADVANTAGE	3433279503		DIVIDER,PAPER	
						01-17-205-73110	59.96
				3433279504		TIMER	
						01-17-205-73110	9.99
				3433279505		CUP	
						01-17-205-73110	6.69
				3433279506		INDEX TABLE N TAB 12 TAB ASSOR	
						01-17-215-73110	153.28
						01-17-205-73110	14.70
				3433279507		RUBBERBANDS,PAPER,REFILLL C/	
						01-41-056-73110	345.45
				3433279508		PENS,HOLDER,2020 WALL CALENE	
					01-12-000-73110	14.59	
					01-15-000-73110	21.79	
						01-14-000-73110	195.08
						Total :	821.53
185779	1/10/2020	011189	STAPLES CREDIT PLAN	01097		****8144 WITE-OUT,PENS,QUICNOT	
						01-26-025-73110	27.99
						01-26-024-73110	3.00
						01-26-023-73110	5.98
						60-00-000-73110	3.77
						63-00-000-73110	0.42
						64-00-000-73110	1.79
				99537		****8144 LABELS,FOLDER LETTERS	
						01-26-023-73110	35.18
						60-00-000-73110	22.16
						63-00-000-73110	2.46
						64-00-000-73110	10.57
						01-26-024-73110	17.59

Page:

19

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

oucher	Date	Vendor		Invoice	PO #	Description/Account	Amour
185779	1/10/2020	011189	011189 STAPLES CREDIT PLAN	(Continued)		Total	: 130.9
85780	1/10/2020	007205	SUBURBAN LABORATORIES INC.	172423		PROJ: UCMR4	
						60-00-000-72865	1,043.0
						63-00-000-72865	447.0
						Total	: 1,490.0
85781	1/10/2020	018878	SUPERION LLC	264857		MAINT FEE 2/1/20-1/31/21 CENTRA	I
						01-17-205-72655	1,349.4
						01-17-220-72655	1,349.4
						01-19-000-72655	1,349.4
						01-21-210-72655	1,349.4
						Total	5,397.9
85782	1/10/2020	007297	SUTTON FORD INC./FLEET SALES	496481		GLASS ASY	
						01-21-000-72540	20.7
			496557		HEADLAMP ASY,CORE		
					01-26-023-72540	271.6	
				496829		WEATHERSTRIP	
						60-00-000-72540	66.7
						63-00-000-72540	22.2 38.1
						64-00-000-72540 <b>Total</b>	
85783	1/10/2020	019607	TELCOM INNOVATIONS GROUP, LLC	A54596		LABOR CHARGE BILLABLE REMO	-
03703	1/10/2020	010007	TELCOW INNOVATIONS GROUP, LLC	A34590		01-26-025-72777	65.0
						71-20-025-72777 Total	
85784	1/10/2020	018724	THE LOCKER SHOP	ES 69699		SHORTS, WINDSHIRT, SHORTS, T-S	
				E0.00745		01-19-000-73610	495.0
				ES 69715		T-SHIRTS,LONG SLEEVE SHIRT,CA	
				OE 69712		01-19-000-73610 POLO,JOB SHIRT/P MARIANOVICH	40.0
				OE 69712		01-19-000-73610	188.0
				OES 69711		T-SHIRT,SHIRTS,CAP,JACKET/T SI	
				OLU 037 11		01-19-000-73610	193.0
				OS 69713		PANTS,SHIRT,T-SHIRT/A BUTERA	100.0

VILLAGE OF TINLEY...

Page | 51

Page:

20

vchlist

01/10/2020

8:57:04AM

#### Voucher List Village of Tinley Park

Date	Vendor		Invoice	PO #	Description/Account	Amount
1/10/2020	018724	THE LOCKER SHOP	(Continued)			
			S 60714			72.00
			0 037 14		01-19-000-73610	56.00
					Total :	1,044.00
1/10/2020	007886	THEODORE POLYGRAPH SERVICE	6854		POLYGRAPH EXAMS WILFREDO PA	
					01-17-205-72446	175.00
					Total :	175.00
1/10/2020	007777	THOMPSON ELEVATOR INSPECTION	19-3943		2 SEMI ANNUAL ELEV INSPECTION	
						76.00
					iotai:	76.00
1/10/2020	012187	TOTAL AUTOMATION CONCEPTS, INC	W19247		LABOR NIGHT SET UP ON THERMC	
						801.00 <b>801.00</b>
						001.00
1/10/2020	010565	TP HOTEL & CONVENTION CTR LLC	28296			5,874.68
					Total:	5,874.68
1/10/2020	007930	TRANS UNION	12900353		BASIC SERVICE 11/26-12/25/19	
					01-17-225-72852	90.00
					Total :	90.00
1/10/2020	004106	TYLER TECHNOLOGIES, INC	045-287415		EXECUTIME LICENSE INCREASE	
				VTP-016786	30-00-000-74139	360.00
				VIP-016786		120.00 <b>480.00</b>
						460.00
1/10/2020	018250	VERIZON CONNECT NWF INC	OSV000001989442			202.45
						322.15 <b>322.15</b>
4/40/0000	00000	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4 0000045 00			<b>522.10</b>
1/10/2020	006362	VILLAGE OF OAK LAWN	1-9990015-00			526,324.46
					63-00-000-73220	485,837.97
	1/10/2020 1/10/2020 1/10/2020 1/10/2020 1/10/2020 1/10/2020	1/10/2020 018724  1/10/2020 007886  1/10/2020 007777  1/10/2020 012187  1/10/2020 007930  1/10/2020 004106  1/10/2020 018250	1/10/2020 018724 THE LOCKER SHOP  1/10/2020 007886 THEODORE POLYGRAPH SERVICE  1/10/2020 007777 THOMPSON ELEVATOR INSPECTION  1/10/2020 012187 TOTAL AUTOMATION CONCEPTS, INC  1/10/2020 010565 TP HOTEL & CONVENTION CTR LLC  1/10/2020 007930 TRANS UNION  1/10/2020 004106 TYLER TECHNOLOGIES, INC  1/10/2020 018250 VERIZON CONNECT NWF INC  1/10/2020 006362 VILLAGE OF OAK LAWN	1/10/2020       018724 THE LOCKER SHOP       (Continued)         1/10/2020       007886 THEODORE POLYGRAPH SERVICE       6854         1/10/2020       007777 THOMPSON ELEVATOR INSPECTION       19-3943         1/10/2020       012187 TOTAL AUTOMATION CONCEPTS, INC       W19247         1/10/2020       010565 TP HOTEL & CONVENTION CTR LLC       28296         1/10/2020       007930 TRANS UNION       12900353         1/10/2020       004106 TYLER TECHNOLOGIES, INC       045-287415         1/10/2020       018250 VERIZON CONNECT NWF INC       OSV000001989442	1/10/2020 018724 THE LOCKER SHOP (Continued) S 69714  1/10/2020 007886 THEODORE POLYGRAPH SERVICE 6854  1/10/2020 007777 THOMPSON ELEVATOR INSPECTION 19-3943  1/10/2020 012187 TOTAL AUTOMATION CONCEPTS, INC W19247  1/10/2020 010565 TP HOTEL & CONVENTION CTR LLC 28296  1/10/2020 007930 TRANS UNION 12900353  1/10/2020 004106 TYLER TECHNOLOGIES, INC 045-287415  VTP-016786 VTP-016786  1/10/2020 018250 VERIZON CONNECT NWF INC OSV000001989442	1/10/2020   1/10

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page: 21

Bank code	:	apbank
-----------	---	--------

Amount	Description/Account	PO#	Invoice	or	Vendor	Date	Voucher
1,012,162.43	Total :		(Continued)			1/10/2020	185792
	4/0 LETTER & MAILING (6,000)~ RE		533008	68 VISION INTEGRATED GRAPHICS,LLC	012368	1/10/2020	185793
1,833.00	01-14-000-72310	VTP-017413		,			
535.00	01-14-000-72110	VTP-017413					
	LATE NOTICES FOR NOV 1ST BILLS		533023				
135.32	60-00-000-72310						
58.00 129.50	64-00-000-72310 60-00-000-72310						
55.50	64-00-000-72310						
413.11	60-00-000-72110						
177.04	64-00-000-72110						
3,336.47	Total :						
	REPLACE HOOD LINER, OUTSIDE I		164212	95 VISSERS COLLISION CENTER	008095	1/10/2020	185794
1,356.71	01-17-205-72540	VTP-017570					
	BODY DAMAGE RT SIDE UNIT 26B		164806				
863.00	01-17-205-72540	VTP-017562					
2,219.71	Total :						
	REIM. EXP. CDL LICENSE		010220	39 WAISHWELL, JOHN	012239	1/10/2020	185795
61.35	01-26-023-72860						
61.35	Total :						
	CALENDAR		S 4532348-0	55 WAREHOUSE DIRECT WORKPL SOLTN	010165	1/10/2020	185796
28.72	01-26-025-73110						
	APPT BOOK		4532348-1				
54.92	01-26-025-73110		4500400.0				
2.42	CALENDAR 01 31 000 73110		4532466-0				
3.43 <b>87.07</b>	01-21-000-73110 <b>Total</b> :						
00.			14/400000	TE WARREN ON OO	044055	4.440.0000	105707
0.000.50	N.L. GAS USED 12/11/19-12/30/19		W1280662	55 WARREN OIL CO.	011055	1/10/2020	185797
8,862.56 428.96	01-17-205-73530 01-19-000-73530						
428.96 116.57	01-19-000-73530						
	0.1002070000						

8:57:04AM

Page | 53

vchlist

01/10/2020

Page: 22

### Voucher List Village of Tinley Park

185797	1/10/2020					
		011055 WARREN OIL CO.	(Continued)			
					60-00-000-73530	617.96
					63-00-000-73530	154.49
					64-00-000-73530	331.05
					01-26-023-73530	1,031.25
					01-26-024-73530	651.19
					01-33-300-73530	224.85
					01-12-000-73530	172.89
					01-14-000-73532	77.28
					01-53-000-73530	213.50
					01-42-000-73530	267.43
			W1280663		DIESEL USED 12/11/19-12/30/19	
					01-19-000-73545	798.13
					60-00-000-73545	188.54
					63-00-000-73545	47.14
					64-00-000-73545	101.00
					01-26-023-73545	1,548.09
					01-26-024-73545	114.45
					01-14-000-73531	2,287.71
					Total :	18,514.03
185798	1/10/2020	018766 WEST CENTRAL MUNICIPAL	0006913-IN		8498 SUB TREE CONSORTIUM FAL	
					01-26-023-75630	42,431.00
					Total :	42,431.00
185799	1/10/2020	013263 WEST SIDE TRACTOR SALES	05-7450		2020 JOHN DEERE 325G TRACK LC	
				VTP-017551	60-00-000-74262	22,632.98
				VTP-017551	63-00-000-74262	22,632.98
				VTP-017551	64-00-000-74262	19,399.69
				VTP-017551	60-00-000-74262	-7,500.00
					Total :	57,165.65
185800	1/10/2020	008200 WILL CO GOVERNMENTAL LEAGUE	2020-1097		MEMBERSHIP	
					01-11-000-72720	4,616.79
					Total:	4,616.79
185801	1/10/2020	016476 WRIGHT CONCRETE RECYCLING INC	121319-83		SEMI ASPHALT DUMP	

vchlist

01/10/2020 8:57:04AM

#### Voucher List Village of Tinley Park

Page: 23

Bank code: apbank

119 Vouchers for bank code: apbank

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185801	1/10/2020	016476 WRIGHT CONCRETE RECYCLING INC	(Continued)			
					01-26-023-72890	30.00
					60-00-000-73681	44.10
					63-00-000-73681	4.90
					64-00-000-73681	21.00
					Total :	100.00
185802	1/10/2020	012976 ZYLKA, MATTHEW	010620		PER DIEM:MEAL INTERDICT MASTE	
					01-17-220-72140	15.00
					Total :	15.00

Bank total: 1,409,712.97

24

Page:

vchlist

01/10/2020

8:57:04AM

#### Voucher List Village of Tinley Park

Bank code :	ipmg						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
2595	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021		PAYEE-ALIGN NETWORKS INC 01-14-000-72542 Total:	342.61 <b>342.61</b>
2596	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-1		PAYEE-ALIGN NETWORKS INC 01-14-000-72542 Total:	342.61 <b>342.61</b>
2597	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190326W026		PAYEE-PETERSON JOHNSON & ML 01-14-000-72542 Total :	1,111.50 <b>1,111.50</b>
2598	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190514W019		PAYEE-PETERSON JOHNSON & ML 01-14-000-72542 Total :	1,501.50 <b>1,501.50</b>
2599	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021		PAYEE-TODD SWARTZENTRUBER 01-14-000-72542 <b>Total</b> :	685.44 <b>685.44</b>
2600	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021		PAYEE-ADVANET 01-14-000-72542 <b>Total</b> :	2,893.33 <b>2,893.33</b>
2601	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-1		PAYEE-HEDGES CLINIC SERVICE C 01-14-000-72542 Total :	182.69 <b>182.69</b>
2602	1/2/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-2		PAYEE-IPMG 01-14-000-72542 <b>Total</b> :	100.00 <b>100.00</b>
8	Vouchers	for bank	code: ipmg			Bank total :	7,159.68
127	Vouchers	in this re	port			Total vouchers :	1,416,872.65

#### VILLAGE OF TINLEY...

Page | 56

vchlist

01/10/2020

8:57:04AM

### Voucher List Village of Tinley Park

Page:	25
. ~9~.	

Bank code: ipmg

 Voucher
 Date
 Vendor
 Invoice
 PO #
 Description/Account
 Amount

The Tinley Park Village Board having duly met at Village Hall do hereby certify that the following claims or demands against said village were presented and are approved for payment as presented on the above listing.

In witness thereof, the Village President and Clerk of the Village of Tinley Park, hereunto set their hands.

vchlist 01/17/2020 9:14:53AM

### Voucher List Village of Tinley Park

Page:

Bank code :	apbank						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185803	1/17/2020	015868	ACROSS THE STREET PRODUCTIONS	INV03962		RECORD MANAGEMENT/TRAINING Total:	626.40 <b>626.40</b>
185804	1/17/2020	010318	ADVOCATE CHRIST MEDICAL CNTR	010920		10 HEARTSAVERS CPR/AED,10 BL\$  Total:	200.00 <b>200.00</b>
185805	1/17/2020	002734	AIR ONE EQUIPMENT, INC	152011 152075		RESCUE TRUCK CACHE HARNESS KIT,CARRY BAG,RESCU Total :	280.89 2,452.42 <b>2,733.31</b>
185806	1/17/2020	010026	ANDERSON PUMP SERVICE	11131901		PUMP SERV 7980 W 183RD ST Total :	78.85 <b>78.85</b>
185807	1/17/2020	002756	APCO INTERNATIONAL INC.	676837	VTP-017583	APCO COMMUNICATIONS TRAINING Total:	444.00 <b>444.00</b>
185808	1/17/2020	002665	APPLE CHEVROLET	335883CVW		BELT KIT  Total:	53.57 <b>53.57</b>
185809	1/17/2020	010953	BATTERIES PLUS - 277	P23010209 P23174033		BATTERIES BATTERIES <b>Total</b> :	7.49 58.50 <b>65.99</b>
185810	1/17/2020	002869	BECHSTEIN CONSTRUCTION	27430		DEMO & REMOVAL OF RESIDENCE Total :	19,500.00 <b>19,500.00</b>
185811	1/17/2020	002974	BETTENHAUSEN CONSTRUCTION SER	200005		HAULING WOOD CHIPS  Total:	850.00 <b>850.00</b>
185812	1/17/2020	016817	BEVERLY SNOW AND ICE INC	42151 42152 42153 42154 42155 42156 42157 42158		TINLEY CREEK BRIDGE PUBLIC SAFETY BUILDING LOT FIRE STATION 3 FIRESTATION 4 HELIPORT & EMA HICKORY ST PARKING STALLS MUNICIPAL LOTS (ED & JOES) MUNICIPAL LOTS SUBWAY	210.00 850.00 480.00 720.00 2,440.00 1,390.00 390.00 650.00

2

Page:

vchlist

01/17/2020

9:14:53AM

### Voucher List Village of Tinley Park

Voucher	Date	Vendor	Invoice	PO #	Description/Account	Amount
185812	1/17/2020	016817 BEVERLY SNOW AND ICE INC	(Continued)			
			42159		MUNICIPAL LOTS-BATH & KITCHEN	285.00
			42160		MUNICIPAL LOTS CARDINAL	295.00
			42161		80TH AVENUE NORTH TRAIN LOT	7,500.00
			42162		OAK PARK AVE TRAIN STATION	2,750.00
			42163		PAWS	395.00
			42164		POLICE DEPARTMENT	1,095.00
			42165		POST 11	280.00
			42166		80TH AVENUE SOUTH TRAIN LOT	8,000.00
			42167		MUNICIPAL LOT-UNITED METHODIS	570.00
			42168		VILLAGE HALL	2,150.00
			42169		VOGT PLAZA	420.00
			42170		ZABROCKI PLAZA	710.00
			42172		PUBLIC SAFETY BUILDING LOT	130.00
			42173		FIRE STATION 3	110.00
			42174		FIRESTATION 4	160.00
			42175		HELIPORT & EMA	580.00
			42176		HICKORY ST PARKING STALLS	300.00
			42177		MUNICIPAL LOTS (ED & JOES)	90.00
			42178		MUNICIPAL LOTS SUBWAY	140.00
			42181		80TH AVENUE NORTH TRAIN LOT	1,800.00
			42182		OAK PARK AVE TRAIN STATION	600.00
			42183		PAWS	90.00
			42184		POLICE DEPARTMENT	245.00
			42186		80TH AVENUE SOUTH TRAIN LOT	1,900.00
			42187		MUNICIPAL LOT-UNITED METHODIS	130.00
			42188		VILLAGE HALL	490.00
			42189		VOGT PLAZA	90.00
			42190		ZABROCKI PLAZA	150.00
					Total :	38,585.00
185813	1/17/2020	016817 BEVERLY SNOW AND ICE INC	42171		TINLEY CREEK BRIDGE	50.00
			42179		MUNICIPAL LOTS-BATH & KITCHEN	65.00
			42180		MUNICIPAL LOTS CARDINAL	65.00
			42185		POST 11	60.00
					Total:	240.00

Page:

vchlist

01/17/2020

9:14:53AM

### Voucher List Village of Tinley Park

	арвани						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185814	1/17/2020	015129	BMI BROADCAST MUSIC INC.	36840418		ACCT#2166348 MUSIC-SPECIAL EV Total :	724.00 <b>724.00</b>
185815	1/17/2020	003148	BREMEN ANIMAL HOSPITAL, LTD	65162 66241		YAMBO/CHEWS YAMBO/CHEWS Total:	55.00 55.00 <b>110.00</b>
185816	1/17/2020	018503	CARDNO INC	286175		7698 NAT STORMWATER AREAS M. Total:	37,754.25 <b>37,754.25</b>
185817	1/17/2020	019326	CARTER, RON	Ref001386850		UB Refund Cst #00453164  Total:	70.52 <b>70.52</b>
185818	1/17/2020	003334	CCP INDUSTRIES, INC	IN02431146		CAP W/LED HEAD LIGHT,GLOVES Total :	153.63 <b>153.63</b>
185819	1/17/2020	003229	CED/EFENGEE	5025-529651 5025-529673		ELECTRICAL 26 AWG CONN <b>Total</b> :	244.75 163.40 <b>408.15</b>
185820	1/17/2020	014026	CHANDLER SERVICES	1989	VTP-017577	#47 REPAIR Total :	6,712.33 <b>6,712.33</b>
185821	1/17/2020	013991	CHICAGO OFFICE PRODUCTS CO.	983569-1 983817-0		TAPE,RIBBON MEMORY CARD,STORAGE BOXES, <b>Total</b> :	16.74 255.74 <b>272.48</b>
185822	1/17/2020	015199	CHICAGO PARTS & SOUNDS LLC	1-0124533 2J0001737 2J0001869	VTP-017568 VTP-017578	BRAKE PARTS FOR POLICE SUV ANTENNA,MNT EMERGENCY LIGHTING NEW GAT( Total:	1,124.16 124.50 2,760.00 <b>4,008.66</b>
185823	1/17/2020	017298	COMCAST BUSINESS	93955560		ACCT#930890410 1/1/20-1/31/20 <b>Total</b> :	1,150.05 <b>1,150.05</b>
185824	1/17/2020	012057	COMCAST CABLE	8771401810028977 8771401810296319		ACCT#8771401810028977 1/16/19-2 ACCT#8771401810296319 1/8-2/7/20	39.75 233.35

#### VILLAGE OF TINLEY...

Page | 60

Page:

vchlist

01/17/2020

9:14:53AM

### Voucher List Village of Tinley Park

	арвани						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185824	1/17/2020	012057	012057 COMCAST CABLE	(Continued)		Total :	273.10
185825	1/17/2020	013878	COMED - COMMONWEALTH EDISON	0385181000 2761036017		ACCT#0385181000 RR ST 18001 80 ACCT#2761036017 STREET LIGHTS <b>Total</b> :	3,989.44 65.78 <b>4,055.22</b>
185826	1/17/2020	018311	CONNECTION	57407308 57407530	VTP-017569	IPHONE CASE <pd> - FALSH DRIVES FOR EVIDEN Total :</pd>	186.72 455.60 <b>642.32</b>
185827	1/17/2020	012410	CONSERV FS, INC.	66034045		CONSERV SCOOP  Total:	34.25 <b>34.25</b>
185828	1/17/2020	018004	COOK COUNTY BOARD-UP, INC	3447		6110 ANDRES AVE/BOARD UP WINI <b>Total</b> :	75.00 <b>75.00</b>
185829	1/17/2020	019101	COOK COUNTY TREASURER	2019-4		MANT TRAFFIC SIGNAL 10/1/19-12, Total:	5,162.00 <b>5,162.00</b>
185830	1/17/2020	018234	CORE & MAIN LP	L639743 L743832 L753065 L757547 L763881 L764725		REPAIR SENSUS METER SENSUS ANALYTIC ENHANCED AN CPLG,PVC'S TUBE,CPLG CREDIT METER  Total:	625.00 505.00 16,016.00 50.59 525.60 -1,195.00 <b>16,527.19</b>
185831	1/17/2020	003635	CROSSMARK PRINTING, INC	77243. 77279 77318		BUSINESS CARDS HANNAH LIPMA PRISONER INFORMATION CARDS BUSINESS CARDS GENE LODE,LIS Total:	8.40 92.21 66.00 <b>166.61</b>
185832	1/17/2020	003770	DUSTCATCHERS INC	69771 69773		MATS/ VH MATS/PW GARAGE <b>Total</b> :	65.93 99.08 <b>165.01</b>
185833	1/17/2020	004009	EAGLE UNIFORM CO INC	285663 285829	VTP-017545	UNIFORMS/DOUG ERWIN UNIFORMS/DC RIORDAN	174.00 266.25

Page:

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

Voucher	<b>Date</b> 1/17/2020	Vendor		Invoice	DO #	B	
105022	1/17/2020			Invoice	PO #	Description/Account	Amount
185833		004009	004009 EAGLE UNIFORM CO INC	(Continued)		Total :	440.25
185834	1/17/2020	004152	ECOLAB PEST ELIMINATION INC.	8529237 8529238		PEST CONTROL VH PEST CONTROL TRAIN STATION Total:	474.44 86.48 <b>560.92</b>
185835	1/17/2020	011176	ELEMENT GRAPHICS & DESIGN, INC	15546 15672	VTP-017522	(100) LIFE AMPLIFIED DOOR GRAP REPAIR UNIT 26B <b>Total</b> :	1,032.18 164.57 <b>1,196.75</b>
185836	1/17/2020	004019	EVON'S TROPHIES & AWARDS	010620		NAME PLATE Total :	22.36 <b>22.36</b>
185837	1/17/2020	015058	FLEETPRIDE	43559668		FILTERS,ELEMENT,AIR SAFETY,FU  Total:	118.28 <b>118.28</b>
185838	1/17/2020	012941	FMP	52-445602 52-445670 52-446158 52-446159 52-446313		AUTO TRANS PARTS, CORE CHARGE BRAKE PAD,BRAKE ROTOR ELEMENT ASSY CAR PART,CORE CHARGE #75 Total:	14.23 291.40 119.10 13.28 116.42 <b>554.43</b>
185839	1/17/2020	011132	FORCE ENTERPRISES	049341 049412		POST CARD PRINT ENVELOPES Total :	1,392.27 111.50 <b>1,503.77</b>
185840	1/17/2020	011611	FOX VALLEY FIRE & SAFETY CO.	IN00326566	VTP-017472	MONTHLY RADIO MAINT DEC'19 Total :	8,378.00 <b>8,378.00</b>
185841	1/17/2020	004538	GOLDY LOCKS	678642 678748 678785		DUPL KEY KEY BY CODE DUPL KEY Total :	8.85 20.00 5.90 <b>34.75</b>
185842	1/17/2020	015397	GOVTEMPSUSALLC	2947743		1/5/20 PAULA WALLRICH Total:	1,511.06 <b>1,511.06</b>

# VILLAGE OF TINLEY...

Page | 62

Page:

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

	•						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185843	1/17/2020	004438	GRAINGER	9372188954 9398728395 9398737610 9399743187 9403200422		FLOOR DRAIN GRATE ALL PURPOSE CLEANER PRESSURE WASHER HOSE SCRATCH BRUSH BATTERY Total:	190.40 83.07 162.52 14.91 15.00 <b>465.90</b>
185844	1/17/2020	004435	GROSSI, STEVEN	011420		REIM.EXP. CDL LICENSE  Total:	61.35 <b>61.35</b>
185845	1/17/2020	018836	ILLINOIS COUNTIES RISK	RCB000000022804 RCB000000022954 RCB000000023015 RCB000000023457 RCB0000000023585 RCB0000000023643		2019-2020 ICRMT-PROPERTY AND 2019-2020 ICRMT- PROPERTY AND 2019-2020 ICRMT - PROPERTY AND 2019-2020 ICRMT - WORKERS' CON 2019-2020 ICRMT - WORKERS' CON 2019-2020 ICRMT - WORKERS' CON Total :	146,887.00 73,443.50 73,443.50 39,476.75 19,738.38 19,738.38 372,727.51
185846	1/17/2020	017381	ILLINOIS DARE OFFICERS ASSOC	010920		MEMBERSHIP SONNY LONDON  Total:	20.00 <b>20.00</b>
185847	1/17/2020	018864	ILLINOIS DRUG ENFORCEMENT	011320 011520		REGISTRATION MATTHEW ZYLKA REGISTRATION RICHARD PORCAR <b>Total</b> :	275.00 275.00 <b>550.00</b>
185848	1/17/2020	005123	ILLINOIS FIRE INSPECTORS ASSOC	21093 21105		RIORDAN,LORENDO/FLSE CONF F 2020 IFIA MEMBERSHIP DUES Total :	650.00 95.00 <b>745.00</b>
185849	1/17/2020	004875	IRMA	SALES0018033		DECEMBER'19 DEDUCTIBLE  Total:	13,727.30 <b>13,727.30</b>
185850	1/17/2020	005022	ISAWWA	200048171		URBANSKI/FITZPATRICK WATERCO Total :	500.00 <b>500.00</b>
185851	1/17/2020	005251	J AND R SALES AND SERVICE INC.	0330793 0330831	VTP-017563	REPLACEMENT OF 880 LARGE GAS IGNITION MODULE	1,551.96 36.09

7

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

Page:

Bank code :	apbank							
Voucher	Date	Vendor		Invoice	PO#	Description/Account		Amount
185851	1/17/2020	005251	005251 J AND R SALES AND SERV	ICE INC. (Continued)		•	Total :	1,588.05
185852	1/17/2020	005278	JULIE INC	2020-1741		PRINT/EMAIL,FAX,VOICE TRA	NSMI: Total :	7,968.79 <b>7,968.79</b>
185853	1/17/2020	018427	KERESTES MARTIN ASSOC INC	2001.03-01		DESIGN DEVELOPMENT .	Total :	1,445.00 <b>1,445.00</b>
185854	1/17/2020	005384	KIRBY SCHOOL DISTRICT # 140	010820		IMPACT FEES THRU NOV '19	Total :	7,600.00 <b>7,600.00</b>
185855	1/17/2020	019248	K-TECH SPECIALTY COATINGS INC	202001-K0011	VTP-017493	PRE-WET ANTI-ICER & DEICE	R <b>Total</b> :	5,912.55 <b>5,912.55</b>
185856	1/17/2020	019235	MANAGEMENT PARTNERS INC	INV08126		STRATEGIC PLANNING & GOA	AL SE Total :	6,500.00 <b>6,500.00</b>
185857	1/17/2020	005765	MARTIN WHALEN O.S. INC.	IN2239639		STAPLES .	Total :	109.00 <b>109.00</b>
185858	1/17/2020	012631	MASTER AUTO SUPPLY, LTD.	15030-83057 15030-83067		24/21 EXTRACLEAR /#75 BRAKE PAD SET,ROTOR	Total :	17.98 197.60 <b>215.58</b>
185859	1/17/2020	006074	MENARDS	78648 78658 78810 78826 78900 79009 79044 79048 79182 79199		EDGELOCK,ADHESIVE,GLUE SPRAY BOTTLES CFL TUBE PX ULTRA BLK RTV 3.35 OZ OUTLET,PICTURE STRIPS SPIN MOP REFILL,GLOVES SPRINGS PAIL,SQUEZ SHIM WIRE STRIPPERS	Total :	20.93 10.92 4.99 8.94 12.38 53.34 2.07 9.72 3.94 15.28
185860	1/17/2020	012517	MERIDIAN IT INC	467336 467428	VTP-017458	NETWORKING LABOR DETAIL <it> - ISE MIGRATION - PROF</it>		370.00 2,700.00

Page:

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185860	1/17/2020	012517	MERIDIAN IT INC	(Continued) 467842 467843	VTP-017574 VTP-017575	<it> - ANNUAL CISCO MAINTENAN <it> - NETAPP MAINT RENEWAL (D Total :</it></it>	27,492.59 7,576.40 <b>38,138.99</b>
185861	1/17/2020	005742	METRO POWER INC.	12690		GENERATOR REPAIR/EDGEWATER <b>Total</b> :	359.00 <b>359.00</b>
185862	1/17/2020	015761	MOKENA FIRE PROTECTION DIST.	186		PREV MAINT SEATBELT ASSY Total:	110.25 <b>110.25</b>
185863	1/17/2020	005856	MONROE TRUCK EQUIPMENT, INC.	328133		LIFT ARM WLDMT <b>Total</b> :	115.21 <b>115.21</b>
185864	1/17/2020	005664	MORTON SALT INC	5401997085	VTP-017494	ROAD SALT FOR 2019/2020 WINTEL  Total:	26,541.72 <b>26,541.72</b>
185865	1/17/2020	014443	MURPHY & MILLER, INC	SVC00024886		AIR FILTERS ICE MACHINE & DISPL Total:	338.33 <b>338.33</b>
185866	1/17/2020	018604	NAPA MONEE	153552		BELT Total :	68.36 <b>68.36</b>
185867	1/17/2020	015723	NICOR	12213610004 49924710004		ACCT#12-21-36-1000 4 7825 W 167 ACCT#49-92-47-1000 4 9191 W 175 Total :	198.06 352.00 <b>550.06</b>
185868	1/17/2020	001487	NUWAY DISPOSAL SERVICE INC	6812259 6846259		SWEEPINGS EXCHANGE HAUL, DUMP CHARGE: Total :	737.00 383.35 <b>1,120.35</b>
185869	1/17/2020	006475	PARK ACE HARDWARE	062411/1 062715/1 062742/1 062750/1 62727/1		CREDIT SG TNT BS NB P&P 1 GAL. #891432 HANDLE TAPR,FLOOR SQI 9404 SOAP,SPRY,CFFEE,BAGS,TOI #891432 KEY,LIGHTER SINGLE FLII #891432 HOOK CUPS Total:	-26.39 73.56 1,045.92 15.14 1.91 <b>1,110.14</b>

Page:

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

	арвани						
Voucher	Date	Vendor	•	Invoice	PO #	Description/Account	Amount
185870	1/17/2020	017268	PETERSON JOHNSON & MURRAY	130165 130166 130283		4131.0001 VOTP GENERAL LABOR 4130.0029 RACINO DEV (MENTAL H 4130.0023 RUDSINSKI (DARREN & : Total :	4,972.50 21,035.00 2,145.00 <b>28,152.50</b>
185871	1/17/2020	006597	PITNEY BOWES PURCHASE POWER	8000900001076300		ACCT#8000-9000-0107-6300 POSTA Total :	3,300.00 <b>3,300.00</b>
185872	1/17/2020	006780	POMP'S TIRE SERVICE, INC	410744344	VTP-017590	(4) 245/45R20 UNIROYAL TIRES Total:	450.00 <b>450.00</b>
185873	1/17/2020	016035	PORCARO, RICHARD	011320.		PER DIEM:LODGING,MEALS/ILL DR Total :	394.95 <b>394.95</b>
185874	1/17/2020	016035	PORCARO, RICHARD	011320		PER DIEM:MEALS SFST INSTRUCT  Total:	75.00 <b>75.00</b>
185875	1/17/2020	013587	PROSHRED SECURITY	100142482		SHREDDING Total:	160.00 <b>160.00</b>
185876	1/17/2020	018454	R.C.WEGMAN CONSTRUCTION CO	8	VTP-017027	CONSTRUCTION OF FIRE STATION Total :	599,794.00 <b>599,794.00</b>
185877	1/17/2020	014412	RAINS, SCOTT	011320		REIM.EXP. YAMBO DOG FOOD  Total:	109.98 <b>109.98</b>
185878	1/17/2020	006361	RAY O' HERRON CO INC	2002376-IN 2002377-IN 2002656-IN 2002657-IN		RIOT HELMET/JOSEPH HICKEY RIOT HELMET/AHMAD ALLAN RIOT HELMET/RON FUGGER RIOT HELMET/JOHN SUTKO Total:	147.15 134.00 134.00 134.00 <b>549.15</b>
185879	1/17/2020	012268	REGIONAL TRUCK EQUIPMENT CO	205278		AMBER LIGHT  Total:	113.25 <b>113.25</b>
185880	1/17/2020	006874	ROBINSON ENGINEERING CO. LTD.	19110367		TP THE MAGNUSON SERV THRU 1'  Total:	715.00 <b>715.00</b>

Page:

10

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

	арвани						
Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185881	1/17/2020	006922	RUBINO'S ITALIAN IMPORTS	092		SUB PLATTER,CHIPS,SALAD  Total:	213.08 <b>213.08</b>
185882	1/17/2020	016334	RUSH TRUCK CENTERS	3017907586 3017926302		CLAMP PIPE STACK,CLAMP <b>Total</b> :	40.80 84.64 <b>125.44</b>
185883	1/17/2020	007629	SAM'S CLUB DIRECT	0294 0897 1201 3410445008162 9998		TEA,TBLECVR,BLCH,TPE,WPES,SF COPY PAPER,SUGAR,CREAMER,PL JANITORIAL SUPPLIES **** 8162 MEMBERSHIPS TOTE Total:	248.88 298.85 151.86 485.00 74.94 <b>1,259.53</b>
185884	1/17/2020	013043	SITE DESIGN GROUP, LTD.	7482ph2-30 7698-50 7946-32 7954-24 7955-20 8081-23 8322-16 8323-17 8498-12		LANDSCAPE MANAGEMENT~ 11/24 NATURAL AREAS MAINT 11/24/19-1; MOWING SERV 11/24/19-12/31/19 PANDUIT LEGACY POND SERV 10/2 IRRIGATION MAINT 11/24/19-12/31/1 DOWNTOWN PLANTERS 11/24/19-1 FAIRFIELD GLEN RESTORATION 11 APPLE POND DREDGING & RESTORATION 11 Total:	352.50 1,396.78 860.26 257.50 1,492.50 1,777.50 1,649.84 756.25 5,263.09 13,806.22
185885	1/17/2020	012238	STAPLES BUSINESS ADVANTAGE	3434355813 3434355814 3434355815 3434355816		POS RLLS,HGHLGHTRS,PST-ITS,FI MONITOR STAND 2020 CALENDAR ERASABLE ELECTRONICS DUSTER Total:	545.08 17.99 27.49 9.99 <b>600.55</b>
185886	1/17/2020	007297	SUTTON FORD INC./FLEET SALES	496481CM 496749 497082		CREDIT GLASS ASY MIRROR ASY SEAL Total :	-20.71 58.02 11.61 <b>48.92</b>
185887	1/17/2020	000645	TED'S GREENHOUSE INC	517924		SEPT'19 WATERING SERV HANGIN	5,058.00

Page:

11

vchlist

01/17/2020

9:14:53AM

# Voucher List Village of Tinley Park

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
185887	1/17/2020	000645	TED'S GREENHOUSE INC	(Continued) 518207 518250 518263		OCT'19 WATERING / HANGING BAS REMOVAL OF BASKETS FALL PLANTER INSTALLATIONS Total:	1,553.00 11,830.16 6,769.59 <b>25,210.75</b>
185888	1/17/2020	004400	THE GORMAN GROUP, LTD.	011020		APPRAISAL SERV18050 & 18120 S : Total :	2,500.00 <b>2,500.00</b>
185889	1/17/2020	018264	THE LAKOTA GROUP, INC.	17030.04-14		HARMONY SQUARE 11/1/19-12/31/1 Total :	39,292.45 <b>39,292.45</b>
185890	1/17/2020	018724	THE LOCKER SHOP	S 69027		T-SHIRTS BULK ORDER Total:	2,690.00 <b>2,690.00</b>
185891	1/17/2020	007717	THIRD DISTRICT FIRE CHIEF ASSN	4286		LUNCHEON MTG/KORTUM,DUNN,R <b>Total</b> :	45.00 <b>45.00</b>
185892	1/17/2020	007909	TRI-RIVER POLICE TRAINING REG	4769		CALOMINO,GEIGNER,RADKE,TRINI <b>Total</b> :	200.00 <b>200.00</b>
185893	1/17/2020	008040	UNDERGROUND PIPE & VALVE CO	040355		CURB BOX Total:	408.00 <b>408.00</b>
185894	1/17/2020	010579	UNIVERSITY OF ILLINOIS	UPIN9854		HIMMELMANN,SCHOUWEN/POL TA <b>Total</b> :	1,618.00 <b>1,618.00</b>
185895	1/17/2020	011904	UPS	0000626634020		SHIPPER 626634 Total :	36.93 <b>36.93</b>
185896	1/17/2020	006362	VILLAGE OF OAK LAWN	6881		REG WATER LOAN INTEREST PYN Total:	16,886.77 <b>16,886.77</b>
185897	1/17/2020	008636	ZETTLEMEIER'S BAKERY	5847-4		BAKERY ITEMS Total:	22.10 <b>22.10</b>
185898	1/17/2020	012976	ZYLKA, MATTHEW	011320		PER DIEM: LODGING,MEALS/ILL DF	394.95

# VILLAGE OF TINLEY...

Page | 68

12

vchlist

01/17/2020

9:14:53AM

Voucher List Village of Tinley Park Page:

Bank code: apbank

 Voucher
 Date
 Vendor
 Invoice
 PO #
 Description/Account
 Amount

185898 1/17/2020 012976 012976 ZYLKA, MATTHEW (Continued) **Total: 394.95** 

96 Vouchers for bank code: apbank Bank total: 1,384,065.93

13

Page:

vchlist

01/17/2020

9:14:53AM

# **Voucher List** Village of Tinley Park

Bank code : ipmg

Voucher	Date	Vendor		Invoice	PO #	Description/Account	Amount
2603	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021		PAYEE-ADVANET Total:	435.55 <b>435.55</b>
2604	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021		PAYEE-ADVANET Total:	24.51 <b>24.51</b>
2605	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021		PAYEE-ALIGN NETWORKS INC Total:	302.56 <b>302.56</b>
2606	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-1		PAYEE-ALIGN NETWORKS INC Total:	298.89 <b>298.89</b>
2607	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-2		PAYEE-ALIGN NETWORKS INC Total:	298.89 <b>298.89</b>
2608	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-3		PAYEE-ALIGN NETWORKS INC  Total:	298.89 <b>298.89</b>
2609	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	190912W021-2		PAYEE-TODD SWARTZENTRUBER Total:	685.44 <b>685.44</b>
2610	1/15/2020	018837	INSURANCE PROGRAM MANAGERS GR	1911* 1909*		PAYEE-ALPHA REVIEW CORPORAT  Total:	238.55 <b>238.55</b>
	8 Vouchers	for bank	code: ipmg			Bank total :	2,583.28

104 Vouchers in this report

Total vouchers: 1,386,649.21

# VILLAGE OF TINLEY...

Page | 70

vchlist

01/17/2020

9:14:53AM

Date

Voucher List Village of Tinley Park Page: 14

Bank code: ipmg Voucher Date PO# **Description/Account** Vendor Invoice **Amount** The Tinley Park Village Board having duly met at Village Hall do hereby certify that the following claims or demands against said village were presented and are approved for payment as presented on the above listing. In witness thereof, the Village President and Clerk of the Village of Tinley Park, hereunto set their hands. Village President \_Village Clerk

# THE VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

# **ORDINANCE NO. 2020-O-003**

AN ORDINANCE APPROVING A MAP AMENDMENT TO REZONE CERTAIN REAL PROPERTY FROM A B-4 (OFFICE AND SERVICE BUSINESS) ZONING DISTRICT AND R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICT TO B-1 (NEIGHBORHOOD SHOPPING) ZONING DISTRICT TO ALLOW FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)

JACOB C. VANDENBERG, PRESIDENT KRISTIN A. THIRION, VILLAGE CLERK

> CYNTHIA A. BERG WILLIAM P. BRADY WILLIAM A. BRENNAN DIANE M. GALANTE MICHAEL W. GLOTZ MICHAEL G. MUELLER Board of Trustees

## VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

## **ORDINANCE NO. 2020-O-003**

AN ORDINANCE APPROVING A MAP AMENDMENT TO REZONE CERTAIN REAL PROPERTY FROM A B-4 (OFFICE AND SERVICE BUSINESS) ZONING DISTRICT AND R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICT TO B-1 (NEIGHBORHOOD SHOPPING) ZONING DISTRICT TO ALLOW FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)

WHEREAS, Section 6(a) of Article VII of the 1970 Constitution of the State of Illinois provides that any municipality which has a population of more than 25,000 is a home rule unit, and the Village of Tinley Park, Cook and Will Counties, Illinois, with a population in excess of 25,000 is, therefore, a home rule unit and, pursuant to the provisions of said Section 6(a) of Article VII, may exercise any power and perform any function pertaining to its government and affairs, including, but not limited to, the power to tax and to incur debt; and

WHEREAS, a petition for granting a rezoning of certain real property from the B-4 (Office and Service Business) zoning district and R-1 (Single-Family Residential) to B-1 (Neighborhood Shopping) ("Rezoning") located at 17100 & 17110 Harlem Avenue, Tinley Park, Illinois 60477 ("Subject Property") to construct a gas station and convenience store has been filed by Vequity, LLC ("Petitioner") with the Village Clerk of this Village and has been referred to the Plan Commission of the Village and has been processed in accordance with the Tinley Park Zoning Ordinance; and

**WHEREAS**, said Plan Commission held a public hearing on the question of whether the Rezoning should be granted on January 2, 2020 at the Village Hall of this Village, at which time all persons present were afforded an opportunity to be heard; and

WHEREAS, public notice in the form required by law was given of said public hearing by publication not more than thirty (30) days nor less than fifteen (15) days prior to said public hearing in the Daily Southtown, a newspaper of general circulation within the Village of Tinley Park; and

WHEREAS, the Plan Commission vote 5-0 and has filed its report and findings and recommendations that the proposed Rezoning be approved with this President and Board of Trustees, and this Board of Trustees has duly considered said report of findings and recommendations; and

**WHEREAS**, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interest of the Village of Tinley Park and its residents to approve said Rezoning; and

**NOW, THEREFORE, BE IT ORDAINED** BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS, STATE AS FOLLOWS:

**SECTION 1**: The foregoing recitals shall be and are hereby incorporated as findings of facts as if said recitals were fully set forth herein.

**SECTION 2**: That the report of findings and recommendations of the Plan Commission are herein incorporated by reference as the findings of this President and the Board of Trustees, as complete as if fully set forth herein at length. This Board finds that the Petitioner has provided evidence establishing that they have met the standards for granting a Rezoning as set forth below and the proposed granting of the Rezoning as set forth herein is in the public good and in the best interest of the Village and its residents and is consistent with and fosters the purpose and spirit of the Tinley Park Zoning Ordinance.

1. The existing uses and zoning of nearby property;

The area is in a transition from residential to commercial uses. The surrounding areas and other corners of the intersection are all commercial zoning districts (B-4 and B-3). The area south of the subject property has similar infill/redevelopment properties that have been rezoned to similar low-intensity commercial districts (B-1 and B-4) upon their redevelopment.

2. The extent to which property values are diminished by the particular zoning;

The area along Harlem Avenue transitioning from residential to commercial uses and is indicated as commercial/office in the Village's Comprehensive Plan. The development of the vacant properties will not diminish property values.

3. The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;

No negative effects on property values are expected. The project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue and convenience for residents and visitors.

4. The relative gain to the public as compared to the hardship imposed on the individual property owner;

No hardship is expected from neighboring properties due to the landscape and fence buffering provided. Lighting, dumpster locations, and overall site design was designed to avoid any issues with the neighboring residential properties. The project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue and convenience for residents and visitors.

5. The suitability of the property for the zoned purpose;

The proposed use as a convenience store and gas station is suitable for the subject property due to the availability of high traffic volumes and available access points.

6. The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;

The existing R-1 zoning house has remained vacant for 4-5 years and is not expected to be suitable for residential use. The B-4 zoned parcel had a vacant office building on it from 2014-2016 and has been vacant since the building's demolition in 2016.

7. The public need for the proposed use; and

There is a demand for additional automotive service (gas) stations and convenience stores in the area. Competition is limited at the two nearest gas stations (Shell and Speedway).

8. The thoroughness with which the municipality has planned and zoned its land use.

The property is shown as a Commercial/Office use in the Comprehensive Plan. The rezoning as a B-1, Neighborhood Shopping zoning district limits the ability for non-desirable uses to be located adjacent to residential properties.

**SECTION 3**: The Rezoning as set forth herein below shall be applicable to the following described property:

**LEGAL DESCRIPTION:** LOTS 1 AND 2 IN BLOCK 1 IN ARTHUR T. MCINTOSH AND COMPANY'S SPUTHLANDS IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL IDENTIFICATION NUMBER: 27-25-403-013-0000 and 27-25-403-014-0000

**COMMONLY KNOWN AS:** 17100 – 17110 Harlem Avenue, Tinley Park, Illinois

**SECTION 4:** That a Rezoning of the Subject Property from the B-4 (Office and Service Business) zoning district and R-1 (Single-Family Residential) to B-1 (Neighborhood Shopping) ("Rezoning") to permit the construction a gas station and convenience store is hereby granted to the Petitioner.

**SECTION 5**: Any policy, resolution, or ordinance of the Village that conflicts with the provisions of this Ordinance shall be and is hereby repealed to the extent of such conflict.

**SECTION 6:** That this Ordinance shall be in full force and effect from and after its adoption and approval.

**SECTION 7:** That the Village Clerk is hereby ordered and directed to publish this Ordinance in pamphlet form, and this Ordinance shall be in full force and effect from and after its passage, approval, and publication as required by law.

PASSED THIS 21st day of January, 2020.	
AYES:	
NAYS:	
ABSENT:	
APPROVED THIS 21st day of January, 2020.	
A TOTAL OFFI	VILLAGE PRESIDENT
ATTEST:	
VILLAGE CLERK	

STATE OF ILLINOIS )
COUNTY OF COOK ) SS
COUNTY OF WILL )

## **CERTIFICATE**

I, KRISTIN A. THIRION, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 2020-O-003 "AN ORDINANCE APPROVING A MAP AMENDMENT TO REZONE CERTAIN REAL PROPERTY FROM A B-4 (OFFICE AND SERVICE BUSINESS) ZONING DISTRICT AND R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICT TO B-1 (NEIGHBORHOOD SHOPPING) ZONING DISTRICT TO ALLOW FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)," which was adopted by the President and Board of Trustees of the Village of Tinley Park on January 21, 2020.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 21st day of January, 2020.

KRISTIN A. THIRION, VILLAGE CLERK

TO: VILLAGE OF TINLEY PARK PRESIDENT AND BOARD OF TRUSTEES

FROM: VILLAGE OF TINLEY PARK PLAN COMMISSION

SUBJECT: MINUTES OF THE DECEMBER 19, 2019 REGULAR MEETING

Item #2 PUBLIC HEARING: 7-ELEVEN GAS STATION – 171st STREET & HARLEM

**AVENUE** 

Consider a request to recommend that the Village Board consider granting Vequity, LLC (Contract Purchaser) a map amendment to rezone the subject properties from B-4 (Office and Service Business) and R-1 (Single-Family Residential) to a B-1 (Neighborhood Shopping) zoning district. Additionally, the Petitioner is requesting a special use for an automobile service (gas) station with a convenience

store and a variation from the Zoning Ordinance to permit a reduced ground sign setback. The requests will permit a 7-Eleven gas station and convenience store to be constructed at the properties located at 17100 - 17110 Harlem Avenue. Site Plan and Final Plat approval will also be considered at the meeting.

Present were the following:

Plan Commissioners: Garrett Gray, Chairman

Stephen Vick Tim Stanton Lucas Engel

MaryAnn Aitchison

Absent Plan Commissioner(s): Eduardo Mani

Angela Gatto James Gaskill Curt Fielder

Guests: George Arnold, Attorney

Chris Ilekis, Petitioner

Dan Aykroyd, Sr. Real Estate Rep. – 7-Eleven

Ivan Nockov, Developer William Perry, Engineer

Javier Millan, KLOA Traffic Consultant

A Motion was made by COMMISSIONER STANTON, seconded by COMMISSIONER ENGEL to open

the Public

Hearing for 7-ELEVEN GAS STATION – 171st & HARLEM AVENUE. The Motion was approved by voice call.

CHAIRMAN GRAY declared the Motion approved.

CHAIRMAN GRAY noted that Village Staff provided confirmation that appropriate notice regarding the Public Hearing was published in the local newspaper in accordance with State law and Village requirements.

CHAIRMAN GRAY requested anyone present in the audience who wished to give testimony, comment, engage in cross-examination or ask questions during the Hearing stand and be sworn in.

Daniel Ritter, Senior Planner gave a presentation as noted in the Staff Report. The Petitioner is here with his design team; they will be available for questions. The site will be a 7- Eleven convenience store and a gas station with 10 fueling stations. The site is on the southwest corner of 171st and Harlem Avenue. The subject property consists of two lots. The lot furthest north is vacant and is currently zoned B-4 (Office and Service Business). The site was previously home to an office building that was demolished in 2016. The south portion of the subject property is zoned R-1 (Single-Family Residential) with a vacant single-family home and detached garage located on the property, both slated for demolition. There are two vacant single-family home lots zoned R-1 to the south of the subject properties as well, and are not part of this development. The developer has agreed with the property owner (who is the owner of all four lots) and staff to demolish those two homes as well as part of the 7-Eleven project and the lots. Staff recommended the demolition be a condition of the approval for the rezoning and special use requests as a substitution for completing a concept plan approval for the remaining lots.

The general history of that westerm block along Harlem Avenue is that it was developed as R-1 single family homes back to the 1950's and 1960's. Over time it has converted to commercial uses starting in the 1980s due to the high traffic volumes along Harlem Avenue. As they have redeveloped it has either been B-4 (Service and Office) or B-1 (Neighborhood Shopping). To the north of the subject property is the Tinley Park Post Office, and to the west is a bank both zoned B-4 (Office and Service Business). To the northeast is a multi-tenant office building and car wash zoned B-3 (General Business). Directly to the east of the property is a Shell gas station/car wash, Jewel-Osco, and Tinley Park Commons Shopping Center zoned B-3 (General Business). To the west is single-family residential zoned R-1, which was a strong consideration in the site design and layout.

Automobile service (gas) stations are a special use in all commercial zoning districts, with the exception of B-5 (Automotive Service). The proposed gas station site is .961 acres and includes a 3,511 sq. ft. convenience store building, vehicle fueling area/canopy, vehicle parking, walkways, exterior storage areas, landscaping, and a dumpster enclosure. There will be no truck/diesel fueling available at this site. Access to the site will primarily be through two curb cuts, one on Harlem Avenue and one on 171st Street. Additionally, there will be cross-access for vehicles to the west through the existing First Merchants Bank and a future cross-access to the south. The cross-access through the bank will only be used for personal vehicles; truck access will be prohibited. Fueling trucks will primarily access the site from 171st Street and exit southbound onto Harlem Avenue.

The access points on both Harlem Avenue and 171st Street will be limited to right-in/right-out turns. The median at Harlem Avenue is likely to make any illegal turns unlikely at that location. The 171st Street access includes limited access and a raised island to discourage illegal or dangerous turning movements. The geometrics of the access has been altered slightly to allow for fuel truck and fire engine access. Drive aisles will meet the 26 foot width minimum with the exception of one on the north of the property that connects to the existing bank cross-access. 24 feet is standard in many situations, including in the Legacy District, and staff has no concerns with matching the existing bank aisle width to the west. There is a Variation to reduce a drive aisle to 24 feet. The Village code is 26 feet, typically for extra width in case there are multiple trucks. 24 feet is typical for most communities. This site is tight and they have requested the reduction. Staff and Fire have no concerns.

The parking and traffic were a primary concern staff and the developer has been reviewing and revising the plans to best address those concerns. The intersection can be very busy and has a history of traffic issues. There was originally a full access on 171st Street. Staff did not feel this worked and pushed for the right-in/right-out with raised curbing to prevent vehicles from making turns they should not be and that could

create traffic issues on 171st Street. Staff feels this plan will work with Cook County Dept. of Transportation requirements and the Village Engineer.

A Gas Station and convience store is not a specific use listed in the Zoning Ordiances parking requirements. With the 3,511 sq. ft. proposed convenience store would require 23 parking spaces if analyzed under the "retail store" requirements. The proposed site plan provides 17 total spaces based on the similar retail requirements. Due to the unique nature of a gas station where some of the retail users may be stationed at the pumps, it yields the potential for 10 additional parking spaces. Customers are usually on the site for short very periods as opposed to typical retail stores with longer shopping periods. This results in high turnover and thereby lowering the demand for parking stalls. Staff believes that the parking supply is adequate on the proposed site.

The Plan Commission did not have concerns about the parking supply on the site due to the experiences with other locations and the expected quick turnover of customers. The Commission did request a review of the traffic analysis findings by the Petitioners' traffic consultant (KLOA). There are some deficiencies in the landscaping. The Village's Landscape Architect

has reviewed the plan and finds it to be in general conformance with the Village's Landscape Ordinance with a few exceptions due to the site's constraints. The Petitioner has indicated that they have worked to meet the landscape requirements to the greatest extent possible and focused their available bufferyard width and landscaping to adequately buffer views from the residential properties to the west. The deficiencies are outlined in the table below.

**Table A**Please note the following abbreviations:  $CT = Canopy\ Tree,\ US = Understory\ Tree,\ SH = Shrub,\ T = Tree.$ 

		BUF	FERYARD F	REQUIREMENTS		
Bufferyard Location	Required Width	Proposed Width	Length	Required Plantings	Proposed Plantings	Deficit
North ("C"	10'	10'	117'	6 CT 3 US	4 CT 2 US	-2 CT -
Bufferyard)				24 SH	24 SH	+9 SH
East				8 CT	4 CT	-4 CT
("C"	10'	10'	149'	3 US	3 US	-
Bufferyard)				30 SH	30 SH	-
G d				4 CT	4 CT	0
South ("B"	20'	20'	154'	1 US	3 US	+2 US
Bufferyard)				19 SH	8 SH	-11 SH
<b></b>				3 CT	3 CT	-
West (top) ("B"	10'	10'	83'	1 US	1 US	-
Bufferyard)				14 SH	12 SH	+1 SH

				6 CT	5 CT	-1 CT
West (bottom) ("D"	30'	30'	82'	3 US	1 US	-2 US
Bufferyard)				23 SH	23 SH	-

PARKWAY STANDARDS								
Location	Requirement	Required Trees	Proposed Trees	Deficit	Comments			
Parkway	1 tree per 25 lineal ft.	9	0	-9	Adequate room does not exist. CT in bufferyards could be further upsized to compensate for this deficiency.			

PARKING LOT LANDSCAPING STANDARDS						
Location	Requirement Provided Deficit		Deficit	Comments		
Parking Lot	15% of parking lot area to be landscaped or 3,130 sq. ft.	1,425 sq. ft.	-1,705 sq. ft.	20,870 sq. ft. of parking lot shown on landscape plan		
Parking Lot	Screening of adjacent properties and streets.	Continuous screening not provided.	~40 lineal ft.	Parking in northwest corner of site not screened along drive aisle – this could also help with Parking Lot deficit outlined above		

The Village's consultant supports the bufferyard and parkway requests with a couple of recommendations/changes listed below. Staff recommends these few revisions be made to reduce the landscape waivers were possible.

- 1. They have only upsized shade trees to a combination of 3" and 4" cal. It is recommended that all CT trees be increased to a minimum of 4.5" cal.
- 2. Add some shrubs along the north drive aisle in the NW corner of the site to help offset the deficiencies.
- 3. Revise the west bufferyard design to add two additional shrubs.

A fence is proposed running between the site and the parcels to the west. The fence is proposed to match the adjacent bank's fence (beige PVC fence). Plans currently show a six foot high fence. The bank's existing fence is eight foot high. Eight foot high fences are recommended for the separation of commercial and residential uses.

The north and west bufferyards were revised to better meet the Landscape Code's requirements. The revised waivers are listed in the table above. The Petitioner agreed to utilize a minimum tree caliber of 4-inches at installation to help offset some of the deficiencies and ensure a buffer is established quickly. They also agreed to revise the fence height to 8 feet and to match the existing bank. These two changes (tree caliber and fencing) were made to plan details but there are also some contradicting notes left on the plans due to the quick resubmittal timeframe. To clarify, the requirements were added as recommended conditions of Site Plan Approval and will be revised prior to permitting. The Plan Commission did not

have concerns at the workshop in regards to the interior landscaping and parkway tree waivers due to the limited space on the site and auto-oriented use. The proposed landscaping is expected to meet or exceed the neighboring commercial properties.

The design of the convenience store building and gas station canopy utilizes high-quality materials, including face brick (76% of the exterior, excluding glazing) with fiber cement and metal cornice architectural treatments. All mechanical equipment on the rooftop will be screened by the parapet. The face brick will be a beige/grey color and the fiber cement accents will be dark brown/espresso in color. The proposed structure will have metal architectural canopies on the front façade over windows and doors. The fueling canopy and dumpster enclosure are also proposed to match the building's materials, colors, and style.

Staff recommended a more residential roof for the convenience store building, utilizing more residential elements such as shingles and peaks. A peak was added to the front entrance and caps to the architectural treatments to give a more traditional look to the building. The architectural design is prototypical of 7-Eleven's new branding initiative. The Plan Commission did not have concerns about the proposed building or canopy designs and preferred the peaked roof element at the entrance.

The Petitioner is requesting a Variation for a 5 foot sign setback. Due to the tight space, a ground sign size and location were presented. The proposed location will require a five foot setback Variation to allow the sign to be setback 5 feet from the property line instead of 10 feet. The Petitioner has decided to leave the final proposal up to the 7- Eleven operator and it will meet the zoning code. Staff is comfortable with the proposed 5 foot setback Variation.

The Petitioner has provided a Photometric Plan that provides lighting via 8 LED light poles, 12 LED canopy fixtures, and 6 LED wall mount fixtures throughout the site. The light spillage will be less than one foot candle at the roadway and zero at the south and western property lines, which are adjacent to the residential uses. All light fixtures are full cut-off and downcast to prevent glare on adjacent properties and roadways. Particular thought was put into the light placement and height to avoid their visibility from the residential properties to the west. Lighting appeared to be placed approximately to avoid off-site light spillage and glare. There is also an 8 foot fence that matches the bank fence that will block light to the residents.

Due to the rezoning of the lots to a B-1 zoning district, three lot bulk variations are required for the following:

- 1. Lot size of .961 acres instead of the required min. of 4 acres.
- 2. Lot width of 186.53 feet instead of the required min. of 600 feet.
- 3. Lot depth of 198.52 feet instead of the required min. of 250 feet.

An automobile service (gas) station is a special use in B-1, B-2, and B-3 commercial zoning districts. Gas stations are a special use in all commercial zoning districts except B-5. Gas stations are generally in high traffic areas and the sites require a unique site design that accounts for safe/efficient access, proper circulation, sufficient parking, and adequate light levels.

The proposed Plat of Subdivision will consolidate two existing lots (17100 and 17110 Harlem Avenue) resulting in a single lot that is .961 acres in size. Existing drainage and utility easements will remain on the property. Easements for the public sidewalk and cross-access to east and south have been included in the Final Plat of Subdivision. However, the public sidewalk easement need to be extended across the north property line. The Plat of Subdivision will need to be revised to add a sidewalk easement covering the full length of the sidewalk along the northern property line. The Final Plat of Subdivision was revised with the appropriate public sidewalk easements in place. Staff has no further concerns.

CHAIRMAN GRAY asked for comments from the Commissioners.

There were none.

CHAIRMAN GRAY asked the Petitioner to speak.

George Arnold, Attorney for the Petitioner thanked staff for a thorough presentation. He introduced his project team and noted they are available for any questions. They would have their traffic consultant give an overview of the existing and proposed traffic situation.

Javier Millan, KLOA Traffic Consultant noted the development will be served by two right-in/right-outs, one on Harlem Avenue and the other on 171st Street. The one on 171st Street will be constructed with a raised triangular island to enforce the turn restrictions. It will also be enhanced with larger radius to accept the tanker trucks. In addition to the access drives there will be additional cross-access connectivity to the west with the First Merchants Bank. The Bank has a full access on 171st Street and they also have a right-in/right-out access on Oconto Drive. This will ensure efficient flexibility with access. There will also be cross-access to the south when that land is developed in the future.

Also in the traffic study he observed the traffic in the area. 171st Street during the peak traffic time backs up quite a bit travelling east bound. The reason for the backup is that Harlem Avenue gets the majority of the green time with three times the amount of traffic than 171st Street. More often than not, the que/backup clears or gets signifigantly reduced and allows people to get out. Most of the trips will be from pass-by traffic. They are already on the road and just looking for a convient gas station. It is our professional opinion that the traffic will be dispersed in an efficient manner. Both intersections, Harlem Avenue and 171st Street will operate in an acceptable level of service. The county and the state have preliminarily reviewed the site plan and are in agreement with an acceptable level of service. In conclusion, the proposed development of the gas station is only proposed to increase traffic 1-2%. This is so minimal that it will not have a large impact.

CHAIRMAN GRAY agreed with the benefit of cross-access to the other sites to the west and south. What does 1-2% equate to in terms of vehicles? Mr. Millan replied during the peak hours there will only be approximately 15 vehicles per hour.

CHAIRMAN GRAY inquired about the curb cuts on Harlem Avenue. Mr. Ritter replied that final details would be decided and permitted by IDOT. At this point IDOT is okay with this and the Village does not have signifigant concerns.

Mr. Ritter noted that Mr. Ilekis was proactive and met with the neighbors to show the proposal and receive feedback. The car wash was removed from the plan to avoid neighbor concerns about noise and the proximity to the lot line. The adjacent residential was one of the biggest concerns taken into account by the developer in regards to the design of lighting and landscaping.

COMMISSIONER VICK inquired about adding trees in the back on the west side of the property. Mr. Ritter replied this has been taken care of along the west property line.

CHAIRMAN GRAY asked for comments from the public. There were none.

A Motion was made by COMMISSIONER ENGEL, seconded by COMMISSIONER VICK, to close the Public Hearing for 7-ELEVEN GAS STATION – 171st & HARLEM AVENUE. The Motion was approved

by voice call. CHAIRMAN GRAY declared the Motion approved.

Mr. Ritter reviewed the Standards for rezoning:

- a. The existing uses and zoning of nearby property;
  - The area is in a transition from residential to commercial uses. The surrounding areas and other corners of the intersection are all commercial zoning districts (B-4 and B-3). The area south of the subject property has similar infill/redevelopment properties that have been rezoned to similar low-intensity commercial districts (B-1 and B-4) upon their redevelopment.
- b. The extent to which property values are diminished by the particular zoning;
  - The area along Harlem Avenue transitioning from residential to commercial uses and is indicated as commercial/office in the Village's Comprehensive Plan. The development of the vacant properties will not diminish property values.
- c. The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;
  - No negative effects on property values are expected. The project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue and convenience for residents and visitors.
- d. The relative gain to the public as compared to the hardship imposed on the individual property owner;
  - No hardship is expected from neighboring properties due to the landscape and fence buffering provided. Lighting, dumpster locations, and overall site design was designed to avoid any issues with the neighboring residential properties. The project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue and convenience for residents and visitors.
- e. The suitability of the property for the zoned purpose;
  - The proposed use as a convenience store and gas station is suitable for the subject property due to the availability of high traffic volumes and available access points.
- f. The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;
  - The existing R-1 zoning house has remained vacant for 4-5 years and is not expected to be suitable for residential use. The B-4 zoned parcel had a vacant office building on it from 2014-2016 and has been vacant since the building's demolition in 2016.
- g. The public need for the proposed use; and
  - There is a demand for additional automotive service (gas) stations and convenience stores in the area. Competition is limited at the two nearest gas stations (Shell and Speedway).
- h. The thoroughness with which the municipality has planned and zoned its land use.

• The property is shown as a Commercial/Office use in the Comprehensive Plan. The rezoning as a B-1, Neighborhood Shopping zoning district limits the ability for non-desirable uses to be located adjacent to residential properties.

## Mr. Ritter reviewed the Standerds for Special Use:

- a. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;
  - The Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare because the proposed project will encompass the development of an automobile service (gas) station and convenience store that will service for visitors and residents of the community. The project will be constructed meeting current Village building codes and is among the highest and best uses of a parcel at a heavily traveled intersection.
- b. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;
  - The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood because the proposed project will develop land that is currently vacant and provide services for visitors and residents of the community. The site will be well-landscaped and will have an eight-foot fence to buffer the property from the residential homes to the west. The building will be constructed with quality materials. This proposed use is similar and compatible with existing nearby uses along Harlem Avenue.
- c. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;
  - The Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district because the majority of the property within this area has already been developed. Landscape buffers have been supplied to the west and cross-access has been supplied for the vacant lots to the south.
- d. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;
  - The proposed plans provide evidence of existing utilities, roads, and drainage facilities and any necessary modifications to be accommodated on the 7-Eleven site. Drainage has been accounted for on the site and utilizes the existing storm sewer system. All on-site and accepted existing off-site drainage has been accounted for within the plans.
- e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and
  - The proposed plans include site access by utilizing two curb cuts on Harlem Avenue and 171st Street that allow for ingress/egress to the site and efficient site circulation. Crossaccess for passenger vehicles is also provided by a cross-access easement to the east through the neighboring bank property. Cross-access is also supplied to the vacant lots to the south for possible future cross-access as well. The site incorporates proposed public and private walkways for safe pedestrian travel to and from the site.

- f. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance.
  - The Special Use conforms to all other applicable regulations of the Zoning Ordinance and Village regulations except for certain Variations applied herein related to the redevelopment of an existing infill site. These Variations are consistent with other properties within along Harlem Avenue and the intent of the regulations are met where possible.
- g. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.
  - The proposed 7-Eleven project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue.

## Mr. Ritter reviewed the Standards for Variation:

- 1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located.
  - The property is an infill site with limited ability to expand its size, dimensions, and setbacks. The overall area on the west side of Harlem Avenue will eventually meet the intent of the Zoning Code's minimum lot requirements upon its full redevelopment. The Variations allow the fairly small and limited sized lot to be reasonably developed with a commercial use.
- 2. The plight of the owner is due to unique circumstances.
  - The small properties offer a challenging situation for redevelopment as they were originally residential lots. Residential uses on the lots are no longer preferred or marketable along the heavily traveled Harlem Avenue commercial corridor.
- 3. The Variation, if granted, will not alter the essential character of the locality.
  - The lot Variations will be similar to other properties that have redeveloped along Harlem Avenue in regards to the lot size and sign setbacks. The drive aisle width is a standard width in many other municipalities and is not expected to be noticeable.
- 4. Additionally, the Plan Commission shall also, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the Petitioner have been established by the evidence:
  - a. The particular physical surroundings, shape, or topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out;

- b. The conditions upon which the petition for a Variation is based would not be applicable, generally, to other property within the same zoning classification;
- c. The purpose of the Variation is not based exclusively upon a desire to make more money out of the property;
- d. The alleged difficulty or hardship has not been created by the owner of the property, or by a previous owner;
- e. The granting of the Variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; and
- f. The proposed Variation will not impair an adequate supply of light and air to an adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety, or substantially diminish or impair property values within the neighborhood.

## CHAIRMAN GRAY asked for Motions:

# **Motion 1 (Site Plan):**

A Motion was made by COMMISSIONER VICK, seconded by COMMISSIONER AITCHISON to grant the Petitioner, Vequity LLC, Site Plan Approval to construct an automobile service (gas) station and a 3,511 sq. ft. 7-Eleven convenience store building at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District, in accordance with the plans submitted and listed herein and subject to the following conditions:

- 1. The two vacant single-family homes to the south of the subject property (17118 & 17130 Harlem Avenue) owned by the same property owner shall be demolished as proposed by the Petitioner.
- 2. The proposed fence shall be a minimum of 8 feet in height and match the existing fence on the neighboring bank property (7231 171st Street) in height, color, and style.
- 3. All Canopy Trees on the site shall be installed at a minimum of 4" trunk caliper.
- 4. Site Plan Approval is subject to approval of the Rezoning, Special Use, and Variations by the Village Board.
- 5. Site Plan Approval is subject to final engineering plan review and approval."

AYES: STANTON, ENGEL, AITCHISON, VICK & CHAIRMAN GRAY

NAYS: NONE

CHAIRMAN GRAY declared the Motion unanimously approved by Roll Call

## **Motion 2 (Rezoning):**

A Motion was made by COMMISSIONER STANTON, seconded by COMMISSIONER ENGEL to recommend that the Village Board grant the Petitioner, Vequity LLC, a rezoning of the properties located at 17100 and 17110 Harlem Avenue from their existing B-4 (Office and Service Business) and R-1 (Single-

Family Residential) zoning districts to the B-1 (Neighborhood Shopping) zoning district and adopt the Findings of Fact submitted by the applicant and as proposed by Village Staff in the Staff Report."

AYES: STANTON, ENGEL, AITCHISON, VICK & CHAIRMAN GRAY

NAYS: NONE

CHAIRMAN GRAY declared the Motion unanimously approved by Roll Call

# **Motion 3 (Variations):**

A motion was made by COMMISSIONER AITCHISON, seconded by COMMISSIONER STANTON to recommend that the Village Board grant the following Variations to the Petitioner, Vequity LLC, at the property located at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District, in accordance with the plans submitted and listed herein and adopt Findings of Fact as proposed by Village Staff in the Staff Report.

- 1. A five foot Variation from Section IX-D-2-c. to permit a freestanding sign to be located five feet from the property instead of the required minimum of ten feet.
- 2. A two foot Variation from Section VIII-C-Table 2 (Parking Lot Dimension Guidelines) to permit a 24 foot wide two-way drive aisle instead of the required 26 foot minimum.
- 3. A 3.039 sq. ft. Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot size of .961 acres, instead of the required minimum of 4 acres.
- 4. A 413.47 foot Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot width of 186.53 feet instead of the required minimum of 600 feet.
- 5. A 51.48 foot Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot depth of 198.52 feet instead of the required minimum of 250 feet.

AYES: STANTON, ENGEL, AITCHISON, VICK & CHAIRMAN GRAY

NAYS: NONE

CHAIRMAN GRAY declared the Motion unanimously approved by Roll Call

## **Motion 4 (Special Use):**

A Motion was made by COMMISSIONER ENGEL, seconded by COMMISSIONER AITCHISON to recommend that the Village Board grant a Special Use Permit to the Petitioner, Vequity LLC, to permit an automobile service (gas) station and a 3,511 sq. ft. convenience store on the property located at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District, in accordance with the plans submitted and listed herein and adopt Findings of Fact as proposed by Village Staff in the Staff Report.

AYES: STANTON, ENGEL, AITCHISON, VICK & CHAIRMAN GRAY

NAYS: NONE

CHAIRMAN GRAY declared the Motion unanimously approved by Roll Call

## **Motion 5 (Final Plat):**

A Motion was made by COMMISSIONER ENGEL, seconded by COMMISSIONER STANTON to recommend that the Village Board grant approval to the Petitioner, Vequity LLC, Final Plat of

Subdivision Approval for Southlands First Consolidation in accordance with the Final Plat submitted and listed herein, subject to the following condition:

1. The Final Plat approval is subject to Final Engineering Plan approval by the Village Engineer.

AYES: STANTON, ENGEL, AITCHISON, VICK & CHAIRMAN GRAY

NAYS: NONE

CHAIRMAN GRAY declared the Motion unanimously approved by Roll Call



# MINUTES OF THE REGULAR MEETING OF THE PLAN COMMISSION, VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS

**December 19, 2019** 

The Regular Meeting of the Plan Commission was held in the Council Chambers of Village Hall on December 19, 2019 at 7:00 p.m.

## PLEDGE OF ALLEGIANCE

## ROLL CALL

Plan Commissioners: Curt Fielder, Acting Chairman

James Gaskill Tim Stanton Angela Gatto Stephen Vick

Absent Plan Commissioner(s): Garrett Gray

Eduardo Mani Lucas Engel Mary Aitchison

Village Officials and Staff: Kimberly Clarke, Community Development Director

Dan Ritter, Senior Planner

Barbara Bennett, Commission Secretary

## **CALL TO ORDER**

PLAN COMMISSION ACTING CHAIRMAN FIELDER called to order the Regular Meeting of the Plan Commission for December 19, 2019 at 7:00 p.m.

## **COMMUNICATIONS**

None

## **APPROVAL OF MINUTES**

Minutes of the November 21, 2019 Regular Meeting of the Plan Commission were presented for approval. A Motion was made by COMMISSIONER STANTON, seconded by COMMISSIONER GASKILL to approve the minutes as presented. ACTING CHAIRMAN FIELDER declared the Motion approved by voice call.

TO: VILLAGE OF TINLEY PARK PRESIDENT AND BOARD OF TRUSTEES

FROM: VILLAGE OF TINLEY PARK PLAN COMMISSION

SUBJECT: MINUTES OF THE DECEMBER 19, 2019 REGULAR MEETING

Item #1 WORKSHOP: 7-ELEVEN GAS STATION – 171st & HARLEM AVENUE

Consider a request to recommend that the Village Board consider granting Vequity, LLC (Contract Purchaser) a map amendment to rezone the subject properties from B-4 (Office and Service Business) and R-1 (Single-Family Residential) to a B-1 (Neighborhood Shopping) zoning district. Additionally, the Petitioner is requesting a special use for an automobile service (gas) station with a convenience store and a variation from the Zoning Ordinance to permit a reduced ground sign setback. The requests will permit a 7-Eleven gas station and convenience store to be constructed at the properties located at 17100 - 17110 Harlem Avenue. Site Plan and Final Plat approval will also be considered at the meeting.

Present were the following:

Plan Commissioners: Curt Fielder, Acting Chairman

James Gaskill Stephen Vick Tim Stanton Angela Gatto

Absent Plan Commissioner(s): Garrett Gray

Eduardo Mani Lucas Engel

MaryAnn Aitchison

Guests: David Sosin, Attorney

Dan Aykroyd, Sr. Real Estate Rep. – 7-Eleven

Ivan Nockov, Developer William Perry, Engineer

Daniel Ritter, Senior Planner gave a presentation as noted in the Staff Report. The Petitioner is here with his design team; they will give a short presentation of their project and respond to any open items. The site will be a 7- Eleven convenience store and a gas station with 10 fueling stations. The site is on the southwest corner of 171<sup>st</sup> and Harlem Avenue. The subject property consists of two lots. The lot furthest north is vacant and is currently zoned B-4 (Office and Service Business). The site was previously home to an office building that was demolished in 2016. The south portion of the subject property is zoned R-1 (Single-Family Residential) with a vacant single-family home and detached garage located on the property, both slated for demolition. There are two vacant single-family home lots zoned R-1 to the south of the subject properties as well, and are not part of this development. The developer has agreed with the property owner (who is the owner of all four lots) and staff to demolish those two homes as well as part of the 7-Eleven project and the lots. Staff recommended the demolition be a condition of the approval for the rezoning and special use requests as a substitution for completing a concept plan approval for the remaining lots.

To the north of the subject property is the Tinley Park Post Office, and to the west is a bank. Both are zoned B-4 (Office and Service. To the northeast is a multi-tenant office building and car wash zoned B-3 General Business). Directly to the

east of the property is a Shell gas station/car wash and the Jewel-Osco and Tinley Park Commons Shopping Center zoned B-3 (General Business). To the west is single-family residential.

Automobile service (gas) stations are a special use in all commercial zoning districts, with the exception of B-5 (Automotive Service). The proposed gas station site includes a 3,511 sq. ft. convenience store building, vehicle fueling area/canopy, vehicle parking, walkways, exterior storage areas, landscaping, and a dumpster enclosure. There will be no truck/diesel fueling available at this site. Access to the site will primarily be through two curb cuts, one on Harlem Avenue and one on 171st Street. Additionally, there will be cross-access for vehicles to the west through the existing First Merchants Bank and a future cross-access to the south. The cross-access through the bank will only be used for personal vehicles; truck access will be prohibited. Fueling trucks will primarily access the site from 171st Street and exit southbound onto Harlem Avenue.

The access points on both Harlem Avenue and 171st Street will be limited to right-in/right-out turns. The median at Harlem Avenue is likely to make any illegal turns unlikely at that location. The 171st Street Access includes limited access and a raised island to discourage illegal or dangerous turning movements. The geometrics of the access has been altered slightly to allow for fuel truck and fire engine access. Drive aisles will meet the 26 foot width minimum with the exception of one on the north of the property that connects to the existing bank cross-access. 24 feet is standard in many situations and staff has no concerns with matching the existing bank aisle width.

The parking and traffic were a primary concern staff and the developer has been reviewing and revising the plans to best address those concerns. The intersection can be very busy and has a history of traffic issues. There was originally a full access on 171<sup>st</sup> Street. Staff did not feel this worked and pushed for the right-in/right-out with raised curbing to prevent vehicles to make turns they should not do and could create traffic issues on 171<sup>st</sup> Street. Staff feels this plan will work with Cook County Dept. of Transportation and the Village Engineer. This should control the access in and out. The Petitioner's transportation expert (KLOA) will be available at the Public Hearing to discuss their report and answer any other specific questions.

With the 3,511 sq. ft. proposed convenience store requires 23 parking spaces per the Zoning Ordinance requirements. The proposed site plan provides 17 total spaces based on the similar retail requirements. Due to the unique nature of a gas station where some of the retail users may be stationed at the pumps yields the potential for 10 additional parking spaces. Customers are usually on the site for short periods, resulting in high turnover and thereby lowering the demand for parking. Staff believes that the parking supply is adequate on the proposed site.

COMMISSIONER GASKILL inquired about the parking. He was not sure there is enough parking at this location. Mr. Sosin, Attorney replied that per the Petitioner's experience with his other locations, he is confident that this parking is adequate.

There are some deficiencies in the landscaping. The Village's Landscape Architect has reviewed the plan and finds it to be in general conformance with the Village's Landscape Ordinance with a few exceptions due to the site's constraints. The Petitioner has indicated that they have worked to meet the landscape requirements to the greatest extent possible and focused their available bufferyard width and landscaping to adequately buffer views from the residential properties to the west. The deficiencies are outlined in the table below.

**Table A**Please note the following abbreviations: CT = Canopy Tree, US = Understory Tree, SH = Shrub, T = Tree.

BUFFERYARD REQUIREMENTS							
Bufferyard Location	Required Width	Proposed Width	Length	Required Plantings	Proposed Plantings	Deficit	

North ("C" Bufferyard)	10′	10′	117′	6 CT 3 US 24 SH	4 CT 2 US 24 SH	-2 CT -1 US -
East ("C" Bufferyard)	10′	10′	149′	8 CT 3 US 30 SH	4 CT 3 US 30 SH	-4 CT - -
South ("B" Bufferyard)	20′	20′	154′	4 CT 1 US 19 SH	4 CT 3 US 8 SH	0 +2 US <b>-11 SH</b>
West (top) ("B" Bufferyard)	10′	10′	83′	3 CT 1 US 14 SH	3 CT 1 US 12 SH	- - -2 SH
West (bottom) ("D" Bufferyard)	30′	30′	82′	6 CT 3 US 23 SH	5 CT 1 US 23 SH	-1 CT -2 US

PARKWAY STANDARDS						
Location	Requirement	Required Trees	Proposed Trees	Deficit	Comments	
Parkway	1 tree per 25 lineal ft.	9	0	-9	Adequate room does not exist. CT in bufferyards could be further upsized to compensate for this deficiency.	

PARKING LOT LANDSCAPING STANDARDS						
Location	Requirement	Provided Deficit		Comments		
Parking Lot	15% of parking lot area to be landscaped or 3,130 sq. ft.	1,425 sq. ft.	-1,705 sq. ft.	20,870 sq. ft. of parking lot shown on landscape plan		
Parking Lot	Screening of adjacent properties and streets.	Continuous screening not provided.	~40 lineal ft.	Parking in northwest corner of site not screened along drive aisle – this could also help with Parking Lot deficit outlined above.		

A fence is proposed running between the site and the parcels to the west. The fence is proposed to match the adjacent bank's fence (beige PVC fence). Plans currently show a six foot high fence. The bank's existing fence is eight foot high. Eight foot high fences are recommended for the separation of commercial and residential uses. The Petitioner will need to revise the plans to indicate an eight foot fence matching the existing bank fence in color, height, and style.

The design of the convenience store building and gas station canopy utilizes high-quality materials, including face brick with fiber cement and metal cornice architectural treatments. All mechanical equipment on the rooftop parapet will be screened. The architectural design is prototypical of 7-Eleven's new branding initiative. Staff recommended a more residential roof for the convenience store building, utilizing more residential elements such as shingles and peaks. A peak was added to the front entrance and caps to the architectural treatments to give a more traditional look to the building.

Due to the tight space, a ground sign size and location were presented. The proposed location will require a five foot setback Variation to allow the sign to be setback five feet from the property line instead of ten feet. The Petitioner has decided to leave the final proposal up to the 7- Eleven operator. Staff is comfortable with the proposed five foot setback Variation.

The Petitioner has provided a Photometric Plan. Particular thought was put into the light placement and height (20' pole height) to avoid their visibility from the residential properties to the west. No light or glare (0 foot candle spillage) will be visible to the neighboring properties. The property will require rezoning. The existing properties are zoned B-4 (Office and Service Business) and R-1 (Single-Family Residential). The B-1 zoning district was chosen due to the cohesiveness with adjacent residential uses. The B-1 zoning district also allows for the Petitioner to request a special use to permit an automobile service (gas) station to be constructed on the site.

Due to the rezoning of the lots to a B-1 zoning district, three lot bulk variations are required for the following:

- 1. Lot size of .961 acres instead of the required min. of 4 acres.
- 2. Lot width of 186.53 feet instead of the required min. of 600 feet.
- 3. Lot depth of 198.52 feet instead of the required min. of 250 feet.

An automobile service (gas) station is a special use in B-1, B-2, and B-3 commercial zoning districts. Gas stations are a special use in all commercial zoning districts except B-5. Gas stations are generally in high traffic areas and the sites require a unique site design that accounts for safe/efficient access, proper circulation, sufficient parking, and adequate light levels.

The proposed Plat of Subdivision will consolidate two existing lots (17100 and 17110 Harlem Avenue) resulting in a single lot that is .961 acres in size. Existing drainage and utility easements will remain on the property. Easements for the public sidewalk and cross-access to east and south have been included in the Final Plat of Subdivision. However, the public sidewalk easement need to be extended across the north property line. The Plat of Subdivision will need to be revised to add a sidewalk easement covering the full length of the sidewalk along the northern property line.

## ACTING CHAIRMAN FIELDER asked the Petitioner to speak.

David Sosin, Attorney for the Petitioner noted regarding the parking that most customers would only spend 3-5 minutes while they get gas and enter the store to pay for the gas and do minor shopping. 17 parking spaces are considered to be more than adequate due to their experience with the other 7-Eleven stores, of which they have many.

Mr. Sosin noted they have been working on this plan for over a year and have done 10 major changes to try and address the access and neighboring property issues. The car wash was eliminated due to the proximity of the residents to the west and that allowed for additional buffering. There is no Master Plan at this time but he is working with the developer on a use for the property to the south. The drive aisle of 24' is standard for other Villages and works well on this site.

Adding 2 feet in height to the fence is not a problem at all. Signage is important to any user and they will work with the Village to meet the code requirements. The houses will be buffered from Harlem Avenue with the 0 foot-candle lighting and the buffering from landscaping and an 8 foot fence. The site actually accepts stormwater from the residents to the west and will accommodate stormwater flow through their site. The stormwater in this area will be improved with the extensive engineering done. The traffic expert will be at the Public Hearing for any questions. As this is currently a busy area, they feel the traffic change will only be 1-2% more at most.

ACTING CHAIRMAN FIELDER asked for comments from the public. There were none.

COMMISSIONER STANTON inquired if you could make a left-hand turn and enter the station on 171st Street when going north on Harlem, then turn into the station. Mr. Ritter replied that it would not be possible to directly enter the gas station that way, you can only turn into the station when going south on Harlem Avenue and east on 171st Street. You could make a left turn at the Oconto Avenue intersection or enter at the bank due to the allowable cross-access between the properties.

COMMISSIONER STANTON inquired about the hours of operation. Mr. Sosin replied the hours of operation for most 7-elevens are 24 hours a day. There are no speakers or bells, and the lighting has been designed very well to avoid any issues off-site. They will be good neighbors. The pumps are close to Harlem Avenue and the entrance is on the east side with the thought of staying away from the residential area.

COMMISSIONER STANTON inquired if there was thought about a security system. Ivan Nockov, Developer replied there will be a camera system that is centrally monitored.

COMMISSIONER VICK inquired about Cook County allowing access on 171<sup>st</sup> Street. It seems that you are doing everything possible to restrict the left-hand turn. The parking seems to be fine and will work similarly to their other gas station location on 159<sup>th</sup> Street with quick customer turnover.

COMMISSIONER GATTO inquired about the properties to the south and who would maintain them after they are demolished. Mr. Sosin replied that the homes that are there now are a buffer to the residents to the west. It could be good to leave them there until there is something done with that property. Mr. Ritter replied that there is a demo plan in the contract with the Petitioner and they are in deteriorating condition with property maintenance issues. Staff does not want these properties to be reoccupied as residential as the 7-Eleven plan was designed assuming these would not be residential homes.

ACTING CHAIRMAN FIELDER inquired if the utility poles will remain or would they be burying the lines. If not, will any of the poles be moved. Mr. Ritter replied the poles will stay and they will not be buried. It is very expensive to bury them and there are poles in the area that connect to these. They will need to adjust the utility line height for safe access amd it does appear one of the Harlem Avenue light poles needs to be relocated.

ACTING CHAIRMAN FIELDER inquired if the triangle at the right-in/right-out would be a choke point for cars entering and exiting. Mr. Nockov replied that the safety standard for 7-Eleven is to have fuel trucks enter from the back rather than around the front of the building. Mr. Ritter replied that the fuel trucks would be coming into the station at slow traffic times. Kimberly Clarke, Community Development Director noted that the entry to the station has been very challenging but they have come up with a plan that should work for all properties.

COMMISSIONER VICK noted that the entry is probably the best way that can be done. What are the changes to the buffer on the landscaping? Mr. Ritter replied they are short a couple trees and shrubs. Staff feels the landscape architect can make it work. Parkway trees are not able to be done. Mr. Sosin noted he would have the Petitioner's landscape architect work with the Village. A 4" tree is probably the best size.

COMMISSIONER VICK inquired if the lots to the south should be rezoned now. Mr. Ritter replied this would not be good to rezone at this time until there are plans for the development.

COMMISSIONER GATTO noted she liked the peak that has been added to the roof.

Ms. Clarke noted this has been a good team to work with.

Mr. Ritter went through all the open items:

- 1. Discuss recommended condition requiring the demolition and lot restoration of the two deteriorating vacant single-family homes south of the subject site (currently the same property owners).
- 2. Discuss Variation to reduce the minimum drive aisle width from 26 feet to 24 feet.
- 3. Staff is recommending a condition that site plan approval be conditioned upon final engineering review and approval.

- 4. Discuss the proposed landscape plan and requested Landscape Ordinance waivers. Discuss staff's recommendations to best offset deficiencies
- 5. Revise plans to indicate that the fence between the subject site and residential properties to the west matches the existing bank's fence in height (eight feet), color (taupe/beige) and style (PVC privacy).
- 6. Review the proposed architectural design and materials used throughout the site.
- 7. Discuss proposed ground sign setback Variation to permit a five foot setback.
- 8. Discussed proposed parking supply of 17 parking spaces and need for the traffic analysis to include parking information for similar locations.
- 9. Discuss overall light plan and light fixture placement.
- 10. Discuss the requested rezoning of the subject property to the B-1 (Neighborhood Shopping) zoning district.
- 11. Discuss the requested Variations associated with the lot dimensions and size.
- 12. Discuss the proposed special use for an Automobile Service (Gas) Station.
- 13. Revise the Plat of Subdivision so that the public sidewalk easement encompasses the entire length of the sidewalk that runs on private property.
- Mr. Ritter noted most of the open items are workable with minimal concerns.
- Ms. Clarke noted the Traffic Consultant (KLOA) will be at the Public Hearing to talk about the improvements.
- Mr. Sosin noted they are fairly certain they will be able to get a permit for a curb cut from IDOT and Cook County.

The Public Hearing will be on January 2, 2020.

## GOOD OF THE ORDER:

- 1. The Village is working towards Property Acquisition for Harmony Plaza.
- 2. The Boulevard/South Street moving forward with the foundation. The weather has cooperated. They are close to the full permit being issued with hopefully one more set of revisions needed.
- 3. Lenny's Food N Fuel on 183<sup>rd</sup> Street was approved by the Village Board.
- 4. Banging Gavel got the incentive agreement amended and will be moving forward with their loan and start the reconstruction.
- 5. SIP Wine Bar has pretty much finished on the outside and they are working on the inside and opening soon.
- 6. The Masonry amendments have been approved at the Village Board. The Fee structure is being reviewed by Village Board currently and will take fees out of the zoning code and put them in a comprehensive fee schedule.
- 7. An English Garden, 16800 Oak Park Avenue will come before the Plan Commission at the next meeting for Special Use to convert commercial space to an apartment on the second floor. This will help with their taxes.

## COMMENTS FROM THE COMMISSION:

None at this time.

#### **PUBLIC COMMENT:**

None at this time.

## **ADJOURNMENT:**

There being no further business, a Motion was made by PLAN COMMISSIONER GASKILL, seconded by PLAN COMMISSIONER VICK to adjourn the Regular Meeting of the Plan Commission of December 19, 2019 at 8:16 p.m. The Motion was unanimously approved by voice call. ACTING PLAN COMMISSION CHAIRMAN FIELDER declared the meeting adjourned.

STATION IS 39 FEET WEST OF THE CENTERLINE OF WILL/COOK ROAD, 54 FEET SOUTH OF THE CENTERLINE OF 167TH STREET, 10 FEET WEST OF A TRAFFIC SIGNAL HAND HOLE AND 1 FOOT NORTHEAST OF AN ORANGE CARSONITE MARKER. ACCESS TO THE COMPASS SURVEYING LTD P.O.B. = POINT OF BEGINNING TIRE HYDRANT CONCRETE SURFACE PROFESSIONAL DESIGN FIRM BC = BACK OF CURB BDC = BACK OF DEPRESSED DATUM POINT IS THROUGH A 6 INCH LOGO CAP AND THE ROD (DATUM POINT) IS SURROUNDED BY A FLOATING BRONZE DISK TO &ICV IRRIGATION CONTROL VALVE LAND SURVEYOR CORPORATION NO. 184-002778 DEPRESSED CURB PIV POST INDICATOR VALVE FL = FLOW LINE LICENSE EXPIRES 4/30/2019 GRAVEL SURFACE SIAMESE WATER CONNECTION LANDSCAPE AREA WK WATER MARKER G = GRAVEI WATER METER STONE SURFACE 35-3585 SITE BENCHMARKS: SCALE: 1'' = 20'AURORA, Ø<sup>B</sup> B/BOX SITE BENCHMARK 1 IE = INVERT ELEVATION ILLINOIS CROSS CUT ON TRAFFIC SIGNAL MANHOLE. 1 TELEPHONE MANHOLE DS = DOWN SPOUT S.F. = SQUARE FEET -x-x- CHAIN LINK FENCE DANIEL W. WALTER THE TELEPHONE NETWORK INTERFACE ELEVATION = 700.19IL PROFESSIONAL LAND SURVEYOR NO. 3585 L = SHORE LINE SF = TRANSFORMER TELEPHONE MARKER LICENSE EXPIRES 11/30/20 TELEPHONE PEDESTAL TO OVERHEAD TRAFFIC P.U. & D.E. = PUBLIC UTILITY AND CABLE TELEVISION PEDESTAL PROJ. NO.: 19.0018 ELEVATION = 700.71 J:\PSDATA\2019 PROJECTS\19.0018\19.0018LTSTOPO.DWG J:\Psdata\2019 Projects\19.0018\19.0018LTSTOPO.dwg, 8/21/2019 2:11:50 PM



# PLAN COMMISSION STAFF REPORT

January 2, 2020 - Public Hearing

#### **Petitioner**

Vequity, LLC (Contract Purchaser)

# **Property Location**

17100 & 17110 Harlem Avenue

#### PIN

27-25-403-013-0000 & 27-25-403-014-0000

# **Zoning**

B-4 (Office & Service Business) & R-1 (Single-Family Residential)

# **Approvals Sought**

Rezoning Special Use Permit Site Plan Approval Variation Plat Approval

#### **Project Planner**

Daniel Ritter, AICP Senior Planner

# 7-Eleven Gas Station

17100 Harlem Ave



# **EXECUTIVE SUMMARY**

The Petitioner, Vequity LLC (Contract Purchaser), is seeking approval to construct a 7-Eleven gas station and convenience store on the southwest corner of 171<sup>st</sup> Street and Harlem Avenue (17100 and 17110 Harlem Avenue). The proposal includes a 3,511 sq. ft. convenience store and canopy area with ten vehicle fueling stations. The project includes installation of a dumpster enclosure, fencing, landscaping, and a public sidewalk. The project requires Rezoning of the properties to the B-1 (Neighborhood Shopping) zoning district, Special Use Approval for an automobile service (gas) station with a convenience store, Site Plan Approval, Final Plat of Consolidation Approval and Variations for min. lot width, min. lot size and min. lot depth, ground sign setback, and min. drive aisle width.

The subject site area on the west side of Harlem Ave was originally developed in the county with single-family homes for the full block. Starting in the 1980s the area began to transition from residential to commercial uses; the Comprehensive Plan designates the area as a "commercial/office" use. As the homes have been demolished and new commercial buildings constructed, the properties have been rezoned to either B-1 (Neighborhood Shopping) or B-4 (Office and Service) due to their proximity to single-family residential homes. The petitioner revised a previous plan for a car wash to be constructed on the site due to staff review comments and a desire to minimize potential negative effects on the abutting residential properties. The petitioner has also added fencing, additional landscaping, and amended the lighting plan to avoid any off-site glare or light pollution.

Changes to the December 19, 2019 Plan Commission Workshop Staff Report are indicated in red.

### **EXISTING SITE & ZONING**

The subject property consists of two lots on the southwest corner of Harlem Avenue and 171st Street. The lot furthest north is vacant and currently zoned B-4 (Office and Service Business). This site was previously home to an office building that was demolished in 2016. The south portion of the lot is zoned R-1 (Single-Family Residential) with a vacant single-family home and detached garage located on the property that are slated for demolition. There are two vacant single-family home lots zoned R-1 to the south of the subject properties as well, and while these are not part of the development, the homes are in deteriorating condition. The developer has agreed with the property owner (who is the current owner of all four lots) and staff to demolish those two homes as well as part of the 7-Eleven project and restore the lots (top soil, seed and blanket). Staff recommends this be a condition of the approval for the rezoning and special use requests. This would remove two vacant and deteriorating homes and would leave only one home occupied residentially on the block.

Open Item #1: Discuss recommended condition requiring the demolition and lot restoration of the two deteriorating vacant single-family homes south of the subject site (currently the same property owners).

Petitioner has indicated they agree to demolish the vacant and deteriorating homes and that it is in their purchase contract for their project.

The block where the gas station is proposed on the west side of Harlem Ave was originally developed with singlefamily homes in the 1950s-1960s. Starting in the 1980s this area began to transition from residential to commercial uses due to their frontage along a heavily traveled commercial corridor. The area is shown commercial/office use in the Village's Comprehensive Plan (2000). Due to the multiple curb cuts and difficulty of access, residential uses are not considered the highest and best use for this area. As the lots have been redeveloped with commercial buildings, the properties have been rezoned to either B-1 (Neighborhood Shopping) or B-4 (Office and Service) due to their proximity to the singlefamily residential to the west.

To the north of the subject property is the Tinley Park Post Office and to the west is bank, both zoned B-4 (Office and Service). To the northeast is a multi-tenant office building and car wash zoned B-3 (General Business). Directly to the east of the property is a Shell gas station/car wash and the

Jewel-Osco and Tinley Park Commons Shopping Center zoned B-3 (General Business).





# **PROPOSED USE**

The proposed gas station site includes fueling stations for ten vehicles. There will be a 3,511 sq. ft. convenience store building that sells vehicle fuel and typical retail items (food, drinks, snacks, tobacco, etc.) There will not be any truck fueling available at this location.

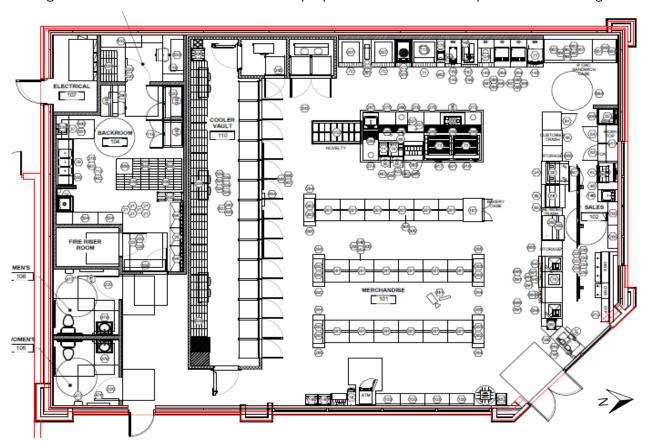
Vehicle service (gas) stations are a special use in all commercial zoning districts with the exception of B-5 (Automotive Service). One typical concern with gas stations is that they require a unique site design that accounts for safe/efficient access, proper circulation, sufficient parking and adequate lighting levels, among other things.

The Petitioner originally proposed an attached car wash as part of the

NEW CORPORATE 7ELEVEN PROTOTYPE (INTERIOR)



proposal requiring B-3 (General Business and Commercial) zoning. Due to staff's concerns related to the more intense uses permitted in the B-3 zoning district and the possible noise from traffic and car wash equipment, the Petitioner agreed to remove the car wash from their proposal and revise their request to a B-1 zoning district.

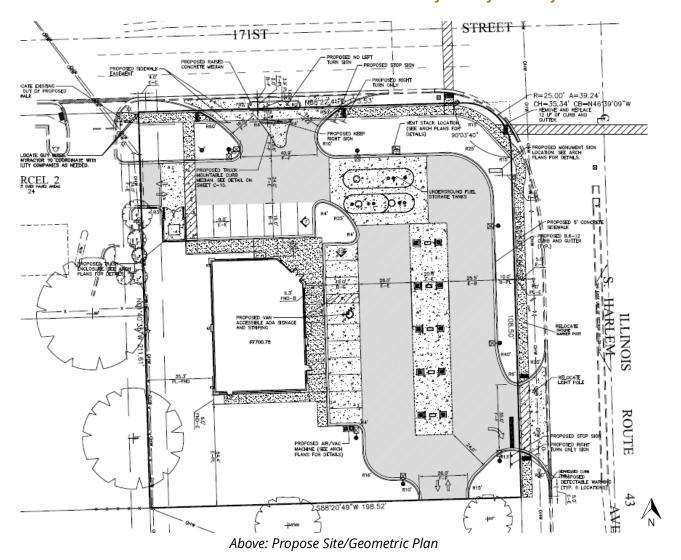


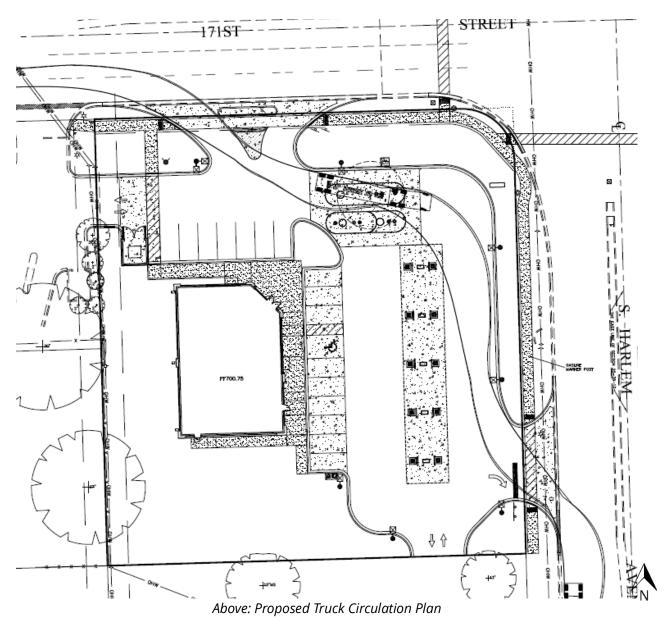
# SITE PLAN

The site plan includes the convenience store building, vehicle fueling area/canopy, vehicle parking, walkways, exterior storage areas, landscaping, and a dumpster enclosure. Access to the site will primarily be through two curb cuts, one on Harlem Avenue and one on 171<sup>st</sup> Street. Additionally, there will be cross-access for vehicles to the west through the existing First Merchants Bank (7231 171<sup>st</sup> Street) and a future cross-access to the south. The cross-access through the bank will only be used for personal vehicles; truck access will be prohibited. Fueling trucks will primarily access the site from 171<sup>st</sup> Street and exit southbound onto Harlem Avenue.

The access points on both Harlem Avenue and 171<sup>st</sup> Street will be limited to right-in/right-out turns. The median at Harlem Avenue is likely to make any illegal turn unlikely at that location. The 171<sup>st</sup> Street access includes limited access and a raised island to discourage illegal or dangerous turning movements. The geometrics of the access have been altered slightly to allow for fuel truck and fire engine access. The access is still subject to Cook County Department of Transportation approval bur Village Staff believes the raised median and limited-access will help avoid causing any traffic issues at the intersection. Drive aisles all meet 26 foot width minimum with the exception of the one on the north of the property that connects to the existing bank cross-access. 24 feet is standard in many situations and staff has no concerns with matching the existing bank aisle width.

Open Item #2: Discuss Variation to reduce the minimum drive aisle width from 26 feet to 24 feet.





The Subdivision Code requires that any new development or redevelopment install a public sidewalk on all public frontages. The other three corners of intersection have sidewalks and crossings installed. The six foot wide sidewalk is the standard width in commercial areas and runs along both the Harlem Avenue and 171<sup>st</sup> Street frontages. Due to the small parkway area along 171<sup>st</sup> Street and at the intersection, the sidewalk will encroach onto the development site and that portion of the sidewalk will need to be placed in a public sidewalk easement. IDOT is reviewing the plans currently and may require crosswalk upgrades to be completed with sidewalk installation.

Engineering has a number of outstanding comments and revisions on the preliminary/final engineering plans that will be addressed prior to permit submittal. Staff is recommending that the site plan approval be conditioned upon final engineering review and approval.

Open Item #3: Staff is recommending a condition that site plan approval be conditioned upon final engineering review and approval.

# **LANDSCAPE**

The proposed Landscape Plan has been reviewed by the Village's Landscape Architect and finds it to be in general conformance with the Village's Landscape Ordinance with a few exceptions due to the site's constraints. The proposal requests a waiver from a few of the bufferyard requirements, parkway tree requirements, and interior landscaping requirements. The Petitioner has indicated that they have worked to meet the landscape requirements to the greatest extent possible and focused their available bufferyard width and landscaping to adequately buffer views from the residential properties to the west. Deficiencies are outlined in the table below.

**Table A**Please note the following abbreviations: CT = Canopy Tree, US = Understory Tree, SH = Shrub, T = Tree.

BUFFERYARD REQUIREMENTS						
Bufferyard Required Proposed Location Width Width Length Plantings Plantings						
North ("C" Bufferyard)	10′	10′	117′	6 CT 3 US 24 SH	4 CT 3 US 33 SH	<b>-2 CT</b> - +9 SH
East ("C" Bufferyard)	10'	10′	149′	8 CT 3 US 30 SH	4 CT 3 US 30 SH	-4 CT - -
South ("B" Bufferyard)	20′	20′	154′	4 CT 1 US 19 SH	4 CT 3 US 8 SH	0 +2 US -11 SH
West (top) ("B" Bufferyard)	10′	10′	83′	3 CT 1 US 14 SH	3 CT 1 US 15 SH	- - +1 SH
West (bottom) ("D" Bufferyard)	30′	30′	82′	6 CT 3 US 23 SH	5 CT 2 US 23 SH	-1 CT -1 US

PARKWAY STANDARDS						
Location	Requirement	Required Trees	Proposed Trees	Deficit	Comments	
Parkway	1 tree per 25 lineal ft	9	0	-9	Adequate room does not exist. CT in bufferyards could be further upsized to compensate for this deficiency.	

PARKING LOT LANDSCAPING STANDARDS						
Location	Requirement	Provided	Deficit	Comments  20,870 sq. ft. of parking lot shown on landscape plan		
Parking Lot	15% of parking lot area to be landscaped or 3,130 sq. ft.	1,425 sq. ft.	-1,705 sq. ft.			
Parking Lot	Screening of adjacent properties and streets.	Continuous screening not provided.	~40 lineal ft	Parking in northwest corner of site not screened along drive aisle – this could also help with Parking Lot deficit outlined above.		

Staff has recognized the difficulty in meeting the Landscape Ordinance requirements for gas stations in recent reviews, especially on smaller sites. As an auto-oriented use, the fueling area needs to remain free from obstructions and allow room for vehicle movement throughout the site. Landscaping pots can be added but these are often hard to maintain throughout the year. The Petitioner has met the majority of the Landscape Ordinance, yet these few deficiencies remain due to site constraints. The proposed landscaping is similar in style and design with surrounding area properties and along Harlem Avenue. Below is a list of the landscaping deficiencies in the proposed plan. The species and variety of plantings are expected to increase the appeal of the property and overall area. The proposed plan shows a plethora of screening along the west property line to help buffer any views form the residential homes the property adjoins.

The Village's consultant supports the bufferyard and parkway requests with a couple of recommendations/changes listed below. Staff recommends these few revisions be made to reduce the landscape waivers were possible.

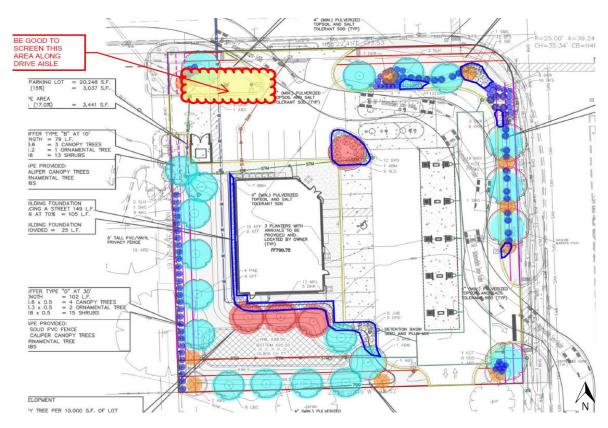
- 1. They have only upsized shade trees to a combination of 3" and 4" cal. It is recommended that all CT trees be increased to a minimum of 4.5" cal.
- 2. Add some shrubs along the north drive aisle in the NW corner of the site to help offset the deficiencies.
- 3. Revise the west bufferyard design to add two additional shrubs.

Open Item #4: Discuss the proposed landscape plan and requested Landscape Ordinance waivers. Discuss staff's recommendations to best offset deficiencies.

A fence is proposed running between the subject property and the parcels to the west. The fence is proposed to match the adjacent bank's fence (beige PVC fence). Plans currently show a six foot high fence proposed. However, the bank's existing fence is eight foot high. Eight foot high fences are recommended for separation of commercial and residential uses. It is believed this was indicated as six feet high in error. The petitioner will need to confirm this and revise the plans to indicate an eight foot fence matching the existing bank fence in color, height, and style.

Open Item #5: Revise plans to indicate that the fence between the subject site and residential properties to the west matches the existing bank's fence in height (eight feet), color (taupe/beige) and style (PVC privacy).

The north and west bufferyards were revised to better meet the Landscape Code's requirements. The revised waivers are listed in the table above. The Petitioner agreed to utilize a minimum tree caliber of 4-inches at installation to help offset some of the deficiencies and ensure a buffer is established quickly. They also agreed to revise the fence height to 8 feet and to match the existing bank. These two changes (tree caliber and fencing) were made in the plan details, but there are also some contradicting notes left on the plans due to the quick resubmittal timeframe. To clarify, the requirements were added as recommended conditions of Site Plan Approval and will be revised prior to permitting. The Plan Commission did not have concerns at the Workshop in regards to the interior landscaping and parkway tree waivers due to the limited space on the site and auto-oriented use. The proposed landscaping is expected to meet or exceed the neighboring commercial properties.



# **ARCHITECTURE**

The design of the convenience store building and gas station canopy utilizes high-quality materials, including face brick (76% of exterior, excluding glazing) with fiber cement and metal cornice architectural treatments. All mechanical equipment will be screened by the rooftop parapet. The face brick will be a beige/grey color and the fiber cement accents will be dark brown/espresso in color (appears black in some renderings). The proposed structure will have metal architectural canopies on the front façade over windows and doors. The fueling canopy and dumpster enclosure are also proposed to match the building's materials, colors, and style.

Staff originally recommended a more residential roof for the convenience store building, utilizing more residential elements such as shingles and peaks. However, the architectural design is prototypical of 7-Eleven's new branding initiative. A peak was added to the front entrance and caps to the architectural treatments to give a more traditional look to the building.

# Open Item #6: Review the proposed architectural design and materials used throughout the site.

The Commission did not have concerns about the proposed building or canopy designs and preferred the peaked roof element at the entrance as proposed.







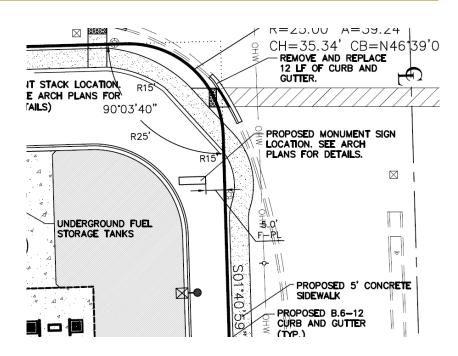


### **SIGNAGE**

Specific wall, canopy, and ground signs are not proposed for the site at this time. The Petitioner has reviewed the Zoning Code's sign requirements and believes that they can comply with them. Wall signs will not be proposed on the south and west facades due to their proximity to residentially zoned property.

Due to the tight space, a ground sign size and location were proposed. The proposed location will require a five foot setback variation to allow the sign to be setback five feet from the property line instead of ten feet. The ground sign is required to have a base that matches the principal building and not exceed ten feet in height. Sign setback **Variations** are typically accompanied by a specific sign design. However, the petitioner has decided to leave the final proposal up to the operator. Staff is comfortable with the proposed variation request because of the tight site constraints. The request will be limited to the proposed location, but will avoid the need to request a separate Variation in the future.

Open Item #7: Discuss proposed ground sign setback Variation to permit a five foot setback.





Above: Not the actual ground sign proposal. For discussion purposes only. Example of a typical 7-Eleven gas station sign with a solid base.

# **PARKING**

The Village Zoning ordinance provides some guidance for required parking for various uses; however, there is no specific reference for a convenience store associated with a gas station. In these situations where a specific use is not listed, the Plan Commission has authority to approve the parking based on the Petitioner's proposal and similar uses noted in the ordinance. A professional parking study is typically required to be supplied to assist the Plan Commission in their review.

Convenience stores are most commonly considered a "retail use" which requires one parking stall for every 150 sq. ft. With a total of 3,511 sq. ft. proposed, this results in a requirement of 23 parking spaces per the Zoning Ordinance requirements. The proposed site plan provides 17 total spaces total (deficient six parking spaces) based on the similar retail requirement. However, due to the unique nature of a gas station where some of the retail users may be stationed at the pumps (which is not included in the parking count) yields the potential for ten additional parking spaces. In addition, customers are usually on the site for short periods, resulting in high turnover and thereby lowering the demand for parking. The gas station exceeds the parking supply compared to other gas stations in

Tinley Park that are similar in size. For example, the Shell gas station across the street (17101 Harlem Avenue) has 6 parking spaces and Mobil/7-Eleven (7601 159<sup>th</sup> Street) has 14 parking spaces. The existing 7-Eleven convenience store at 17055 Oak Park Avenue does not have fueling, but is comparable in size, and has 14 parking spaces.

The petitioner did supply a traffic analysis from their consultant (KLOA) but that analysis did not address the proposed parking. Staff believes that the parking supply is adequate on the proposed site, but if the Commission have any parking concerns, parking counts of comparable locations can be requested.

The Plan Commission did not have concerns about the parking supply on the site due to the experiences with other locations and the expected quick turnover of customers. The Commission did request a review of the traffic analysis findings by the Petitioner's traffic consultant (KLOA) at the Public Hearing.

Open Item #8: Discussed proposed parking supply of 17 parking spaces and need for the traffic analysis to include parking information for similar locations.

# **LIGHTING**

A new lighting ordinance was recently adopted in September 2019. The lighting plan for the proposed development complies with the new lighting standards in respect to fixture type, illumination intensity, and light intensity at the property lines.

The Petitioner has provided a Photometric Plan that provides lighting via 8 LED light poles, 12 LED canopy fixtures, and 6 LED wall mount fixtures throughout the site. The Photometric Plan indicates light spillage of less than one foot candle at the roadway and zero at the south and western property lines, which are adjacent to residential uses. All light fixtures are full cut-off and downcast to prevent glare on adjacent properties and roadways. Particular thought was put into the light placement and height (20' pole height) to avoid their visibility from the residential properties to the west. Between the thoughtful placement of lights, fence and landscape screening, no light or glare will be visible to the neighboring properties.



Above: Proposed wal-pac lighting will be attached to the building and downcast at a 90 degree angle.

Open Item #9: Discuss overall light plan and light fixture placement.

Lighting appeared to be placed approximately to avoid off-site light spillage and glare.

### ABOUT THE SPECIAL APPROVALS NEEDED

### Rezoning

The two existing properties are zoned B-4 (Office and Service Business) and R-1 (Single-Family Residential) and proposed to be rezoned to B-1 (Neighborhood Shopping). The Zoning Code's describes the zoning district as follows:

"The B-1 Neighborhood Shopping District is intended to provide areas for retail and service establishments to supply convenience goods or personal services for the daily needs of the residents living in adjacent residential neighborhoods. The district is designed to encourage shopping centers with planned off-street parking and loading and to provide for existing individual or small groups of local stores."

The Petitioner originally proposed an attached car wash as part of the proposal requiring B-3 (General Business and Commercial) zoning. Due to staff's concerns related to the more intense uses permitted in the B-3 zoning district and the possible noise from traffic and car wash equipment, the Petitioner agreed to remove the car wash from their proposal and revise their request to a B-1 zoning district.

The B-1 zoning district was chosen due to the cohesiveness with adjacent residential uses. The B-1 zoning district also allows for the petitioner to request a special use to permit an automobile service (gas) station to be constructed on the site. The other commercial zoning district traditionally used adjacent to residential properties is the B-4. However, the B-4 zoning district does not permit a gas station special use permit to be requested.

Open Item #10: Discuss the requested rezoning of the subject property to the B-1 (Neighborhood Shopping) zoning district.

#### Lot Variations

Due to the rezoning of the lots to a B-1 zoning district, three lot bulk variations are required for the following:

- 1. Lot size of .961 acres instead of the required min. of 4 acres.
- 2. Lot width of 186.53 feet instead of the required min. of 600 feet.
- 3. Lot depth of 198.52 feet instead of the required min. 250 feet.

These Variations are the result of their prior use and subdivision as residential lots. The area is shown as a commercial/office use in the Village's Comprehensive Plan (2000). Due to the multiple curb cuts and difficulty of access, residential uses are not considered the highest and best use for this area. Since the 1980s, the lots have been redeveloped in the area with commercial buildings and have been rezoned to either B-1 (Neighborhood Shopping) or B-4 (Office and Service) due to their proximity to the single-family residential to the west. The properties to the south of the subject property have similar lot dimensions as the proposed lot.

Open Item #11: Discuss the requested Variations associated with the lot dimensions and size.

# **Special Use**

An automobile service (gas) station is a special use in B-1 (Neighborhood Shopping), B-2 (Community Shopping), and B-3 (General Business) commercial zoning districts. Gas stations are only a permitted use in the B-5 (Automotive Service) zoning district. Gas stations are a special use in all commercial zoning districts with the exception of B-5 (Automotive Service). One typical concern with gas stations is that due to high traffic volumes, the sites require a unique site design that accounts for safe/efficient access, proper circulation, sufficient parking and adequate lighting levels. Gas stations

Open Item #12: Discuss the proposed special use for an Automobile Service (Gas) Station.

# Final Plat of Subdivision Approval

The proposed Plat of Subdivision will consolidate two existing lots (17100 and 17110 Harlem Avenue) resulting in a single lot that is .961 acres in size. Existing drainage and utility easements will remain on the property. Easements for the public sidewalk and cross-access to east and south have been included in the Final Plat of Subdivision. However, the public sidewalk easement need to be extended across the north property line. The Plat of Subdivision will need to be revised to add a sidewalk easement covering the full length of the sidewalk along the northern property line (see image below).

Open Item #13: Revise the Plat of Subdivision so that the public sidewalk easement encompasses the entire length of the sidewalk that runs on private property.

The Final Plat of Subdivision was revised with the appropriate public sidewalk easements in place. Staff has not further concerns.

#### STANDARDS FOR REZONING APPROVAL

The Zoning Code does not establish any specific criteria that must be met in order for the Village Board to approve a rezoning request. Likewise, Illinois Statutes does not provide any specific criteria. Historically, Illinois courts have used eight factors enunciated in two court cases. The following "LaSalle Standards" have been supplied for the Commission to consider. Staff has provided the following draft Findings for the Commission's review.

- a. The existing uses and zoning of nearby property;
  - The area is in a transition from residential to commercial uses. The surrounding areas and other corners of the intersection are all commercial zoning districts (B-4 and B-3). The area south of the subject property has similar infill/redevelopment properties that have been rezoned to similar low-intensity commercial districts (B-1 and B-4) upon their redevelopment.
- b. The extent to which property values are diminished by the particular zoning;
  - The area along Harlem Avenue transitioning from residential to commercial uses and is indicated as commercial/office in the Village's Comprehensive Plan. The development of the vacant properties will not diminish property values.
- c. The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;
  - No negative effects on property values are expected. The project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue and convenience for residents and visitors.
- d. The relative gain to the public as compared to the hardship imposed on the individual property owner;
  - No hardship is expected from neighboring properties due to the landscape and fence buffering provided. Lighting, dumpster locations, and overall site design was designed to avoid any issues with the neighboring residential properties. The project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue and convenience for residents and visitors.
- e. The suitability of the property for the zoned purpose;
  - The proposed use as a convenience store and gas station is suitable for the subject property due to the availability of high traffic volumes and available access points.
- f. The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;
  - The existing R-1 zoning house has remained vacant for 4-5 years and is not expected to be suitable for residential use. The B-4 zoned parcel had a vacant office building on it from 2014-2016 and has been vacant since the building's demolition in 2016.
- g. The public need for the proposed use; and
  - There is a demand for additional automotive service (gas) stations and convenience stores in the area. Competition is limited at the two nearest gas stations (Shell and Speedway).
- h. The thoroughness with which the municipality has planned and zoned its land use.
  - The property is shown as a Commercial/Office use in the Comprehensive Plan. The rezoning as a B-1, Neighborhood Shopping zoning district limits the ability for non-desirable uses to be located adjacent to residential properties.

# STANDARDS FOR A SPECIAL USE

Section X.J.5. of the Zoning Ordinance lists standards that need to be considered by the Plan Commission. The Plan Commission is encouraged to consider these standards (listed below) when analyzing a Special Use request. Staff has provided the following draft Findings for the Commission's review.

X.J.5. Standards: No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

- a. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;
  - The Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare because the proposed project will encompass the development of an automobile service (gas) station and convenience store that will service for visitors and residents of the community. The project will be constructed meeting current Village building codes and is among the highest and best uses of a parcel at a heavily traveled intersection.
- b. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;
  - The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood because the proposed project will develop land that is currently vacant and provide services for visitors and residents of the community. The site will be well-landscaped and will have an eight-foot fence to buffer the property from the residential homes to the west. The building will be constructed with quality materials. This proposed use is similar and compatible with existing nearby uses along Harlem Avenue.
- c. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;
  - The Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district because the majority of the property within this area has already been developed. Landscape buffers have been supplied to the west and cross-access has been supplied for the vacant lots to the south.
- d. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;
  - The proposed plans provide evidence of existing utilities, roads, and drainage facilities and any necessary
    modifications to be accommodated on the 7-Eleven site. Drainage has been accounted for on the site and
    utilizes the existing storm sewer system. All on-site and accepted existing off-site drainage has been
    accounted for within the plans.
- e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and
  - The proposed plans include site access by utilizing two curb cuts on Harlem Avenue and 171<sup>st</sup> Street that allow for ingress/egress to the site and efficient site circulation. Cross-access for passenger vehicles is also provided by a cross-access easement to the east through the neighboring bank property. Cross-access is also supplied to the vacant lots to the south for possible future cross-access as well. The site incorporates proposed public and private walkways for safe pedestrian travel to and from the site.

- f. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance.
  - The Special Use conforms to all other applicable regulations of the Zoning Ordinance and Village regulations except for certain Variations applied herein related to the redevelopment of an existing infill site. These Variations are consistent with other properties within along Harlem Avenue and the intent of the regulations are met where possible.
- g. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.
  - The proposed 7-Eleven project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue.

It is also important to recognize that a Special Use Permit does not run with the land and instead the Special Use Permit is tied to the Petitioner. This is different from a process such as a variance, since a variance will forever apply to the property to which it is granted. Staff encourages the Plan Commission to refer to Section X.I.6. to examine the conditions where a Special Use Permit will expire.

# STANDARDS FOR A VARIATION

Section X.G.4. of the Zoning Ordinance states the Plan Commission shall not recommend a Variation of the regulations of the Zoning Ordinance unless it shall have made Findings of Fact, based upon the evidence presented for each of the Standards for Variations listed below. The Plan Commission must provide findings for the first three standards; the remaining standards are provided to help the Plan Commission further analyze the request. Staff has provided the following draft Findings of the Statutorily required Standards for the Commission's review.

- 1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located.
  - The property is an infill site with limited ability to expand its size, dimensions, and setbacks. The overall area on the west side of Harlem Avenue will eventually meet the intent of the Zoning Code's minimum lot requirements upon its full redevelopment. The Variations allow the fairly small and limited sized lot to be reasonably developed with a commercial use.
- 2. The plight of the owner is due to unique circumstances.
  - The small properties offer a challenging situation for redevelopment as they were originally residential lots. Residential uses on the lots are no longer preferred or marketable along the heavily traveled Harlem Avenue commercial corridor.
- 3. The Variation, if granted, will not alter the essential character of the locality.
  - The lot Variations will be similar to other properties that have redeveloped along Harlem Avenue in regards to the lot size and sign setbacks. The drive aisle width is a standard width in many other municipalities and is not expected to be noticeable.
- 4. Additionally, the Plan Commission shall also, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the Petitioner have been established by the evidence:

- a. The particular physical surroundings, shape, or topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out;
- b. The conditions upon which the petition for a Variation is based would not be applicable, generally, to other property within the same zoning classification;
- c. The purpose of the Variation is not based exclusively upon a desire to make more money out of the property;
- d. The alleged difficulty or hardship has not been created by the owner of the property, or by a previous owner;
- e. The granting of the Variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; and
- f. The proposed Variation will not impair an adequate supply of light and air to an adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety, or substantially diminish or impair property values within the neighborhood.

## STANDARDS FOR SITE PLAN APPROVAL

Section III.T.2. of the Zoning Ordinance requires that Planning Staff must find that the conditions listed below must be met prior to presenting the proposal to the Plan Commission. The Standards are listed below for the Commission's consideration for reviewing the site plan as well.

- a. That the proposed Use is a Permitted Use in the district in which the property is located.
- b. That the proposed arrangement of buildings, off-street parking, access, lighting, landscaping, and drainage is compatible with adjacent land uses.
- c. That the vehicular ingress and egress to and from the site and circulation within the site provides for safe, efficient, and convenient movement of traffic, not only within the site but on adjacent roadways as well.
- d. That the Site Plan provides for the safe movement of pedestrians within the site.
- e. That there is a sufficient mixture of grass, trees, and shrubs within the interior and perimeter (including public right-of-way) of the site so that the proposed development will be in harmony with adjacent land uses and will provide a pleasing appearance to the public; any part of the Site Plan area not used for buildings, structures, parking, or access-ways shall be landscaped with a mixture of grass, trees, and shrubs.
- f. That all outdoor trash storage areas are adequately screened.

# **MOTIONS TO CONSIDER**

If the Plan Commission wishes to take action on the Petitioner's requests, the appropriate wording of the motions are listed below. The protocol for the writing of a motion is to write it in the affirmative so that a positive or negative recommendation correlates to the Petitioner's proposal. By making a motion, it does not indicate a specific recommendation in support or against the plan.

### Motion 1 (Site Plan):

"...make a motion to grant the Petitioner, Vequity LLC, Site Plan Approval to construct an automobile service (gas) station and a 3,511 sq. ft. 7-Eleven convenience store building at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District, in accordance with the plans submitted and listed herein and subject to the following conditions:

- 1. The two vacant single-family homes to the south of the subject property (17118 & 17130 Harlem Avenue) owned by the same property owner shall be demolished as proposed by the Petitioner.
- 2. The proposed fence shall be a minimum of 8 feet in height and match the existing fence on the neighboring bank property (7231 171st Street) in height, color, and style.
- 3. All Canopy Trees on the site shall be installed at a minimum of 4" trunk caliper.
- 4. Site Plan Approval is subject to approval of the Rezoning, Special Use, and Variations by the Village Board.
- 5. Site Plan Approval is subject to final engineering plan review and approval."

[any conditions that the Commission would like to add]

# Motion 2 (Rezoning):

"...make a motion to recommend that the Village Board grant the Petitioner, Vequity LLC, a rezoning of the properties located at 17100 and 17110 Harlem Avenue from their existing B-4 (Office and Service Business) and R-1 (Single-Family Residential) zoning districts to the B-1 (Neighborhood Shopping) zoning district and adopt the Findings of Fact submitted by the applicant and as proposed by Village Staff in the Staff Report."

# Motion 3 (Variations):

"...make a motion to recommend that the Village Board grant the following Variations to the Petitioner, Vequity LLC, at the property located at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District, in accordance with the plans submitted and listed herein and adopt Findings of Fact as proposed by Village Staff in the Staff Report.

- 1. A five foot Variation from Section IX-D-2-c. to permit a freestanding sign to be located five feet from the property instead of the required minimum of ten feet.
- 2. A two foot Variation from Section VIII-C-Table 2 (Parking Lot Dimension Guidelines) to permit a 24 foot wide two-way drive aisle instead of the required 26 foot minimum.
- 3. A 3.039 sq. ft. Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot size of .961 acres, instead of the required minimum of 4 acres.
- 4. A 413.47 foot Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot width of 186.53 feet instead of the required minimum of 600 feet.
- 5. A 51.48 foot Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot depth of 198.52 feet instead of the required minimum of 250 feet.

[any conditions that the Commissioners would like to add]

# Motion 4 (Special Use):

"...make a motion to recommend that the Village Board grant a Special Use Permit to the Petitioner, Vequity LLC, to permit an automobile service (gas) station and a 3,511 sq. ft. convenience store on the property located at 17100 Harlem Avenue in the B-1 (Neighborhood Shopping) Zoning District, in accordance with the plans submitted and listed herein and adopt Findings of Fact as proposed by Village Staff in the Staff Report.

[any conditions that the Commission would like to add]

### Motion 5 (Final Plat):

"...make a motion to recommend that the Village Board grant approval to the Petitioner, Vequity LLC, Final Plat of Subdivision Approval for Southlands First Consolidation in accordance with the Final Plat submitted and listed herein, subject to the following condition:

1. The Final Plat approval is subject to Final Engineering Plan approval by the Village Engineer."

[any conditions that the Commissioners would like to add]

# **LIST OF REVIEWED PLANS**

	Submitted Sheet Name	Prepared By	Date On Sheet
	Project Narrative	Vequity	7/15/19
	LaSalle Standard Responses	Vequity	N/A
	Standards for a Special Use Responses	Vequity	N/A
AS1.01	Site Plan	llekis	11/22/19
AS1.02	Site Details	llekis	11/22/19
A1.01	Floor Plan	llekis	11/22/19
A3.01	Exterior Elevations and Schedule	llekis	11/22/19
A3.02	Exterior Color Elevations and Schedule	llekis	11/22/19
A3.03	Fuel Canopy Elevations	llekis	11/22/19
A3.04	3D Views	Ilekis	11/22/19
PH1.01	Photometric Plan	llekis	11/22/19
PH1.02	Photometric Schedules	llekis	11/22/19
C-1	Engineering Plan – Cover Sheet	Watermark	11/22/19
C-1.1	Demolition Plan	Watermark	11/22/19
C-2	Geometric Plan	Watermark	11/22/19
C-3	Grading Plan	Watermark	11/22/19
C-4	Accessible Route Grades and Details	Watermark	11/22/19
C-5	Utility Plan	Watermark	11/22/19
C-6	Phase 1 Soil Erosion Control Plan	Watermark	11/22/19
C-7	Phase 2 Soil Erosion Control Plan	Watermark	11/22/19
C-8	Soil Erosion Control Details and Specs	Watermark	11/22/19
C-9	Project Details	Watermark	11/22/19
C-10	Project Specifications	Watermark	11/22/19
C-11	MWRD General Notes	Watermark	11/22/19
C-12 – C-15	IDOT Details	Watermark	11/22/19
1	ALTA/NSPS Land Title & Topographic Survey	Compass	8/5/19
L-1	Landscape Plan (Revised)	Watermark	12/27/19
L-2	Landscape Details and Specifications	Watermark	11/22/19
1 of 1	MWRD Drainage Exhibit	Watermark	11/22/19
2pg	Final Plat of Subdivision – Southlands First Consolidation	Compass	12/27/19
	(Revised)		
	Fire Truck Circulation Plan	Watermark	11/22/19
	Fuel Truck Circulation Plan	Watermark	11/22/19
	Traffic Impact Study – Proposed 7-Eleven Gas Station	KLOA	8/23/19

Vequity – Vequity Inc. Ilekis – Ilekis Associates (Architect) Watermark – Watermark Engineering Resources LTD Compass – Compass Surveying LTD KLOA – Kenig, Lindgren, O'Hara, Aboona, Inc.



Village of Tinley Park Community Development Dept. 16250 S. Oak Park Ave. Tinley Park, IL 60477 708-444-5100

# VILLAGE OF TINLEY PARK, ILLINOIS PLANNING AND ZONING GENERAL APPLICATION

*Additional Information is Required for Specific	Requests as Outlined in Specific Addendums
Special Use for:  □ Planned Unit Development (PUD) □ Concep □ Variation □ Residential □ Commercial □ Annexation  ☑ Rezoning (Map Amendment) From ♣ ↓ ↓ ☑ Plat (Subdivision, Consolidation, Public Easem ☑ Site Plan □ Landscape Change Approval	1 to <u>B3</u>
Other:	
PROJECT & PROPERTY INFORMATION  Project Name: GAS + CONVENION	Storu
Project Description: 3,500 SF Ous + Convu	
	roperty Index No. (PIN): 27-25-403-013 + 27-75-403
Zoning District: $34 + R1$	ot Dimensions & Area: 41,802 SF
Estimated Project Cost: \$	V Page ■ A street and a street
OWNER OF RECORD INFORMATION Please supply proper documentation of ownership and/or de	esignated representative for any corporation.
Name of Owner. Mohammad Alzaubi	Company: EMPIRE Properties
Street Address:	City, State & Zip:
E-Mail Address: Malzovbiagmail.com	Phone Number:
APPLICANT INFORMATION	
Same as Owner of Record	
All correspondence and invoices will be sent to the applican Representative Consent" section must be completed.	t. If applicant is different than owner, "Authorized
Name of Applicant: Veguty LC Series XLIX	Company: VIQUITY
Relation To Project: Developer & future owner	, ,
Street Address: 450 N. Statt St. Svit 450	City, State & Zip: Chicago, IL 10054
E-Mail Address: K. WARD @VIQUITY LOM	Phone Number:



Updated 12/18/2018

Village of Tinley Park
Community Development Dept
16250 S. Oak Park Ave.
Tinley Park, IL 60477
708-444-5100

# VILLAGE OF TINLEY PARK, ILLINOIS PLANNING AND ZONING GENERAL APPLICATION

# <u>Authorized Representative Consent</u>

It is required that the property owner or his designated representative be present at all requests made to the Plan Commission Zoning Board of Appeals. During the course of a meeting, questions may arise regarding the overall project, the property, proprimprovements, special conditions attached to recommendations among other aspects of any formal request. The representative present must have knowledge of the property and all aspects of the project. They must have the authority to make commitmentated to the project and property. Failure to have the property owner or designated representative present at the public meeting to substantial delays to the project approval. If the owner cannot be present or does not wish to speak at the public meeting, the following statement must be signed by the owner for an authorized repositive.

meeting, the following statement must be signed by the owner for an authorized repetitive.	
I hereby authorize (print clearly) to act on my behalf and advise that they have to act as my/our representative in regards to the subject property and project, including modifying any project or required by all terms and project or required by all terms are all the project or required by all terms are all the project or required by all terms are all the project or required by all terms are all the project or required by all the	e full auth
be bound by all terms and agreements made but he subject property and project, including modifying any project or requirements and agreements made but he subject property and project, including modifying any project or requirements.	iest. I agre
Property Owner Signature:	
Property Owner Name (Print): Emaar properties 11c	
<u>Acknowledgements</u>	
<ul> <li>Applicant acknowledges, understands and agrees that under Illinois law, the Village President (Mayor), Village I Village Manager, Corporation Counsel and/or any employee or agent of the Village or any Planning and Zoning member or Chair, does not have the authority to bind or obligate the Village in any way and therefore cannot be obligate the Village. Further, Applicant acknowledges, understands and agrees that only formal action (including limited to, motions, resolutions, and ordinances) by the Board of Trustees, properly voting in an open meeting, the Village or confer any rights or entitlement on the applicant, legal, equitable, or otherwise.</li> </ul>	Commission or a commission or commission or a commission or a commission or a commission or a
<ul> <li>Members of the Plan Commission, Zoning Board of Appeals, Village Board as well as Village Staff may conduct in of subject site(s) as part of the pre-hearing and fact finding review of requests. These individuals are given permissioners.</li> </ul>	spections ission to
<ul> <li>Required public notice signs will be obtained and installed by the Petitioner on their property for a minimum of prior to the public hearing. These may be provided by the Village or may need to be produced by the petitioner.</li> <li>The request is accompanied by all addendums and required additional information and all applicable fees are passcheduling any public meetings or hearings.</li> </ul>	3 200
Applicant verifies that all outstanding fees and monies owed to the Village of Tinley Park have been paid.      Any applicable recapture, impact, engineering, contracted review or other.	
<ul> <li>to issuance of any building permits, occupancy permits, or business licenses.</li> <li>The Owner and Applicant by signing this application certify that the above information and all supporting addend documentation is true and correct to the best of their knowledge.</li> </ul>	
Property Owner Signature:	
Property Owner Name (Print): FMAR Properties ILC	
Applicant Signature: (If other than Owner)	E PROFES
Applicant's Name (Print):	W. A.
Date: 7/15/19	

# VILLAGE OF TINLEY PARK

# APPLICATION FOR SITE PLAN APPROVAL

PROJECT NAME:	7-11 Tinley Park	LOCATION:	17100 S. Harlem Avenue
		an Commission and/or the Vi Approval for the project descri	illage Board of the Village of Tinley bed within.
APPLICANT INFO	ORMATION Kim Ward		
Company:	Veguity LLC Series XLIX		
Mailing Address:	400 N. State Street Suite 400, C	hicago, IL 60654	
Phone (Office):			···
Phone (Cell):			<del></del> -
Fax:			
Email:	k.ward@vequity.com		
If the Applicant is not the relationship to the The applicant is a pursuant of	e property owner:	scribe the nature of the Applic	cant's interest in the property and/or
PROPERTY INFO	RMATION		
Property Address:	17100 S. Harlem Avenue		
PIN(s):	27-25-403-013 + 27-25-403-014	-	
Existing Land Use:	Land // house + garage		
Zoning District:	B4 + R1		-
Lot Dimensions:	198'.51" X 196'.6"	·	
Property Owner(s): Mailing Address:	Mohammad Alzoubi // Emarr Pro	perties	
· ·			
APPLICATION IN		1 1	
	'	al attachments as necessary):	
3,500 SF Gas + Convenienc	e Store with a car wash attached		
explain and note tha		ired from the terms of the Zon plication is required with the s	
	ies that all of the above s	tatements and other information his or her knowledge.	on submitted as part of this
		7/19	5/19
Signature of Applica	nt		Date

# **VILLAGE OF TINLEY PARK**

# SITE PLAN APPROVAL CONTACT INFORMATION

PROJECT	NAME: 7-11 Tinley Park	LOCATIO	ON:	17100 S. Harlem Avenue
following	expedite your site plan submission through the properties on the information of the provide the information on the provide the information is greatly appreciated.	planning pro	cess, and re	the Village of Tinley Park requires the eturn to the Planning Department. Your
CURREN'	Γ PROPERTY OWNER OF RECORD	PROJEC1	ARC	СНІТЕСТ
Name:	Mohammad Alzoubi	Name:	Yous	uf Ghori
Company:	Emair Properties	Company:	llekis	Associates
Address:		Address:	226 V	V. Jackson Blvd Suite 1000, Chicago, IL
Phone:		Phone:		
Fax:		Fax:		
Email:	malzoubi2010@gmail.com	Email:		
PROJECT	ENGINEER	PROJECT	LAN	NDSCAPE ARCHITECT
Name:	Bill Perry	Name:		
Company:	Watermark Engineering	Company:	Water	mark Engineering
Address:	2631 Ginger Woods Pky, Suite 100, Aurora, IL	Address:	2631	Ginger Woods Pky, Suite 100, Aurora, IL
Phone:		Phone:		
Fax:		Fax:		
Email:	b-perry@watermark-engineering.com	Email:	b-perr	y@watermark-engineering.com
ATTORNI	ΣΥ	END USEI	R	
Name:	John Morse	Name:		
Company:	PFS	Company:	7Elev	en
Address:	200 S. Wacker Drive, Suite 2700, Chicago, II	Address:		
Phone:		Phone:		
Fax:		Fax:		
Email:	jmorse@pfs-law.com	Email:	Danie	I.Aykroyd@7-11.com

# VILLAGE OF TINLEY PARK

# SITE PLAN APPROVAL RESPONSIBLE PARTIES

PROJEC:	I NAME: 7-11 linley Park	LOCATI	ON: 17100 S. Hanem Avenue
review, en	wide name, address and telephone number of gineering, landscaping, attorney and building pe for all fees, please list that party's contact info	ermit fees in the s	pace provided below. If only one party will be
GENERA	L BILLING	RESPONS	SIBLE FOR PLAN REVIEW FEES
Name:		Name:	
Company:	Veguity LLC Series XLIX	Company:	Vequity LLC Series XLIX
Address:	400 N. State Street Suite 400, Chicago, IL 60654	Address:	400 N. State Street Suite 400, Chicago, IL 60654
Phone:		Phone:	
Fax:	N/A	Fax:	
Email:	k.ward@vequity.com	Email:	k.ward@vequity.com
Name: Company: Address: Phone: Fax: Email:	Vequity LLC Series XLIX  400 N. State Street Suite 400, Chicago, IL 60654  k.ward@vequity.com	Name: Company: Address: Phone: Fax: Email:	Vequity LLC Series XLIX  400 N. State Street Suite 400, Chicago, IL 60654  k.ward@vequity.com
	SIBLE FOR ENGINEERING/ UCTION OVERSIGHT FEES	RESPONS FEES Name:	SIBLE FOR LANDSCAPE REVIEW
Company:	Vequity LLC Series XLIX	Company:	Vequity LLC Series XLIX
Address:	400 N. State Street Suite 400, Chicago, IL 60654	Address:	400 N. State Street Suite 400, Chicago, IL 60654
Phone:		Phone:	
Fax:		Fax:	
Email:	k.ward@vequity.com	Email:	k.ward@vequity.com



VEQUITY

400 N STATE STREET SUITE 400 CHICAGO, IL 60654

www.vequity.com + 312 985 0987 7/15/2019

Village of Tinley Park 16250 S. Oak Park Avenue Tinley Park, IL 60477

RE: 17100 S Harlem Avenue, Tinley Park IL, Project Narrative

Vequity is proposing the development of a new 3,500 SF 7Eleven Gas + Convenience store with a car wash located at the intersection of Harlem and 171st Street in Tinley Park, IL. The building will be comprised of masonry face brick with a Cordova limestone wall base and Nichiha, fiber cement paneling as accents. The site will have 12 regular parking spaces and one additional handicap parking space per code. Vequity has added heavy landscaping and a 6' fence along the western portion of the site to act as a buffer between the proposed development and the residential neighborhood. The carwash will be a one-car, carwash bay attached to the building.

As the developer, we don't have access to operations of the future store but based on our conversations with the Tenant we are happy to share the details we have available.

7Eleven, the proposed Tenant, is the world's largest operator, franchisor, and licensor of convenience stores. The company operates, franchises and licenses close to 8,700 convenience stores in the US and Canada alone. Outside of the U.S. and Canada, there are some 45,600 7-Eleven stores in Japan. Taiwan, Thailand. South Korea, China, Malaysia, Mexico, Singapore, Australia, Philippines, Indonesia, Norway, Sweden, and Denmark. 7Eleven is listed as S&P AA (Investment Grade) Outlook Stable.

The proposed hours of operation are 24 hours a day and 7 days a week with approximately three to four employees in the store at any given peak period. The franchisee is given all rights to determine how many full-time and part-time employees are employed at each store but based off our real estate representatives experience it is somewhere between seven and ten people.

As for delivery schedules, this is something the store is unable to predict prior to opening. All delivery and vendor schedules are created closer to store opening. On average, stores have two main deliveries per vendor per week during business hours.

Vequity will be requesting a Special Use for this property for the gas/convenience store use. We will also be engaging a zoning attorney to rezone the property as B-3 from the current zoning of B-4/R-1.



# <u>LaSalle Standards – 7/11 Gas Station (171st Street & Harlem Ave.)</u>

A.US Post Office to the north on 171st St., zoned B-4. SFH to the south abutting property line, zoned R-1. Shell gas station to the east on S. Harlem Ave, zoned B-3. First Merchant Bank to the west, zoned B-4

- **B.** Automobile service stations with attached carwashes are not permitted in B-4 or R-1 zoned districts. B-3 Districts are the only zoning districts in which automobile service stations are permitted. The current zoning classification diminishes the property value by restricting the permissible uses.
- **C.** To no extent does the destruction of the complaining party's property value benefit the health, safety and welfare of the general public.
- D. The public gains tax revenue contribution and job creation for the local economy. The hardship imposed on the property owner is that the current zoning is incompatible with the functional roadway classifications abutting the property. This parcel does not serve as a buffer or transition between residential and commercial uses as intended in the B-4 district.
- E. A B-3 zoning designation is suitable to accommodate a wide range of specialized commercial uses, including highway-oriented services and commercial types of establishments to serve the needs of motorists. He parcel is bordered by southbound IL-43 S. Harlem Ave, Illinois Dept of Transportation (IDOT) ROW, to the east and 171st St., Cook County Department of Transportation and Highways (CCDOTH), to the north. The parcel is not compatible with the current B-4 and R-1 zoning.
- **F.** The commercial property on the north parcel has been vacant since 2015. Between August and September of 2016, the building and parking lot were demolished. The residential building on the south parcel has been present on the property since at least 1962 and remains intact.
- G. The proposed automobile service station development will serve motorists along southbound IL-43 S. Harlem Ave which is a Principal Arterial Roadway and eastbound along 171<sup>st</sup> St which is a Major Collector roadway, as designed in B-3 districts. Furthermore, the proposed development will meet modern requirements set by IDOT and CCDOTH in highway safety, the Metropolitan Water Reclamation District (MWRD) in stormwater management, site development and optimized energy performance referenced by current building and energy code.
- H. Comprehensively, the municipality has addressed changes in population growth and density, commercial/residential use and urban planning by modernizing the zoning map with overlay districts. IL-43 S. Harlem Ave, a Principal Arterial roadway, which has 31,000+ vehicles per day and 171st St, a Major Collector roadway, which has 12,000+ vehicles per day, has a high number of SFH's in both R-1 and R-4 districts. It is appropriate to re-zone areas in and around this intersection to B-3 in order to accommodate motorists given the high volume of daily traffic.

# LASALLE FACTORS/CRITERIA FOR REZONING (MAP AMENDMENT)

The Zoning Code does not establish any specific criteria that must be met in order for the Village Board to approve a rezoning request. Likewise, Illinois Statutes does not provide any specific criteria. Historically, Illinois courts have used eight factors enunciated in two court cases, LaSalle Bank of Chicago v. Count of Cook (1957) and Sinclair Pipeline v. Village of Richton Park (1960), when evaluating the validity of zoning changes. The so-called "LaSalle factors" are listed below. Village staff and officials will take these factors into consideration when evaluating and deciding rezoning requests. The petitioner should prepare their own responses to the "LaSalle Factors" with factual evidence to defend the requested rezoning. If additional space is required, you may provide the responses on a separate document or page.

pre	epare their own responses to the "LaSalle Factors" with factual evidence to defend the requested rezoning. If additional ace is required, you may provide the responses on a separate document or page.
A.	The existing uses and zoning of nearby property;
В.	The extent to which property values are diminished by the particular zoning;
C.	The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;
D.	The relative gain to the public as compared to the hardship imposed on the individual property owner;
E.	The suitability of the property for the zoned purpose;
F.	The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;
G.	The public need for the proposed use; and
н.	The thoroughness with which the municipality has planned and zoned its land use.

# Standards for a Special Use - 7/11 Gas Station (171st & Harlem)

1. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

The proposed plan will allow the petitioner to redevelop a vacant piece of land which will in turn enhance the corner property at 171st St & Harlem Avenue. The proposed development will provide fueling services to residents, businesses, and visitors. The proposed use is in the interest of the public convenience and will contribute to the general welfare of the area as the petitioner will further invest in this property. Our tenant upholds the highest safety standards regarding truck refueling, the tenant only allows trucks refuel from one side of the tank, they do not allow extenders to reach the tanks and bollards are always used to protect the MEPs themselves.

2. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values with the neighborhood.

The proposed plan will not be injurious to the use and enjoyment of other property in the immediate vicinity. The petitioner has ensured that there will be a 6' privacy fence between the development and the residential area to the West. The petitioner has also added ample landscaping to the western portion of the building as an even larger buffer. The petitioner has also added several shrubs and trees through the site to enhance the corner visually.

3. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district

The petitioner will not impede the normal and orderly development and improvement of the surrounding property as it fits in nicely with the surrounding uses. To the North of the building is a United States Postal Office, to the East is a Shell Gas Station, a Jewel Grocery as well as several other commercial uses, and to the South of the petitioner's building will be a new commercial development. We feel like the addition of a new gas + convenience store will only enhance this commercial corridor.

4. That adequate utilities, access roads, drainage, and/or necessary facilities have been or are being provided

The petitioner will be providing all new utilities to this site. They will also may every attempt to work with the building owner's to the West and South to ensure the properties have cross-access for ease of entrance. The new development has also been working with MWRD to make sure all storm detention and volume control measures have been addressed properly.

That adequate measures have been or will be taken to provide ingress and egress to designed as to minimize traffic congestion in the public streets. The petitioner has reached out and received feedback from IDOT and CCDOT which the petitioner has already built into the site plan that has been submitted for Special Use approval to ensure that the site plan meets or exceeds all ingress and egress requirements to minimize traffic and congestion to the corner of 171st and Harlem.

6. That the Special Use shall in all other respects confirm to the applicable regulations of the district in which it is located except as such regulations may in each instance be modified by the Village Board to the recommendation of the Plan Commission.

The proposed plan will confirm to the applicable regulations of the district in which it resides.

7. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

The proposed plan will allow the petitioner to redevelop a piece of land that has been vacant. Once the development has been built and is open it will add not only a new attractive store to the corner of 171<sup>st</sup> and Harlem but it will also affect the economic development by adding tax revenues from both the gas and convenience store sales.

# THE VILLAGE OF TINLEY PARK

**Cook County, Illinois Will County, Illinois** 

# **ORDINANCE NO. 2020-O-006**

# AN ORDINANCE APPROVING AND ACCEPTING A FINAL PLAT OF SUBDIVISION FOR SOUTHLANDS FIRST CONSOLIDATION

JACOB C. VANDENBERG, PRESIDENT KRISTIN A. THIRION, VILLAGE CLERK

CYNTHIA A. BERG
WILLIAM P. BRADY
WILLIAM A. BRENNAN
DIANE M. GALANTE
MICHAEL W. GLOTZ
MICHAEL G. MUELLER
Board of Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tinley Park Peterson, Johnson, & Murray Chicago, LLC, Village Attorneys 200 W. Adams, Suite 2125 Chicago, IL 60606

#### VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

#### **ORDINANCE NO. 2020-O-006**

# AN ORDINANCE APPROVING AND ACCEPTING A FINAL PLAT OF SUBDIVISION FOR SOUTHLANDS FIRST CONSOLIDATION

WHEREAS, Section 6(a) of Article VII of the 1970 Constitution of the State of Illinois provides that any municipality which has a population of more than 25,000 is a home rule unit, and the Village of Tinley Park, Cook and Will Counties, Illinois, with a population in excess of 25,000 is, therefore, a home rule unit and, pursuant to the provisions of said Section 6(a) of Article VII, may exercise any power and perform any function pertaining to its government and affairs, including, but not limited to, the power to tax and to incur debt; and

**WHEREAS**, the Village of Tinley Park ("Village") has considered the Plat of Subdivision for Southlands First Consolidation ("Plat") pertaining to certain real property located at 17100 Harlem Avenue, Tinley Park, Illinois 60477 ("Subject Property"), a true and correct copy of which is attached hereto and made a part hereof as Exhibit 1; and

WHEREAS, said Plat, was referred to the Plan Commission of the Village and has been processed in accordance with the Village of Tinley Park Zoning Ordinance; and

**WHEREAS**, the Plan Commission held a public hearing on the proposed Plat on January 2, 2020, at which time all persons were afforded an opportunity to be heard; and

WHEREAS, the Plan Commission voted 5-0 in favor to recommend that said Plat be approved; and

WHEREAS, the Plan Commission of this Village has filed its report of findings and recommendations that the proposed Plat be approved by this President and Board of Trustees, and this Board of Trustees has duly considered said report of findings and recommendations; and

**WHEREAS**, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interest of the Village of Tinley Park and its residents to approve said Plat; and

**NOW, THEREFORE, BE IT ORDAINED** BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS, STATE AS FOLLOWS:

**SECTION 1**: That the report and findings and recommendations of the Plan Commission of this Village are herein incorporated by reference as the findings of this Board of Trustees, as completely, as if fully recited herein at length.

**SECTION 2**: That the President and Board of Trustees of the Village of Tinley Park, hereby approve and accept said Plat, attached hereto as <u>Exhibit 1</u>, and all necessary Village Officials and staff are hereby authorized to execute said Plat prior to final recording, subject to review and revision as to form by the Village Attorney and Village staff.

**SECTION 3:** Any policy, resolution, or ordinance of the Village that conflicts with the provisions of this Ordinance shall be and is hereby repealed to the extent of such conflict.

**SECTION 4:** That this Ordinance shall be in full force and effect from and after its adoption and approval.

**SECTION 5:** That the Village Clerk is hereby ordered and directed to publish this Ordinance in pamphlet form, and this Ordinance shall be in full force and effect from and after its passage, approval, and publication as required by law.

PASSED THIS 21st day of January, 2020.

AYES:

NAYS:

ABSENT:

APPROVED THIS 21st day of January, 2020.

VILLAGE PRESIDENT

ATTEST:

VILLAGE CLERK

STATE OF ILLINOIS	)	
COUNTY OF COOK	)	SS
COUNTY OF WILL	j	

# CERTIFICATE

I, KRISTIN A. THIRION, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 2020-O-006, "AN ORDINANCE APPROVING AND ACCEPTING A FINAL PLAT OF SUBDIVISION FOR SOUTHLANDS FIRST CONSOLIDATION," which was adopted by the President and Board of Trustees of the Village of Tinley Park on January 21, 2020.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 21st day of January, 2020.

KRISTIN A. THIRION, VILLAGE CLERK

# FINAL PLAT OF SUBDIVISION SOUTHLANDS FIRST CONSOLIDATION

IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

OWNER'S CERTIF	<u>ICATE</u>		
STATE OF	) ) SS		
COUNTY OF	)		
COMPANY, IS THE OWN THE PROPERTY TO BE FORTH AND AS ALLOWE	ER OF THE PROPERTY DE SURVEYED AND SUBDIVID ED AND PROVIDED BY ST,		ND AS SUCH OWNER, HAS CAUSED USES AND PURPOSES THEREIN SE LITY COMPANY DOES HEREBY
		BEING SUBDIVIDED AFORESAID A ENTIRELY WITHIN THE LIMITS OF	
DATED AT		THIS DAY OF	, A.D., 20
		ADDRESS:	
BY: SIGNATURE			
TITLE: PRINT_TITLE			
NOTARY'S CERTI	<u>FICATE</u>		
STATE OF	) ) SS		
COUNTY OF	·		
AFORESAID, DO HEREB	Y CERTIFY THAT	(PRINT	R THE SAID COUNTY IN THE STATE NAME),
	(TITLE) OF SAID SON WHOSE NAME IS SUB	LIMITED LIABILITY COMPANY, WHO SCRIBED TO THE FOREGOING INS	O ARE PERSONALLY KNOWN TO ME TRUMENT AS SUCH
	AID INSTRUMENT AS THEIF	ME THIS DAY IN PERSON AND AG R OWN FREE AND VOLUNTARY AC IPANY, FOR THE USES AND PURF	
		·	A.D., 20
NOTARY PUBLIC SIGNA	ΓURE		
 (PRINT NAME)			
,			
VIII A CE ENCON	zen		
VILLAGE ENGINE	<u>lek</u>		
STATE OF ILLINOIS ) )S: COUNTY OF COOK )	5		
APPROVED BY THE VILI	LAGE ENGINEER OF THE V	VILLAGE OF TINLEY PARK, COOK	COUNTY, ILLINOIS.
DATED THIS	DAY OF	20	
JAIED INIS	DAT OF	, 20	
VILLAGE ENGINEER			
	TEICATE		
DRAINAGE CERT		THE BEST OF OUR KNOWLEDGE	AND RELIEF THE DRAINAGE OF
SURFACE WATERS WILL WILL BE CHANGED, REAWATERS INTO PUBLIC AWATERS WILL BE PLANIELIMINATE THE LIKELIMIELIMING OVERLAND FLENGINEERING DESIGN. S	NOT BE CHANGED BY THASONABLE PROVISION WILL AREAS OR DRAINS THAT NED FOR IN ACCORDANCE OOD OF DAMAGE TO ADJUDY ROUTES WILL CONFOR SHOULD ANY PONDING OC	HIS CONSOLIDATION OR THAT, IF  BE MADE FOR COLLECTION AND THE OWNER HAS A RIGHT TO USI WITH GENERALLY ACCEPTED EN DINING PROPERTY OWNERS BECAU RM TO THE ORIGINAL SUBDIVISION	SUCH SURFACE WATER DRAINAGE D DIVERSION OF SUCH SURFACE E, AND THAT SUCH SURFACE GINEERING PRACTICES SO AS TO JSE OF THIS CONSOLIDATION. THE GRADING PLAN AND ACCEPTED RESPONSIBILITY TO ADDRESS AS PE
MANAGEMENT, SOIL ERG	OSION CONTROL AND SITE	E GRADING.	
DATED THIS	DAY OF	, 20	
OWNER			
ENGINEER			

VILLAGE PLAN COMMISSION
STATE OF ILLINOIS )
COUNTY OF COOK )
REVIEWED AND APPROVED BY THE PLAN COMMISSION
THIS, A.D. 20
CHAIRMAN
VILLAGE BOARD OF TRUSTEES
STATE OF ILLINOIS )
) SS COUNTY OF COOK )
APPROVED AND ACCEPTED BY THE BOARD OF TRUSTEES
THIS, A.D. 20
PRESIDENT

### SIDEWALK EASEMENT PROVISIONS

VILLAGE CLERK

A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF TINLEY PARK, ITS HEIRS, SUCCESSORS AND ASSIGNS OVER ALL AREAS HEREON PLATTED AND DESIGNATED "SIDEWALK EASEMENT" FOR THE PERPETUAL RIGHT, PRIVILEGE AND AUTHORITY TO CONSTRUCT, RECONSTRUCT, REPAIR, REPLACE AND MAINTAIN A PATHWAY WITHIN THE SUBJECT EASEMENT AREA, TOGETHER WITH THE RIGHT OF ACCESS FOR THE NECESSARY PERSONS AND OR EQUIPMENT TO COMPLETE ANY OF THE ABOVE WORK, TOGETHER WITH THE RIGHT OF TRANSFER FOR PEDESTRIAN AND NON-MOTORIZED VEHICULAR TRAFFIC ALONG THE EASEMENT. THE RIGHT IS ALSO GRANTED TO CUT DOWN, TRIM OR REMOVE ANY TREES OR SHRUBS ON THE EASEMENT THAT INTERFERE WITH THE OPERATION OF THE PUBLIC PATHWAYS. NO PERMANENT BUILDINGS SHALL BE PLACED ON SAID EASEMENT, BUT THE SAME MAY BE USED FOR DRIVEWAYS CROSSING THE EASEMENT AREA, LAWNS AND LANDSCAPING AND OTHER PURPOSES THAT DO NOT THEN OR LATER INTERFERE WITH THE AFORESAID USES OR RIGHTS.

### ACCESS EASEMENT PROVISIONS

AN ACCESS EASEMENT IS RESERVED FOR AND GRANTED TO THE OWNERS OF LOTS 3, 4 AND 24 IN BLOCK 1 ARTHUR T. MCINTOSH & COMPANY'S SOUTHLANDS SUBDIVISION, THEIR HEIRS, SUCCESSORS, ASSIGNS AND VISITORS OVER ALL PAVED DRIVEWAYS, ROADWAYS AND WALKWAYS AS PRESENTLY OR HEREAFTER CONSTRUCTED ON LOT 1, SO AS TO PROVIDE FOR THE PASSAGE OF MOTOR VEHICLES AND PEDESTRIANS TO AND FROM ALL ABUTTING STREETS OR RIGHTS OF WAY.

### SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS )
)SS
COUNTY OF KANE )

I, DANIEL W. WALTER, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3585, HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING PROPERTY:

LOTS 1 AND 2 IN BLOCK 1 IN ARTHUR T. MCINTOSH AND COMPANY'S SOUTHLANDS IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD

AS SHOWN BY THE ATTACHED PLAT WHICH IS A REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. THIS SUBDIVISION IS WITHIN THE VILLAGE OF TINLEY PARK WHICH HAS ADOPTED AN OFFICIAL COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY THE STATE OF ILLINOIS ACCORDING TO 65 ILCS 5/11-12-6 AS HERETOFORE AND HEREAFTER AMENDED, AND THIS SITE FALLS WITHIN "OTHER AREAS: ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEFINED BY THE FLOOD INSURANCE RATE MAP, MAP NUMBER 17031C07081J, HAVING A REVISED DATE OF AUGUST 19, 2008.

GIVEN UNDER MY HAND AND SEAL AT AURORA , ILLINOIS

THIS\_\_\_\_\_, DAY OF \_\_\_\_\_, 20\_\_\_\_.

COMPASS SURVEYING LTD
PROFESSIONAL DESIGN FIRM

PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

BY: \_\_\_\_\_\_ DANIEL W. WALTER

LAND SURVEYOR CORPORATION NO. 184-002778

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3585 LICENSE EXPIRES 11/30/2020

## SURVEYOR'S AUTHORIZATION TO RECORD

STATE OF ILLINOIS )
) SS
COUNTY OF KANE )

LICENSE EXPIRES 4/30/2021

I HEREBY DESIGNATE \_\_\_\_\_\_\_\_, AND/OR REPRESENTATIVES THEREOF, TO RECORD THIS PLAT, A TRUE COPY OF WHICH HAS BEEN RETAINED BY ME TO ASSURE NO CHANGES HAVE BEEN MADE TO SAID PLAT.

DATED THIS \_\_\_\_\_DAY OF\_\_\_\_\_\_, 20\_\_\_\_, AT AURORA, KANE COUNTY, ILLINOIS.

COMPASS SURVEYING LTD
PROFESSIONAL DESIGN FIRM
LAND SURVEYOR CORPORATION NO. 184-002778
LICENSE EXPIRES 4/30/2021

BY: \_\_\_\_\_\_\_\_DANIEL W. WALTER
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3585
EXPIRES 11/30/2020

	PROJECT	DATE: 7/16/20	19 PC T	C DRAWN BY MR	DATE: 7/16/2019 PC TK DRAWN BY MRA CHECKED BY DW	BOOK
	SOLITHI ANDS FIRST CONSOLIDATION	NO.		REVISIONS		
		1		PER LETTER DATED 8/5/19	8/5/19	
	Tinley Park, Illinois	2		PER LETTER DATED 9/6/19	9/6/19	,
		3		PER LETTER DATED 12/20/19	2/20/19	
	CLIENT					
	VENTITY					
MO	400 N. State Street, Suite 400					
	Chicago Illinois 60654					l

SCALE: NONE

J:\PSDATA\2019 PROJECTS\19.0018\19.0018-01 PLAT OF SUBDIVISION\19.0018-01 POSUBD.DWG PROJ. NO.: 19.

### THE VILLAGE OF TINLEY PARK

**Cook County, Illinois Will County, Illinois** 

# **ORDINANCE NO. 2020-O-004**

AN ORDINANCE GRANTING A SPECIAL USE PERMIT FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)

JACOB C. VANDENBERG, PRESIDENT KRISTIN A. THIRION, VILLAGE CLERK

> CYNTHIA A. BERG WILLIAM P. BRADY WILLIAM A. BRENNAN DIANE M. GALANTE MICHAEL W. GLOTZ MICHAEL G. MUELLER Board of Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tinley Park
Peterson, Johnson, & Murray Chicago, LLC, Village Attorneys
200 W. Adams, Suite 2125 Chicago, IL 60606

#### VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

#### **ORDINANCE NO. 2020-O-004**

# AN ORDINANCE GRANTING A SPECIAL USE PERMIT FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)

WHEREAS, Section 6(a) of Article VII of the 1970 Constitution of the State of Illinois provides that any municipality which has a population of more than 25,000 is a home rule unit, and the Village of Tinley Park, Cook and Will Counties, Illinois, with a population in excess of 25,000 is, therefore, a home rule unit and, pursuant to the provisions of said Section 6(a) of Article VII, may exercise any power and perform any function pertaining to its government and affairs, including, but not limited to, the power to tax and to incur debt; and

WHEREAS, a petition for the granting of a Special Use Permit to construct a gas station and convenience store at 17100 Harlem Avenue Tinley, Park, Illinois 60477 ("Subject Property") has been filed by Vequity, LLC ("Petitioner") with the Village Clerk of this Village and has been referred to the Plan Commission of the Village and has been processed in accordance with the Tinley Park Zoning Ordinance; and

**WHEREAS**, said Plan Commission held a public hearing on the question of whether the Special use Permit should be granted on January 2, 2020 at the Village Hall of this Village, at which time all persons present were afforded an opportunity to be heard; and

WHEREAS, public notice in the form required by law was given of said public hearing by publication not more than thirty (30) days nor less than fifteen (15) days prior to said public hearing in the Daily Southtown, a newspaper of general circulation within the Village of Tinley Park; and

**WHEREAS**, the Plan Commission vote 5-0 and has filed its report and findings and recommendations that the proposed Special Use Permit be approved with this President and Board of Trustees, and this Board of Trustees has duly considered said report of findings and recommendations; and

**WHEREAS**, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interest of the Village of Tinley Park and its residents to approve said Special Use Permit; and

**NOW, THEREFORE, BE IT ORDAINED** BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS, STATE AS FOLLOWS:

**SECTION 1**: The foregoing recitals shall be and are hereby incorporated as findings of facts as if said recitals were fully set forth herein.

**SECTION 2**: That the report of findings and recommendations of the Plan Commission are herein incorporated by reference as the findings of this President and the Board of Trustees, as complete as if fully set forth herein at length. This Board finds that the Petitioner has provided evidence establishing that they have met the standards for granting the Special Use Permit as set forth in Section X.J.5 of the Zoning Ordinance, and the proposed granting of the Special Use Permit as set forth herein is in the public good and in the best interest of the Village and its residents and is consistent with and fosters the purpose and spirit of the Tinley Park Zoning Ordinance.

<u>X.J.5. Standards:</u> No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

1. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;

The Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare because the proposed project will encompass the development of an automobile service (gas) station and convenience store that will service for visitors and residents of the community. The project will be constructed meeting current Village building codes and is among the highest and best uses of a parcel at a heavily traveled intersection.

2. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;

The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood because the proposed project will develop land that is currently vacant and provide services for visitors and residents of the community. The site will be well-landscaped and will have an eight-foot fence to buffer the property from the residential homes to the west. The building will be constructed with quality materials. This proposed use is similar and compatible with existing nearby uses along Harlem Avenue.

3. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;

The Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district because the majority of the property within this area has already been developed. Landscape buffers have been supplied to the west and cross-access has been supplied for the vacant lots to the south.

4. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;

The proposed plans provide evidence of existing utilities, roads, and drainage facilities and any necessary modifications to be accommodated on the 7-Eleven site. Drainage has

been accounted for on the site and utilizes the existing storm sewer system. All on-site and accepted existing off-site drainage has been accounted for within the plans.

5. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and

The proposed plans include site access by utilizing two curb cuts on Harlem Avenue and 171st Street that allow for ingress/egress to the site and efficient site circulation. Cross-access for passenger vehicles is also provided by a cross-access easement to the east through the neighboring bank property. Cross-access is also supplied to the vacant lots to the south for possible future cross-access as well. The site incorporates proposed public and private walkways for safe pedestrian travel to and from the site.

6. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance.

The Special Use conforms to all other applicable regulations of the Zoning Ordinance and Village regulations except for certain Variations applied herein related to the redevelopment of an existing infill site. These Variations are consistent with other properties within along Harlem Avenue and the intent of the regulations are met where possible.

7. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

The proposed 7-Eleven project will contribute directly to the economic development of the community by providing fuel, retail, and food services to visitors, providing additional jobs, and providing additional property and sales tax revenue where the existing vacant property is generating minimal tax revenue.

**SECTION 3**: The Special Use Permit set forth herein below shall be applicable to the following described property

**LEGAL DESCRIPTION:** LOTS 1 AND 2 IN BLOCK 1 IN ARTHUR T. MCINTOSH AND COMPANY'S SPUTHLANDS IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL IDENTIFICATION NUMBER: 27-25-403-013-0000 and 27-25-403-014-0000

**COMMONLY KNOWN AS:** 17100 – 17110 Harlem Avenue, Tinley Park, Illinois

**SECTION 4:** That a Special Use Permit to allow for the construction of a gas station and convenience store at the Subject Property is hereby granted to the Petitioner.

**SECTION 5**: Any policy, resolution, or ordinance of the Village that conflicts with the provisions of this Ordinance shall be and is hereby repealed to the extent of such conflict.

**SECTION 6:** That this Ordinance shall be in full force and effect from and after its adoption and approval.

**SECTION 7:** That the Village Clerk is hereby ordered and directed to publish this Ordinance in pamphlet form, and this Ordinance shall be in full force and effect from and after its passage, approval, and publication as required by law.

PASSED THIS 21st day of January, 2020.

AYES:

NAYS:

ABSENT:

APPROVED THIS 21st day of January, 2020.

VILLAGE PRESIDENT

ATTEST:

VILLAGE CLERK

STATE OF ILLINOIS )
COUNTY OF COOK ) SS
COUNTY OF WILL )

### CERTIFICATE

I, KRISTIN A. THIRION, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 2020-O-004, "AN ORDINANCE GRANTING A SPECIAL USE PERMIT FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)," which was adopted by the President and Board of Trustees of the Village of Tinley Park on January 21, 2020.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 21st day of January, 2020.

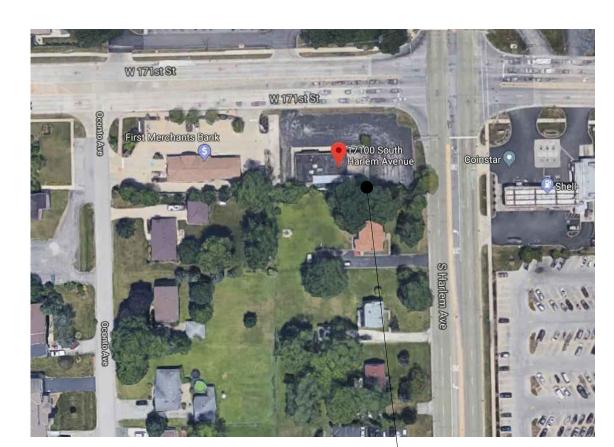
KRISTIN A. THIRION, VILLAGE CLERK

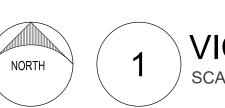
VILLAGE OF TINLEY... AGENDA - 1/21/2020,...



# 7- Eleven

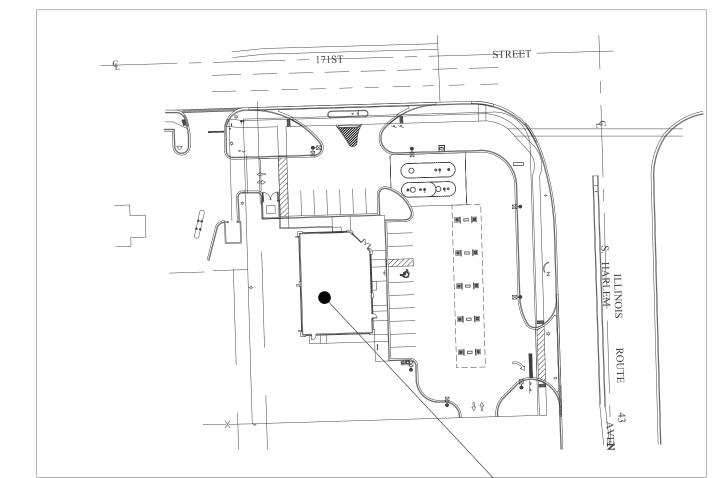
17100 S HARLEM AVE TINLEY PARK, IL 60477





VICINITY AERIAL MAP









	PERSPECTIVE VIEW
3	SCALE: NTS FOR REFERENCE ONLY

### SHEET INDEX REVISION SHEET NAME 4 3 2 ARCHITECTURAL G0.00 COVER SHEET, DRAWING INDEX AND PROJECT INFO AS1.02 SITE DETAILS A3.01 EXTERIOR COLOR ELEVATIONS AND SCHEDULE A3.02 EXTERIOR ELEVATIONS AND SCHEDULE A3.02 CANOPY ELEVATIONS A3.04 3D VIEWS PH1.01 PHOTOMETRIC PLAN PH1.02 | PHOTOMETRIC PLAN

### PROJECT DIRECTORY

OWNER VEQUITY LLC 400 N. STATE ST. SUITE 400 CHICAGO, IL 60654

P. 312-985-0987

P. 312-419-0009

P. 630-375-1800

ARCHITECT OF RECORD ILEKIS ASSOCIATES 223 WEST JACKSON BLVD. SUITE 1000 CHICAGO, IL 60606

**CIVIL ENGINEER:** WATERMARK ENGINEERING RESOURCES, LTD 2631 GINGER WOODS PARKWAY SUITE 100 AURORA, IL 60502

## PROJECT STATEMENTS

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH ALL LOCAL BUILDING CODES.

ALPHONSE A. ILEKIS LICENSE EXPIRES 11/30/18

### **ENERGY STATEMENT**

I CERTIFY THAT I AM A REGISTERED ENERGY PROFESSIONAL (REP). I ALSO CERTIFY THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE PLANS FOR ADDRESS: 17100 S HARLEM AVE TINLEY PARK IL 60477 FULL COMPLY WITH THE REQUIREMENTS OF CHAPTER 18-13. ENERGY CONSERVATION OF THE MUNICIPAL CODE OF ARLINGTON HEIGHTS AS WELL AS THE STATE OF ILLINOIS ENERGY CONSERVATION AS REQUIRED BY STATE LEGISLATION

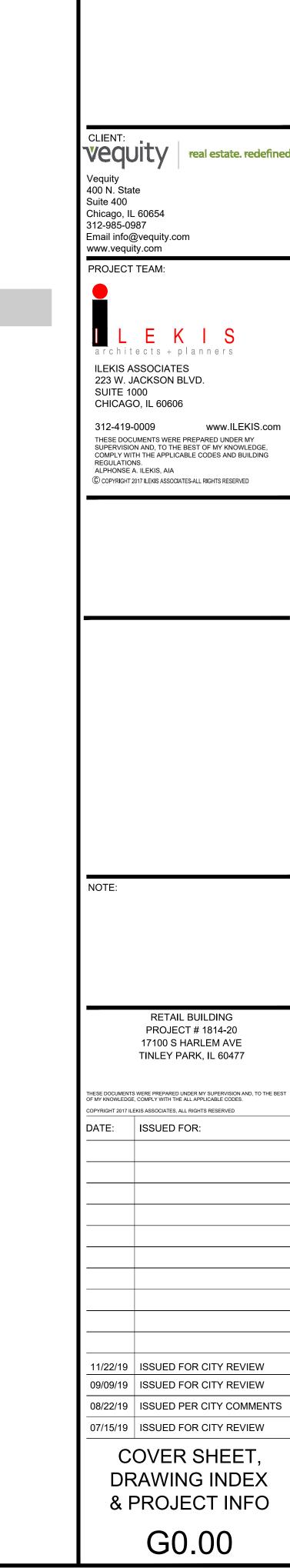
DATE: 07/15/19 ILLINOIS LICENSE # 01-8612 ALPHONSE A. ILEKIS (ARCHITECT) LICENSE EXPIRES 11/30/20

# **CODE SUMMARY**

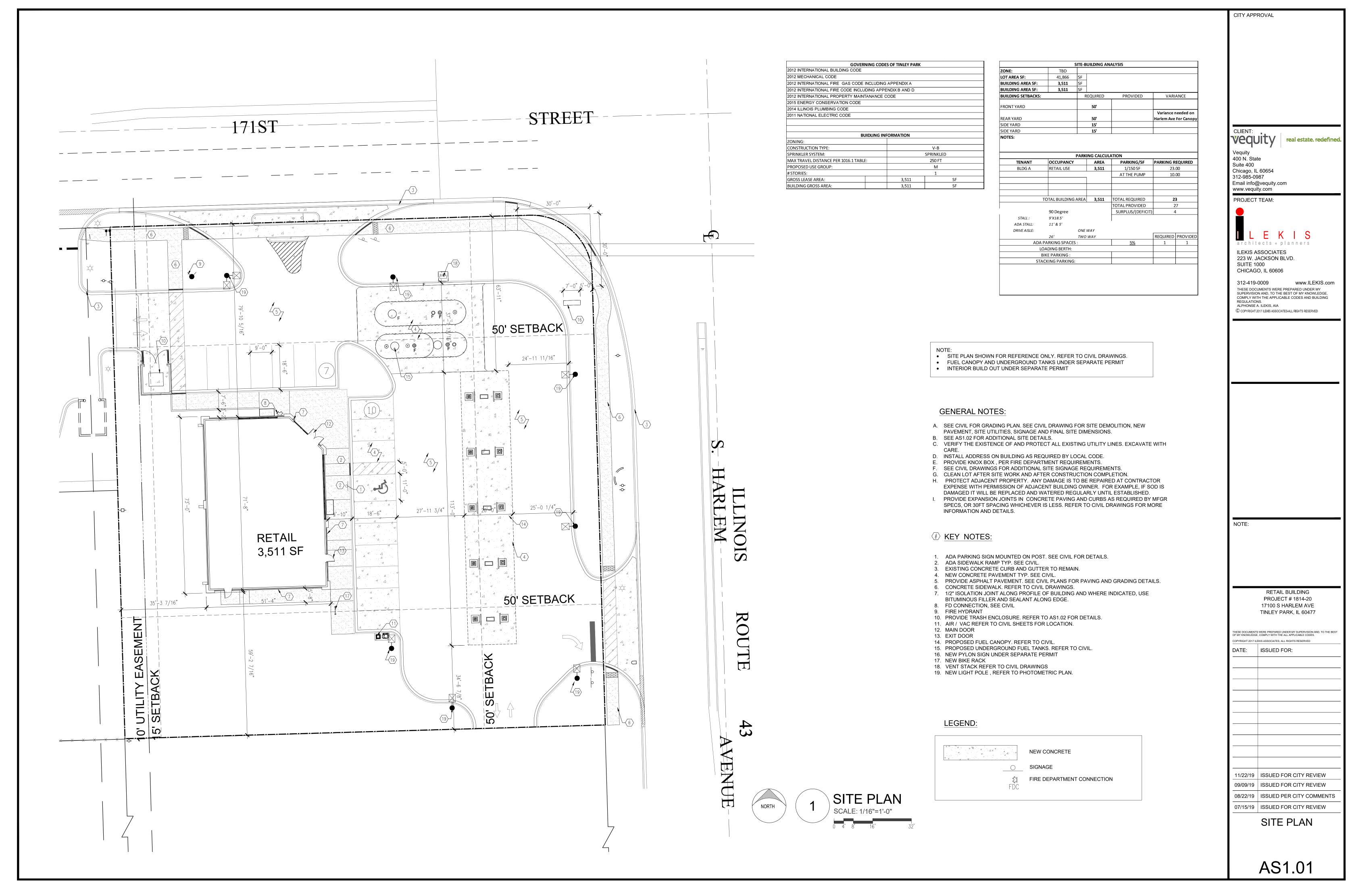
SEE AS1.01 FOR ALL REVIEW AND SUMMARIES.

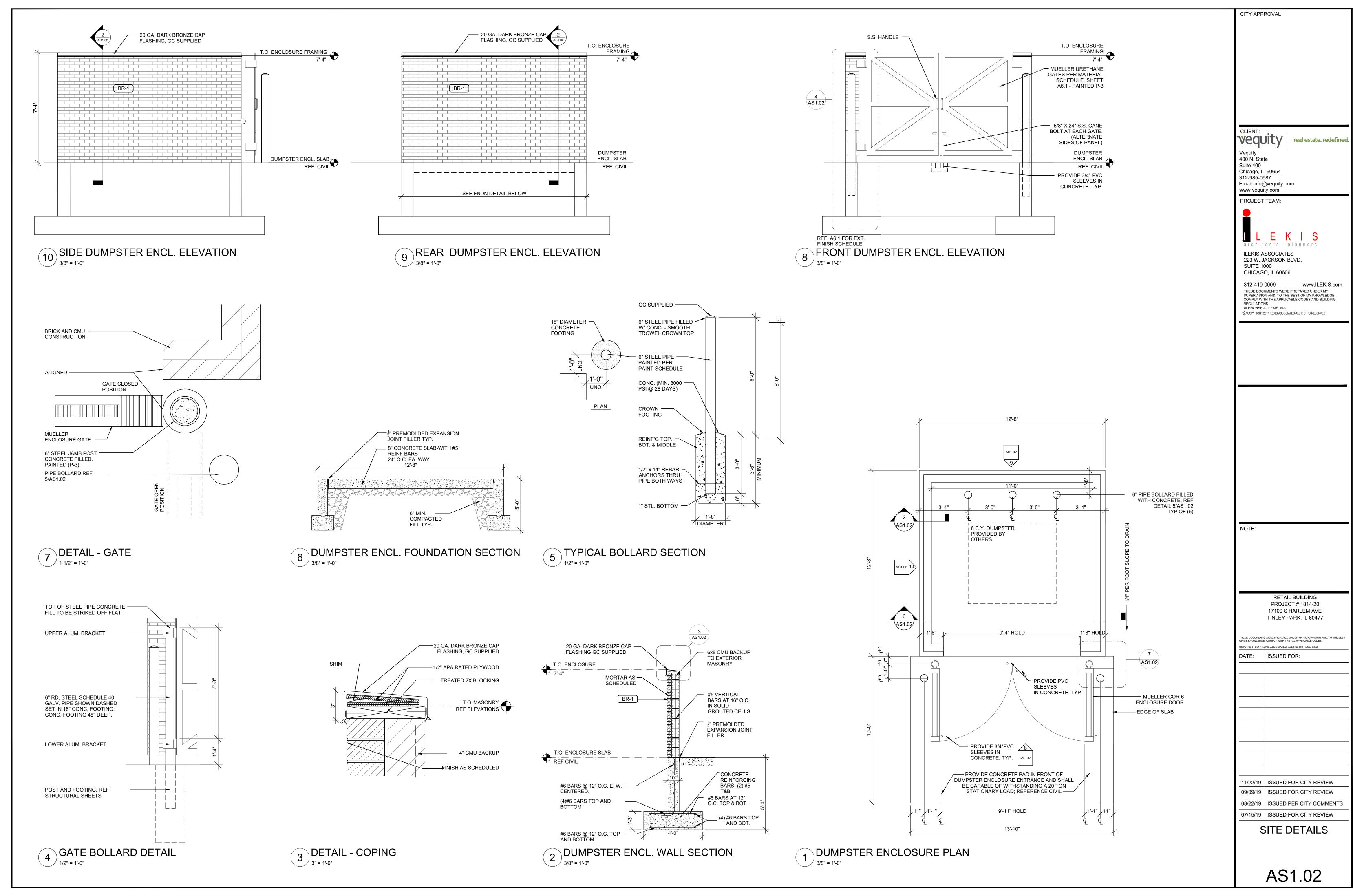
## **DIGGING NOTICE**

CONTRACTOR TO VERIFY ALL LOCAL REQUIREMENTS IF DIGGING IS REQUIRED.

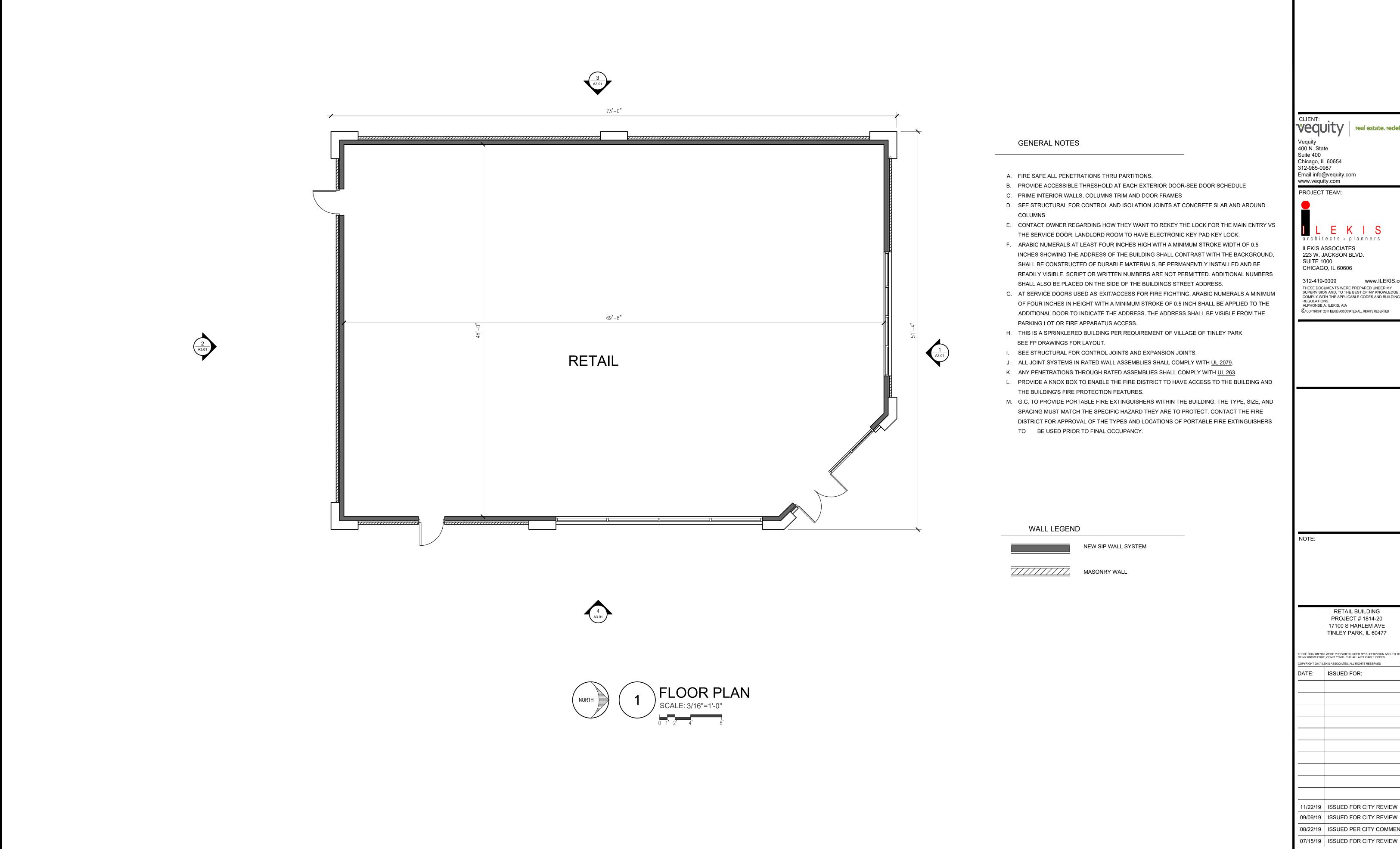


CITY APPROVAL





VILLAGE OF TINLEY... AGENDA - 1/21/2020,...



real estate. redefined.

CITY APPROVAL

www.ILEKIS.com THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING

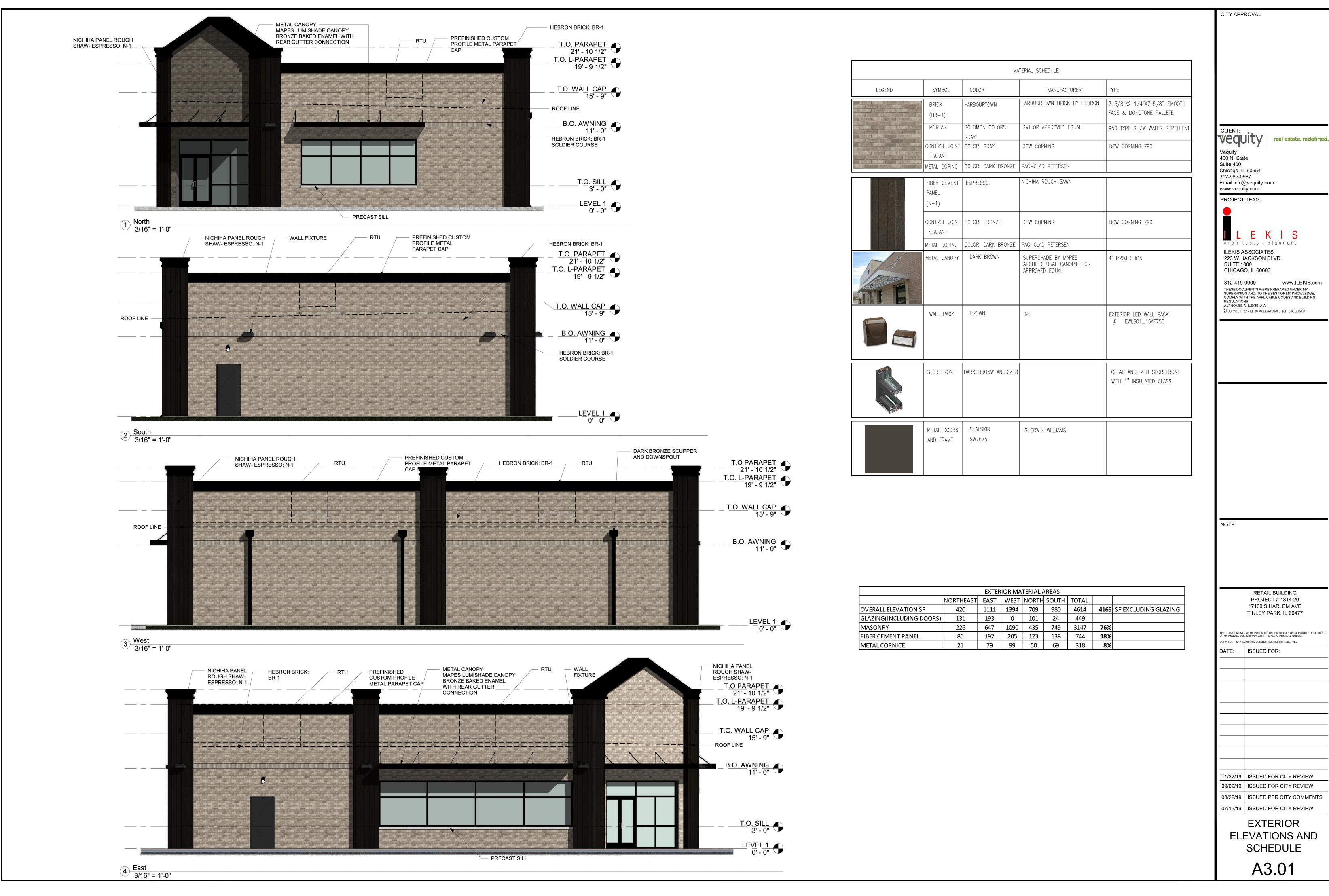
> RETAIL BUILDING PROJECT # 1814-20 17100 S HARLEM AVE

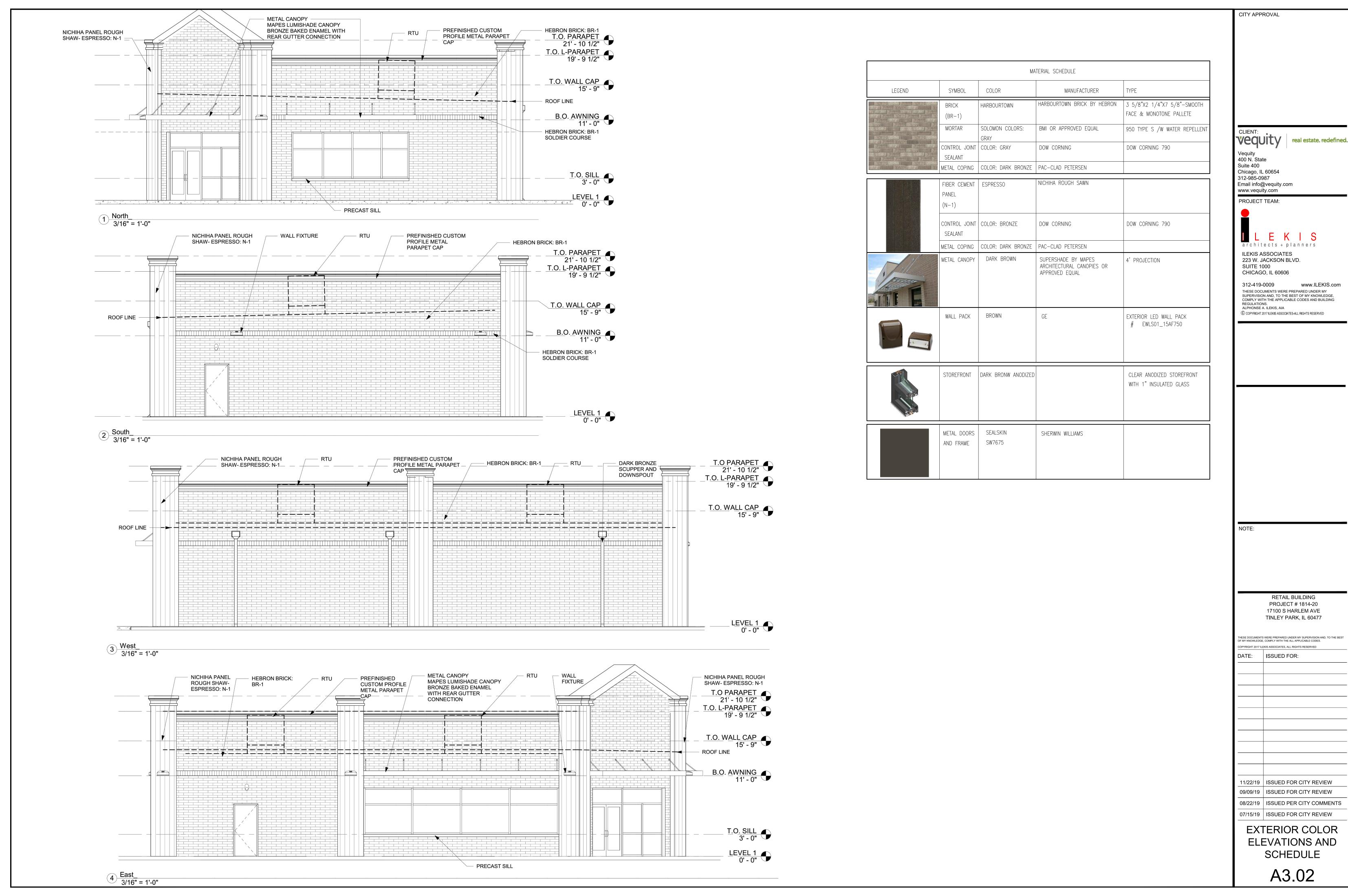
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.

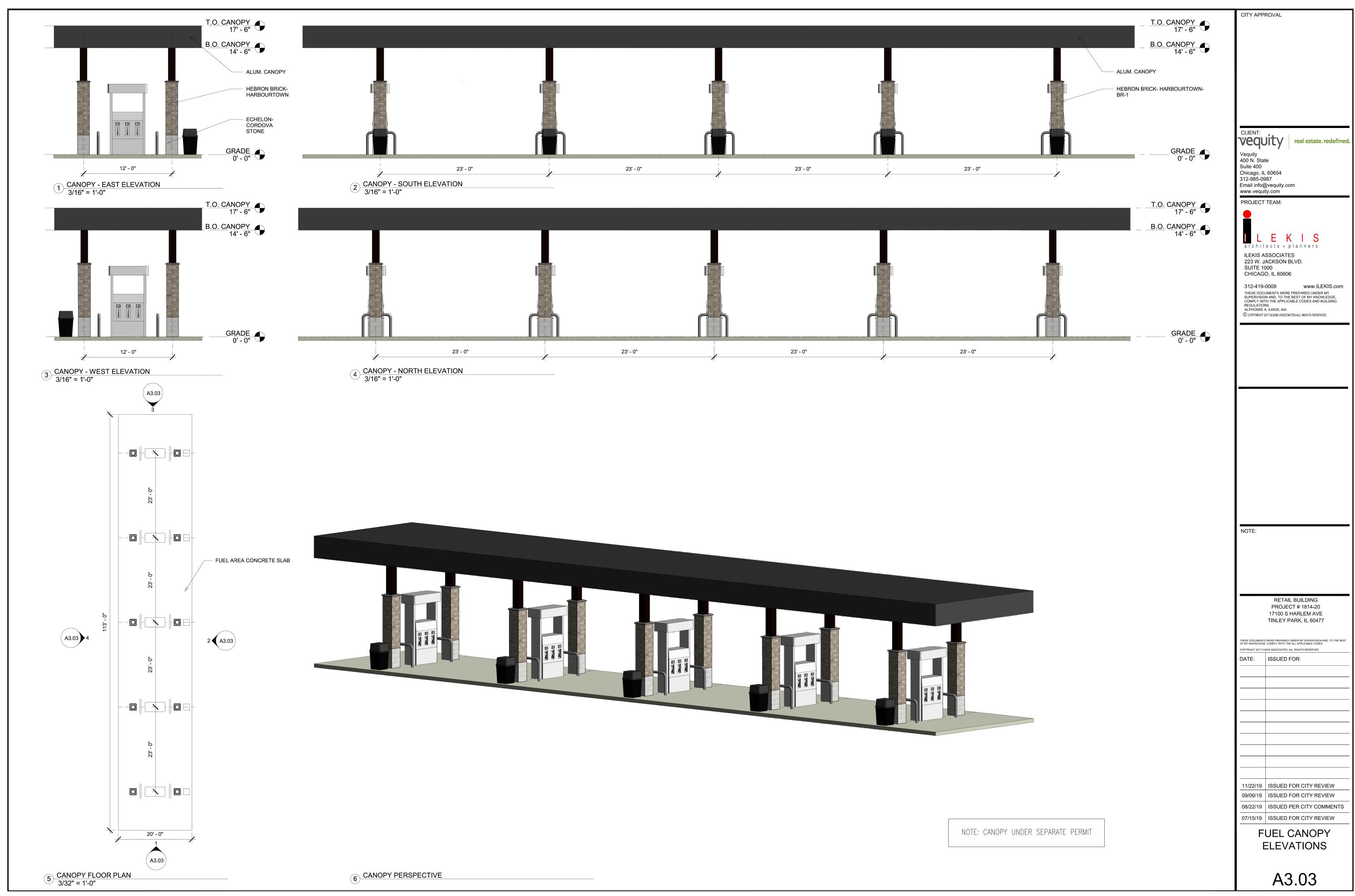
11/22/19 ISSUED FOR CITY REVIEW 09/09/19 | ISSUED FOR CITY REVIEW 08/22/19 | ISSUED PER CITY COMMENTS

FLOOR PLAN

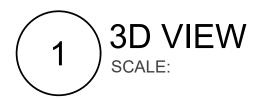
A1.01











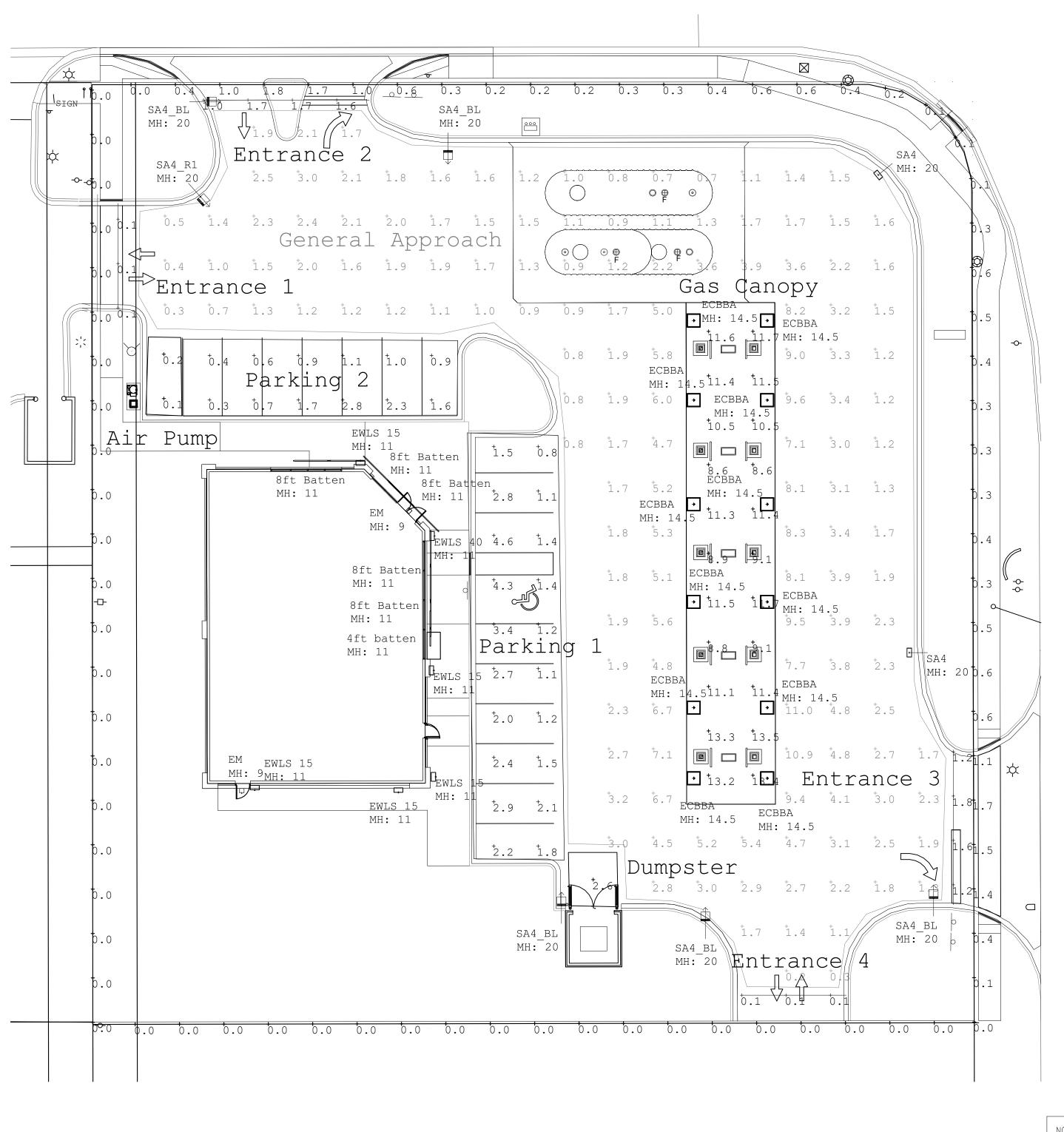




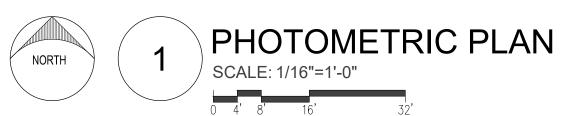
CITY APPROVAL real estate. redefined. Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com PROJECT TEAM: architects + planners ILEKIS ASSOCIATES 223 W. JACKSON BLVD. SUITE 1000 CHICAGO, IL 60606 312-419-0009 www.ILEKIS.com THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
ALPHONSE A. ILEKIS, AIA © COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED RETAIL BUILDING PROJECT # 1814-20 17100 S HARLEM AVE TINLEY PARK, IL 60477 THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES. DATE: ISSUED FOR: 11/22/19 ISSUED FOR CITY REVIEW 09/09/19 ISSUED FOR CITY REVIEW 08/22/19 ISSUED PER CITY COMMENTS 07/15/19 ISSUED FOR CITY REVIEW

**3D VIEWS** 

A3.04



NOTE: PHOTOMETRIC PLAN WAS DEVELOPED BY GE



CITY APPROVAL
VEQUITY real estate. redefine
Vequity
400 N. State Suite 400 Chicago, IL 60654
312-985-0987 Email info@vequity.com
www.vequity.com PROJECT TEAM:
•
Architects + planners
ILEKIS ASSOCIATES 223 W. JACKSON BLVD.
SUITE 1000 CHICAGO, IL 60606
312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
REGULATIONS. ALPHONSE A. ILEKIS, AIA © COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED
NOTE:
RETAIL BUILDING PROJECT # 1814-20
17100 S HARLEM AVE TINLEY PARK, IL 60477
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BES' OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.  COPYRIGHT 2017 ILEKIS ASSOCIATES, ALL RIGHTS RESERVED
DATE: ISSUED FOR:
-
11/22/19 ISSUED FOR CITY REVIEW 09/09/19 ISSUED FOR CITY REVIEW
08/22/19 ISSUED PER CITY COMMENTS

07/15/19 ISSUED FOR CITY REVIEW

PHOTOMETRIC PLAN

PH1.01

Luminaire Scl	nedule						
Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Watts	Arr. Lum. Lumens
<b>→</b>	12	ECBBA	SINGLE	1.000	ECBB0A5F5501AWHTE	35	4230
-	1	EWLS 40	SINGLE	1.000	EWLS01_40AF750120-277V	37	4000
-	5	EWLS 15	SINGLE	1.000	EWLS01_15AF750120-277V	12	1500
<b>→</b>	2	EM	SINGLE	0.010	LEDPRS-BR-CL (Phillips)	20	32
	5	8ft Batten	SINGLE	1.000	GE 96 4100K Batten Strip GEWI109641BAT-SY	33	3073
	1	4ft batten	SINGLE	1.000	GE 48 4100K Batten Strip GEWI104841BAT-SY	16.68	1536
	2	SA4	SINGLE	1.000	EASC_A4F550	44	4200
	5	SA4_BL	SINGLE	1.000	1-EASC0A4F550DCD with ELSEASXRBLBLCK	44	4000
	1	SA4_R1	SINGLE	1.000	1-EASC0A4F550DCD with ELSEASXRS1BLCK (Right)	44	2400

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Air Pump	Illuminance	Fc	0.15	0.2	0.1	1.50	2.00
Dumpster	Illuminance	Fc	2.60	2.6	2.6	1.00	1.00
Entrance 1	Illuminance	Fc	0.10	0.1	0.1	1.00	1.00
Entrance 2	Illuminance	Fc	1.50	1.7	1.0	1.50	1.70
Entrance 3	Illuminance	Fc	1.45	1.8	1.2	1.21	1.50
Entrance 4	Illuminance	Fc	0.10	0.1	0.1	1.00	1.00
Gas Canopy	Illuminance	Fc	11.00	13.5	8.6	1.28	1.57
General Approach	Illuminance	Fc	2.88	11.0	0.2	14.40	55.00
Parking 1	Illuminance	Fc	2.12	4.6	0.8	2.65	5.75
Parking 2	Illuminance	Fc	1.19	2.8	0.3	3.97	9.33
Property Line	Illuminance	Fc	0.27	1.8	0.0	N.A.	N.A.

Poles cannot be placed in tree islands. Residential areas located to the West and South, therefore, the property line has to be 0FC.

Due to the above, this design does not meet 7-Eleven spec.

ntrances	10FC AVG
Air Pump	10FC
Gasoline Canopy	30FC
Dumpster	10FC
Parking	10FC
General Approach	3FC
idewalk	NO SPEC
Property Line	NO SPEC



NOTE: PHOTOMETRIC PLAN WAS DEVELOPED BY GE COMPANY.

CITY APPROVAL
CLIENT:
<b>VEQUITY</b> real estate. redefine
* * '
Veguity
400 N. State Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com
PROJECT TEAM:
_
ILLEKIS
architects + planners
ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000 CHICAGO II 60606
CHICAGO, IL 60606
312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY
SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING
REGULATIONS. ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED
NOTE
NOTE:
RETAIL BUILDING
PROJECT # 1814-20
17100 S HARLEM AVE TINLEY PARK, IL 60477
THINGET FARM, IL 00477
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.  COPYRIGHT 2017 ILEKIS ASSOCIATES, ALL RIGHTS RESERVED
DATE: ISSUED FOR:
DATE. ISSUED FUK:
I
11/22/19 ISSUED FOR CITY REVIEW
11/22/19 ISSUED FOR CITY REVIEW 09/09/19 ISSUED FOR CITY REVIEW
09/09/19 ISSUED FOR CITY REVIEW 08/22/19 ISSUED PER CITY COMMENTS
09/09/19 ISSUED FOR CITY REVIEW
09/09/19 ISSUED FOR CITY REVIEW 08/22/19 ISSUED PER CITY COMMENTS 07/15/19 ISSUED FOR CITY REVIEW
09/09/19 ISSUED FOR CITY REVIEW 08/22/19 ISSUED PER CITY COMMENTS 07/15/19 ISSUED FOR CITY REVIEW  PHOTOMETRIC
09/09/19 ISSUED FOR CITY REVIEW 08/22/19 ISSUED PER CITY COMMENTS 07/15/19 ISSUED FOR CITY REVIEW

PH1.02















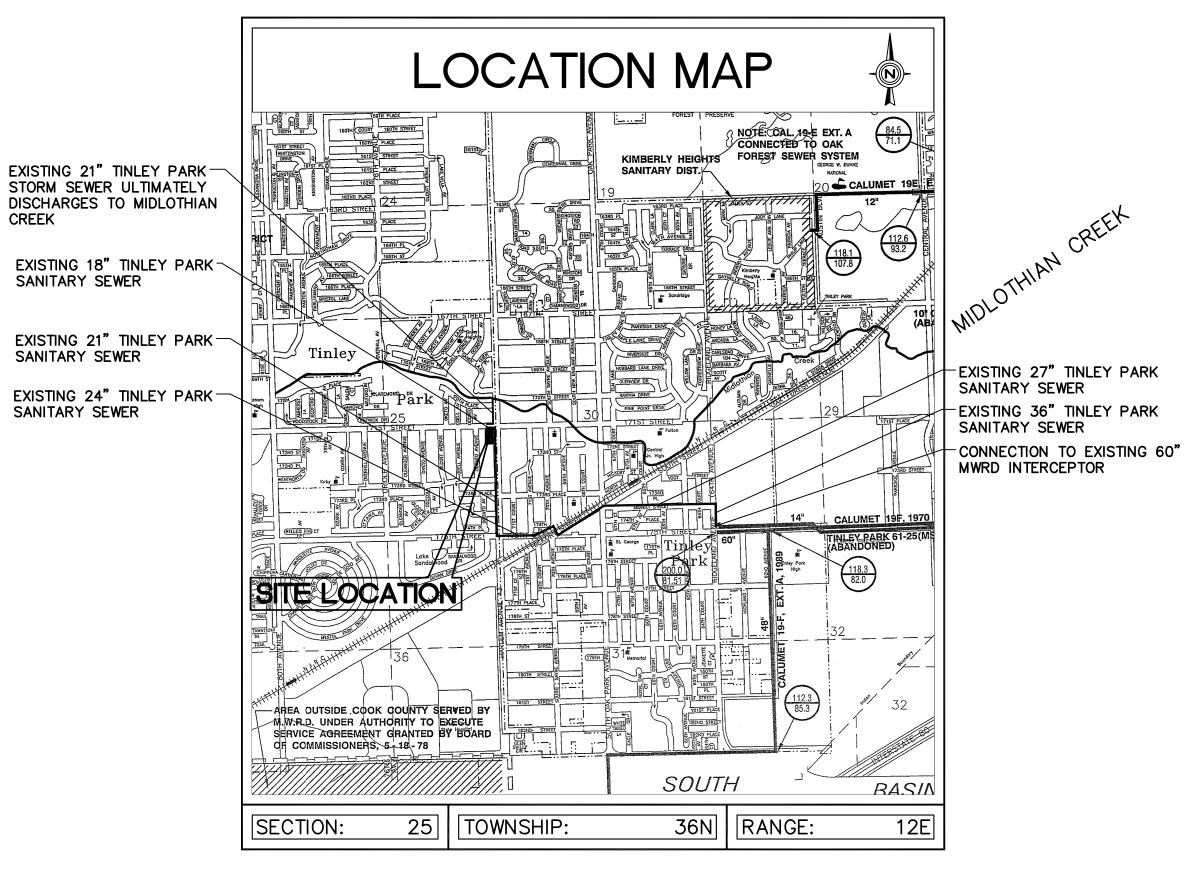
# FINAL ENGINEERING PLANS

# PROPOSED FUEL CENTER - TINLEY PARK

17100 S. HARLEM AVENUE VILLAGE OF TINLEY PARK COOK COUNTY, ILLINOIS

INDEX									
	REVISIONS								
	CIVIL ENGINEERING PLANS	1	2	3	4	5	6	7	
C-1	COVER SHEET								
C-1.1	DEMOLITION PLAN	X		X					
C-2	GEOMETRIC PLAN	X	X	Х					
C-3	GRADING PLAN	X	X	X					
C-4	ACCESSIBLE ROUTE GRADES AND DETAILS	X	X	X					
C-5	UTILITY PLAN	X	X	X					
C-6	PHASE 1 SOIL EROSION CONTROL PLAN			X					
C-7	PHASE 2 SOIL EROSION CONTROL PLAN		X	Χ					
C-8	SOIL EROSION CONTROL DETAILS AND SPECS								
C-9	PROJECT DETAILS	X							
C-10	PROJECT SPECIFICATIONS	X							
C-11	MWRD GENERAL NOTES								
C-12	IDOT DETAILS 1								
C-13	IDOT DETAILS 2								
C-14	IDOT DETAILS 3								
C-15	DOT DETAILS			Χ					
	SUPPORTING DOCUMENTS		F	REV	'ISI	ONS	<u> </u>		
SUPPORTING DOCUMENTS				3	4	5	6	7	
1 of 1	LAND TITLE SURVEY	X							
L-1	LANDSCAPE PLAN	X	X	X	X				
L-2	LANDSCAPE DETAILS AND SPECIFICATIONS		X						
1 of 1	MWRD DRAINAGE EXHIBIT		X	X					

NOTE: THE DESIGNS CONTAINED IN THE ABOVE PLANS AND SUPPORTING DOCUMENTS WERE PREPARED WITH THE UNDERSTANDING THAT THEY WOULD BE USED AS A WHOLE PLAN SET. EACH CONSTRUCTION DISCIPLINE IS TO USE ALL THE PLANS AND SUPPORTING DOCUMENTS TOGETHER AS A WHOLE AND NOT AS SEPARATE DOCUMENTS. EACH CONTRACTOR IS TO BECOME COMPLETELY FAMILIAR WITH THE WHOLE PLAN SET AND THE EXISTING SITE CONDITIONS. SHOULD ANYTHING WITH ALL THESE PLANS AND SUPPORTING DOCUMENTS BE INCONSISTENT WITH THE SITE CONDITIONS THEN THE CONTRACTOR IS TO CONTACT THE ENGINEER IMMEDIATELY BEFORE ANY CONSTRUCTION IS STARTED.



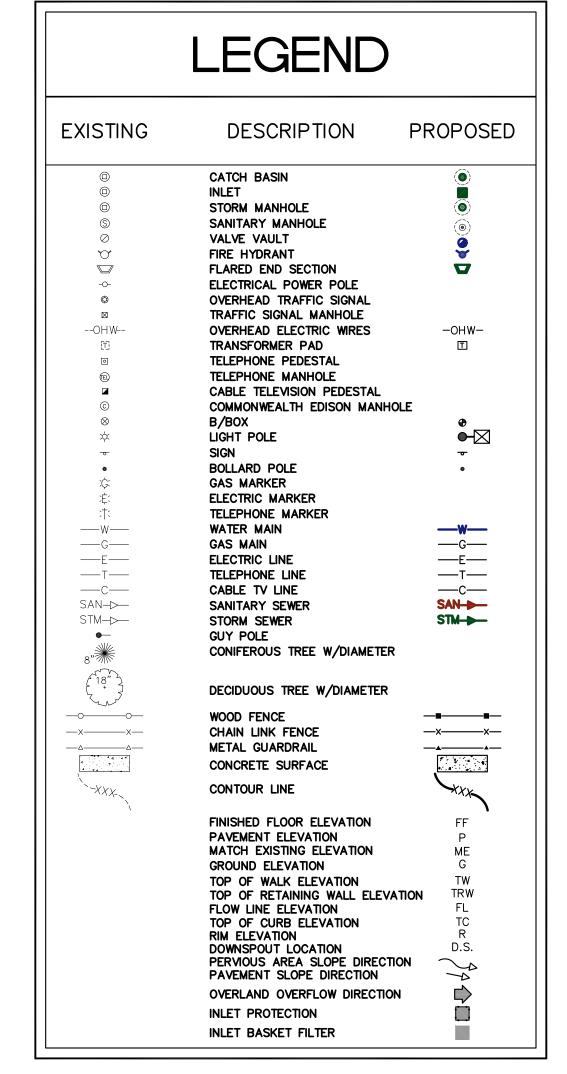
### BENCHMARK REFERENCE BENCHMARK NGS DESIGNATION - DK2006 DATUM: NAVD88 PIN - DN4693 STATION IS 39 FEET WEST OF THE CENTERLINE OF WILL/COOK ROAD, 54 FEET SOUTH OF THE CENTERLINE OF 167TH STREET, 10 FEET WEST OF A TRAFFIC SIGNAL HAND HOLE AND 1 FOOT NORTHEAST OF AN ORANGE CARSONITE MARKER. ACCESS TO THE DATUM POINT IS THROUGH A 6 INCH LOGO CAP AND THE ROD (DATUM POINT) IS SURROUNDED BY A FLOATING BRONZE DISK TO AID IN IDENTICATION. ELEVATION = 751.92SITE BENCHMARK

SITE BENCHMARK 2 - SOUTHWEST BOLT OF FIRE HYDRANT

SITE BENCHMARK 1 - CROSS CUT ON TRAFFIC SIGNAL MANHOLE

ELEVATION = 700.19ELEVATION = 700.71

WILLIAM H. PERRY, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THE DESIGN PLANS ARE IN COMPLIANCE WITH ALL APPLICABLE STATE, COUNTY AND VILLAGE ORDINANCES WITH REGARD TO DRAINAGE AND THAT THE PROJECT WILL NOT CHANGE DRAINAGE OF SURFACE WATERS, AND WILL NOT INCREASE THE LIKELIHOOD OF FLOODING THE NEIGHBORING PROPERTIES.



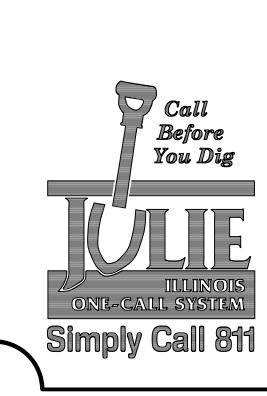
STATE OF ILLINOIS) COUNTY OF KANE)

I, WILLIAM H. PERRY, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THESE CIVIL ENGINEERING PLANS, NOT THE SUPPORTING DOCUMENTS, AS LISTED IN THE INDEX, HAVE BEEN PREPARED BY WATERMARK ENGINEERING RESOURCES, LTD. UNDER MY PERSONAL DIRECTION. THESE PLANS ARE INTENDED TO BE USED AS AN INTEGRAL PART OF THE PROJECT SPECIFICATIONS AND

ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 62-055801. MY LICENSE EXPIRES ON 11-30-21. UNLESS THIS DOCUMENT BEARS ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE DESIGN ENGINEER, IT IS NOT A VALID DOCUMENT.

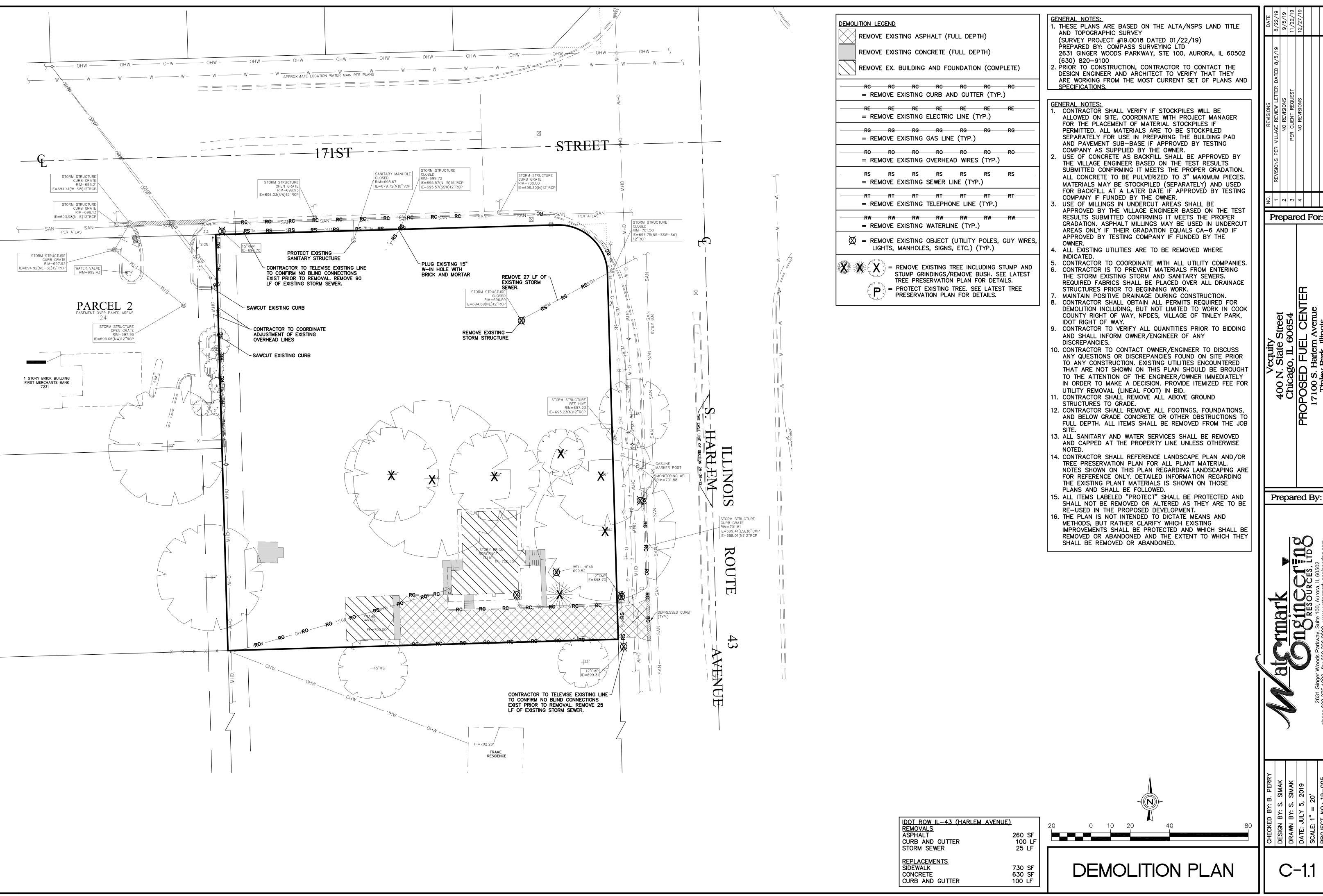
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184.002989

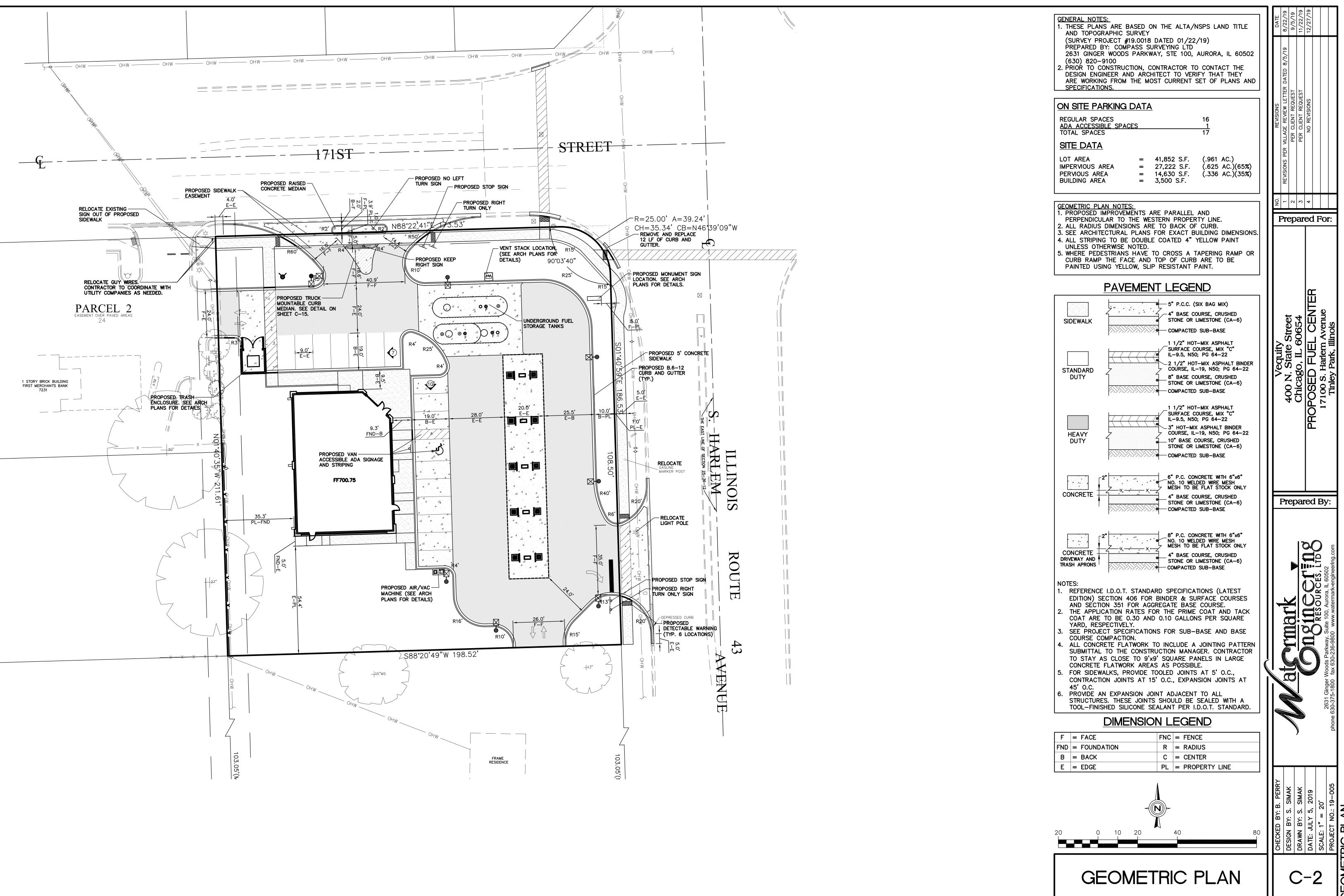
COVER SHEET

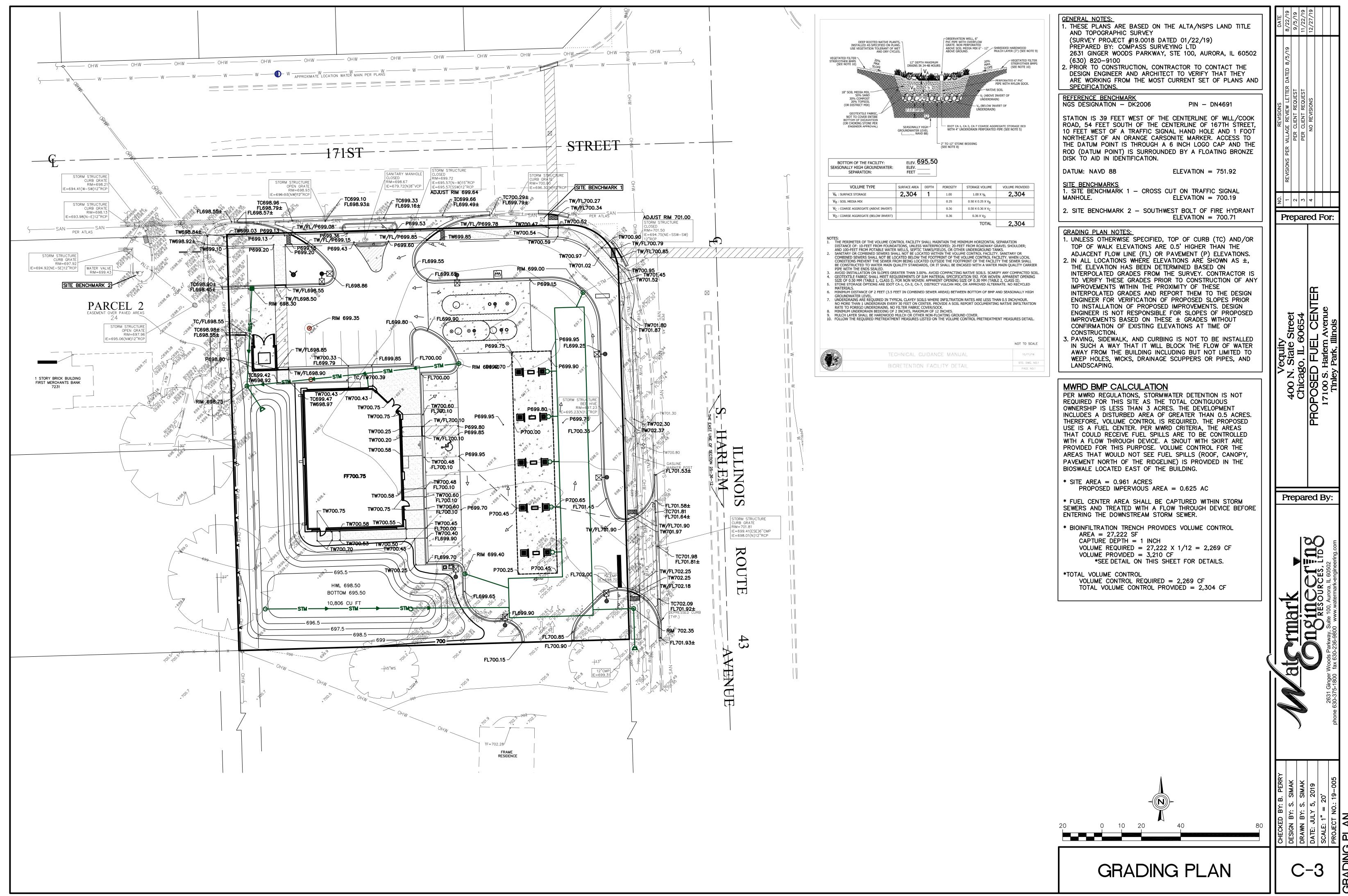


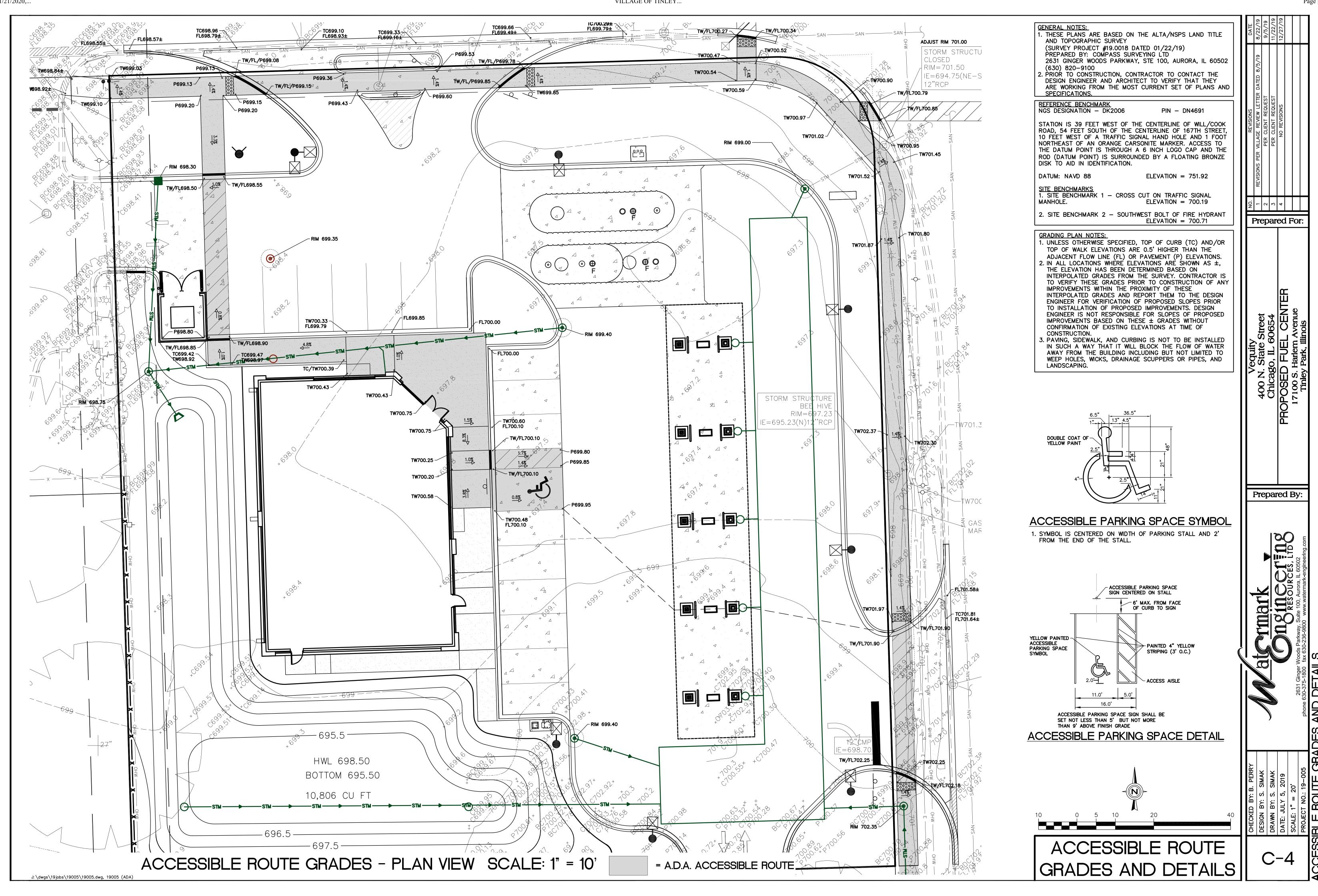
Prepared By:

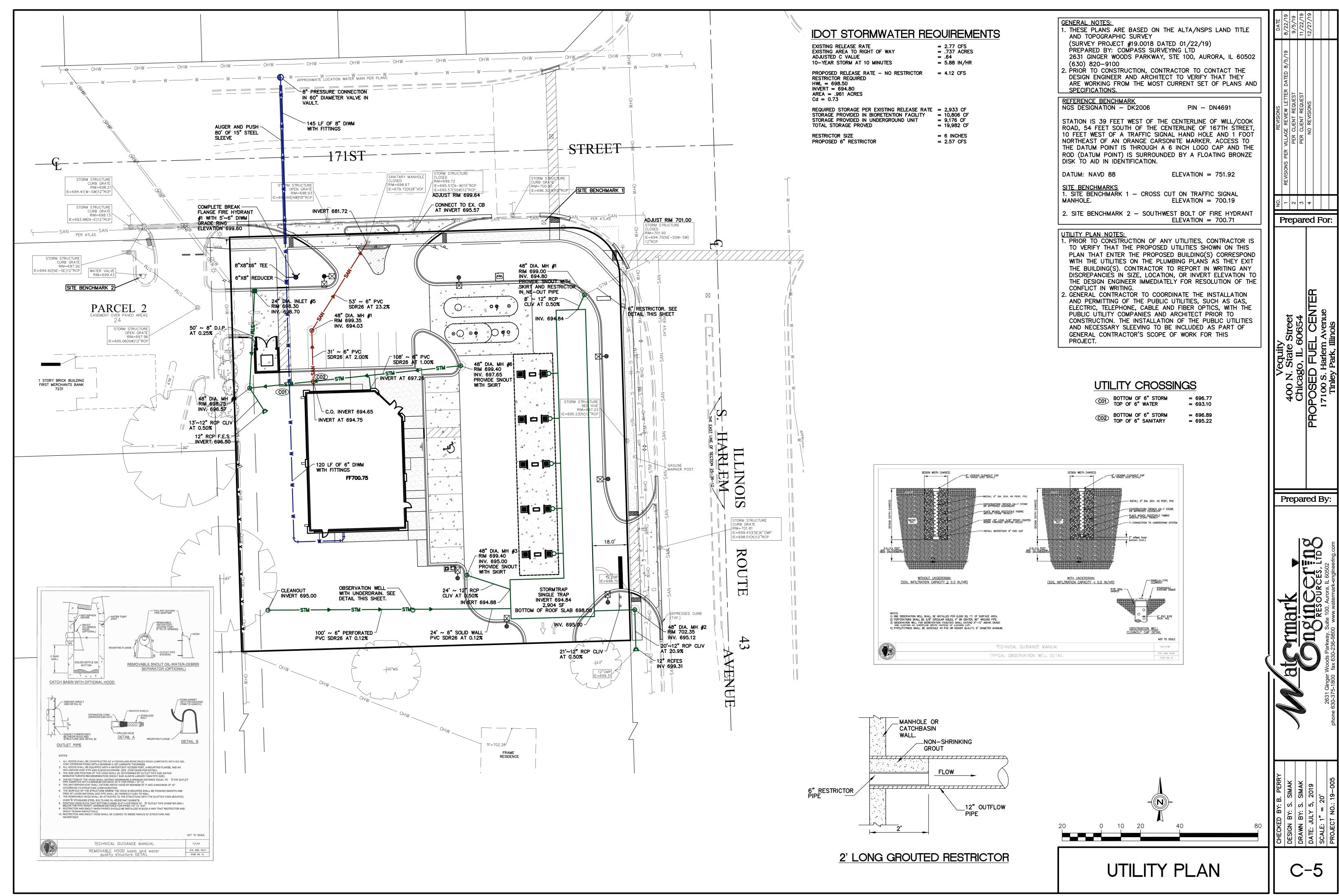
Prepared For

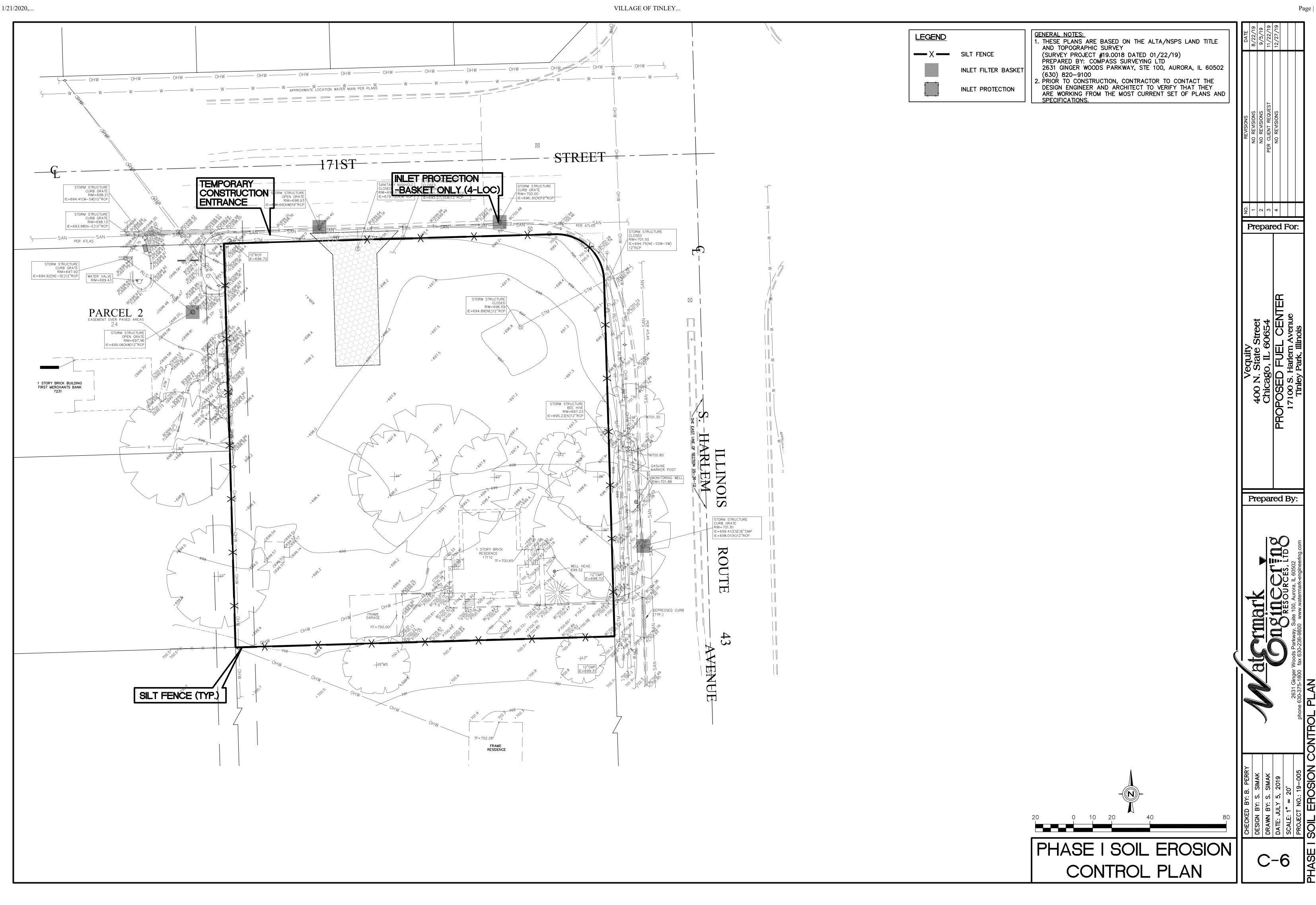


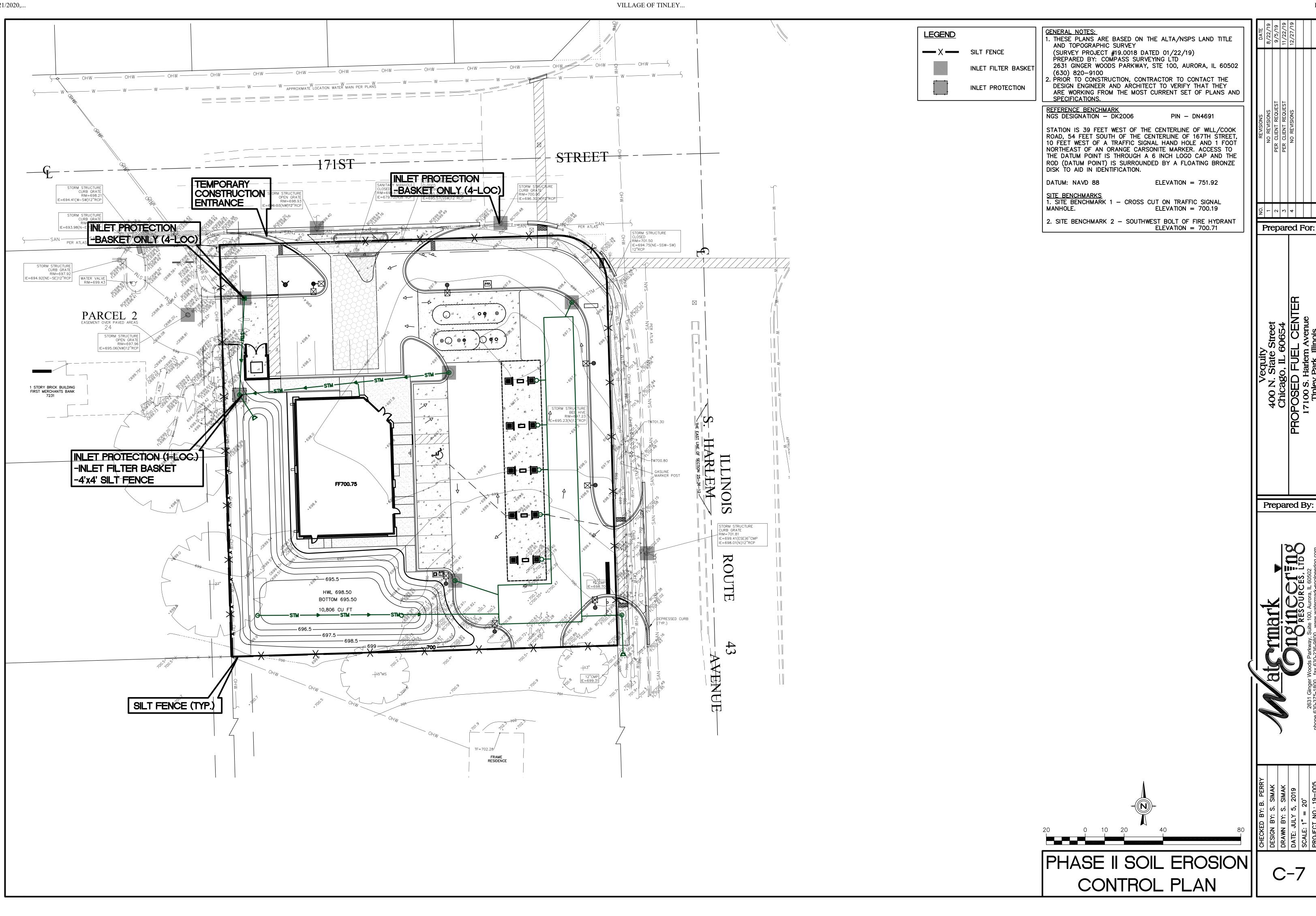












STONE SIZE - IDOT COARSE AGGREGATE GRADATIONS: CA-1, CA-2, CA-3 OR CA-4.

THICKNESS - NOT LESS THAN EIGHT (8) INCHES. FILTER FABRIC - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS

INGRESS OR EGRESS POINTS

OF MATERIAL CLASS I, II OR IV IN THE ILLINOIS URBAN MANUAL. STONE PLACEMENT - THE STONES IN THE ENTRANCE SHALL BE PLACED ACCORDING TO ILLINOIS URBAN MANUAL CONSTRUCTION SPECIFICATION 25 (ROCKFILL). PLACEMENT WILL BE BY METHOD 1 AND COMPACTION WILL BE

CLASS III. 5. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY

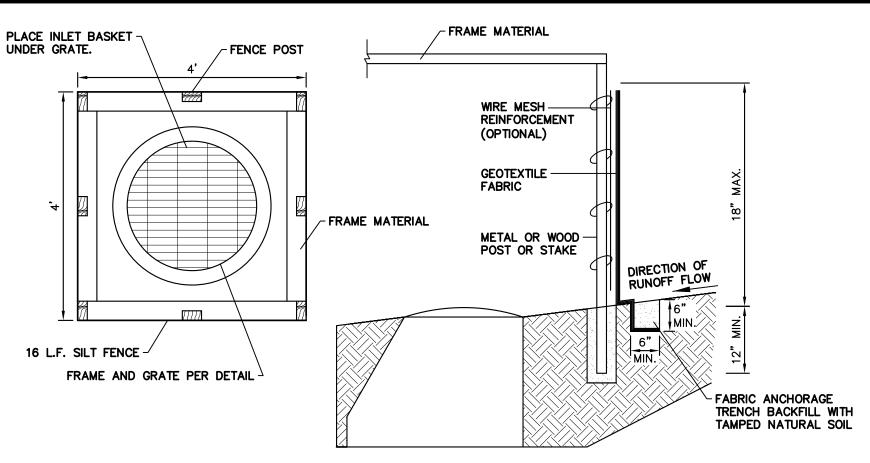
MUST BE REMOVED IMMEDIATELY. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHS, WATERCOURSES, OR SURFACE WATERS INCLUDING WETLANDS.

PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

# STABILIZED CONSTRUCTION ENTRANCE

### EROSION CONTROL

- CONTRACTOR IS TO FOLLOW THE REQUIREMENTS OF THE "ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL" CURRENT EDITION AND THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM
- SOIL EROSION CONTROL SYSTEMS SHALL BE CONSTRUCTED AS SHOWN ON THE SOIL EROSION CONTROL PLANS AND/OR AS SPECIFIED BY THE DESIGN ENGINEER, VILLAGE ENGINEER, APPOINTED SWPPP INSPECTOR, OR MUNICIPAL INSPECTOR
- PERIMETER EROSION BARRIER SHALL BE PLACED IN A MANNER THAT WILL INTERCEPT WATER BORNE SILT AND PREVENT IT FROM LEAVING THE AREA OF CONSTRUCTION. ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE WITH THE ENDS EXTENDING UPSLOPE. THE MAXIMUM SPACING OF POSTS SHALL BE 5 FEET. WHEN WIRE OR OTHER FORM OF APPROVED BACKING IS USED THE MAXIMUM SPACING MAY BE INCREASED TO 8 FEET. SPACING MAY NEED TO BE ADJUSTED SO THAT POSTS ARE LOCATED IN LOW AREAS WHERE WATER MAY POND. THE FILTER FABRIC AND WIRE SUPPORT, IF USED, MUST BE SECURELY FASTENED TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST ONE INCH LONG OR TIE WIRES (10 GAGE MINIMUM). THE FABRIC SHALL NOT BE STAPLED OR WIRED TO THE WIRE SUPPORT OR TO EXISTING TREES. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 (GEOTEXTILE) TABLE 1 OR 2, CLASS I IN THE ILLINOIS URBAN MANUAL, CURRENT EDITION. THE FABRIC SHALL HAVE AN AOS OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN MATERIAL.
- INLET FILTERS SHALL BE CONSTRUCTED OF A REPLACEABLE REINFORCED FILTER BAG SUSPENDED FROM A RETAINER RING OR FRAME. INLET FILTER SYSTEMS SHALL BE THE CATCH-ALL WITH OVERFLOW, AS FURNISHED BY MARATHON MATERIALS INC., OR PRE-APPROVED EQUAL. CARE SHOULD BE TAKEN WHEN MAINTAINING OR REMOVING THIS FILTER FABRIC BAG TO NOT ALLOW THE PREVIOUSLY TRAPPED DEBRIS TO ENTER THE
- STORM SEWER SYSTEM. THE BED FOR RIP RAP SHALL BE TRIMMED AND SHAPED TO ALLOW THE FINISHED SURFACE TO CONFORM TO THE LINES SPECIFIED. AT THE TOE OF THE SLOPE, THE RIP RAP SHALL COMMENCE ON A CONTINUATION OF THE SLOPE AFTER EXCAVATION TO ACCOMMODATE THE FULL DEPTH OF FABRIC, BEDDING LAYER, AND RIP RAP SPECIFIED.
- FILTER FABRIC IS REQUIRED UNDER STONE RIP RAP GRADATION 4, 5, 6 AND 7 FOR ALL USES, AND UNDER CONCRETE BLOCK, BROKEN CONCRETE, AND STONE OR BROKEN CONCRETE DUMPED RIP RAP WHEN USED FOR SOIL EROSION PROTECTION.
- STREETS ARE TO BE CLEARED OF DEBRIS, AND SWEPT CLEAN OF SILT AND MUD DAILY. B. SOIL EROSION CONTROL MEASURES ARE TO BE CHECKED BY QUALIFIED PERSONNEL AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL AND REPAIRED IF NECESSARY.
- ALL EROSION CONTROL PROTECTION SHALL BE KEPT IN PLACE UNTIL THE GROUND HAS BEEN STABILIZED AND THE PAVEMENT HAS BEEN INSTALLED.
- 10. ANY DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE STOPPED (PERMANENTLY OR TEMPORARILY) FOR 7 DAYS, MUST BE STABILIZED IN ACCORDANCE
- WITH NPDES REQUIREMENTS. 11. BUILT UP SEDIMENT SHALL BE REMOVED FROM THE SILT FENCE WHEN IT HAS REACHED ONE- THIRD THE HEIGHT OF THE FENCE.
- 12. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, ETC., TO SEE IF FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND THAT THE FENCE POSTS ARE SECURELY IN THE GROUND.
- 13. THE SEDIMENT BASIN, IF PRESENT, SHALL BE INSPECTED FOR DEPTH OF SEDIMENT AT LEAST ONCE A WEEK. BUILD UP SEDIMENT SHALL BE REMOVED WHEN IT REACHES 25 PERCENT OF THE DESIGN CAPACITY.
- 4. CONTRACTOR TO COMPLY WITH FINAL STABILIZATION AND TERMINATION REQUIREMENTS OF THE SWPPP.
- 15. AT A MINIMUM, SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PHASE I AND PHASE II SOIL EROSION CONTROL PLANS. THEY SHALL ALSO BE INSTALLED ANYWHERE THAT THEY ARE NEEDED DURING CONSTRUCTION IN ORDER TO PREVENT EROSION AND SEDIMENT FROM BEING CARRIED DOWN STREAM. THIS IS THE GENERAL CONTRACTOR'S RESPONSIBILITY AND SHALL BE INSTALLED, RELOCATED, MAINTAINED, ETC. AS DIRECTED BY THE APPOINTED SWPPP INSPECTOR, EROSION CONTROL INSTALLATION AND MAINTENANCE IS TO BE A PART OF THE CONTRACT AND IS NOT AN EXTRA TO THE OWNER.



1. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST

WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN. 2. STEEL POSTS SHALL BE STANDARD T AND U SECTIONS WEIGHING NOT LESS THAN 1.33 POUNDS PER LINEAR FOOT OR OTHER STEEL POSTS

HAVING EQUIVILENT STRENGTH AND BENDING RESISTANCE. 3. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 (GEOTEXTILE) TABLE 1 OR 2, CLASS I IN THE ILLINOIS URBAN MANUAL. CURRENT EDITION. THE FABRIC SHALL HAVE AN AOS OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN

4. STAKES ARE TO BE PLACED A MAXIMUM OF 3 FEET APART.

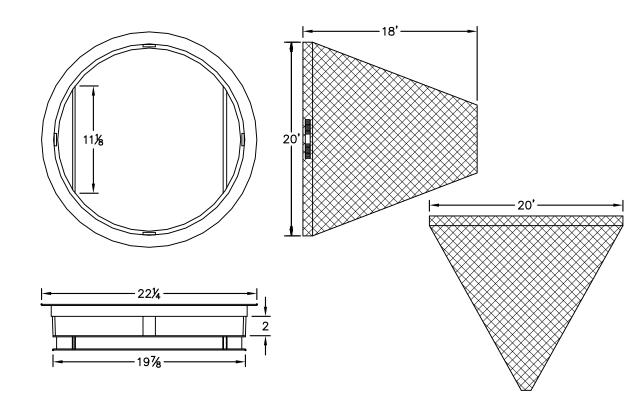
5. JOINTS IN GEOTEXTILE FABRIC ARE TO BE MADE AT STAKES.

### INLET PROTECTION

### SOIL PROTECTION CHART

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	ОСТ	NOV	DEC
PERMANENT SEEDING			•						<b>—</b>			
SODDING			•						<b>→</b>			
TEMPORARY SEEDING			•						<b></b>			
MULCHING												<b>—</b>

- 1. PERMANENT VEGETATION SHALL BE PLANTED ACCORDING TO THE APPROVED LANDSCAPE PLAN AND SHALL FOLLOW ILLINOIS URBAN MANUAL PRACTICE STANDARD 880 FOR
- PERMANENT SEEDING AND 925 FOR SODDING AT A MINIMUM. 2. TEMPORARY SEEDING SHALL BE APPLIED ACCORDING TO THE ILLINOIS URBAN MANUAL PRACTICE STANDARD 965. THIS PRACTICE APPLIES TO ALL CLEARED, UNVEGETATED, OR SPARSELY VEGETATED SOIL SURFACES WHERE VEGETATIVE COVER IS NEEDED FOR LESS
- THAN 1 YEAR. A. WHERE THE PH OF THE SOIL IS BELOW 5.5, APPLY ONE AND ONE HALF TO TWO TONS PER ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE. IF THE SEEDING PERIOD IS
- LESS THAN 30 DAYS, LIMING WILL NOT BE REQUIRED. B. APPLY 500 POUNDS PER ACRE OF 10-10-10 FERTILIZER OR EQUIVALENT. INCORPORATE LIME AND FERTILIZER INTO THE TOP 2-4 INCHES OF SOIL. IF THE SEEDING PERIOD IS LESS THAN 30 DAYS, FERTILIZER WILL NOT BE REQUIRED.
- C. PREPARE A TOPSOIL SEEDBED OF LOOSE SOIL TO A DEPTH OF 3 TO 4 INCHES. IF RECENT TILLAGE OR GRADING OPERATIONS HAVE RESULTED IN A LOOSE SURFACE, ADDITIONAL TILLAGE OR ROUGHENING MAY NOT BE REQUIRED EXCEPT TO BREAK UP LARGE CLODS. IF RAINFALL CAUSED THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING BY DISKING, RAKING, HARROWING, OR OTHER SUITABLE METHODS. GROVE OR FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR
- BEFORE SEEDING. D. SEED SHALL BE EVENLY APPLIED WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. SMALL GRAINS SHALL BE PLANTED NO MORE THAN ONE INCH DEEP. GRASSES SHALL BE PLANTED NO MORE THAN ONE HALF INCH DEEP
- E. COVER BROADCAST SEEDINGS BY CULTIPACKING, DRAGGING A HARROW, OR RAKING. F. OATS SHALL BE APPLIED AT 90 LBS PER ACRE AND SHALL ONLY BE APPLIED EARLY SPRING TO JULY 1.
- G. CEREAL RYE SHALL BE APPLIED AT 90 LBS PER ACRE AND SHALL ONLY BE APPLIED EARLY SPRING TO SEPTEMBER 30. H. WHEAT SHALL BE APPLIED AT 90 LBS PER ACRE AND SHALL ONLY BE APPLIED EARLY
- SPRING TO SEPTEMBER 30. I. PERENNIAL RYE GRASS SHALL BE APPLIED AT 25 LBS PER ACRE AND SHALL ONLY BE APPLIED EARLY SPRING TO SEPTEMBER 30.
- 3. TEMPORARY MULCHES ARE TO BE APPLIED TO: A. AREAS THAT HAVE BEEN SEEDED TO PROVIDE A TEMPORARY OR PERMANENT SEEDING; B. AREAS THAT CANNOT BE SEEDED BECAUSE OF THE SEASON OF THE YEAR AND NEED
- FOR SOIL SURFACE PROTECTION; C. FOR MUD AND DUST CONTROL;
- D. PROVIDE PROTECTION DURING PERIODS WHEN CONSTRUCTION OR SEEDING CANNOT BE DONE; AND SHALL BE CONSTRUCTED ACCORDING TO THE ILLINOIS URBAN MANUAL PRACTICE STANDARD 875.



VILLAGE OF TINLEY..

- 1. TOP FLANGE FABRICATED FROM 1 1/4" x 1 1/4" x 1/8" ANGLE BASE RIM FABRICATED FROM 1 1/2" x 1/2" x 1/8" CHANNEL. HANDLES AND SUSPENSION BRACKETS FABRICATED FROM 1 1/4" x 1/4" FLAT STOCK
- ALL DOMESTIC STEEL IS TO CONFORM TO ASTM-A36.

PHASE 1 CONSTRUCTION SEQUENCE:

STRUCTURES.

INSPECTION AGENCIES.

CLEAR AND GRUB THE SITE.

5. PREPARE SITE FOR PAVING.

IF SITE IS STABILIZED).

6. PAVE SITE.

INSTALL STABILIZED CONSTRUCTION ENTRANCE.

CONSTRUCT THE SILT FENCES ON THE SITE.

CONSTRUCT THE SEDIMENTATION BASINS.

WATER TO THE SEDIMENTATION BASINS.

PHASE II CONSTRUCTION SEQUENCES

TEMPORARILY SEED DENUDED AREAS.

INSTALL INLET PROTECTION DEVICES.

PREPARE TEMPORARY PARKING AND STORAGE AREA.

9. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.

10. BEGIN MASS GRADING OPERATIONS FOR THE SITE.

INSTALL RIP RAP AROUND OUTLET STRUCTURES.

. INSTALL INLET PROTECTION AROUND ALL EXISTING STORM SEWER

HOLD PRE-CONSTRUCTION MEETING TO DISCUSS THE STORM WATER

CONSTRUCT DIVERSION DITCHES AND AGGREGATE DITCH CHECKS TO DIRECT

POLLUTION PLAN WITH ENGINEER, ALL CONTRACTORS AND JURISDICTIONAL

INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.

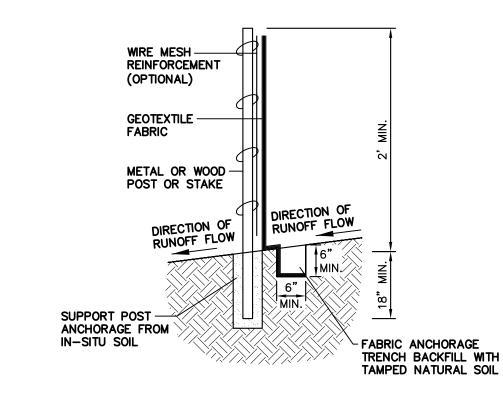
COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.

REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY

INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES.

SEDIMENT BAG IS TO BE FABRICATED FROM 4 OZ./SQ.YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH WITH A MINIMUM FLOW RATE OF 145 GAL/MIN/SQ. FT. BAG IS TO BE DESIGNED FOR A MINIMUM SILT AND DEBRIS CAPACITY OF 2 CU. FT. BAG IS TO BE SECURED TO BASE RIM WITH A STAINLESS STEEL STRAP AND LOCK.

INLET BASKET FILTER FOR TYPE 1 INLETS



TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION. 2. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST

WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN. 3. STEEL POSTS SHALL BE STANDARD T AND U SECTIONS WEIGHING NOT LESS THAN 1.33 POUNDS PER LINEAR FOOT OR OTHER STEEL POSTS

HAVING EQUIVILENT STRENGTH AND BENDING RESISTANCE. 4. WIRE FENCE SHALL BE A MINIMUM 12 GAGE WIRE WITH A 6 INCH MAXIMUM OPENING.

5. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 (GEOTEXTILE) TABLE 1 OR 2, CLASS I IN THE FABRIC SHALL HAVE AN AOS OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN MATERIAL.

MAINTENENCE NOTES . FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL GREATER THAN 1/2" AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE

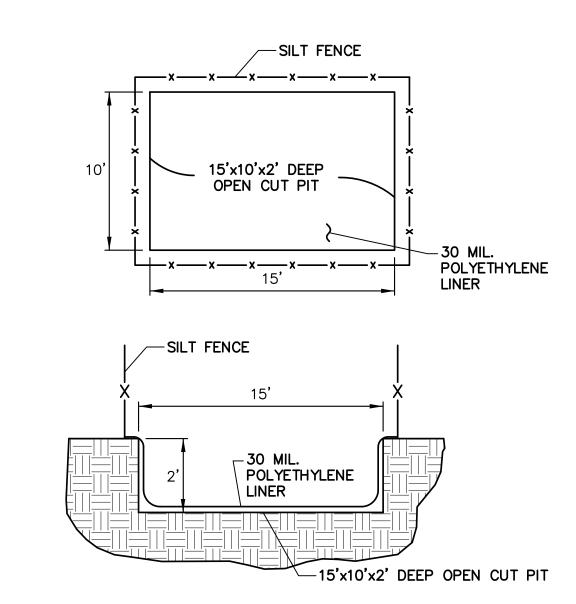
IMMEDIATELY. 2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE BARRIER.

4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

5. AT A MINIMUM, SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PHASE I AND PHASE II SOIL EROSION CONTROL PLANS. THEY SHALL ALSO BE INSTALLED ANYWHERE THAT THEY ARE NEEDED DURING CONSTRUCTION IN ORDER TO PREVENT EROSION AND SEDIMENT FROM BEING CARRIED DOWN STREAM. THIS IS THE GENERAL CONTRACTOR'S RESPONSIBILITY AND SHALL BE INSTALLED, RELOCATED, MAINTAINED, ETC. AS DIRECTED BY THE APPOINTED SWPPP INSPECTOR. EROSION CONTROL INSTALLATION AND MAINTENANCE IS TO BE A PART OF THE CONTRACT AND IS NOT AN EXTRA TO THE OWNER.

### SILT FENCE DETAIL



NOTE: OPTIONAL USE OF A PORTABLE CONCRETE WASHOUT CONTAINER IS ACCEPTABLE WITH 30 MIL. POLYETHYLENE LINER.

CONCRETE WASHOUT AREA DETAIL

SOIL EROSION CONTROL DETAILS AND SPECS

| 2 | 2 | 2 | 2 Prepared For: Prepared By: 

PROJECT DETAILS

- 1. CONTRACTOR IS TO FOLLOW ALL ORDINANCES AND REQUIREMENTS OF THE STATE, COMMUNITY, LOCAL DISTRICTS AND THE ILLINOIS ACCESSIBILITY CODE (IAC). ALL PROPOSED IMPROVEMENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS WELL AS THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS"
- 2. THE CONTRACTOR SHALL INDEMNIFY WATERMARK ENGINEERING RESOURCES, LTD (THE DESIGN ENGINEER), ARCHITECT AND OWNER, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONDUCTING WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, SPECIFICATIONS, AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THIS DEVELOPMENT.
- THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS THAT ARE REQUIRED BY THE LOCAL AGENCIES.
- 4. PRIOR TO BID AND PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSPECT THE SITE TO VERIFY THAT THERE ARE NO DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL CONDITIONS AT THE SITE. IF ANY DISCREPANCIES ARE FOUND, AT ANY TIME BEFORE OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY (BEFORE ANY ADDITIONAL IMPROVEMENTS ARE INSTALLED) IN ORDER TO OBTAIN WRITTEN CONFIRMATION BY THE DESIGN ENGINEER AS TO ANY REVISIONS THAT MAY NEED TO BE MADE TO THE PLANS.
- 5. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS. FINAL APPROVED PLAN SETS SHALL BE LABELED "FOR
- 6. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION, AND ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE APPROPRIATE CONSTRUCTION INSPECTIONS.
- 7. THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS. ALL WORK IN THE 171ST STREET RIGHT OF WAY SHALL BE LINDED AUTHORITY OF COOK COUNTY DOT
- OF WAY SHALL BE UNDER AUTHORITY OF COOK COUNTY DOT.

  8. PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS, THE CONTRACTOR MUST CALL J.U.L.I.E. FOR THE LOCATION AND STAKING OF EXISTING UNDERGROUND UTILITIES (GAS, ELECTRIC, TELEPHONE) AT 1-800-892-0123, 48 HOURS PRIOR TO DIGGING.
- 9. PRIOR TO THE OCCUPANCY PERMIT BEING ISSUED, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS PER THE MUNICIPALITY AND/OR ANY OTHER AGENCY REQUIREMENTS. ANY CHANGES TO THE DRAWINGS MUST BE REPORTED TO THE DESIGN ENGINEER BEFORE WORK PROGRESSES.
- 10. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY.
- 11. ALL QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE VERIFIED PRIOR TO CONSTRUCTION. IF DISCREPANCIES OCCUR, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER IMMEDIATELY AND NO WORK IS TO BE DONE UNTIL APPROVED BY THE DESIGN ENGINEER.
- 12. ANY RESTORATION NEEDED BECAUSE OF CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- 13. TRENCH BACKFILL MATERIAL, CRUSHED STONE OR LIMESTONE (CA-6) IS REQUIRED UNDER AND WITHIN TWO FEET (2') OF SIDEWALKS AND PAVED AREAS. THIS BACKFILL SHALL BE IN SIX INCH (6") LIFTS AND COMPACTED TO 95% STANDARD PROCTOR.
- 14. CONTRACTOR IS TO PROVIDE ALL TEMPORARY SIGNAGE AS REQUIRED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.
- 15. ALL EXISTING DRAIN TILES THAT ARE ENCOUNTERED ARE TO BE RESTORED TO THEIR ORIGINAL CONDITION OR REROUTED TO THE PROPOSED STORM SEWER SYSTEM.

  16. RESTORATION OF EXISTING RIGHT—OF—WAYS IS TO BE COMPLETED WITH FOUR INCH
- (4") MINIMUM TOPSOIL AND SALT TOLERANT SOD UNLESS OTHERWISE NOTED.

  17. THE WATER SYSTEM CANNOT BE TURNED ON OR SHUT DOWN WITHOUT CONSENT BY
- THE OWNER OF THE SYSTEM.

  18. ALL FRAME ADJUSTMENTS SHALL BE MADE WITH PRE—CAST CONCRETE RINGS
- CONFORMING TO ASTM C-39 AND CANNOT EXCEED TWELVE INCHES (12").
- 19. FRAMES SHALL BE SET WITH EZ STIK8 (OR EQUAL) MATERIAL TO PREVENT LEAKAGE.
  20. THE REINFORCED CONCRETE SECTIONS SHALL BE LAID IN MORTAR, SEALED WITH EXTERNAL SEALING BANDS, OR SEALED USING MASTIC JOINT SEALER. WHEN MASTIC JOINT SEALER IS USED, THE MATERIAL SHALL COMPLETELY FILL THE JOINT AFTER
- THE UNITS HAVE BEEN BROUGHT TOGETHER.

  21. STEPS IN STRUCTURES SHALL BE MADE OF COPOLYMER POLYPROPYLENE PLASTIC WITH CONTINUOUS ONE HALF INCH (1/2") GRADE SIXTY (60) STEEL REINFORCEMENT, STEP PSI-PF, AS MANUFACTURED BY M.A. INDUSTRIES, INC., OR APPROVED EQUAL. STEPS TO BE SPACED SIXTEEN INCHES (16") ON-CENTER.
- 22. ALL INSTRUMENTS ARE TO BE PROPERLY CALIBRATED PRIOR TO CONSTRUCTION USE.
  23. ALL PARKING LOT LIGHT POLES ARE TO BE CONSTRUCTED AT THE INTERSECTION OF PARKING LOT STRIPING OR IN LANDSCAPE AREAS WITH A MINIMUM OF 2' CLEARANCE BETWEEN THE BACK OF CURB AND THE EDGE OF THE PARKING LOT LIGHT BASE UNLESS OTHERWISE SPECIFIED.
- 24. GENERAL CONTRACTOR TO BECOME FAMILIAR WITH AND APPLY THE ADA MINIMAL REQUIREMENTS AND REPORT TO ARCHITECT/DESIGN ENGINEER ANY DISCREPANCIES BEFORE CONSTRUCTION. THIS INCLUDES, BUT NOT LIMITED TO, TRANSITIONS TO EXISTING CONDITIONS.
- 25. CONSTRUCTION MEANS, METHODS AND JOB SITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR.
- 26. PAVING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED IN SUCH A WAY THAT IT WILL BLOCK THE FLOW OF WATER AWAY FROM THE BUILDING INCLUDING BUT NOT LIMITED TO WEEP HOLES, WICKS, DRAINAGE SCUPPERS OR PIPES, AND LANDSCAPE.

### PAVEMENT

FREE OF COAL TAR.

- 1. ALL PAVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING REFERENCES AS THEY APPLY: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION; MANUAL FOR STRUCTURAL DESIGN OF PORTLAND CEMENT CONCRETE PAVEMENT, ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION; DESIGN MANUAL,
- ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION.

  2. ALL BASE COURSE AND SUB-BASE AREAS SHALL BE COMPACTED TO 95% STANDARD LABORATORY DENSITY, PER I.D.O.T. SECTION 301. BEFORE THE BASE COURSE MATERIALS ARE INSTALLED, THE SUB-BASE SHALL BE PROOF-ROLLED TO THE SATISFACTION OF THE ENGINEER, HIS AGENT, AND/OR THE SOILS ENGINEER.
- COMPACTION AND DENSITY TESTS SHALL BE TAKEN AT THE OWNER'S OPTION.

  3. ALL CONCRETE TO BE MINIMUM 3500 PSI, SALT TOLERANT, 6 BAG MIX WITH A
- SPRAY ON SEALER.
  4. EXPANSION AND CONTRACTION JOINTS SHALL BE TOOL FINISHED.
- 5. BINDER COURSE TO BE PLACED WHEN TEMPERATURE IS AT LEAST 40°F AND RISING.
  SURFACE COURSE TO BE PLACED WHEN TEMPERATURE IS AT LEAST 45°F AND RISING.
  6. ALL PROPOSED PAVEMENT, SIDEWALKS, AND CURBS ARE TO BE CONSTRUCTED TO

WITHIN A TOLERANCE OF 0.05' OF THE PROPOSED ELEVATIONS EXCEPT IN THE

ACCESSIBLE STALLS OR ACCESSIBLE ROUTES.

7. PRIOR TO SEAL COATING, ALL ASPHALT AREAS ARE TO BE CLEAN AND DRY. ALL LOOSE MATERIALS ARE TO BE REMOVED. ALL GREASE TO BE REMOVED. ALL CRACKS ARE TO BE FILLED PER IDOT STANDARDS. ALL PAINTED STRIPING TO BE MODIFIED SHALL BE "BLACKED OUT" WITH BLACK PAINT (1 COAT MINIMUM, 2 COATS IF NECESSARY), ALLOWED TO THOROUGHLY DRY PER PAINT MANUFACTURER, PRIOR TO SEAL COATING. ALL AREAS THAT ARE ADJACENT TO THE SEAL COATED AREA ARE TO BE MASKED (I.E. SIDEWALKS, CONCRETE SURFACES, BRICK SURFACES, GUTTERS, CATCHBASINS/INLETS, ETC.) PRIOR TO SEAL COATING TO BE APPLIED. AIR TEMPERATURE TO BE 50°F AND RISING. APPLICATION RATE TO BE SUCH THAT ALL SURFACES OF THE ASPHALT BEING COATED IS THOROUGHLY COVERED IN ONE COAT. SPRAYING IS NOT ALLOWED. ALL SEAL COATING SHOULD BE APPLIED BY SQUEEGEE OR BRUSHES. THE BITUMINOUS SEAL COATING MATERIAL SHOULD NOT BE ALLOWED TO ENTER STORM SEWERS AND SHOULD BE ALLOWED TO DRY AT LEAST 18 HOURS PRIOR TO VEHICULAR USE. CRACK FILLER AND SEAL COATING MATERIALS ARE TO BE

### GRADING

- 1. GEOTECHNICAL REPORTS AS PREPARED BY OWNER (OR REPRESENTATIVE) SHALL BE REFERRED TO PRIOR TO EARTH MOVING AND/OR UTILITY CONSTRUCTION.

  2. LINSTABLE SOIL SHALL BE DEMOVED OR STABILIZED.
- UNSTABLE SOIL SHALL BE REMOVED OR STABILIZED.
   CONTRACTOR IS TO MAINTAIN A POSITIVE DRAINAGE PATTERN AT THE END OF EACH DAY. CARE SHOULD BE TAKEN TO INSURE THAT DRAINAGE IS NOT REROUTED OR

BLOCKED IN A WAY THAT MAY BE INJURIOUS TO ADJACENT LAND.

BE PROOF ROLLED. IF SOIL RUTS, PUMPS, DEFLECTS EXCESSIVELY OR EXHIBITS EXCESSIVE MOVEMENT OR MOISTURE, THEN THE UNSTABLE SOIL SHALL BE UNDERCUT AND REPLACED WITH STRUCTURAL FILL OR DISCING AND DRYING TO NEAR OPTIMUM MOISTURE SO SOIL CAN BE PROPERLY COMPACTED. THIS PROCESS IS TO BE OBSERVED BY A GEOTECHNICAL ENGINEER.

5. ALL FILLS SHALL BE PLACED IN 6" LIFTS COMPACTED TO A MINIMUM OF 98%

4. THE SUB-BASE BELOW STRUCTURES, PAVEMENTS OR NEW STRUCTURAL FILL SHALL

- 5. ALL FILLS SHALL BE PLACED IN 6" LIFTS COMPACTED TO A MINIMUM OF 98% STANDARD LABORATORY DENSITY PER ASTM D698 UNDER AND WITHIN INFLUENCE OF THE BUILDING, A MINIMUM OF 95% STANDARD LABORATORY DENSITY PER ASTM D698 UNDER AND WITHIN THE INFLUENCE OF ALL OTHER IMPERVIOUS AREAS, AND A MINIMUM OF 90% STANDARD LABORATORY DENSITY PER ASTM D698 IN ALL LANDSCAPE AREAS.
- 6. EROSION CONTROL SHALL BE PROVIDED PRIOR TO ANY DISTURBANCES. SEE EROSION CONTROL PLANS FOR ADDITIONAL SPECIFICATIONS AND DETAILS.
- 7. PROVIDE TOPSOIL RESPREAD PER THE FOLLOWING UNLESS OTHERWISE NOTED:
- A. 4" MINIMUM IN GRASS OR SOD AREAS.

  B. 6" MINIMUM IN PLANTING AREAS.
- C. 12" MINIMUM IN LANDSCAPE ISLANDS.
- 8. ALL TOPSOIL TO BE FRIABLE (NOT COHESIVE), WEED FREE, AND FREE OF ROCKS, LARGE ROOTS AND UNNATURAL DEBRIS.
- 9. ALL GRADING IS TO BE CONSTRUCTED TO WITHIN A TOLERANCE OF 0.10' OF THE PROPOSED ELEVATIONS. SEE PAVEMENT SPECIFICATIONS FOR PAVEMENT TOLERANCES.

### SANITARY SEWER SPECIFICATIONS

- 1. ALL SANITARY SEWER PIPE SHALL BE P.V.C. PIPE CONFORMING TO ASTM D-3034 SPECIFICATIONS, SDR26 WALL THICKNESS AND ASTM D-3212 GASKET TYPE JOINTS OR ASTM D-2855 SOLVENT WELDED JOINTS WITH A TRACER WIRE ON THE TOP.
- 2. ALL WATERMAIN QUALITY PLASTIC PIPE SHALL BE P.V.C. CONFORMING TO NSF STANDARD 14 AND: ASTM STANDARD D 1784 OR AWWA STANDARD C900 OR C905. JOINTING SHALL BE PRESSURE SLIP JOINTED. ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH ASTM STANDARD F477, AND SHALL BE PRESSURE RATED IN ACCORDANCE WITH ASTM D3139.
- 3. DEFLECTION OF POLYVINYL CHLORIDE (PVC) PIPE SHALL NOT EXCEED 5.0% OF THE "BASE I.D." (INTERNAL DIAMETER) OF THE PIPE. "BASE I.D." SHALL BE CALCULATED IN ACCORDANCE WITH THE FOLLOWING:
  - AVG ID = AVG OD 2(1.06)T TOLERANCE PACKAGE =  $(A^2 + B^2 + C^2)^(1/2)$
  - WHERE:
  - A = OD TOLERANCE (ASTM D-3034)
  - B = EXCESS WALL THICKNESS TOLERANCE = 0.06T
  - C = OUT-OF-ROUNDNESS TOLERANCE = 0.015 (AVG OD)
  - T = MINIMUM WALL THICKNESS (ASTM D-3034)
    BASE ID = AVG ID TOLERANCE PACKAGE
- DEFLECTION OF COMPOSITE PIPE ("TRUSS" PIPE) SHALL NOT EXCEED 3.0% OF THE AVERAGE INSIDE DIAMETER (ID) OF THE PIPE IN ACCORDANCE WITH ASTM D-2680. THE PIPE LINE SHALL BE TESTED FOR EXCESS DEFLECTING BY PULLING A "GO NO GO" MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. THE MANDREL SHALL BE SIZED IN ACCORDANCE WITH SECTION 31-1.11C (4), AND AS SPECIFIED IN THE SPECIAL PROVISIONS. A "DEFLECTOMETER" MAY ALSO BE USED TO CHECK AND RECORD DEFLECTION. WHENEVER POSSIBLE AND PRACTICAL, THE TESTING SHALL INITIATE AT THE DOWNSTREAM LINES AND PROCEED TOWARDS THE UPSTREAM LINES. WHERE THE DEFLECTION IS FOUND TO BE IN EXCESS OF ALLOWABLE TESTING LIMITS, THE CONTRACTOR SHALL EXCAVATE TO THE POINT OF EXCESS DEFLECTION AND CAREFULLY COMPACT AROUND THE POINT WHERE EXCESS DEFLECTION WAS FOUND. THE LINE SHALL THEN BE RETESTED FOR DEFLECTION. HOWEVER, SHOULD AFTER THE INITIAL TESTING THE DEFLECTED PIPE FAIL TO RETURN TO THE ORIGINAL SIZE (INSIDE
- DIAMETER) THE LINE SHALL BE REPLACED.

  4. INFILTRATION OR EXFILTRATION SHALL NOT EXCEED 100 GALLONS PER TWENTY—FOUR (24) HOURS PER MILE PER INCH—DIAMETER OF THE SEWER PIPE, FOR ANY SECTION OF THE SYSTEM AND AT ANY TIME DURING ITS SERVICE LIFE. TESTING IS REQUIRED PER THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN
- ILLINOIS" CURRENT EDITIONS.

  5. LEAKAGE TESTING FOR MANHOLES FOR WATER TIGHTNESS SHALL BE DONE IN ACCORDANCE WITH ASTM C969-94(2000) "STANDARD PRACTICE FOR INFILTRATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996)(NO LATER EDITIONS OR AMENDMENTS) OR ASTM C1244-93 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE PRESSURE (VACUUM) TEST", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996)(NO LATER EDITIONS OR AMENDMENTS) PRIOR
- TO PLACING INTO SERVICE.

  6. ALL STRUCTURE LIDS SHALL BE IMPRINTED "SANITARY" AND "VILLAGE OF TINLEY
- PARK". 7. ALL WATERTIGHT FRAMES AND LIDS SHALL BE EAST JORDAN IRON WORKS 1020.
- 3. ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48.
- 9. ALL SEWERS ARE TO BE INSTALLED FROM THE DOWNSTREAM END UPSTREAM. IF ANY CONFLICTS ARE ENCOUNTERED, THE DESIGN ENGINEER IS TO BE CONTACTED PRIOR TO TO THE INSTALLATION OF ANY PIPE.
- 10. FOR A DROP CONNECTION, THE DIAMETER OF THE DROP PIPE SHALL PREFERABLY BE LARGER THAN, OR OF THE SAME DIAMETER AS, THE ENTERING SEWER. THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE SMALLER THAN THE DIAMETER OF THE ENTERING SEWER BY MORE THAN TWO NOMINAL DIAMETERS, PROVIDED THAT THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE LESS THAN EIGHT INCHES (8")
- (8).
  11. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
- 12. ALL SANITARY SEWER BEDDING SHALL BE IN ACCORDANCE WITH THE TRENCH DETAIL AS INCLUDED IN THE PLANS.

## STORM SEWER SPECIFICATIONS

- 1. ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM C-76 SPECIFICATIONS WITH ASTM C-443 FLAT GASKET JOINTS, OR ASTM C-361 "O-RING" JOINTS WHEN WATER MAIN QUALITY JOINTS ARE REQUIRED.
- 2. ALL PLASTIC PIPE SHALL BE P.V.C. WITH SDR26 WALL THICKNESS AND CONFORM TO D-3034 SPECIFICATIONS WITH ASTM D-3212 GASKET TYPE JOINTS.
- 3. ALL WATERMAIN QUALITY PLASTIC PIPE SHALL BE P.V.C. CONFORMING TO NSF STANDARD 14 AND: ASTM STANDARD B 1784 OR AWWA STANDARD C900 OR C905. JOINTING SHALL BE PRESSURE SLIP JOINTED. ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH ASTM STANDARD F477, AND SHALL BE PRESSURE RATED IN ACCORDANCE WITH ASTM D3139.
- 4. ALL STRUCTURE LIDS SHALL BE IMPRINTED "STORM" AND "VILLAGE OF TINLEY PARK". 5. ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48.
- 6. ALL SEWERS ARE TO BE INSTALLED FROM THE DOWNSTREAM END UPSTREAM. IF ANY CONFLICTS OR INFORMATION INCONSISTENT WITH SITE CONDITIONS ARE ENCOUNTERED, THE DESIGN ENGINEER IS TO BE CONTACTED PRIOR TO THE INSTALLATION OF
- 7. IN PAVED AREAS, ALL FRAMES AND LIDS SHALL BE: EAST JORDAN IRON WORK 1050z1 WITH TYPE M1 GRATES AT LOW POINTS AND CURB LINES.
- 8. IN NON-PAVED AREAS, ALL FRAMES AND LIDS SHALL BE: EAST JORDAN IRON WORK 1050z1 WITH TYPE M1 GRATES AT LOW POINTS AND CURB LINES.
- 9. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER.
  10. ALL FLARED END SECTIONS (FES) ARE TO BE INSTALLED WITH TRASH GRATES.

### WATER MAIN SPECIFICATIONS

- 1. HORIZONTAL SEPARATION
- A. WATER MAINS AND SEWERS: WATER MAINS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.
- B. WATER MAINS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE OR SEWER SERVICE CONNECTION WHEN:
- i) LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET;
   ii) THE WATER MAIN INVERT IS AT LEAST EIGHTEEN INCHES (18") ABOVE THE CROWN OF THE SEWER; AND
- ii) THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWED.
- C. BOTH THE WATER MAIN AND SEWER PIPE SHALL BE CONSTRUCTED OF PUSH JOINT OR MECHANICAL JOINT DUCTILE IRON PIPE, PRESSURE PIPE, PRESTRESSED CONCRETE PIPE, OR PVC SDR18 PIPE WITH AWWA C-900 JOINTS, MEETING THE REQUIREMENTS OF SECTION 653.111 OF THE IEPA'S TITLE 35 SUBTITLE F, WHEN IT IS IMPOSSIBLE TO MEET (A) OR (B) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE
- BACKFILLING.
  2. VERTICAL SEPARATION
- A. A WATER MAIN SHALL BE LAID SO THAT ITS INVERT IS EIGHTEEN INCHES (18")
  ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS
  STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE
  VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER
  MAIN LOCATED WITHIN TEN FEET HORIZONTALLY OF ANY SEWER OR DRAIN
  CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE
- SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.

  B. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF PUSH JOINT OR MECHANICAL JOINT DUCTILE PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE MEETING THE REQUIREMENTS OF SECTION 635.111 OF THE IEPA'S TITLE F, SUBTITLE F, AND CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER DRAIN LINE IS AT LEAST TEN FEET (10') WHEN:
- i) IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A) ABOVE; OR
- ii) THE WATER MAIN PASSES UNDER A SEWER OR DRAIN.
   C. A VERTICAL SEPARATION OF EIGHTEEN INCHES (18") BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE
- SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATER MAIN.

  3. WATER MAINS AND SERVICES SHALL BE CONSTRUCTED SO THAT THE MINIMUM DEPTH IS FIVE AND ONE HALF FEET (5 1/2') MEASURED FROM FINISHED GRADE TO THE TOP OF THE PIPE, UNLESS OTHERWISE SPECIFIED AND/OR APPROVED BY THE REVIEW ENGINEER.
- 4. ALL WATER MAIN FITTINGS MAY OR MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE INCLUDED IN THE COST OF THE WATER MAIN ITSELF FOR BIDDING PURPOSES. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 52 CEMENT LINED CONFORMING TO ANSI A-21.51 WITH ANSI A-21.11 JOINTS, OR TYPE "K" COPPER PIPE WITH SWEATED JOINTS.
- 5. FIRE HYDRANTS SHALL MEET AWWA C-502 AND BE EAST JORDAN IRON WORKS WATERMASTER 5BR250, WITH FIVE AND ONE QUARTER INCH (5 1/4")VALVE OPENING, TWO TWO AND ONE HALF INCH (2 1/2") HOSE NOZZLES AND ONE FIVE INCH (4 1/2") PUMPER NOZZLE. FIRE HYDRANT SHALL BE EQUIPPED WITH AN AUXILIARY RESILIENT SEAL GATE VALVE COMPLETE WITH ROADWAY BOX, TYLER, 6850 SERIES, ITEM 668-S. FIRE HYDRANTS MUST HAVE THEIR DISCHARGE AT LEAST 18 INCHES BUT NOT MORE THAN TWENTY-FOUR INCHES (24") FROM THE SURFACE OF THE
- ADJACENT GROUND.

  6. HYDRANTS SHALL BE INSTALLED NO CLOSER THAN THREE FEET (3') NOR FURTHER THAN EIGHT FEET (8') FROM THE BACK OF CURB OR EDGE OF PAVEMENT TO THE FIVE INCH (5") STEAMER NUT. NO BARRIERS, TREES, SHRUBS, WALLS OR OTHER OBSTACLES WHICH MAY HIDE OR IMPEDE THE USE OF A FIRE HYDRANT SHALL BE INSTALLED, MAINTAINED, CONSTRUCTED, OR ENLARGED, WITHIN FORTY—EIGHT INCHES (48") OF A HYDRANT.
- 7. ALL STRUCTURE LIDS SHALL BE IMPRINTED "WATER" AND "VILLAGE OF TINLEY PARK".
  8. ALL WATERTIGHT FRAMES AND LIDS SHALL BE EAST JORDAN IRON WORKS 1020a WITH TYPE A LIDS..
- 9. BEFORE BEING PLACED INTO SERVICE, ALL NEW MAINS AND REPAIRED PORTIONS OF, OR EXTENSIONS TO EXISTING MAINS SHALL BE CHLORINATED SO THAT THE INITIAL CHLORINE RESIDUAL IS NOT LESS THAN FIFTY (50) mg/L AND THAT A CHLORINE RESIDUAL OF NOT LESS THAN TWENTY—FIVE (25) mg/L REMAINS IN THE WATER AFTER STANDING TWENTY—FOUR (24) HOURS IN THE PIPE.
- 10. A HYDROSTATIC PRESSURE TEST SHALL BE DONE WITH NO LESS THAN 150 PSI OF PRESSURE BEING HELD FOR A FOUR (4) HOUR PERIOD. VILLAGE HAS THE RIGHT TO EXTEND THE DURATION UP TO 6 HOURS. A PUBLIC WORKS REPRESENTATIVE SHALL BE CONTACTED PRIOR TO THE START OF THE TEST.
- BE CONTACTED PRIOR TO THE START OF THE TEST.

  11. VALVE VAULTS SHALL PASS A VACUUM TEST TO ENSURE INFILTRATION CANNOT AND WILL NOT OCCUR. A PUBLIC WORKS REPRESENTATIVE SHALL BE CONTACT AND AT THE SITE PRIOR TO THE START OF THE TEST.

- "AMERICANS WITH DISABILITIES ACT" (ADA) MINIMAL REQUIREMENTS:

  1. GENERAL CONTRACTOR TO BECOME FAMILIAR WITH AND APPLY THE ADA MINIMAL REQUIREMENTS AND REPORT TO
- ARCHITECT/ENGINEER ANY DISCREPANCIES BEFORE CONSTRUCTION.

  2. ACCESSIBLE ROUTES ON AN ACCESSIBLE SITE AND FOR ANY NEW SITE IMPROVEMENTS SHALL BE PROVIDED TO SERVE ALL ACCESSIBLE SPACES OR ELEMENTS.
- 3. THE MINIMUM CLEAR WIDTH OF AN ACCESSIBLE ROUTE PER CODE
- 4. EACH ACCESSIBLE PARKING SPACE IS TO BE:
  - A MINIMUM OF 192" WIDE, CONSISTING OF A 96" WIDE ACCESS AISLE AND A 96" WIDE PARKING SPACE, UNLESS OTHERWISE NOTED. (SEE DETAIL). THE ACCESS AISLE SHALL BE PERMITTED TO BE PLACED ON EITHER SIDE OF THE PARKING SPACE. SEE DETAIL FOR REQUIRED DEPTH.
  - A MINIMUM OF 192" WIDE, CONSISTING OF A 96" WIDE
    ACCESS AISLE AND A 96" WIDE PARKING SPACE, UNLESS
    OTHERWISE NOTED (SEE DETAIL). WHEN VAN ACCESSIBLE
    PARKING SPACES ARE ANGLED, THE ACCESS AISLE SHALL BE
    LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACE.
    SEE DETAIL FOR REQUIRED DEPTH.
- 5. ACCESSIBLE PARKING SPACES ARE TO BE LOCATED AS CLOSE TO THE BUILDING ENTRANCE AS POSSIBLE AND SHALL BE IDENTIFIED WITH A SIGN
- WITH A SIGN.

  6. RAMPS MUST NOT EXTEND OUT FROM THE CURB INTO THE
- ACCESS AISLE OF ANY ACCESSIBLE PARKING SPACE.

  7. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM. (SEE DETAIL)
- 8. ALL ADA PARKING STALLS, ACCESS AISLES AND CROSSWALKS SHALL BE STRIPED USING 4" WIDE DOUBLE LAYER OF HIGH QUALITY YELLOW PAINT, UNLESS OTHERWISE NOTED.
- 9. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 1:50 (2.00%) IN ANY DIRECTION.
- EXCEED A SLOPE OF 1:50 (2.00%) IN ANY DIRECTION.

  10. EACH ACCESSIBLE PARKING SPACE SHALL HAVE AN IDENTIFICATION SIGN (SEE DETAIL).
- 11. AN ACCESSIBLE ROUTE WITH A RUNNING SLOPE GREATER THAN
  1:20 (5.00%) IS A RAMP AND SHALL COMPLY WITH THE RAMP
- 12. AN ACCESSIBLE ROUTE MAY CROSS OPEN PAVEMENT OR FOLLOW A RAMP AS REQUIRED BY SITE—SPECIFIC CONDITIONS. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE ACROSS OPEN PAVEMENT MUST NOT EXCEED 1:20 (5.00%), WITH A CROSS SLOPE NOT EXCEEDING 1:50 (2.00%). SLOPES EXCEEDING 1:20 (5.00%), BUT LESS THAN 1:12 (8.33%), CONSTITUTE RAMPS AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS, RISE AND RUN LIMITS, ETC.) AS DETAILED ON THE CIVIL AND ARCHITECTURAL PLANS. NO RAMP SHALL HAVE A RUNNING SLOPE EXCEEDING 1:12 (8.33%), NOR HAVE A CROSS SLOPE EXCEEDING
- 1:50 (2.00%).
   13. THE GENERAL CONTRACTOR/CONTRACTOR SHALL MEASURE THE SUBGRADE AND ACROSS FORMS PRIOR TO INSTALLATION OF ASPHALT OR CONCRETE IMPROVEMENTS TO ASSURE THE FINAL IMPROVEMENTS WILL MEET THESE MINIMAL ADA REQUIREMENTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE CIVIL ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.
- CURB RAMPS

  14. A CURB RAMP SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES A CURB.
- 15. CURB RAMPS HAVE A MAXIMUM SLOPE OF 1:12 (8.33%) AND DO NOT REQUIRE HANDRAILS.
- 16. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, OR WHERE IT IS NOT PROTECTED BY HANDRAILS, OR GUARDRAILS, IT SHALL HAVE FLARED SIDES; THE MAXIMUM SLOPE OF THE FLARE SHALL BE 1:12 (8.33%).

400 N. State Stre Chicago, IL 606 PROPOSED FUEL C 17100 S. Harlem Ave Tinley Park, Illinoi

Prepared By:

Stat Ginger Woods Parkway, Suite 100, Aurora, IL 60502

CHECKED BY: B. PERRY
DESIGN BY: S. SIMAK
DRAWN BY: S. SIMAK
DATE: JULY 5, 2019
SCALE: NONE
PROJECT NO: 19-005

C-10

PROJECT SPECIFICATIONS

### A. REFERENCED SPECIFICATIONS

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
- \* STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- \* STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- \* VILLAGE OF TINLEY PARK MUNICIPAL CODE;

  \* THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED
- MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;

  \* IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

### **B. NOTIFICATIONS**

- 1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- 2. THE VILLAGE OF TINLEY PARK ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- 3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

### C. GENERAL NOTES

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NGVD 1929. SUBTRACT 0.42' FROM ALL ELEVATIONS SHOWN HEREON TO OBTAIN NAVD88 DATUM.
- 2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- 3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- 4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- 5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- 6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- 7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- 8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- 9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- 10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

### D. SANITARY SEWER

- I. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- 2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- 3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- 4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- 5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- 6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- 7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS	
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425	
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443	
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564	
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11	
POLYVINYL CHLORIDE (PVC) PIPE 6-INCH TO 15-INCH DIAMETER SDR 26 18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM D-3034 ASTM F-679	ASTM D-3212 ASTM D-3212	
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D $-3261$ ,F $-2620$ (HEAT FUSI ASTM D $-3212$ ,F $-477$ (GASKETED)	ON)
WATER MAIN QUALITY PVC 4-INCH TO 36-INCH 4-INCH TO 12-INCH 14-INCH TO 48-INCH	ASTM D-2241 AWWA C900 AWWA C905	ASTM D-3212,1-477 (GASKETED)  ASTM D-3139 ASTM D-3139 ASTM D-3139	

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

- 8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ "TO 1"IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- 9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- 10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- 11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
  - a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR)
     AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
     b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH
  - A WYE OR TEE BRANCH SECTION.

    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- 12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- 13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- 14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE—CAST REINFORCED CONCRETE
- 15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- 16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- 17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
- 18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

### E. EROSION AND SEDIMENT CONTROL

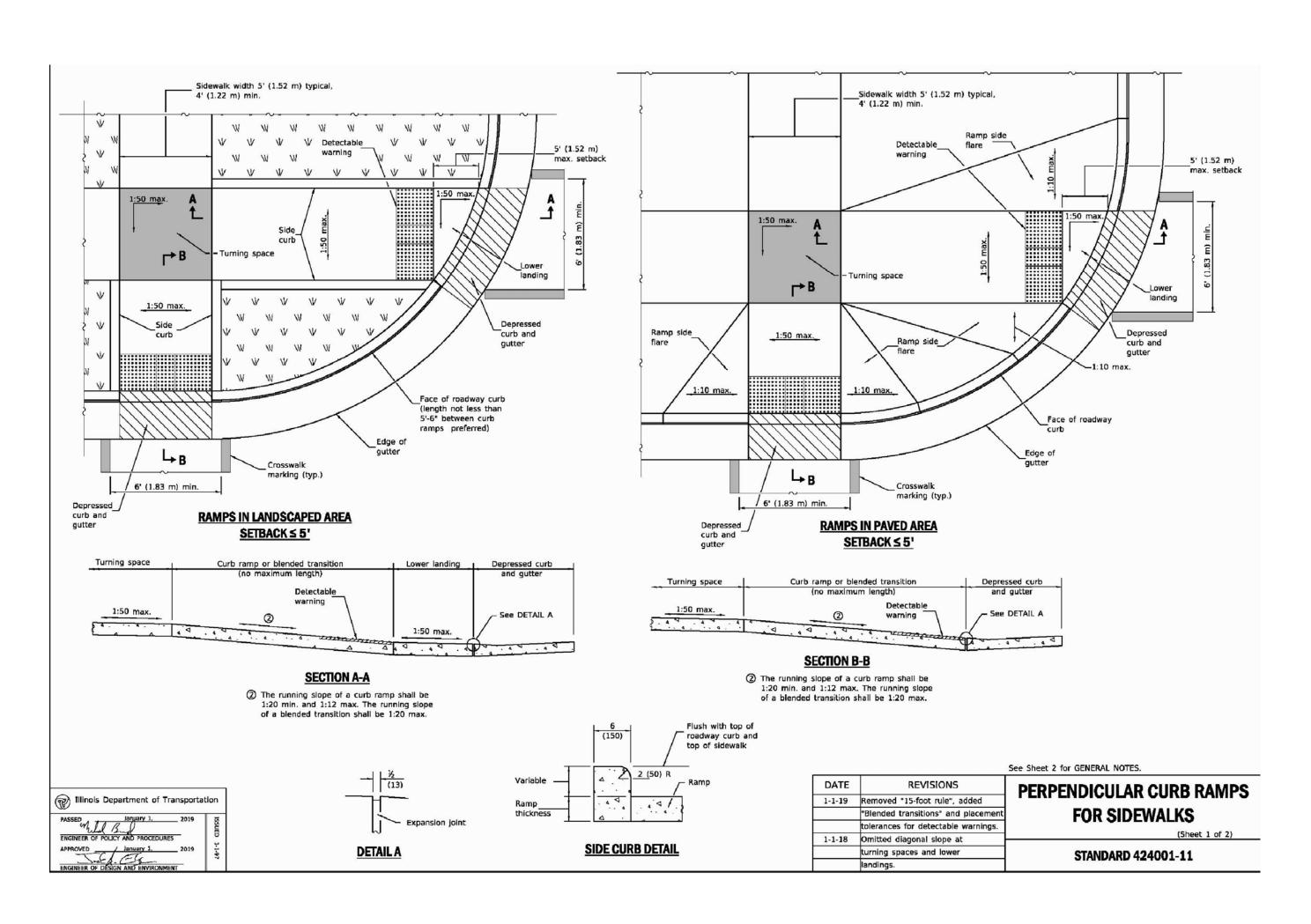
- 1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
- 3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:

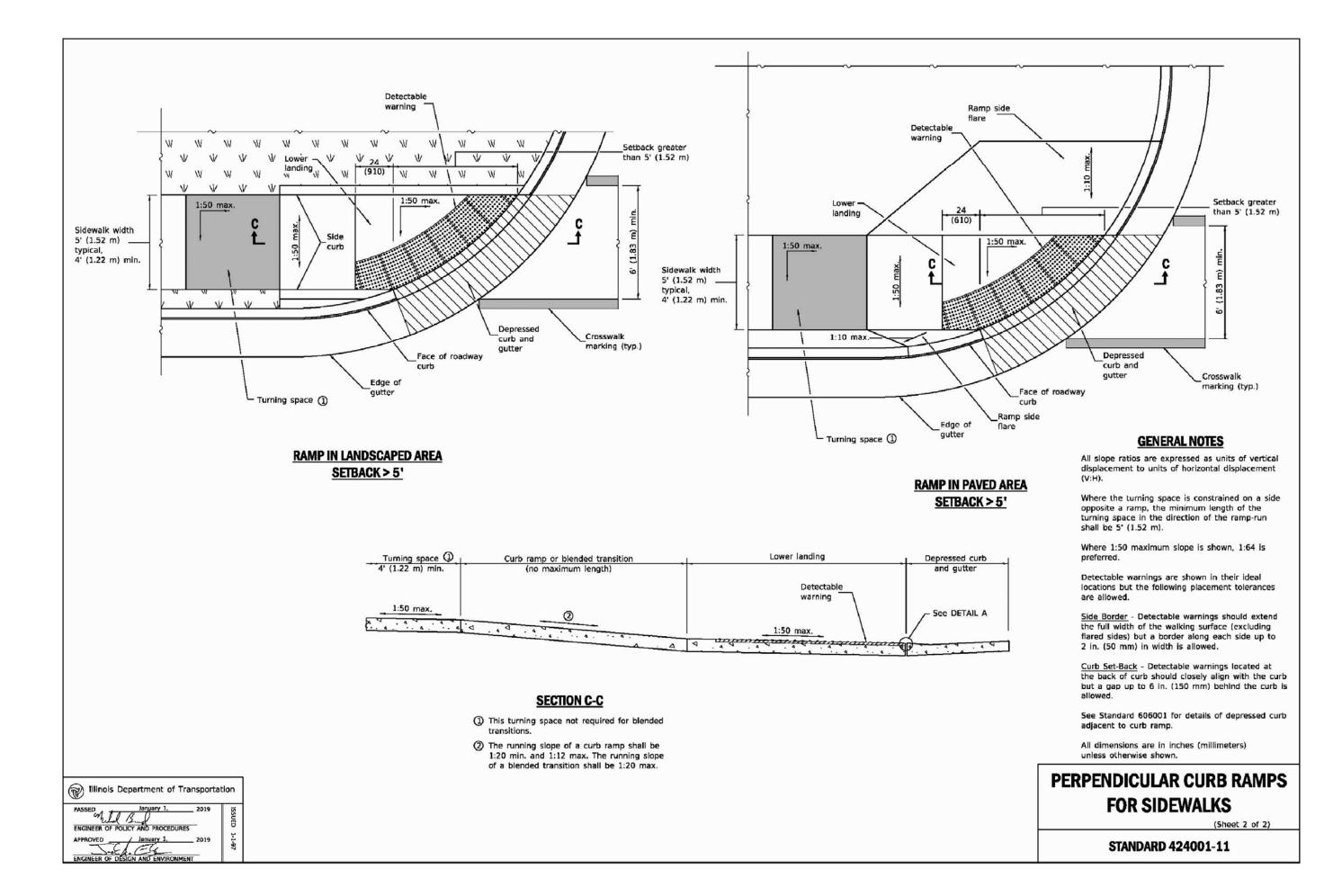
  a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
- b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- 6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- 7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT—OF—WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- 8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
- 9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
- 10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
- 12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
- 13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
- 14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- 15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS
- 16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
- 17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- 18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
- 19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- 20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER
- 21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- 22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- 23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- 24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

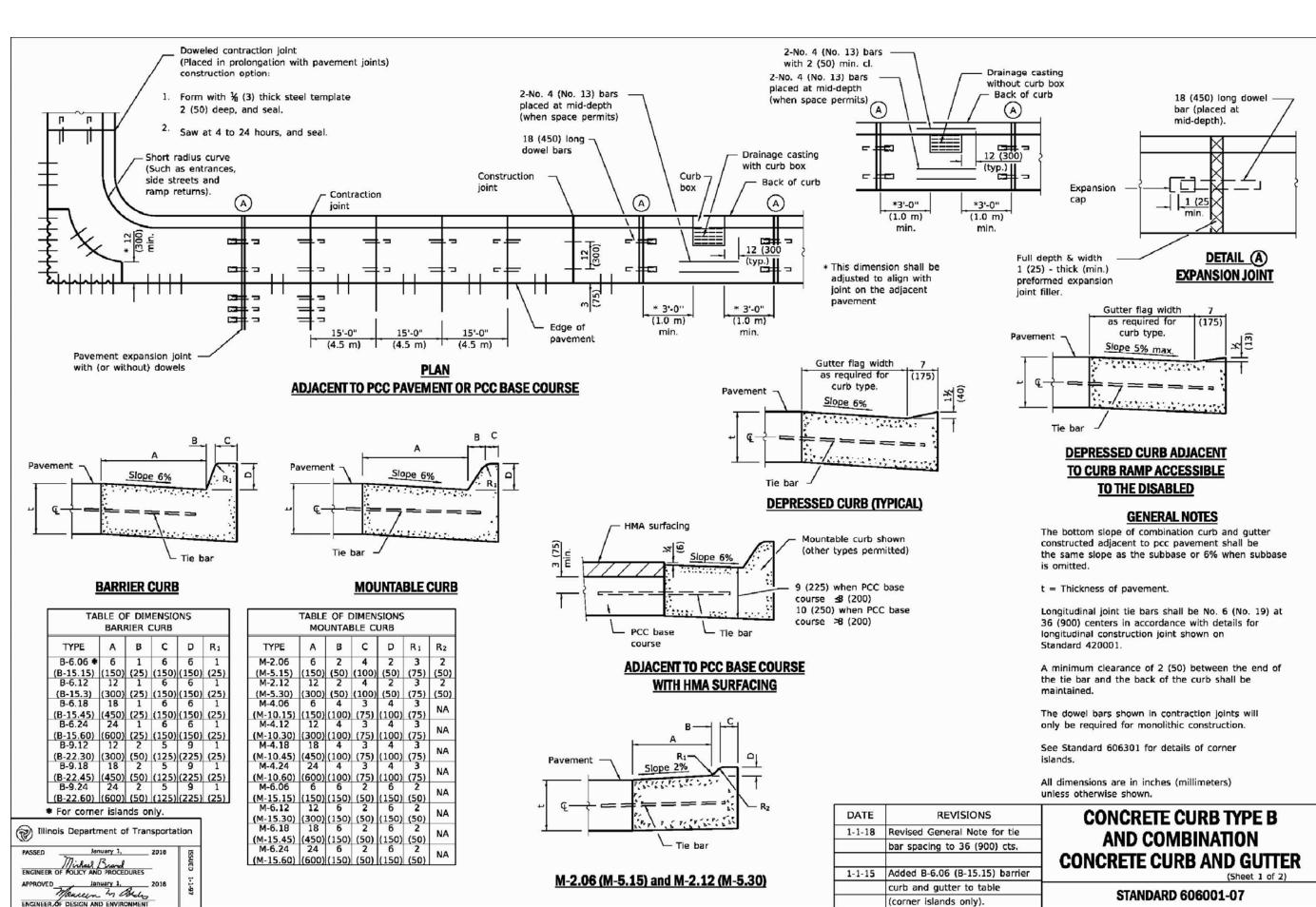
DRAWN BY: S. SIMAK
DATE: JULY 5, 2019
SCALE: NONE
PROJECT NO.: 19-005

MWRD GENERAL NOTES

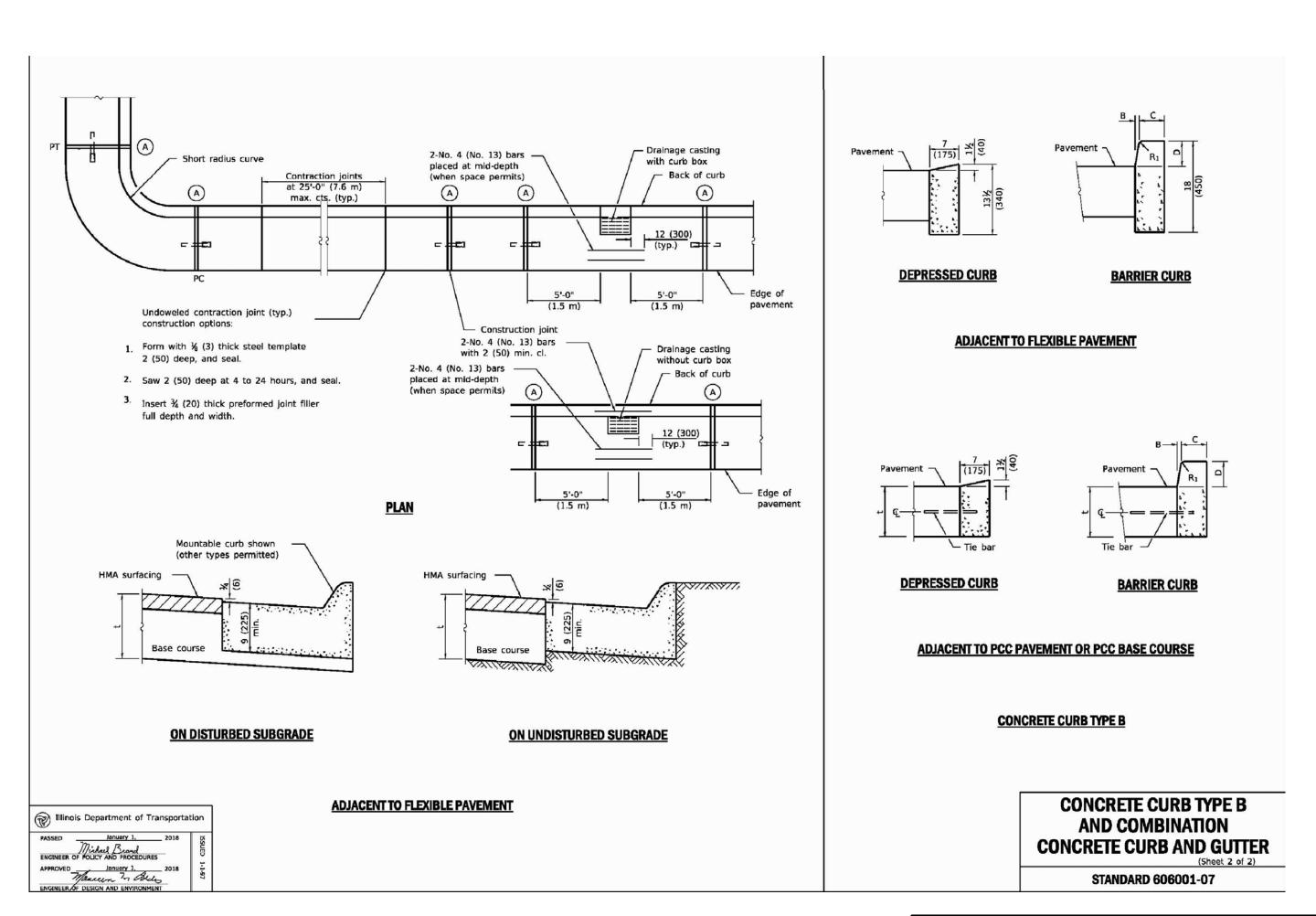
C-11







ENGINEER OF DESIGN AND ENVIRONMENT

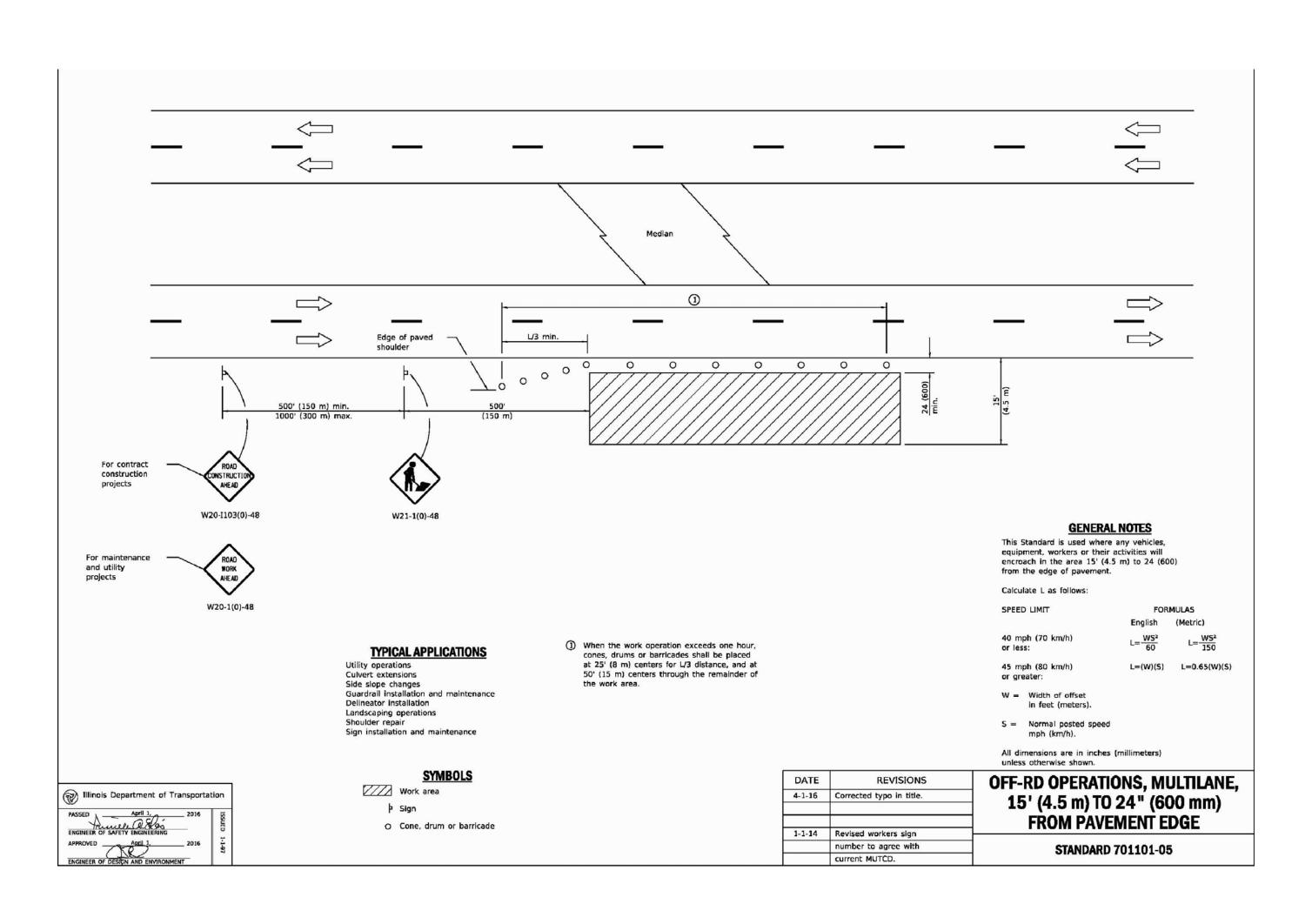


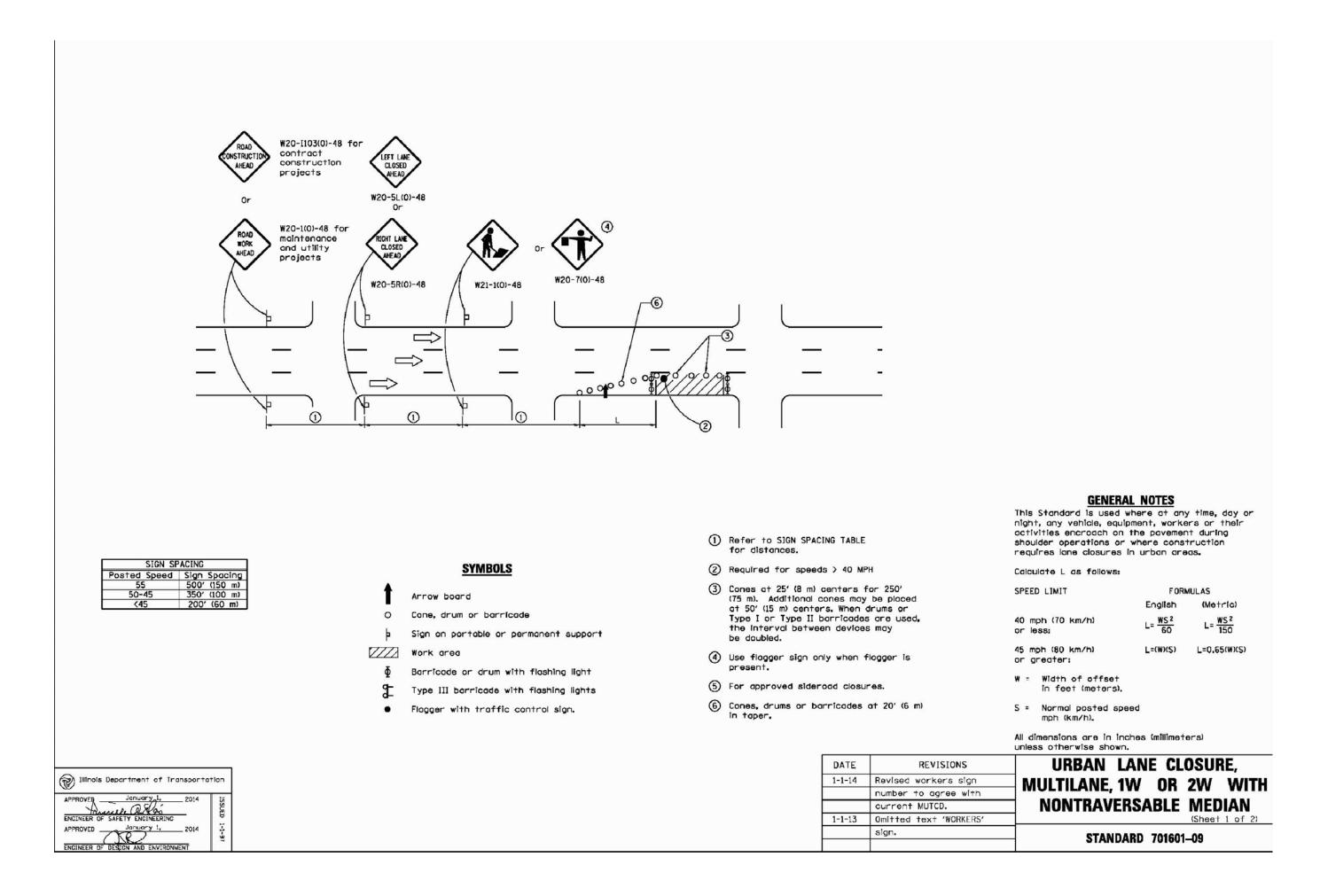
**IDOT DETAILS 1** 

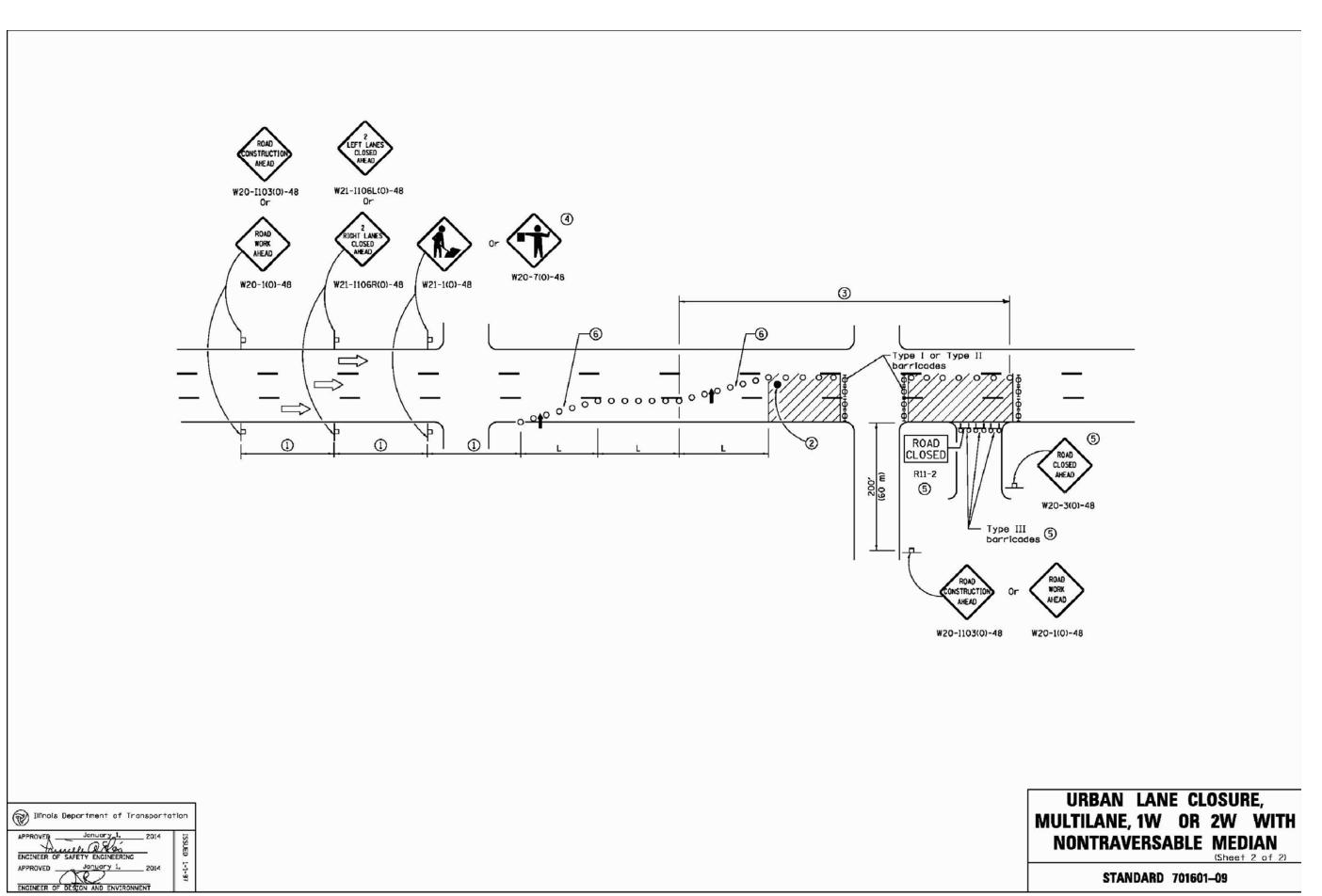
Prepared For:

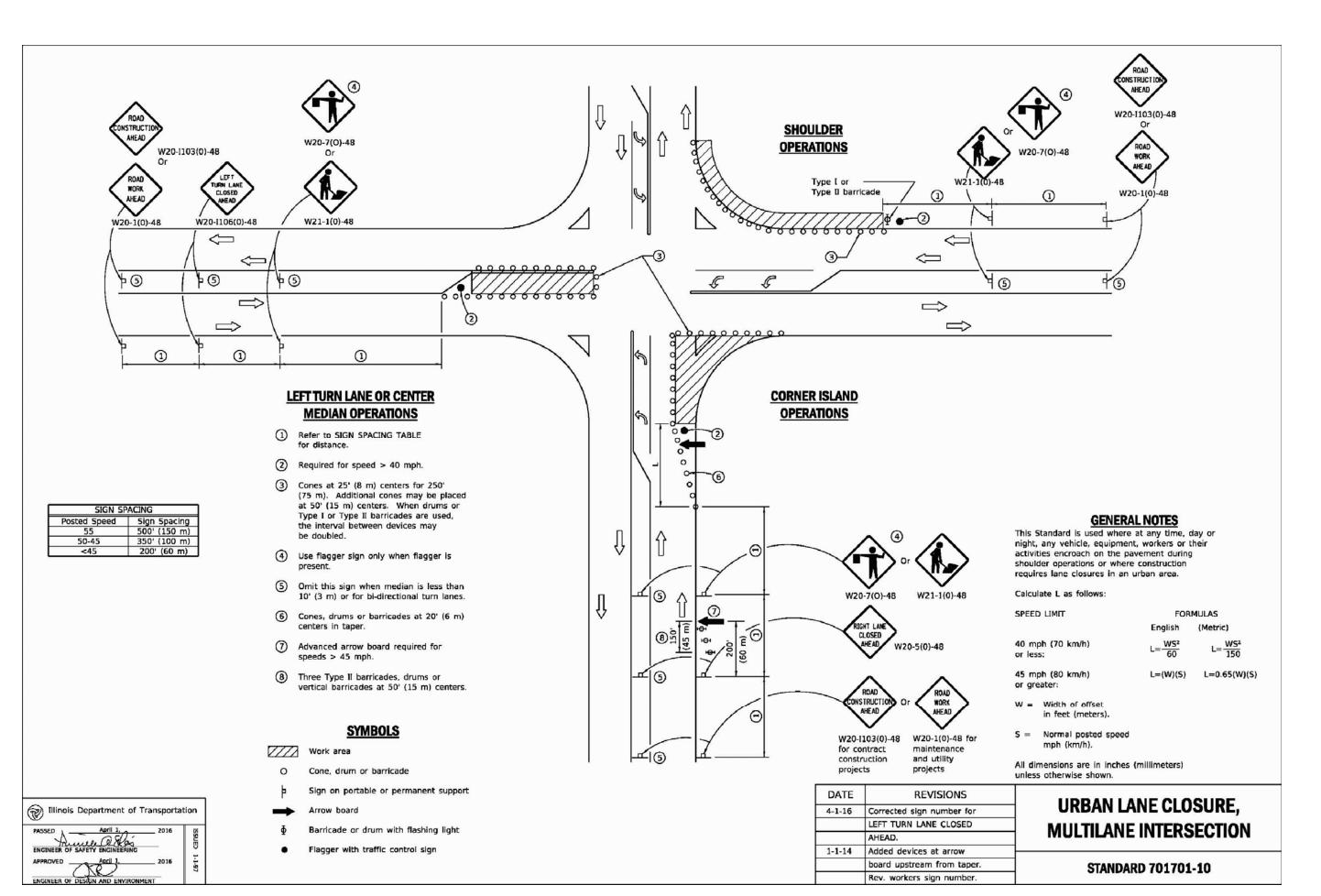
Prepared By:

rmark



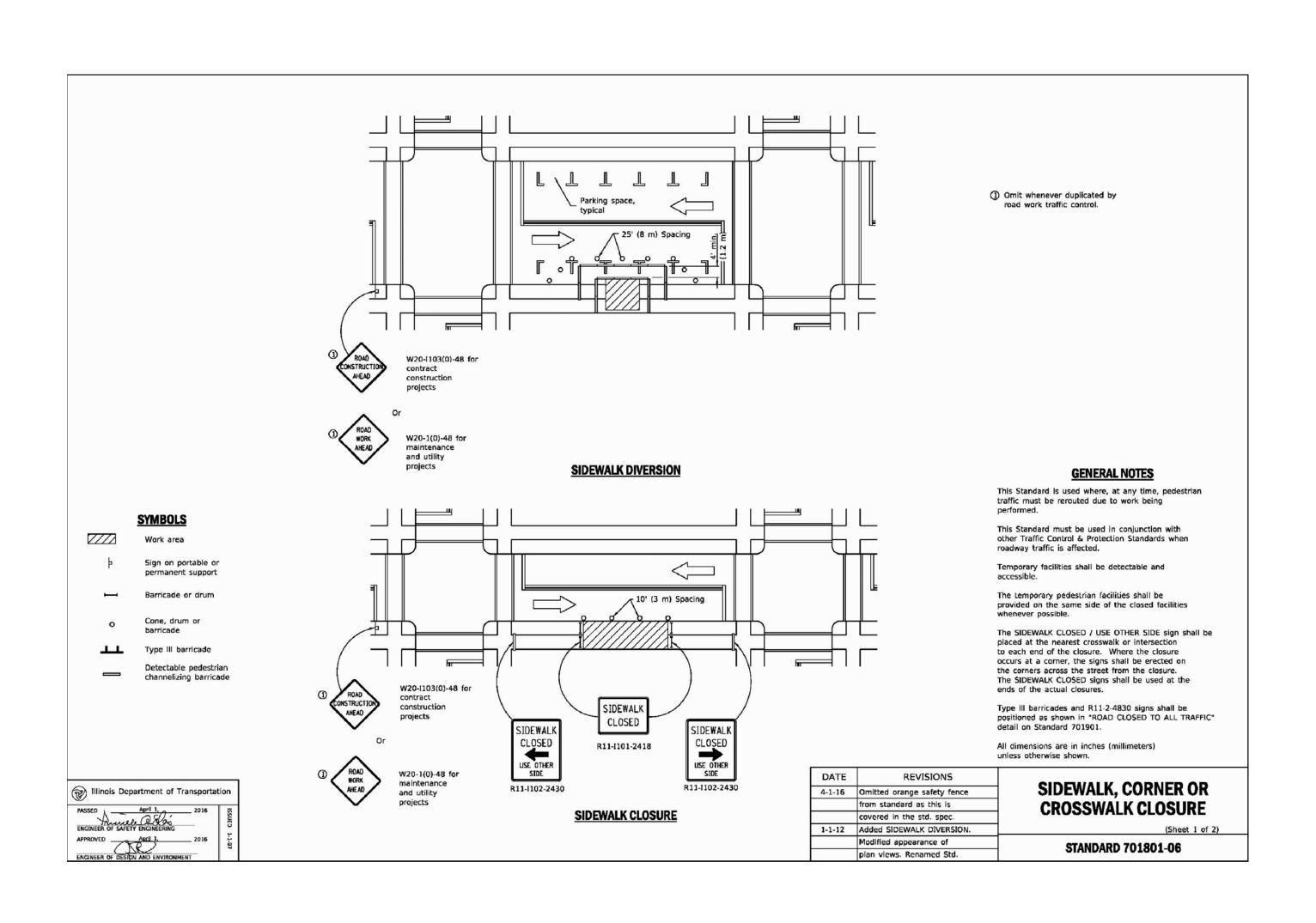


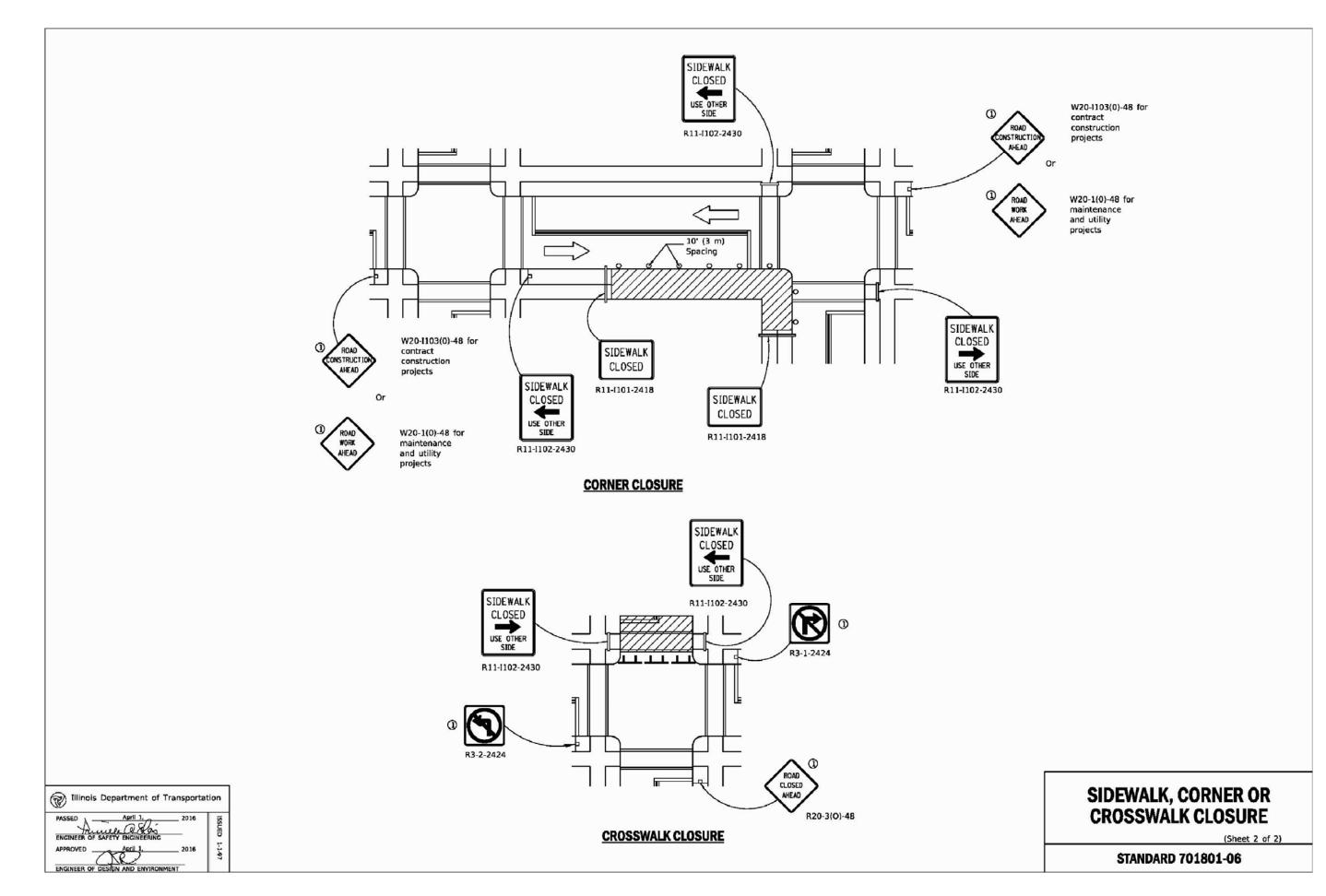


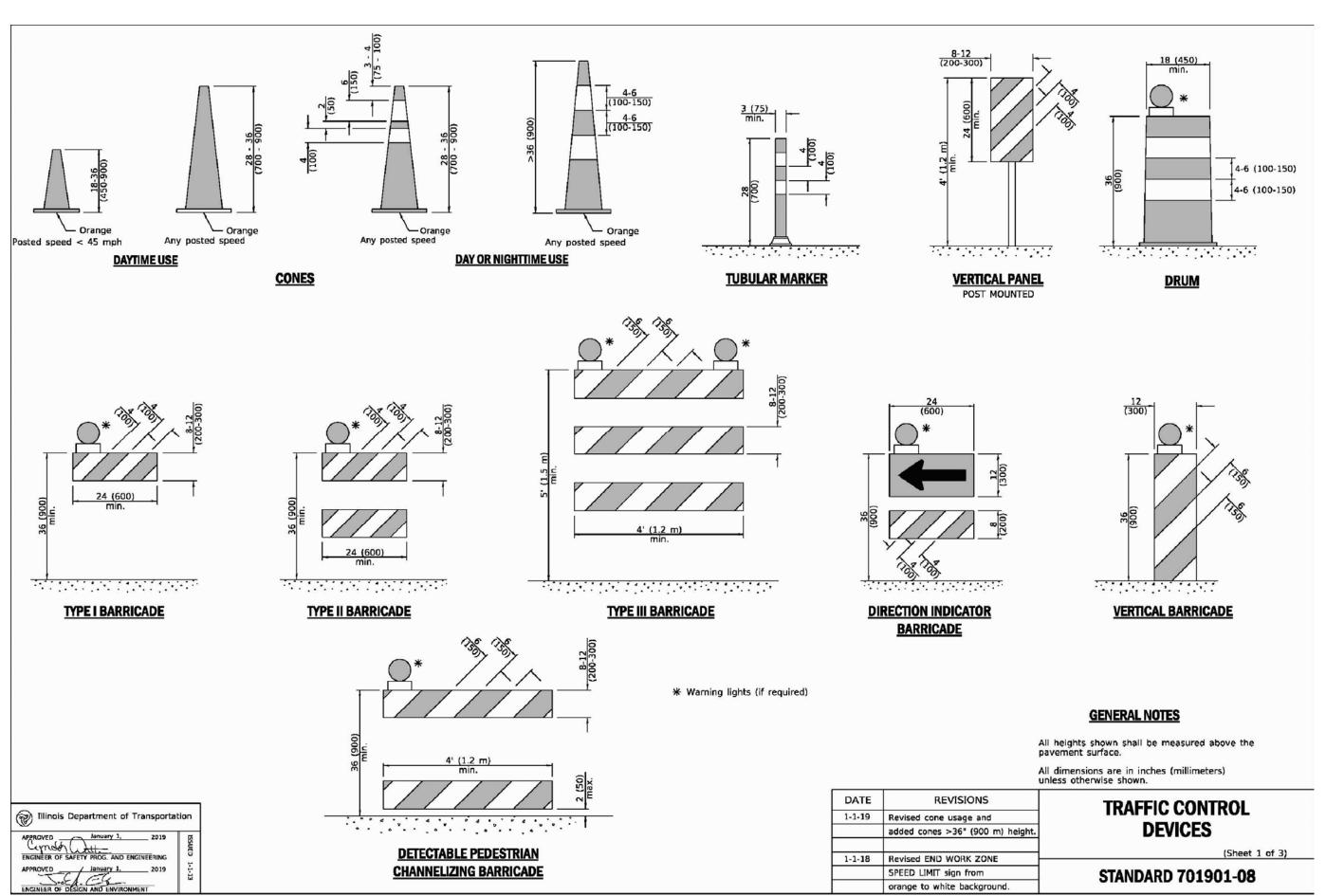


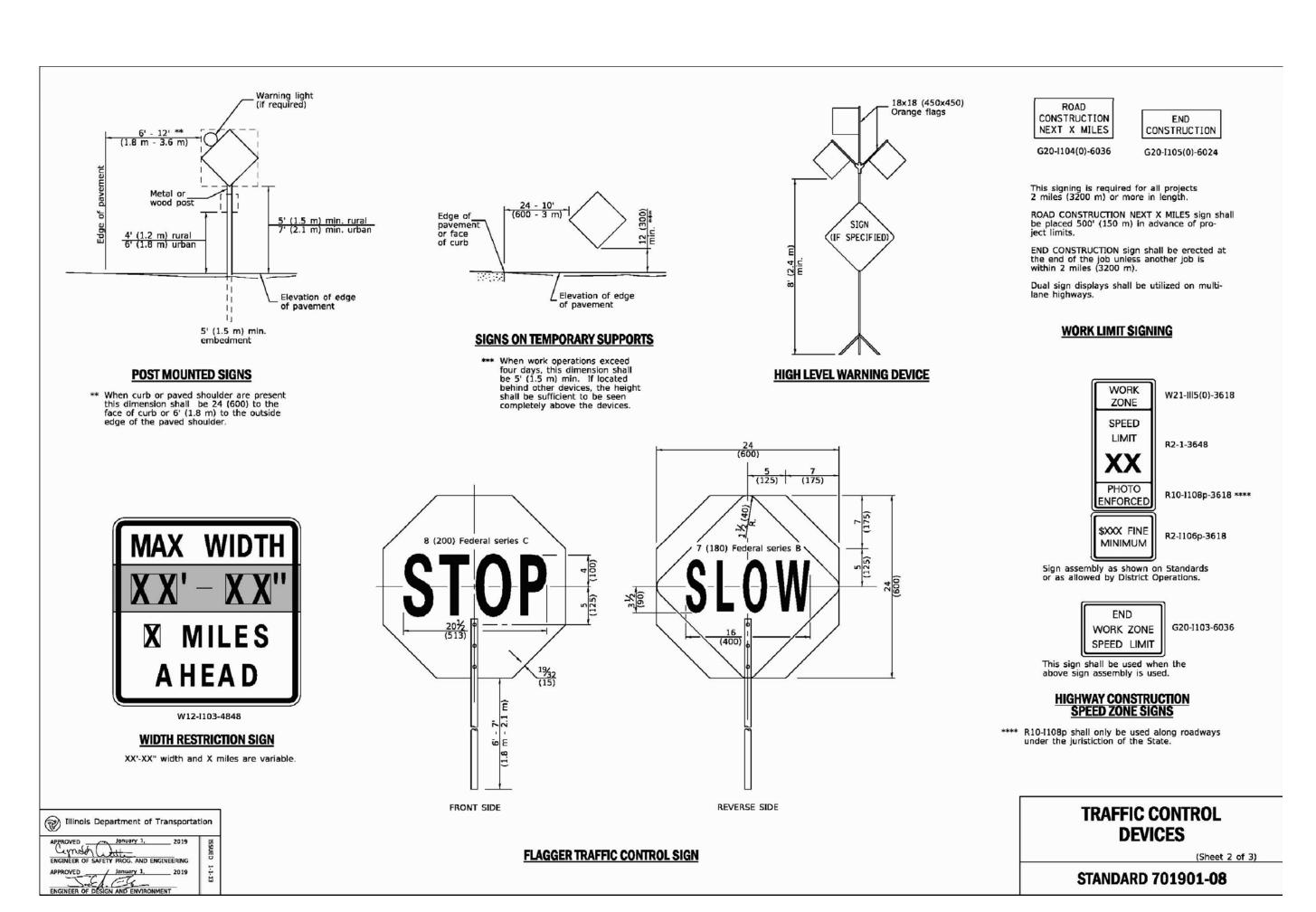
IDOT DETAILS 2

Prepared For: Prepared By:





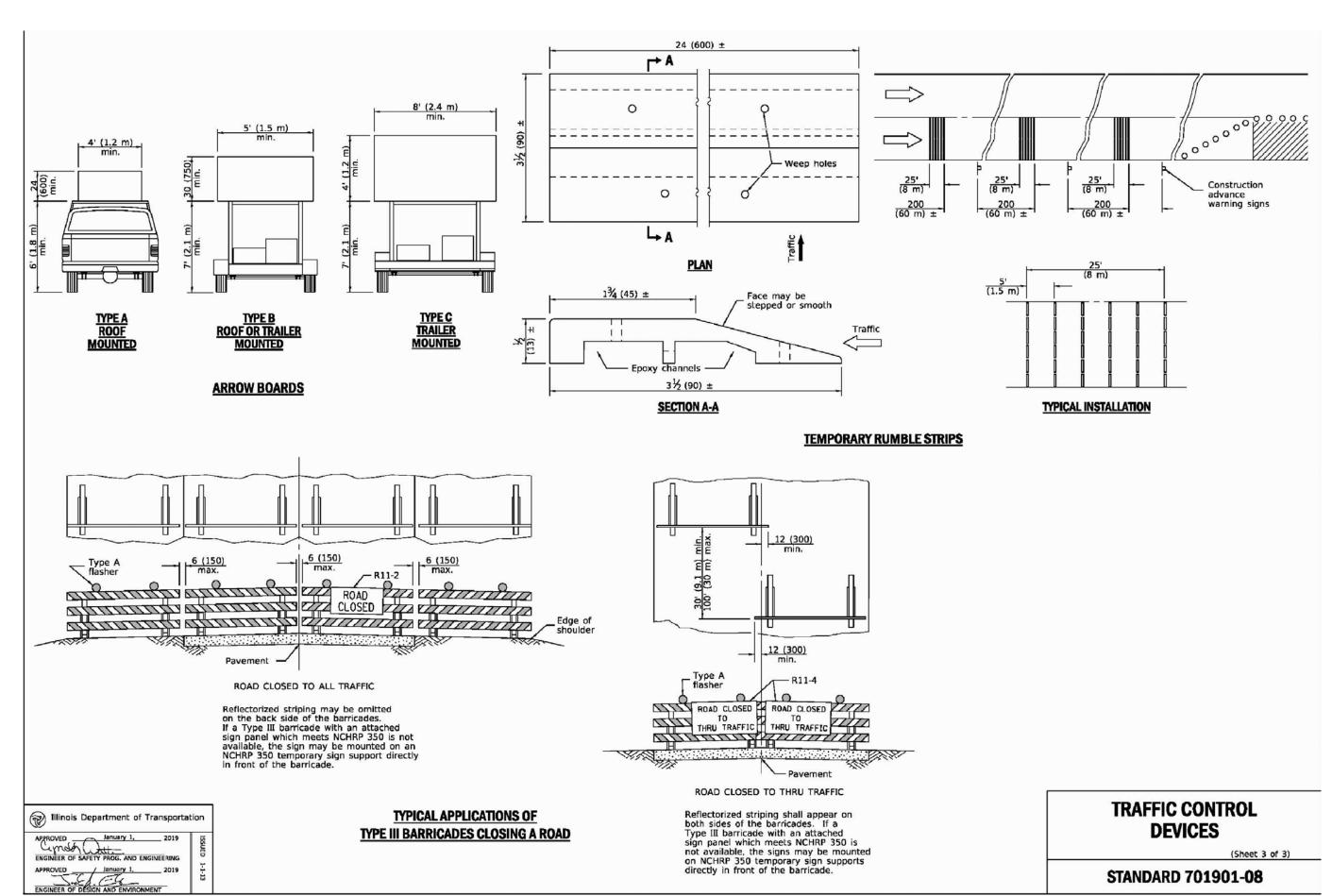


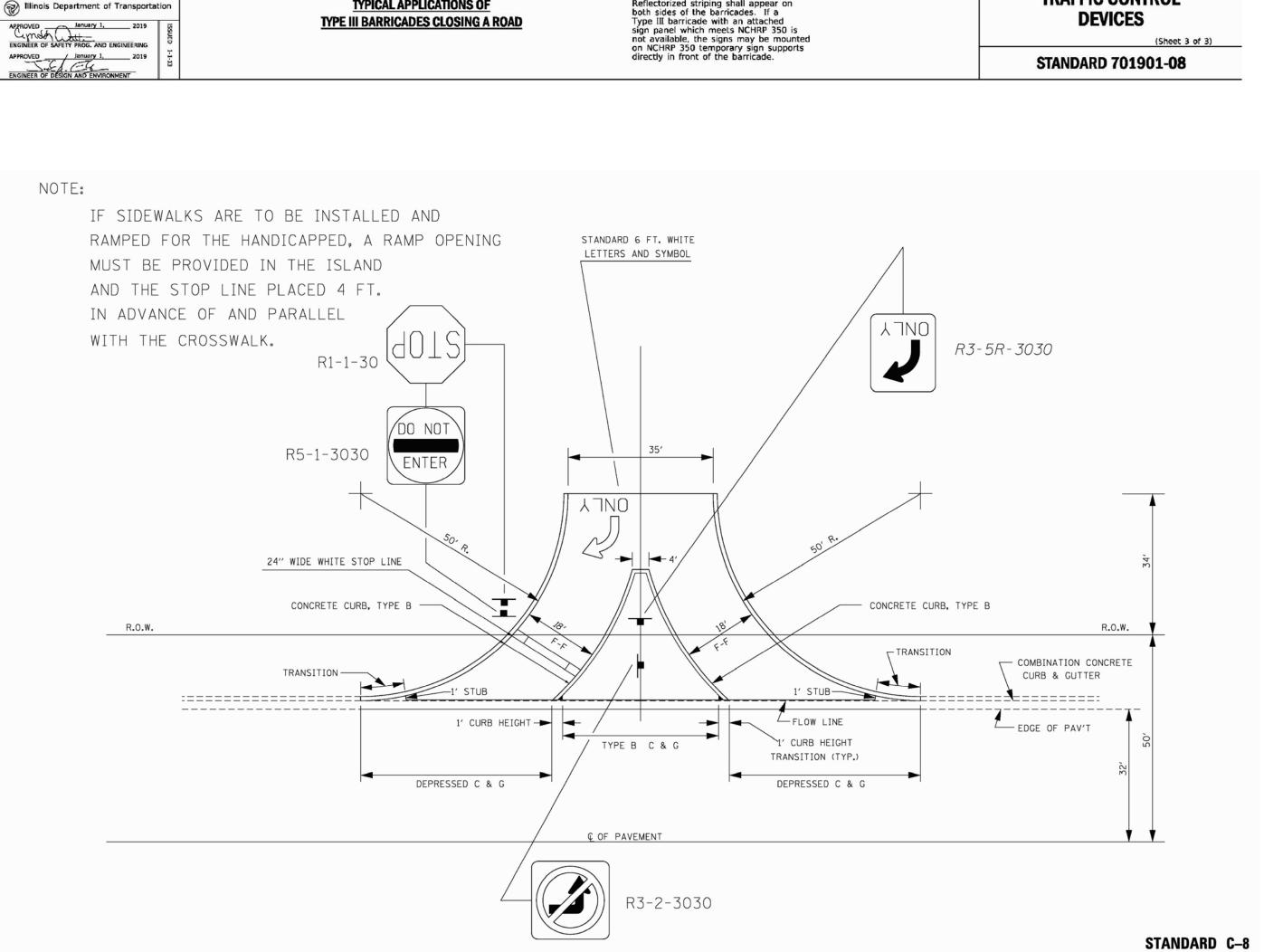


IDOT DETAILS 3

Prepared For: Prepared By: MSIMCCF TO SESOURCES, LTD rmark

Page | 167 AGENDA - 1/21/2020,... VILLAGE OF TINLEY...

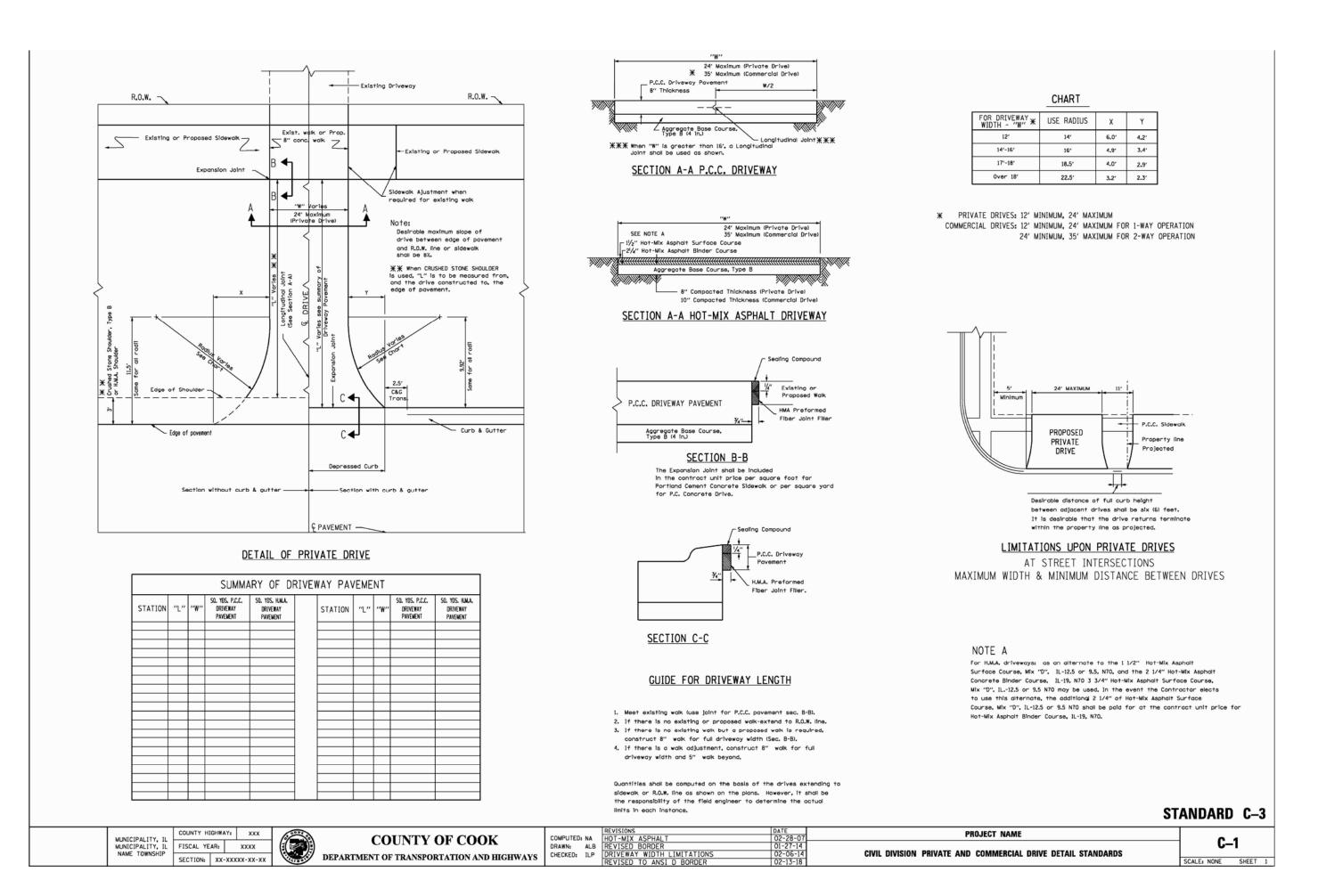




 $J: \dwgs\19jobs\19005\19005.dwg, 19005 (Details)$ 

PROJECT NAME

C-1

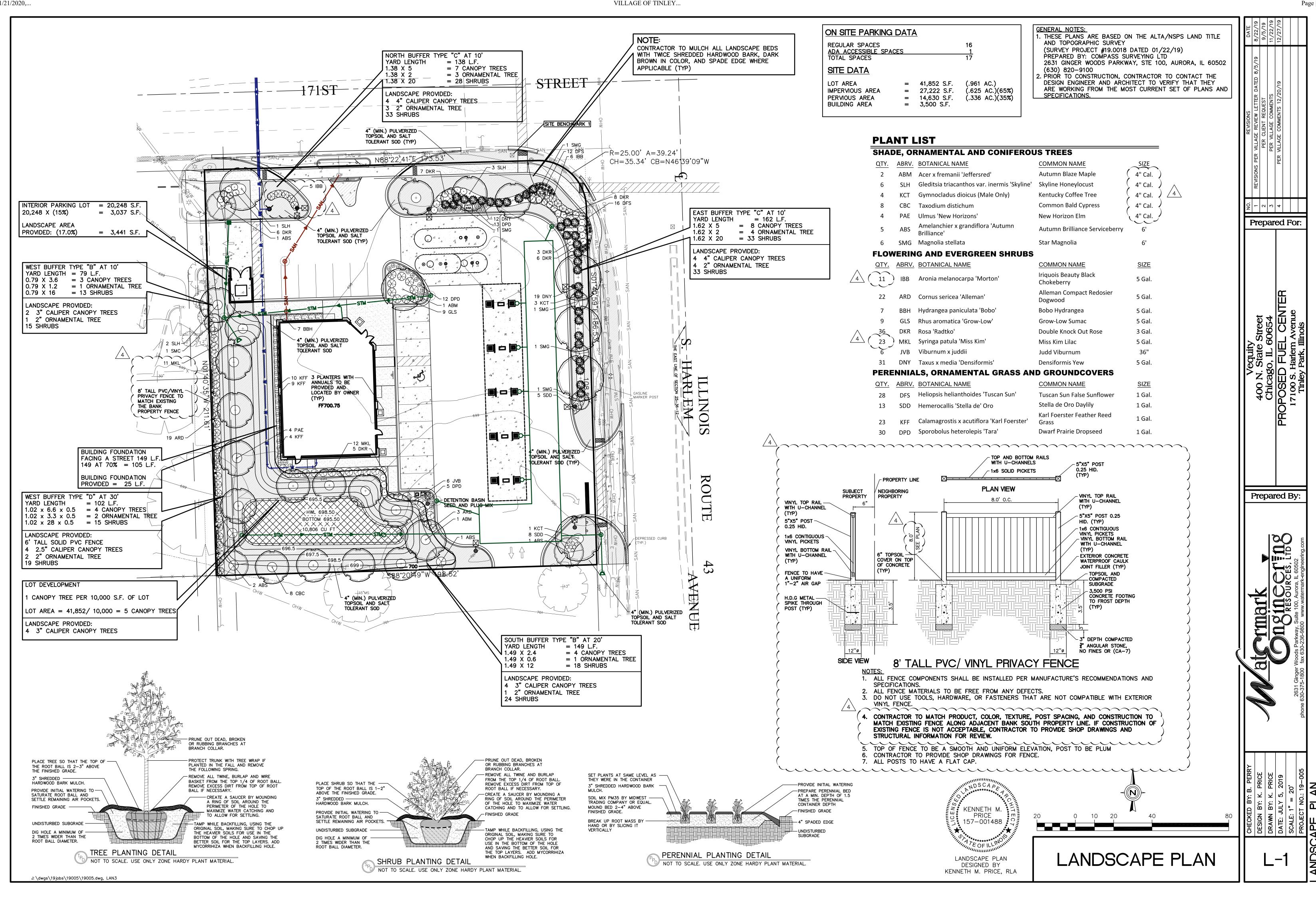


Prepared For: Prepared By: C-15

DOT DETAILS

STATION IS 39 FEET WEST OF THE CENTERLINE OF WILL/COOK ROAD, 54 FEET SOUTH OF THE CENTERLINE OF 167TH STREET, 10 FEET WEST OF A TRAFFIC SIGNAL HAND HOLE AND 1 FOOT NORTHEAST OF AN ORANGE CARSONITE MARKER. ACCESS TO THE CONCRETE SURFACE PROFESSIONAL DESIGN FIRM BC = BACK OF CURB BDC = BACK OF DEPRESSED DATUM POINT IS THROUGH A 6 INCH LOGO CAP AND THE ROD (DATUM POINT) IS SURROUNDED BY A FLOATING BRONZE DISK TO &ICV IRRIGATION CONTROL VALVE LAND SURVEYOR CORPORATION NO. 184-002778 DEPRESSED CURB PIV POST INDICATOR VALVE FL = FLOW LINE LICENSE EXPIRES 4/30/2019 GRAVEL SURFACE SIAMESE WATER CONNECTION LANDSCAPE AREA WK WATER MARKER G = GRAVEI WATER METER STONE SURFACE 35-3585 SITE BENCHMARKS: SCALE: 1'' = 20'AURORA, Ø<sup>B</sup> B/BOX SITE BENCHMARK 1 IE = INVERT ELEVATION ILLINOIS CROSS CUT ON TRAFFIC SIGNAL MANHOLE. 1 TELEPHONE MANHOLE DS = DOWN SPOUT S.F. = SQUARE FEET -x-x- CHAIN LINK FENCE DANIEL W. WALTER THE TELEPHONE NETWORK INTERFACE ELEVATION = 700.19IL PROFESSIONAL LAND SURVEYOR NO. 3585 -D--- PLASTIC FENCE L = SHORE LINE SF = TRANSFORMER TELEPHONE MARKER LICENSE EXPIRES 11/30/20 TELEPHONE PEDESTAL TO OVERHEAD TRAFFIC P.U. & D.E. = PUBLIC UTILITY AND CABLE TELEVISION PEDESTAL PROJ. NO.: 19.0018 ELEVATION = 700.71J:\PSDATA\2019 PROJECTS\19.0018\19.0018LTSTOPO.DWG J:\Psdata\2019 Projects\19.0018\19.0018LTSTOPO.dwg, 8/21/2019 2:11:50 PM

VILLAGE OF TINLEY... AGENDA - 1/21/2020,...



Pizzo Native Plant Nursery, LLC · 10729 Pine Road · Leland, IL 60531 · P: 815.981.8000 · F: 815-498-4406 · www.pizzonursery.com © 2015 Pizzo Native Plant Nursery, LLC

		sin Seed Mix (Mesic-We		<u> </u>	Botton	O Busii	.5 01 5	wai		<u> </u>						
MIX STATISTIC																
	hout Supplemental Plugs	1	u I													
Average Mix I		4.0		intion: Pizze	s Dry Bottor	n Detention Ba	sin Mix is d	lesione	ed fo	rsur	nnv are	eas that flood r	neriodically fo	or short nerio	ds of time	ranging from
Median Mix H	Height			_							-		-	-		
Mix Height M	lode (# of Occurrences in Mix)	3.0' (10), 4.0' (9), 5.0' (7), 2.0' (2), 3.5' (2) 6.0' (2), 7.0' (2), 1.0' (1), 1.5' (1), 2.5 (1), 8.0	and is ide	eal for plant	ing in the bo	r most of the gi ttom of dry-bot	tom deten	tion ba	asins	, wit	hin the	e "Bounce Zon	e" on detenti	on basin slop	es, dry-bott	tom bioswal
Number of Na	ative Species in Mix	38	K I			open floodplaii										
bs/Acre of N	· · · · · · · · · · · · · · · · · · ·	30.:		ity and abo	ut 18% of see	eds typically ave	eraging 5.0	' high o	or m	ore.	While	this mix does	provide flowe	ring species	from April-C	October, it is
Propagules pe	er Square Foot	0.0	designed	to be a bit (	grass heavy (p	particularly long	g-term) wit	h near	ly 60	0% o	f seeds	s being grass &	sedge specie	s. Pizzo desig	gned the mix	x in this fash
Native FQI		30.2	to ensure	excellent e	rosion contro	ol when used in	stromwat	er app	licat	ions.	This r	nix can be sup	plemented w	ith the recom	mended pl	ug list provi
Native Mean	C Value	4.9	9		below	to add diversity	, color, an	d resili	ence	e to t	he lon	g-term health	of your natur	alized basin.		
Native Mean '		-0.4	4									•	Anna Processia, April 1980			
National Wetl	land Category	Facultative - Equally likely to occur in wetlar	ds or non-we	tlands (estim	ated probabili	ty 34 - 66%)										
Grasses, Sedg	ges, & Rushes															
ACRONYM	SCIENTIFIC NAME	COMMON NAME	C-Value	W-Value	WETNESS	HEIGHT	COLOR	100	11000	M TIN		SEEDS/OZ	OZ/ACRE	LB/ACRE	1000	OF MIX
500 0 00 30 00 00 00 00 00 00 00			**************************************	•• value	(Charles and Association Co.)	Min-Max (Typical)	11	A M	J .	J A	5 0				by Weight	by Seed Cou
ANDGER	Andropogon gerardii	BIG BLUESTEM GRASS	5	0	FAC	6-8' (7')	N/A					10,000	64.0000	4.00		4
CXBEBB	Carex bebbii	BEBB'S OVAL SEDGE	6	-5	OBL	2-4' (3')	N/A					34,000	2.0000	0.13	0.41%	0.
XBREV	Carex brevior	PLAINS OVAL SEDGE	4	0	FAC	6"-18" (12")	N/A					29,000	4.0000	0.25	0.82%	0
XHYST	Carex hystericina	PORCUPINE SEDGE	5	-5	OBL	2-4' (3')	N/A					30,000	4.0000	0.25	0.82%	0
XVULP	Carex vulpinoidea	BROWN FOX SEDGE	2	-3	FACW	2-4' (3')	N/A			$\perp$	$\sqcup \!\!\! \perp$	100,000	8.0000	0.50	1.65%	6
LEPAL	Eleocharis palustris	GREAT SPIKE RUSH	10	-5	OBL	6"-18" (12")	N/A					51,000	4.0000	0.25	0.82%	1.
LYCAN	Elymus canadensis	CANADA WILD RYE	4	3	FACU	2-5' (3.5')	N/A					5,200	32.0000	2.00	6.60%	1.
	Elymus virginicus	VIRGINIA WILD RYE	4	-3	FACW	3-5' (4')	N/A		$\perp$			4,200	48.0000	3.00	9.90%	1.
UNDUD	Juncus dudleyi	DUDLEY'S RUSH	4	-3	FACW	1-3' (2')	N/A					3,200,000	1.0000	0.06	0.21%	24.
	Panicum virgatum	SWITCH GRASS	5	0	FAC	3-5' (4')	N/A					14,000	80.0000	5.00	16.49%	8.
	C.I.	LITTLE BULLECTENA CDACC	-	_	EAGLI	2 21 (21)	AI/A					45.000				
SCHSCO	Schizachyrium scoparium	LITTLE BLUESTEM GRASS	5	3	FACU	2-3' (3')	N/A					15,000	64.0000	4.00	13.20%	
SCHSCO	Schizachyrium scoparium Sorghastrum nutans	LITTLE BLUESTEM GRASS INDIAN GRASS	5 5	3	FACU FACU	2-3' (3') 3-7' (6')	N/A N/A					12,000	16.0000	1.00	3.30%	1.
PANVIR SCHSCO SORNUT	·												16.0000			1.4
SCHSCO SORNUT	·											12,000	16.0000	1.00	3.30%	7.3 1.4 <b>59.</b> 7
SCHSCO SORNUT Flowers & Otl	Sorghastrum nutans her Broadleaves	INDIAN GRASS	5	3	FACU	3-7' (6')	N/A			M TIN	ΛE	12,000 Grass/Sedge Su	16.0000 ibtotals	1.00 <b>20.44</b>	3.30% <b>67.42%</b>	1.4
SCHSCO SORNUT Flowers & Otl ACRONYM	Sorghastrum nutans	COMMON NAME			FACU WETNESS	3-7' (6')  HEIGHT  Min-Max (Typical)	N/A COLOR					12,000 Grass/Sedge Su SEEDS/OZ	16.0000 lbtotals OZ/ACRE	1.00 20.44 LB/ACRE	3.30% 67.42% % by Weight	1. 59. OF MIX by Seed Cou
SCHSCO SORNUT Flowers & Otl ACRONYM ALLCER	her Broadleaves  SCIENTIFIC NAME  Allium cernuum	COMMON NAME  NODDING WILD ONION	5	W-Value	WETNESS FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')	N/A  COLOR  Pink				ΛE	12,000 Grass/Sedge Su SEEDS/OZ 7,600	16.0000 lbtotals  OZ/ACRE  4.0000	1.00 20.44 LB/ACRE	3.30% 67.42% % by Weight 0.82%	OF MIX by Seed Cou
SCHSCO SORNUT Flowers & Otl ACRONYM ALLCER ASCINC	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED	C-Value	W-Value 3 -5	WETNESS FACU OBL	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')	N/A  COLOR  Pink  Magenta				ΛE	12,000 Grass/Sedge Su SEEDS/OZ 7,600 4,800	16.0000 ibtotals OZ/ACRE 4.0000 24.0000	1.00 20.44 LB/ACRE 0.25 1.50	3.30% 67.42% % by Weight 0.82% 4.95%	OF MIX by Seed Cou
CHSCO SORNUT  Flowers & Otl  ACRONYM  ALLCER  ASCINC  CHAFAS	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA	7 4 5	3 W-Value 3 -5 3	WETNESS FACU OBL FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')	COLOR Pink Magenta Yellow				ΛE	12,000 Grass/Sedge Su - SEEDS/OZ - 7,600 - 4,800 - 2,700	16.0000   btotals	1.00 20.44 LB/ACRE 0.25 1.50	3.30% 67.42% % by Weight 0.82% 4.95% 3.30%	0F MIX by Seed Cou
ACRONYM ALLCER ASCINC CHAFAS CORTRP	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS	7 4 5 5	3 -5 3 0	WETNESS FACU OBL FACU FAC	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7')	COLOR Pink Magenta Yellow Yellow				ΛE	12,000 Grass/Sedge Su SEEDS/OZ 7,600 4,800 2,700 14,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 16.0000 6.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24%	1. 59. OF MIX by Seed Cou 0. 0.
Flowers & Otl  ACRONYM  ALLCER  ASCINC CHAFAS CORTRP  DESCAA	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL	7 4 5 5 4	3 -5 3 0	FACU OBL FACU FAC FACU FAC	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')	COLOR Pink Magenta Yellow Yellow Purple				ΛE	12,000 Grass/Sedge Su SEEDS/OZ 7,600 4,800 2,700 14,000 5,500	16.0000 ubtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82%	1 59. OF MIX by Seed Cou 0. 0. 0.
CHSCO ORNUT  LOWERS & Otl ACRONYM  ALLCER ASCINC CHAFAS CORTRP DESCAA CHPUR	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata  Chamaecrista fasciculata  Coreopsis tripteris  Desmodium canadense  Echinacea purpurea	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER	7 4 5 5 4 3	3 -5 3 0 3 5	FACU OBL FACU FAC FACU UPL	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4')	COLOR Pink Magenta Yellow Yellow Purple Purple				ΛE	12,000 Grass/Sedge Su SEEDS/OZ 7,600 4,800 2,700 14,000 5,500 6,600	16.0000 ubtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 16.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30%	0F MIX by Seed Coo 0. 0. 0. 0. 0. 0. 0. 0. 0.
CHSCO ORNUT  ACRONYM ALLCER ASCINC CHAFAS CORTRP DESCAA ICHPUR RYYUC	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata  Chamaecrista fasciculata  Coreopsis tripteris  Desmodium canadense  Echinacea purpurea  Eryngium yuccifolium	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER	7 4 5 5 4 3 9	W-Value  3 -5 3 0 3 5	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FAC	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')	COLOR Pink Magenta Yellow Yellow Purple Purple White				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 16.0000 12.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47%	0F MIX by Seed Coo 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ACRONYM ALLCER ASCINC CHAFAS CORTRP DESCAA ECHPUR ERYYUC EUPPER	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata  Chamaecrista fasciculata  Coreopsis tripteris  Desmodium canadense  Echinacea purpurea  Eryngium yuccifolium  Eupatorium perfoliatum	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET	7 4 5 5 4 3 9	3 -5 3 0 3 5 0	FACU OBL FACU FACU UPL FAC OBL	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  3-6' (4')	COLOR Pink Magenta Yellow Yellow Purple Purple White White				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 16.0000 12.0000 0.5000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10%	0F MIX by Seed Cod 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Iowers & Otl ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD	7 4 5 5 4 3 9 4	3 -5 3 0 3 5 0 -5 -5	FACU OBL FACU FAC FACU UPL FAC OBL FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  3-6' (4')  2-4' (3')	COLOR Pink Magenta Yellow Yellow Purple Purple White White Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 16.0000 12.0000 0.5000 1.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21%	0F MIX by Seed Co 0 0 0 0 0 0 0 0 0 2
IOWERS & OTI ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED	7 4 5 5 4 3 9 4 4 4	3 -5 3 0 3 5 0 -5 -3 -5	FACU OBL FACU FAC FACU UPL FAC OBL FACW OBL	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 3-6' (4') 2-4' (3') 4-7' (5')	COLOR Pink Magenta Yellow Yellow Purple Purple White White Yellow Pink				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 12.0000 0.5000 1.0000 2.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41%	0F MIX by Seed Co 0 0 0 0 0 0 2 1
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED	7 4 5 5 4 3 9 4 4 4 4 5	W-Value  3 -5 3 0 3 5 0 -5 -3 -5 -3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FAC  OBL  FACW  OBL  FACW	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 3-6' (4') 2-4' (3') 4-7' (5') 2-5' (4')	COLOR Pink Magenta Yellow Yellow Purple Purple White White Yellow Pink Yellow				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 16.0000 12.0000 0.5000 1.0000 2.0000 3.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62%	0F MIX by Seed Co 0 0 0 0 0 0 2 1
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC ELAUT UHEUC	Sorghastrum nutans  her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET	7 4 5 5 4 3 9 4 4 4	3 -5 3 0 3 5 0 -5 -3 -5 -3 -5	FACU OBL FACU UPL FAC OBL FACW OBL FACW UPL	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 3-6' (4') 2-4' (3') 4-7' (5') 2-5' (4') 2-5' (4')	COLOR Pink Magenta Yellow Yellow Purple Purple White White Yellow Pink Yellow White				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 16.0000 12.0000 0.5000 1.0000 2.0000 3.0000 4.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82%	0F MIX by Seed Co 0 0 0 0 0 0 2 1 2 0 0
ACRONYM ALLCER ASCINC CHAFAS CORTRP DESCAA CHPUR ERYYUC CUPPER CUTMAC HELAUT CUHEUC	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT	7 4 5 5 4 3 9 4 4 4 5 6	3 -5 3 0 3 5 0 -5 -3 -5 -3 -5 3	FACU  WETNESS  FACU  OBL  FACU  UPL  FAC  OBL  FACW  OBL  FACW  UPL  FACW  OBL	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 3-6' (4') 2-4' (3') 4-7' (5') 2-5' (4') 2-5' (4') 3-6' (4') 3-6' (4') 3-6' (4') 3-6' (4') 3-6' (4') 3-6' (4') 3-6' (4')	COLOR Pink Magenta Yellow Yellow Purple Purple White Yellow Pink Yellow White Yellow Vellow Vellow Vellow				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 12.0000 0.5000 1.0000 2.0000 3.0000 4.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25	3.30% 67.42% by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82%	1 59 OF MIX by Seed Coo 0 0 0 0 0 2 1 2 0
CHSCO ORNUT  ACRONYM  ALLCER ASCINC CHAFAS CORTRP DESCAA ICHPUR I	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE	7 4 5 5 4 3 9 4 4 4 5 6	3 -5 3 0 3 5 0 -5 -3 -5 -3 5 3 0	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FAC  OBL  FACW  OBL  FACW  UPL  FACW  UPL  FACW  FACW  UPL  FACO  FACW  UPL  FACW  UPL  FACO  FACW  UPL  FACO  FACW  UPL	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (3')  3-5' (4')  2.5-5' (3')	COLOR Pink Magenta Yellow Yellow Purple Purple White Yellow Pink Yellow Vellow White Purple White				ΛE	12,000 Grass/Sedge Su  SEEDS/OZ  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 95,000 95,000 130,000 70,000 130,000	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 12.0000 0.5000 1.0000 2.0000 3.0000 4.0000 4.0000 4.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25	3.30% 67.42% by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82%	1 59 OF MIX by Seed Coo 0 0 0 0 0 2 1 2 0 2
IOWERS & Otl  ACRONYM  ALLCER SCINC HAFAS ORTRP DESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT UHEUC MONFIS ENDIG YCVIR	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT	7 4 5 5 4 3 9 4 4 4 5 6 4	3 -5 3 0 3 5 0 -5 -3 -5 -3 -5 3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FAC  OBL  FACW  OBL  FACW  OBL  FACW  OBL  FACW	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (4')  2-5' (4')  2-5' (3')  3-5' (4')  1-4' (3')	COLOR  Pink  Magenta  Yellow  Purple  White  White  Yellow  Pink  Yellow  Pink  Yellow  White  Purple  White  White  White  White				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 12.0000 0.5000 1.0000 2.0000 4.0000 4.0000 4.0000 4.0000 4.0000 2.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25	3.30% 67.42% by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82%	1 59 OF MIX by Seed Co 0 0 0 0 0 2 1 1 2 0 2 3 3
IOWERS & Otl ACRONYM  ALLCER SCINC HAFAS CORTRP DESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT UHEUC MONFIS ENDIG YCVIR	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN	7 4 5 5 4 3 9 4 4 4 5 6 4	3 -5 3 0 3 5 0 -5 -3 -5 -3 5 3 0	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  OBL  FACW  FACW  FACW  FACU  FACU  FACU  FACU  FACU  FACU  FACU  FACU  FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-5' (4')  2-5-5' (3.5')  1-4' (3')  2-3' (2.5')	COLOR  Pink  Magenta  Yellow  Yellow  Purple  White  White  Yellow  Pink  Yellow  White  Purple  White  Yellow  White  Yellow  White  Yellow  White  Yellow  White  Yellow  White  Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 12.0000 0.5000 1.0000 2.0000 3.0000 4.0000 4.0000 4.0000 8.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.13 0.50	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.82% 0.41% 1.65%	1 59 OF MIX by Seed Coo 0 0 0 0 0 2 1 1 2 0 2 3 3
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT UHEUC MONFIS ENDIG YCVIR UDHIR UDSUB	Sorghastrum nutans  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN	7 4 5 5 4 3 9 4 4 4 5 6 4 4 5	3 -5 3 0 3 5 0 -5 -3 -5 -3 -5 -3 5 3	FACU  WETNESS  FACU  OBL  FAC  FACU  UPL  FAC  OBL  FACW  FACU  FACW  FACU  FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-5' (4')  2-5' (3.5')  1-4' (3')  2-3' (2.5')  3-6' (5')	COLOR  Pink Magenta Yellow Yellow Purple Purple White White Yellow Pink Yellow White Purple White Purple White Yellow Yellow Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000 43,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 12.0000 1.0000 2.0000 3.0000 4.0000 4.0000 4.0000 4.0000 4.0000 4.0000 4.0000 4.0000 4.0000	1.00 20.44 LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.25	3.30% 67.42% % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.41% 1.65% 0.82%	1. 59. OF MIX by Seed Co. O.
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC ELAUT UHEUC MONFIS ENDIG YCVIR UDSUB UDTRI	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN	7 4 5 5 4 3 9 4 4 4 4 5 6 4 4 5 5	3 W-Value 3 -5 3 0 3 5 0 -5 -3 -5 -3 5 0 -5 -3 5 3 0 -5 -3 5 3 3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  OBL  FACW  FACW  FACW  FACU  FACU  FACU  FACU  FACU  FACU  FACU  FACU  FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-5' (4')  2-5-5' (3.5')  1-4' (3')  2-3' (2.5')	COLOR  Pink  Magenta  Yellow  Yellow  Purple  White  White  Yellow  Pink  Yellow  White  Purple  White  Yellow  White  Yellow  White  Yellow  White  Yellow  White  Yellow  White  Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000	16.0000 lbtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 12.0000 0.5000 1.0000 2.0000 3.0000 4.0000 4.0000 4.0000 8.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.13 0.50	3.30% 67.42% by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.41% 1.65% 0.82%	1 59 OF MIX by Seed Col 0 0 0 0 0 2 1 2 2 3 3 3 5
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC ELAUT UHEUC MONFIS ENDIG YCVIR UDSUB UDTRI ILLAC	Sorghastrum nutans  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN	7 4 5 5 4 3 9 4 4 4 5 6 4 4 5 1 9 3	3 W-Value 3 -5 3 0 3 5 0 -5 -3 -5 -3 -5 -3 5 0 -3 -3 3 3 3 3 3	FACU  WETNESS  FACU  OBL  FACU  UPL  FAC  OBL  FACW  OBL  FACW  UPL  FACW  OBL  FACW  UPL  FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-6' (5')  4-6' (5')	COLOR  Pink Magenta Yellow Yellow Purple Purple White Yellow Pink Yellow White Purple White Yellow Yellow Yellow Yellow Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000 43,000 34,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 12.0000 1.0000 2.0000 3.0000 4.0000 4.0000 4.0000 4.0000 3.0000 3.0000 3.0000 3.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.25 0.13	3.30% 67.42% by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.41% 1.65% 0.82%	1 59 OF MIX by Seed Coo 0 0 0 0 0 2 1 2 0 2 3 3 3 5 1
CHSCO ORNUT  OWERS & Otl  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC ELAUT UHEUC MONFIS ENDIG YCVIR UDSUB UDTRI ILLAC OLRID	Sorghastrum nutans  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT	7 4 5 5 4 3 9 4 4 4 5 6 4 4 5 1 9 3 5	W-Value  3 -5 3 0 3 5 0 -5 -3 -5 -3 5 3 0 -3 5 3 3 5	FACU  WETNESS  FACU  OBL  FACU  UPL  FAC  OBL  FACW  OBL  FACW  UPL  FACU	3-7' (6')  HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 2-4' (3') 4-7' (5') 2-5' (4') 2-5' (3') 3-5' (4') 2-5' (3') 3-5' (4') 2-5' (3') 3-6' (5') 1-4' (3') 2-3' (2.5') 3-6' (5') 4-6' (5') 6-9' (8')	COLOR Pink Magenta Yellow Yellow Purple Purple White Yellow Pink Yellow White Yellow White Purple White Yellow Yellow Yellow Yellow Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000 43,000 34,000 660	16.0000 abtotals  OZ/ACRE  4,0000 24.0000 16.0000 4,0000 12.0000 1.0000 2,0000 3,0000 4,0000 4,0000 4,0000 4,0000 4,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.19 0.06	3.30% 67.42%  % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.82% 0.82% 0.82% 0.082% 0.082% 0.082% 0.082% 0.082% 0.082% 0.082%	1 59 OF MIX by Seed Co 0 0 0 0 0 2 1 2 2 3 3 3 5 1 0 0
IOWERS & OTI ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT UHEUC IONFIS ENDIG YCVIR UDHIR UDSUB UDTRI ILLAC OLRID OLRIG	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum Solidago riddellii	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT RIDDELL'S GOLDENROD	7 4 5 5 4 3 9 4 4 4 5 6 4 5 1 9 3 5 7	3 W-Value 3 -5 3 0 3 5 0 -5 -3 -5 -3 5 3 0 -3 3 5 -5 -3 5 -5 -3 -5 -5 -3 -5 -5 -5 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7	FACU  WETNESS  FACU  OBL  FACU  UPL  FAC  OBL  FACW  OBL  FACW  UPL  FACU  OBL	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-4' (3')  4-7' (5')  2-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-6' (5')  4-6' (5')  4-6' (5')  6-9' (8')  2-4' (3')	COLOR Pink Magenta Yellow Yellow Purple Purple White Yellow Pink Yellow White Purple White Yellow Yellow Yellow Yellow Yellow Yellow Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 220,000 130,000 220,000 43,000 43,000 660 93,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 6.0000 4.0000 12.0000 0.5000 1.0000 2.0000 4.0000 4.0000 4.0000 4.0000 4.0000 2.0000 3.0000 4.0000 2.0000 3.0000 2.0000 2.0000 2.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.19 0.06 0.13	3.30% 67.42%  % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.82% 0.82% 0.82% 0.62% 0.62% 0.21% 0.41%	1 59 OF MIX by Seed Co 0 0 0 0 0 2 1 2 0 2 3 3 5 1 0 0
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT UHEUC MONFIS ENDIG YCVIR UDSUB UDTRI ILLAC OLRID OLRIG YMNOV	Sorghastrum nutans  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum Solidago riddellii Solidago rigida	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT RIDDELL'S GOLDENROD STIFF GOLDENROD	5  C-Value  7  4  5  5  4  3  9  4  4  5  6  4  5  1  9  3  5  7  4	3  W-Value  3  -5  3  0  3  5  0  -5  -3  5  3  0  -3  3  3  5  -5  3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  UPL  FACU	3-7' (6')  HEIGHT  Min-Max (Typical)  1-2' (1.5')  3-5' (4')  1-3' (2')  5-8' (7')  3-6' (5')  2-5' (4')  2-5' (4')  2-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-5' (4')  2-5' (3')  3-6' (5')  4-6' (5')  6-9' (8')  2-4' (3')  3-6' (4')	N/A  COLOR  Pink  Magenta  Yellow  Purple  White  White  Yellow  Pink  Yellow  White  Purple  White  Yellow				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 220,000 92,000 43,000 34,000 660 93,000 41,000	16.0000	1.00 20.44  LB/ACRE 0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.13 0.50 0.19 0.06 0.13 0.09	3.30% 67.42%  by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.82% 0.82% 0.82% 0.10% 0.10% 0.21% 0.41% 0.62% 0.82%	1 59 OF MIX by Seed Co 0 0 0 0 0 2 1 1 2 0 2 3 3 3 5 1 1 0 0
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT UHEUC MONFIS ENDIG YCVIR UDHIR UDSUB UDTRI ILLAC OLRID OLRIG YMNOV HADAD	Sorghastrum nutans  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum Solidago riddellii Solidago rigida Symphyotrichum novae-angliae	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT RIDDELL'S GOLDENROD STIFF GOLDENROD NEW ENGLAND ASTER	5  C-Value  7  4  5  5  4  3  9  4  4  5  6  4  5  1  9  3  5  7  4  4	3 W-Value 3 -5 3 0 -5 -3 -5 -3 5 0 -5 -3 5 3 0 -3 3 3 5 -5 3 -5 -3 -5 -3 -5 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  UPL  FACU	HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (3') 3-5' (4') 2-5' (3') 3-5' (4') 2-5' (3') 3-6' (5') 4-6' (5') 6-9' (8') 2-4' (3') 3-6' (4') 4-6' (5')	N/A  COLOR  Pink  Magenta  Yellow  Purple  White  White  Yellow  Pink  Yellow  White  Purple  White  White  Yellow  Purple				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 220,000 92,000 43,000 34,000 660 93,000 41,000 65,000	16.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.13 0.50 0.60 0.13 0.06 0.13 0.9 0.06 0.13 0.9 0.06	3.30% 67.42%  by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.82% 0.82% 0.41% 1.65% 0.62% 0.62% 0.10% 0.41% 1.65% 0.82% 0.82% 1.24%	1. 59.  OF MIX  by Seed Coo  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0
CHSCO ORNUT  LOWERS & Otl  ACRONYM  ALLCER SCINC CHAFAS CORTRP DESCAA CHPUR RYYUC UPPER UTGRA UTMAC IELAUT CUHEUC MONFIS ENDIG YCVIR	Sorghastrum nutans  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum Solidago riddellii Solidago rigida Symphyotrichum novae-angliae Thalictrum dasycarpum	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT RIDDELL'S GOLDENROD STIFF GOLDENROD NEW ENGLAND ASTER PURPLE MEADOW RUE	5  C-Value  7  4  5  5  4  3  9  4  4  5  6  4  5  1  9  3  5  7  4  4  5	3  W-Value  3  -5  3  0  3  5  0  -5  -3  5  3  0  -3  3  3  5  -5  3  -3  -3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  UPL  FACU	HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (3') 3-5' (4') 2-5' (3') 3-5' (4') 2-5' (3.5') 1-4' (3') 2-3' (2.5') 3-6' (5') 4-6' (5') 6-9' (8') 2-4' (3') 3-6' (4') 4-6' (5') 4-6' (5') 4-7' (6')	N/A  COLOR  Pink  Magenta  Yellow  Purple  White  White  Yellow  Pink  Yellow  White  Purple  White  White  Yellow  Purple  Cream				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000 43,000 660 93,000 41,000 65,000 11,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 6.0000 16.0000 12.0000 1.0000 2.0000 3.0000 4.0000 4.0000 2.0000 3.0000 1.0000 2.0000 8.0000 1.0000 2.0000 1.5000 1.5000 1.5000 4.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.25 0.13 0.50 0.60 0.13 0.90 0.06 0.13 0.90 0.06	3.30% 67.42%  8% by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 3.30% 2.47% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.82% 0.41% 1.65% 0.82% 0.62% 0.10% 0.21% 0.41% 1.65% 0.82% 0.21% 0.21% 0.21% 0.21% 0.21% 0.21% 0.21% 0.31% 1.24% 0.82%	1. 59.  OF MIX by Seed Cod 0. 0. 0. 0. 0. 0. 2. 1. 2. 0. 2. 1. 2. 0. 2. 1. 2. 0. 2. 1. 2. 0. 2. 1. 2. 0. 2. 1. 1. 0. 0. 1. 0. 1. 0. 1. 1. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC ELAUT UHEUC MONFIS ENDIG YCVIR UDHIR UDSUB UDTRI ILLAC OLRID OLRIG YMNOV HADAD ERFAS ERHAS	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum Solidago riddellii Solidago rigida Symphyotrichum novae-angliae Thalictrum dasycarpum Vernonia fasciculata	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT RIDDELL'S GOLDENROD STIFF GOLDENROD NEW ENGLAND ASTER PURPLE MEADOW RUE COMMON IRONWEED	5  C-Value  7  4  5  5  4  3  9  4  4  4  5  6  4  5  1  9  3  5  7  4  4  5  5  7  4  5  5  7	3 W-Value 3 -5 3 0 -5 -3 -5 -3 3 0 -3 3 3 5 -5 -3 -5 -3 -5 -3 -5 -3 -5 -3 -5 -3 -5 -5 -5 -5 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  UPL  FACU  FACW  FACW  FACW	HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (3') 3-6' (5') 2-5' (3') 3-5' (4') 2-5' (3.5') 1-4' (3') 2-3' (2.5') 3-6' (5') 4-6' (5') 4-6' (5') 4-6' (5') 4-6' (5') 4-6' (5') 4-6' (5') 4-6' (5')	N/A  COLOR  Pink  Magenta  Yellow  Yellow  Purple  White  White  Yellow  White  Purple  White  White  Yellow  Purple  Cream  Purple				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 32,000 70,000 130,000 220,000 92,000 43,000 34,000 660 93,000 41,000 65,000 11,000 24,000	16.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.25 0.13 0.50 0.60 0.13 0.99 0.06 0.13 0.09 0.38 0.25 0.38	3.30% 67.42%  % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.82% 0.41% 1.65% 0.82% 0.021% 0.41% 1.65% 0.82% 1.24% 0.31% 0.31% 1.24% 0.82% 1.24% 0.82% 3.30%	1. 59.  OF MIX  by Seed Cool  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0
CHSCO ORNUT  ACRONYM  LLCER SCINC HAFAS ORTRP ESCAA CHPUR RYYUC UPPER UTGRA UTMAC ELAUT UHEUC MONFIS ENDIG YCVIR UDHIR UDSUB UDTRI ILLAC OLRID OLRIG YMNOV HADAD ERFAS ERHAS	her Broadleaves  SCIENTIFIC NAME  Allium cernuum  Asclepias incarnata Chamaecrista fasciculata Coreopsis tripteris Desmodium canadense Echinacea purpurea Eryngium yuccifolium Eupatorium perfoliatum Euthamia graminifolia Eutrochium maculatum Helenium autumnale Kuhnia eupatorioides corymbulosa Monarda fistulosa Penstemon digitalis Pycnanthemum virginianum Rudbeckia hirta Rudbeckia subtomentosa Rudbeckia triloba Silphium laciniatum Solidago riddellii Solidago rigida Symphyotrichum novae-angliae Thalictrum dasycarpum Vernonia fasciculata Verbena hastata	COMMON NAME  NODDING WILD ONION SWAMP MILKWEED PARTRIDGE PEA TALL COREOPSIS SHOWY TICK TREFOIL PURPLE CONEFLOWER RATTLESNAKE MASTER COMMON BONESET COMMON GRASS-LEAVED GOLDENROD SPOTTED JOE PYE WEED SNEEZEWEED FALSE BONESET WILD BERGAMOT FOXGLOVE BEARD TONGUE COMMON MOUNTAIN MINT BLACK-EYED SUSAN SWEET BLACK-EYED SUSAN BROWN-EYED SUSAN COMPASS PLANT RIDDELL'S GOLDENROD STIFF GOLDENROD NEW ENGLAND ASTER PURPLE MEADOW RUE COMMON IRONWEED BLUE VERVAIN	5  C-Value  7  4  5  5  4  3  9  4  4  4  5  6  4  5  1  9  3  5  7  4  4  5  6  4  4  5  7  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  6  4  4  5  7  4  4  5  5  4	3  W-Value  3  -5  3  0  3  5  0  -5  -3  -5  3  0  -3  3  3  5  -5  3  -3  -3  -3  -3	FACU  WETNESS  FACU  OBL  FACU  FAC  FACU  UPL  FACW  OBL  FACW  OBL  FACW  UPL  FACU  FACW	HEIGHT Min-Max (Typical) 1-2' (1.5') 3-5' (4') 1-3' (2') 5-8' (7') 3-6' (5') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (4') 2-5' (3') 3-5' (4') 2-5' (3) 3-5' (4') 2-3' (2.5') 3-6' (5') 4-6' (5') 4-6' (5') 4-6' (5') 4-7' (6') 4-6' (5') 4-7' (6') 4-7' (5')	COLOR  Pink Magenta Yellow Yellow Purple Purple White Yellow Pink Yellow White Purple White Yellow Yellow Yellow Yellow Yellow Yellow Yellow Yellow Yellow Purple Cream Purple Blue				ΛE	12,000 Grass/Sedge Su  7,600 4,800 2,700 14,000 5,500 6,600 7,500 160,000 350,000 95,000 130,000 220,000 92,000 43,000 34,000 660 93,000 41,000 65,000 11,000 24,000 93,000	16.0000 abtotals  OZ/ACRE  4.0000 24.0000 16.0000 4.0000 12.0000 1.0000 2.0000 4.0000 4.0000 4.0000 4.0000 4.0000 4.0000 6.0000 4.0000 1.5000 6.0000 4.0000 6.0000 4.0000	1.00 20.44  LB/ACRE  0.25 1.50 1.00 0.38 0.25 1.00 0.75 0.03 0.06 0.13 0.19 0.25 0.25 0.25 0.25 0.25 0.13 0.50 0.25 0.13 0.50 0.25 0.13 0.50 0.25 0.13 0.50 0.25 0.13 0.50 0.25 0.13 0.50 0.25 0.13 0.50 0.25 0.13 0.50 0.25	3.30% 67.42%  % by Weight 0.82% 4.95% 3.30% 1.24% 0.82% 0.10% 0.21% 0.41% 0.62% 0.82% 0.82% 0.41% 1.65% 0.82% 0.041% 1.65% 0.82% 0.124% 0.31% 0.41% 0.31% 1.24% 0.82% 1.24% 0.82%	1. 59. OF MIX by Seed Cou 0. 0.

Facultative Wetland / Facultative - Usually occur in wetlands (estimated probability 67 - 99%), but occasionally found in non-wetlands (estimated probability 34 - 66%)

1.) Pizzo recommends installing a Mycorrhizal Inocculant with the above seed mix at 40 lbs/acre

2.) For spring planting, Pizzo recommends installing a cover crop of Seed Oats (Avena sativa) with the above seed mix at 40 lbs/acre 3.) For fall planting, Pizzo recommends installing a cover crop of ReGreen (a Winter Wheat x Wheatgrass Sterile Hybrid) with the above mix at 50 lbs/acre 4.) \*\*At no time should Annual nor Perennial Rye (Lolium multiflorum or perenne) be utilized as a cover crop\*\*

## NATIVE SEED MIX INFORMATION

ECOLOGY + VISION, LLC ECOLOGYLLC.COM 815-981-8003 P.O. BOX 601 LELAND, IL 60531

CONTRACTOR TO INSTALL NATIVE SEED MIXES AND BLANKET PER SUPPLIERS SPECIFICATIONS, INSTRUCTIONS AND RECOMMENDATIONS INCLUDING SEED BED PREPARATION, SOIL AMENDMENTS, AND PH LEVELS. ALL BLANKETS SHALL BE STAKED AS NECESSARY TO PROPERLY ANCHOR BLANKETS IN PLACE.

SEPARATE BID ITEM: CONTRACTOR TO PROVIDE A SEPARATE BID FOR A MAINTENANCE CONTRACT FOR THE NATIVE AREAS AS REQUIRED.

## NOTES:

Some species are not appropriate for inclusion into a seed mix, however they may be very desirable to have as part of the permanent plant matrix because of their

ecological, habitat, and/or aesthetic value. The plug species listed above are appropriate for supplementing this seed mix. Following are the common reasons for not

ncluding these species within the seed mix: 1-Does not germinate well from seed in the field, 2-Seed is very expensive, 3-Low number of seeds per ounce, 4-Requires

specialized microclimate, 5-Seed is not commercially available or is only available in small quantities

1. CONTRACTOR TO PROVIDE AT LEAST 75% OF THE RECOMMENDED SPECIES BASED ON AVAILABILITY AND INSTALL AS NEEDED TO COVER DESIGNATED AREAS.

NATIVE PLANTING SPECIFICATIONS FOR STORMWATER B.M.P.S DESCRIPTION AND GENERAL REQUIREMENTS

WORK SHALL CONSIST OF PROVIDING, DELIVERING, AND INSTALLING ALL SEEDS, PLUGS, PLANTS, OR OTHER MATERIALS REQUIRED FOR THE ESTABLISHMENT OF THE PROPOSED STORMWATER BMP. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POST-PLANTING MAINTENANCE UNTIL RELEASED BY THE LANDSCAPE ARCHITECT/ DESIGNER OR OWNER'S REPRESENTATIVE. AND ANY TASKS AND OPERATIONS IN COMPLIANCE WITH THE PLANS AS SPECIFIED IN THIS PROVISION OR AS DEEMED NECESSARY BY THE LANDSCAPE ARCHITECT/DESIGNER OR OWNER'S REPRESENTATIVE.

2. COMPLIANCE WITH LOCAL REQUIREMENTS AS RELATED TO THE WORK AS DESCRIBED HEREIN INCLUDING PERFORMANCE AND MAINTENANCE STANDARDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND / OR SUB-CONTRACTORS.

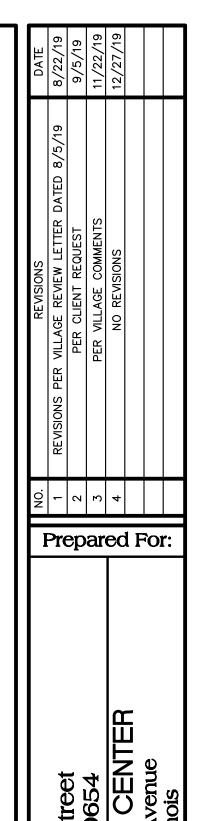
- 3. WORK SHALL BE PERFORMED ONLY BY A COMPANY SPECIALIZING IN NATIVE / WETLAND INSTALLATION AND MAINTENANCE WITH A MINIMUM OF 7 YEARS OF EXPERIENCE. PERSONAL ASSIGNED TO SITE SHALL HAVE A MINIMUM OF 3 YEARS OF PROFESSIONAL EXPERIENCE IN ASSIGNED WORK. IN NO CASE SHALL ANYONE WORK ON-SITE WITHOUT A QUALIFIED SUPERVISOR.
- 4. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS THAT ARE REQUIRED BY THE
- THE CONTRACTOR SHALL NOTIFY THE DESIGNER, ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION, AND ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE APPROPRIATE CONSTRUCTION INSPECTIONS.
- 6. THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS TO CONTACT THE DESIGNER TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND
- 8. THE CONTRACTOR IS TO FOLLOW ALL ORDINANCES AND REQUIREMENTS OF THE STATE, COMMUNITY, AND LOCAL DISTRICTS. ALL PROPOSED IMPROVEMENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS FOR THE PROJECT. PRIOR TO BID AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE SITE TO VERIFY THAT THERE ARE NO DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL CONDITIONS AT THE SITE. IF ANY DISCREPANCIES ARE FOUND, AT ANY TIME BEFORE OR DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY (BEFORE ANY ADDITIONAL IMPROVEMENTS ARE INSTALLED) IN ORDER TO OBTAIN WRITTEN CONFIRMATION BY THE LANDSCAPE ARCHITECT/DESIGNER AS TO ANY REVISIONS/SUBSTITUTIONS THAT MAY NEED TO BE MADE TO THE PLANS.
- 9. CONTRACTOR SHALL GUARANTEE ALL SEED, PLUGS, PLANTS, LABOR AND ANY MATERIAL FOR THE DURATION OF ANY AND ALL INSTALLATION AND MAINTENANCE CONTRACT OR 1 YEAR. WHICHEVER IS GREATER.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES ON AND OFF-SITE AND THE CONTRACTOR SHALL PROVIDE A WRITTEN STATEMENT TO HOLD HARMLESS THE OWNER AND ANY OTHER AGENTS OF THE PROJECT.
- 11. THE CONTRACTOR SHALL INDEMNIFY WATERMARK ENGINEERING RESOURCES, LTD (THE ENGINEER), ARCHITECT AND OWNER, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION.

SEEDS, PLUGS AND PLANTS

- 12. ALL SEEDS, PLUGS AND PLANTS SHALL BE GUARANTEED TO BE TRUE TO BOTANICAL NAME AND VARIETIES.
- 13. SEED MIX PERCENTAGES SHALL MATCH SEED COUNT AND PERCENTAGES SPECIFIED. 14. SEED MIX PERCENTAGES / QUANTITY INDICATED PER ACRE SHALL MEAN THE TOTAL AMOUNT OF PLS (PURE LIVE SEED) PER ACRE FOR ALL SPECIES EXCLUDING FORBS.
- 15. SEED MIXTURES TAGS SHALL BE SUBMITTED A MINIMUM OF 2 WEEKS PRIOR TO SEEDING TIME FOR APPROVAL BY THE LANDSCAPE ARCHITECT/ DESIGNER OR OWNER'S
- 16. ALL SEEDS SHALL HAVE THE PROPER STRATIFICATION AND/OR SCARIFICATIONS TO BREAK SEEDS OUT OF DORMANCY FOR ANY PLANTING TO OCCUR OTHER THAN FALL
- 17. LEGUMES SHALL BE INOCULATED WITH THE PROPER RHIZOBIA AS NECESSARY FOR SCHEDULED PLANTING TIME.
- 18. IF NOT ALREADY INCLUDED IN THE SEED MIX. PLANT A TEMPORARY COVER CROP ALONG WITH THE SEED TO STABILIZE THE SOIL WHILE THE PERMANENT NATIVE SPECIES GERMINATE AND BECOME ESTABLISHED, ESPECIALLY IN HIGHLY ERODIBLE AREAS.
- 19. SEEDS AND PLUGS SHALL BE FROM A SOURCE WITHIN A MAXIMUM OF 200 MILES FROM THE PROJECT LOCATION. 20. ALL QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE VERIFIED
- PRIOR TO CONSTRUCTION. IF DISCREPANCIES OCCUR, THE CONTRACTOR IS TO CONTACT THE LANDSCAPE ARCHITECT/ DESIGNER OR OWNER'S REPRESENTATIVE IMMEDIATELY AND NO WORK IS TO BE DONE UNTIL APPROVED BY THE LANDSCAPE ARCHITECT/ DESIGNER OR OWNER'S REPRESENTATIVE.
- 21. CONSTRUCTION REQUIREMENTS AND TIMELINES SHALL BE SCHEDULED WITH THE GENERAL CONTRACTOR.
- 22. MOW ANY EXCESS EXISTING VEGETATION SCHEDULED TO REMAIN TO A HEIGHT OF 6" MAXIMUM
- 23. APPLY BROAD SPECTRUM OR TARGETED HERBICIDE, DEPENDING ON SPECIES PRESENT. HERBICIDE APPLICATION MUST BE PERFORMED BY A LICENSED PESTICIDE APPLICATOR.CONTRACTOR TO VERIFY EXISTING TOPSOIL PH AND ORGANIC MATTER.
- 24. SOIL PH SHALL BE MONITORED AND ADJUSTED AS NEEDED FOR VIGOROUS PLANT HEALTH 25. CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND LABOR FOR ANNUAL SOIL TESTS
- AND AS NEEDED TO DIAGNOSE ANY PROBLEMATIC AREAS. 26. CONTRACTOR TO VERIFY WITH SEED SOURCE FOR APPROPRIATE PLANTING TIMES AND
- CONDITIONS AS NEEDED.
- 27. CONTRACTOR SHALL AVOID THE USE OF HEAVY EQUIPMENT AND ANY OTHER ACTIVITY THAT WILL RESULT IN OVER COMPACTION OF THE AREAS TO BE PLANTED. 28. WHEN APPLICABLE, CONTRACTOR SHALL INSTALL THE AMENDED SOIL MIX PER PLAN.
- MATERIALS MAKING UP AMENDED SOIL MIXTURE SHALL BE WELL BLENDED AND SHALL NOT INSTALLED SEPARATELY IN "LAYERS". 29. TOPSOIL SHALL BE TILLED AS NECESSARY TO COINCIDE WITH SEEDING METHODOLOGY WHETHER IT BE BROADCAST, DRILL, HYDRO-SEEDING, OR NO-TILL TYPES. SEEDING
- METHODOLOGY SHALL BE AT THE DISCRETION OF THE CONTRACTOR BUT SHALL BE IN A MANNER NECESSARY TO MAXIMIZE PLANT ESTABLISHMENT, UNIFORM COVERAGE AND THE PREVENTION OF SOIL EROSION.
- 30. TOPSOIL AND FINISH GRADE SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR FOR SUPPLY, QUALITY, QUANTITY AND PLACEMENT OF TOPSOIL. 31. THE FINISH GRADE WILL BE SHAPED TO THE ELEVATION SHOWN ON THE PLANS. TOPSOIL
- WILL BE FREE OF DEBRIS, CLODS, STONES, ROOTS, STICKS, WASHOUTS, CRUSTING/ CAKING. WITH SOIL PARTICLES NOT TO EXCEED 2" IN DIAMETER. A TEMPORARY COVER CROP WILL BE REQUIRED TO BE ESTABLISHED AFTER THE FIRST FULL GROWING SEASON PER PLAN.
- 32. IF BROADCAST SEEDING IN DORMANCY, INSTALL WHEN THE EVENING TEMPERATURES DROP BELOW FREEZING. USE APPROPRIATE EROSION CONTROL MEASURES TO PROVIDE STABILIZATION UNTIL THE FOLLOWING GROWING SEASON. 33. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING AND IMPLEMENTING THE
- MEANS AND METHODS NECESSARY FOR THE SAFE AND SUCCESSFUL EXECUTION OF THE APPROVED PLANS. THIS INCLUDES BUT IS NOT LIMITED TO; 34. SEED INSTALLATION METHODS AND EQUIPMENT, PROTECTION OF PLANT MATERIAL/SEED
- FROM WILDLIFE AND OTHER ENVIRONMENTAL FACTORS DURING ESTABLISHMENT, APPROPRIATE MAINTENANCE TIMING AND TECHNIQUES ETC.
- 35. THIS SHALL BE DONE IN ACCORDANCE WITH THE PROVIDED DETAILS, SPECIFICATIONS AND PERFORMANCE STANDARDS WHICH ARE INTEGRAL TO THE APPROVED PLANS. 36. ANY RESTORATION NEEDED BECAUSE OF CONSTRUCTION SHALL BE PROVIDED BY THE
- CONTRACTOR AT NO ADDITIONAL COST. MAINTENANCE AND MANAGEMENT
- 37. TO ENSURE PROPER ESTABLISHMENT, A MAINTENANCE AND MANAGEMENT PLAN SHALL BE REQUIRED TO SUPPORT SITE DEVELOPMENT GOALS. THEREFORE REGULAR MAINTENANCE AND MONITORING CONTROLS TO PREVENT INVASIVE SPECIES AND MAINTAIN OPTIMAL MOISTURE LEVELS ARE NECESSARY MANAGEMENT ACTIONS ITEMS FOR DURATIONS AS SPECIFIED. SELECTION OF MAINTENANCE METHODS PARTLY DEPENDS UPON TIMING AND OTHER FACTORS SUCH AS AESTHETIC GOALS, PROJECT SIZE, AND BUDGET TO DETERMINE WHAT TECHNIQUES WILL BE USED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH THE PERFORMANCE STANDARDS AND, IN CONJUNCTION WITH THE OWNER, DEVELOPING THE APPROPRIATE MAINTENANCE TECHNIQUES AND SCHEDULE IN ORDER TO MEET THE CRITERIA AS DEFINED IN THE AFOREMENTIONED PERFORMANCE
- 38. THE MAINTENANCE OF A NATIVE LANDSCAPE INCLUDES MANY DIFFERENT ACTIONS: REGULAR SITE INSPECTION AND MONITORING, MOWING, SELECTIVE HERBICIDE/ PESTICIDE APPLICATION. OVER-SEEDING AND SUPPLEMENTAL PLANTING, WATER CONTROL AND TEMPORARY IRRIGATION AND PRESCRIBED BURNING.

LANDSCAPE NOTES

- 1. ALL PLANT MATERIAL SHALL BE HARDY TO THE ZONE IT IS BEING PLANTED IN. ALL TREES AND SHRUBS ARE TO BE BALLED AND BURLAPED UNLESS OTHERWISE NOTED AND SHALL BE GROWN IN ACCORDANCE WITH THE STANDARDS SET FORTH BY THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORT.
- 2. PLANT SIZES CALLED OUT ON THIS PLAN ARE THE MINIMUM SIZE REQUIRED. PLANTS WHICH FAIL TO MEET THE SIZES LISTED, SHALL BE REJECTED AT THE EXPENSE OF THE CONTRACTOR.
- 3. CONTRACTOR MUST VERIFY ALL MATERIAL QUANTITIES AS DEPICTED ON THE DRAWING. THE PLANT LIST PROVIDED ON THIS PLAN IS FOR CONVENIENCE ONLY.
- 4. SUBSTITUTIONS MAY NOT BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER.
- 5. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES AND UTILITY LOCATORS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOT BEGIN ANY WORK ON-SITE UNTIL ALL UTILITIES HAVE BEEN LOCATED. CONTRACTOR SHALL OBTAIN "AS-BUILT" PLANS FOR ALL IRRIGATION AND LIGHTING PRIOR TO CONSTRUCTION.
- 6. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL UTILITIES INCLUDING IRRIGATION AND LIGHTING. ALL DAMAGE SHALL BE REPAIRED TO A NEW CONDITION IN ACCORDANCE WITH ALL CODES AT NO COST TO THE OWNER - SEE NOTE 5.
- 7. ALL UNSUITABLE MATERIAL (CONCRETE, AGGREGATE STONE, CRUSHED ASPHALT, BRICK ETC.) SHALL BE REMOVED, INCLUDING HAUL OFF, PRIOR TO PLANTING AND SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- 8. SOIL MIX PM35 BY MIDWEST TRADING COMPANY OR EQUAL SHALL BE ROTOTILLED INTO ALL PERENNIAL AND ANNUAL PLANTING BEDS PRIOR TO THE INSTALLATION OF THE PLANT MATERIAL. A SLOW RELEASE, GRANULAR FERTILIZER SHALL BE APPLIED TO ALL ANNUAL AND PERENNIAL PLANTING BEDS AT THE RECOMMENDED RATE, AND SHALL BE ROTOTILLED IN WITH THE ABOVE SOIL MIXTURE BEFORE THE PLANT MATERIAL IS INSTALLED.
- 9. CONTRACTOR TO PROVIDE THOROUGH INITIAL WATERING OF ALL PLANTINGS WITHIN 12 HOURS OF INSTALLATION TO ENSURE ALL AIR POCKETS HAVE BEEN REMOVED AROUND
- 10. ALL PLANT BED AREAS ARE TO BE MULCHED WITH 3" OF DOUBLE SHREDDED HARDWOOD MULCH AND SHALL BE SEPARATED WITH A SPADE EDGE ALONG PERIMETERS ADJACENT TO TURF AREAS. FINAL GRADE (AFTER SETTLING) SHALL BE 1" BELOW ADJACENT CURBS.
- 11. ALL TURF AREAS ARE TO BE A MINIMUM OF A FIVE WAY BLUEGRASS BLEND, UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL INSTALLED TURF AREAS UNTIL TIME OF KNITTING. IF TURF SEED AND SOD OCCUR ON THE SAME PROJECT, CONTRACTOR SHALL VERIFY AND USE SEED MIXTURES TO MATCH SOD.
- 12. AREAS TO BE SODDED SHALL BE WITH AN "APPROVED TURFGRASS SOD" OF PREMIUM GRADE. SOD SHALL BE A 5 WAY BLEND OF IMPROVED KENTUCKY BLUEGRASS VARIETIES THAT HAS BEEN GROWN LOCALLY TO THE PROJECT SITE. SOD MUST BE MATURED FOR 2 FULL GROWING SEASONS PRIOR TO HARVEST CUTTING AND BE HEALTHY WITH WELL ESTABLISHED ROOTS. SOD SHALL BE FREE OF DISEASE, INSECTS AND DEBRIS. SOD SHALL BE UNIFORM IN LEAF COLOR. TEXTURE, AND DENSITY. SOD SHALL BE DELIVERED, INSTALLED, AND WATERED WITHIN 24 HOURS OF HARVEST IN WHICH TEMPERATURES DO NOT EXCEED 90 DEGREES (F) NOR LESS THAN 55 DEGREES (F). SOD SHALL BE MACHINE-CUT AT A MINIMUM UNIFORM SOIL THICKNESS (1.5" OF SOD IS DESIRED) BUT SOD THICKNESS SHALL BE A THICKNESS NECESSARY FOR PLANT VIABILITY. SOD SHALL BE LAID IN STAGGERED STRAIGHT LINES, TIGHTLY AGAINST EACH OTHER WITHOUT STRETCHING OR OVERLAPPING. SOD STAKES SHALL USED ON ALL SLOPES 4:1 OR
- GREATER. 13. CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS (INTENDED OR UNINTENDED) AT A MINIMUM, TO THE ORIGINAL CONDITION UNLESS OTHERWISE NOTED.
- 14. THE EXISTING PLANT MATERIAL SHOWN ON THIS PLAN IS INTENDED SOLELY TO IDENTIFY THEM AS OBSERVED IN THE FIELD. THIS PLAN DOES NOT MAKE ANY CLAIMS ABOUT THE CONDITION OR SAFETY OF ANY OF THE PLANT MATERIAL DESCRIBED HEREIN OR OBSERVED IN THE FIELD.
- 15. ALL TRANSPLANTED PLANT MATERIAL MUST BE INSTALLED IMMEDIATELY UPON EXTRACTION FROM IT'S ORIGINAL LOCATION, UNLESS SPECIFIC ARRANGEMENTS HAVE BEEN MADE WITH THE LANDSCAPE ARCHITECT/DESIGNER. SHOULD IT BECOME UNREASONABLE TO TRANSPLANT ANY OF THE PLANT MATERIAL AS DESCRIBED IN THIS PLAN, DUE TO SITE CONSTRAINTS OR OTHERWISE, CONTRACTOR IS RESPONSIBLE FOR CONTACTING LANDSCAPE ARCHITECT/DESIGNER TO MAKE ALTERNATIVE ARRANGEMENTS.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE HEALTH AND VIABILITY OF THE PROPOSED PLANT MATERIAL INCLUDING WATERING, PROTECTION FROM PHYSICAL DAMAGE FROM THE TIME PLANT IS SELECTED THROUGH IT'S INSTALLATION.
- 17. CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL REMAINING PLUMB UNTIL THE END OF THE GUARANTEE PERIOD. PLANTS MAY NOT BE STAKED UNLESS APPROVED BY THE LANDSCAPE ARCHITECT/DESIGNER.
- 18. CONTRACTOR TO GUARANTEE PLANT MATERIAL AND LABOR FOR A MINIMUM OF ONE YEAR FROM THE TIME OF INSTALLATION.
- 19. THE CONTRACTOR IS RESPONSIBLE FOR BECOMING FAMILIAR WITH AND ABIDING BY THE LANDSCAPE ORDINANCES FOR THE SPECIFIC JURISDICTION IN WHICH THE WORK IS TAKING
- 20. BIDDERS SHALL BE RESPONSIBLE FOR EXAMINING THE SITE, PRIOR TO PREPARING BID, TO BECOME FAMILIAR WITH THE SPECIFIC SITE CONSTRAINTS.
- 21. ALL EXISTING ON-SITE PLANT MATERIAL NOT EFFECTED BY CONSTRUCTION OR THE PROPOSED LANDSCAPE, SHALL BE BE PROTECTED AS PART OF THIS PLAN. EXISTING LANDSCAPE IN AREAS OF CONSTRUCTION AND PROPOSED LANDSCAPE SHALL BE REMOVED AS PART OF THIS PLAN.
- 22. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF ALL THE ITEMS SHOWN ON THE PLANS.
- 23. IF IRRIGATION IS DEEMED NECESSARY, THE DESIGN AND INSTALLATION OF THE IRRIGATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. AN IRRIGATION PLAN ALONG WITH AN AS BUILT OF THE IRRIGATION SYSTEM SHALL BE PREPARED FOR OWNER REVIEW AND APPROVAL. CONTRACTOR SHALL GUARANTEE PERFORMANCE. PARTS. AND LABOR FOR A PERIOD OF 1 YEAR FROM THE DATE OF FINAL APPROVAL.
- 24. IF EXISTING IRRIGATION IS PRESENT ON SITE, CONTRACTOR SHALL ADJUST, ADD TO, OR SUBTRACT FROM, THE EXISTING IRRIGATION SYSTEM TO ACCOMMODATE ANY PROPOSED ALTERATIONS/ADDITIONS TO THE EXISTING LANDSCAPE. CONTRACTOR SHALL PROVIDE THE OWNER AN AS BUILT OF THE IRRIGATION SYSTEM AND ALL CHANGES TO THE SYSTEM AFFECTED BY THIS PROJECT.
- 25. PROVIDE TOPSOIL RE-SPREAD PER THE FOLLOWING UNLESS OTHERWISE NOTED:
- A. 4" MINIMUM IN GRASS OR SOD AREAS B. 6" MINIMUM IN PLANTING AREAS
- C. 12" MINIMUM IN LANDSCAPE ISLANDS



Prepared By:

RESC

rmark

**L-2** 

LANDSCAPE DETAILS AND SPECIFICATIONS

Base Seed Mix Including Supplemental Plugs

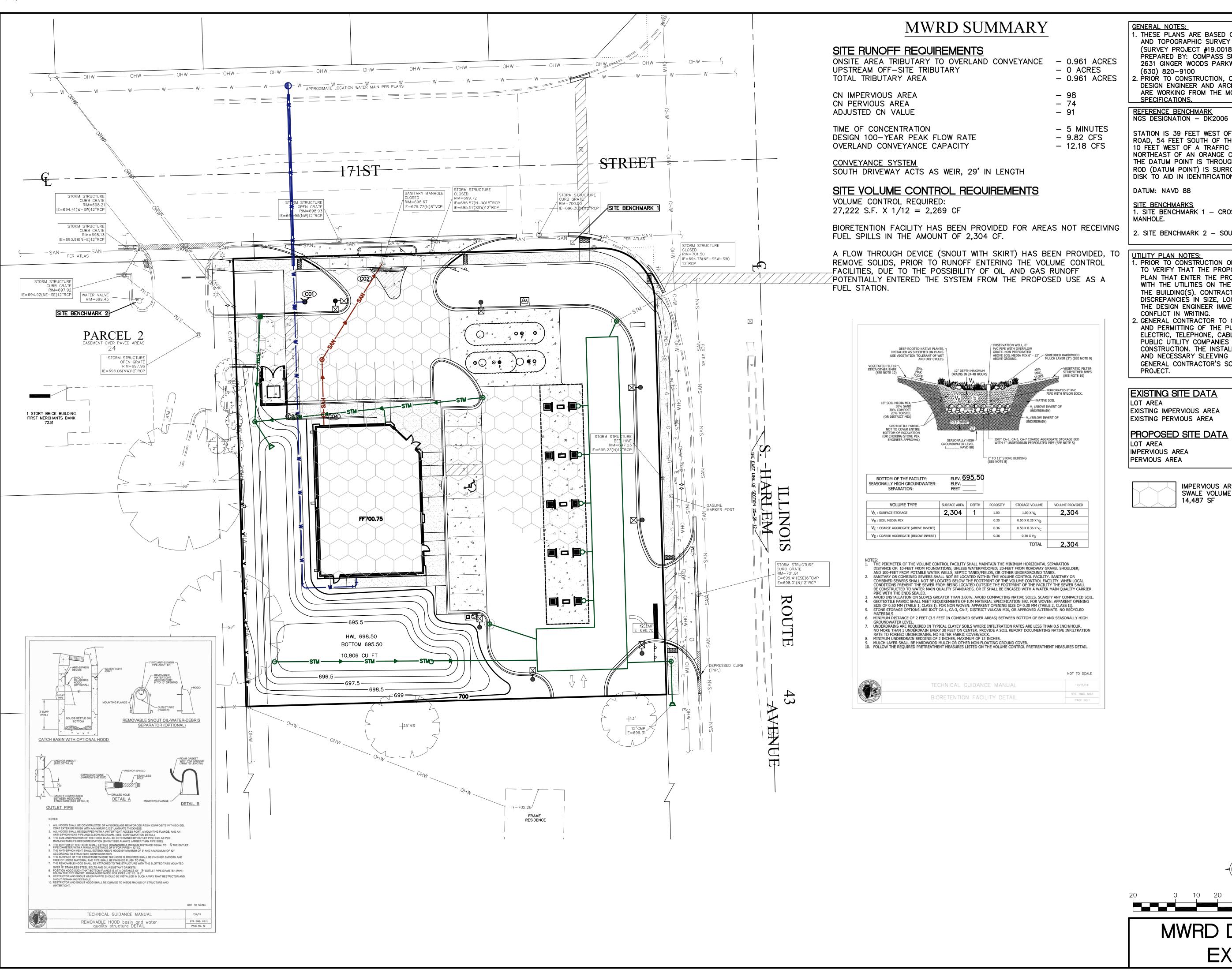
Number of Native Species in Mix

Native FQI

Native Mean C Value

Native Mean W Value

National Wetland Category



THESE PLANS ARE BASED ON THE ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY (SURVEY PROJECT #19.0018 DATED 01/22/19)

PREPARED BY: COMPASS SURVEYING LTD 2631 GINGER WOODS PARKWAY, STE 100, AURORA, IL 60502

. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND

PIN - DN4691

STATION IS 39 FEET WEST OF THE CENTERLINE OF WILL/COOK ROAD, 54 FEET SOUTH OF THE CENTERLINE OF 167TH STREET, 10 FEET WEST OF A TRAFFIC SIGNAL HAND HOLE AND 1 FOOT NORTHEAST OF AN ORANGE CARSONITE MARKER. ACCESS TO THE DATUM POINT IS THROUGH A 6 INCH LOGO CAP AND THE ROD (DATUM POINT) IS SURROUNDED BY A FLOATING BRONZE DISK TO AID IN IDENTIFICATION.

ELEVATION = 751.92

1. SITE BENCHMARK 1 - CROSS CUT ON TRAFFIC SIGNAL

ELEVATION = 700.19

2. SITE BENCHMARK 2 - SOUTHWEST BOLT OF FIRE HYDRANT

ELEVATION = 700.71

PRIOR TO CONSTRUCTION OF ANY UTILITIES, CONTRACTOR IS

TO VERIFY THAT THE PROPOSED UTILITIES SHOWN ON THIS PLAN THAT ENTER THE PROPOSED BUILDING(S) CORRESPOND WITH THE UTILITIES ON THE PLUMBING PLANS AS THEY EXIT THE BUILDING(S). CONTRACTOR TO REPORT IN WRITING ANY DISCREPANCIES IN SIZE, LOCATION, OR INVERT ELEVATION TO THE DESIGN ENGINEER IMMEDIATELY FOR RESOLUTION OF THE CONFLICT IN WRITING. GENERAL CONTRACTOR TO COORDINATE THE INSTALLATION

AND PERMITTING OF THE PUBLIC UTILITIES, SUCH AS GAS, ELECTRIC, TELEPHONE, CABLE AND FIBER OPTICS, WITH THE PUBLIC UTILITY COMPANIES AND ARCHITECT PRIOR TO CONSTRUCTION. THE INSTALLATION OF THE PUBLIC UTILITIES AND NECESSARY SLEEVING TO BE INCLUDED AS PART OF GENERAL CONTRACTOR'S SCOPE OF WORK FOR THIS

EXISTING SITE DATA

41,852 S.F. (0.961 AC.) EXISTING IMPERVIOUS AREA = 36,932 S.F. (0.848 AC.) 4,920 S.F. (0.113 AC.)

PROPOSED SITE DATA

= 41,852 S.F. (0.961 AC.) = 27,222 S.F. (0.625 AC.) = 14,630 S.F. (0.336 AC.)

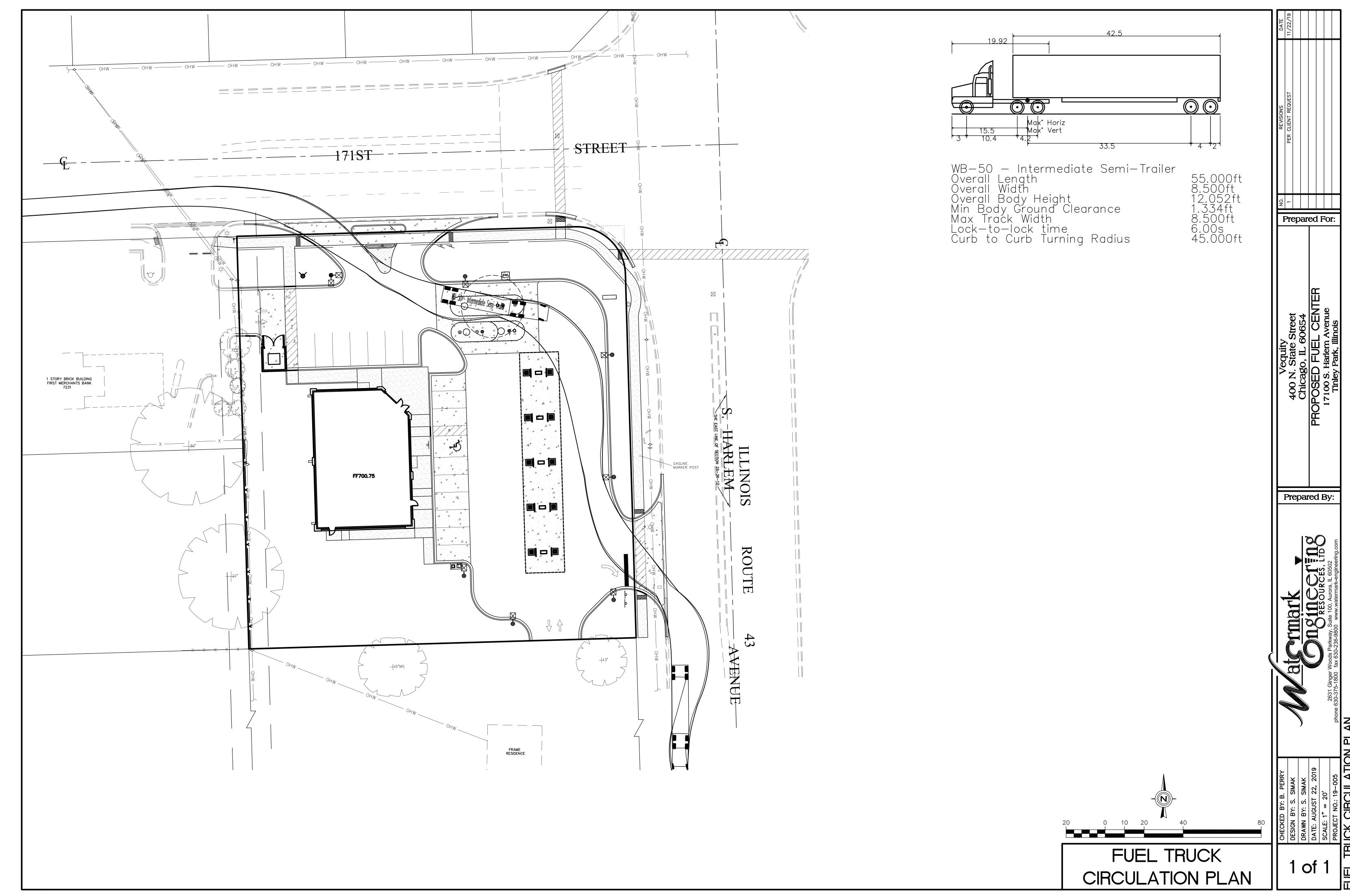
> IMPERVIOUS AREA SENT TO BIORETENTION SWALE VOLUME CONTROL FACILITY 14,487 SF

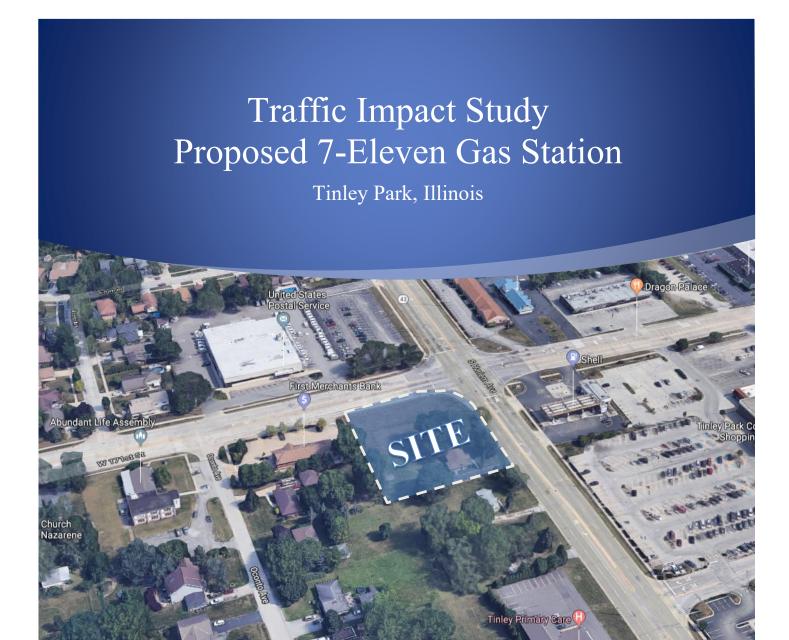
Prepared For:

Prepared By:

Of

MWRD DRAINAGE **EXHIBIT** 









## 1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed 7-Eleven gas station to be located in Tinley Park, Illinois. The site, which is currently occupied by a single-family home, is located in the southwest quadrant of the intersection of Harlem Avenue (IL Route 43) with 171<sup>st</sup> Street. As proposed, the site will be developed with a 7-Eleven convenience store with 20 fueling positions and an automated car wash. Access to the gas station will be provided via a proposed right-in/right-out access drive off Harlem Avenue, a right-in/right-out access drive off 171<sup>st</sup> Street, and a cross connection to the existing First Merchants Bank.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed gas station will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate the traffic generated by the proposed gas station.

Figure 1 shows the location of the site in relation to the area roadway system. Figure 2 shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed gas station
- Directional distribution of the gas station traffic
- Vehicle trip generation for the gas station
- Future traffic conditions including access to the gas station
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

- 1. Existing Conditions Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
- 2. No-Build Conditions Analyze the capacity of the future roadway system using background traffic volumes that include the existing traffic volumes increased by an ambient growth factor.
- 3. Projected Conditions Analyze the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient traffic growth, and the traffic estimated to be generated by the full buildout of the proposed gas station.





Site Location Figure 1



Aerial View of Site Figure 2

## 2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

#### Site Location

The site, which is currently occupied by a single-family home, is located in the southwest quadrant of the intersection of Harlem Avenue with 171<sup>st</sup> Street and is bounded by First Merchants Bank to the west and a single-family home to the south. Land uses in the area include single family homes to the west, the United States Postal Service (USPS) to the north, Creekview Offices, Montego Bay Car Wash, and Tinley Park Commons to the west and DuPage Medical Group and single-family homes to the south.

#### **Existing Roadway System Characteristics**

The characteristics of the existing roadways near the gas station are described below and illustrated in **Figure 3**.

Harlem Avenue (IL Route 43) is a north-south arterial roadway that in the vicinity of the site provides two through lanes in each direction separated by a raised barrier median. At its signalized intersection with 171<sup>st</sup> Street, Harlem avenue provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the northbound and southbound approaches. The north leg of the intersection provides a standard style crosswalk and pedestrian countdown signals. Harlem Avenue is under the jurisdiction of the Illinois Department of Transportation (IDOT), is classified as a Strategic Regional Arterial (SRA) route, carries an annual average daily traffic (AADT) volume of 32,500 vehicles north of 171<sup>st</sup> Street and an AADT volume of 35,300 vehicles south of 171<sup>st</sup> Street (IDOT AADT 2017) and has a posted speed limit of 40 miles per hour.

171<sup>st</sup> Street is an east-west collector roadway that in the vicinity of the site provides two through lanes in each direction separated by a mountable/striped median. At its signalized intersection with Harlem Avenue, 171<sup>st</sup> Street provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the eastbound and westbound approaches. The east leg provides a standard style crosswalks and pedestrian countdown signals. At its unsignalized intersection with Oconto Avenue, 171<sup>st</sup> Street provides a through lane and a shared through/right-turn lane on the eastbound approach and an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the westbound approach. West of Harlem Avenue, 171<sup>st</sup> Street is under the jurisdiction of the Cook County Department of Transportation and Highways, carries an AADT volume of 16,00 vehicles (IDOT AADT 2018) and has a posted speed limit of 40 miles per hour. East of Harlem Avenue, 171<sup>st</sup> Street is under the jurisdiction of the Village of Tinley Park, carries an AADT volume of 11,800 vehicles (IDOT AADT 2018) and has a posted speed limit of 35 miles per hour.



**4** 💥 |

Oconto Avenue is a north-south local roadway that provides one through lane in each direction and extends from 171<sup>st</sup> Street to its terminus at 173<sup>rd</sup> Street approximately 1,300 feet to the south. At its unsignalized intersection with 171<sup>st</sup> Street, Oconto Avenue provides a shared left/right-turn lane under stop-sign control. Oconto Avenue is under the jurisdiction of the Village of Tinley Park and has a posted speed limit of 20 miles per hour.

#### Traffic Signal Interconnect

The intersection of Harlem Avenue with 171<sup>st</sup> Street is part of a 16-signal interconnect system that extends along Harlem Avenue from 175<sup>th</sup> Street (located one-half mile to the south) to 151<sup>st</sup> Street (approximately 2.5 miles to the north) and also includes the traffic signals along US Route 6 (159<sup>th</sup> Street) between the Park Center/Home Depot Signalized Access Drives and Laramie Avenue. These traffic signals are maintained by IDOT.

### **Existing Traffic Volumes**

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units during the weekday morning (7:00 to 9:00 A.M.) and evening (4:00 to 6:00 P.M.) peak periods on Tuesday, August 6, 2019 at the following intersections:

- Harlem Avenue with 171st Street
- 171<sup>st</sup> Street with the First Merchants Bank Access Drive
- 171st Street with Oconto Avenue/USPS Westerly Access Drive
- 171<sup>st</sup> Street with USPS Easterly Access Drive

The results of the traffic counts indicated that the weekday morning peak hour of traffic occurs from 7:45 A.M. to 8:45 A.M. and the weekday evening peak hour of traffic occurs from 5:00 P.M. to 6:00 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.

#### Crash Analysis

KLOA, Inc. obtained crash data<sup>1</sup> for the most recent available past five years (2013 to 2017) for the intersection of Harlem Avenue with 171<sup>st</sup> Street as summarized in **Table 1.** A review of the crash data indicated that no fatalities were reported.

<sup>&</sup>lt;sup>1</sup> IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.



LEGEND

(00)

7 Eleven

0 (3) 502 (813) 1 (16)

Table 1 HARLEM AVENUE WITH 171<sup>st</sup> STREET - CRASH SUMMARY

			Type of	Accident Fre	quency		
Year	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2013	2	1	21	3	8	0	35
2014	1	0	12	2	4	0	19
2015	2	1	14	3	10	0	30
2016	2	1	23	5	5	1	37
2017	1	0	6	2	7	1	17
Total	8	3	76	15	34	2	138
Average/Year	1.6	< 1	15.2	3	6.8	< 1	27.6

## 3. Traffic Characteristics of the Proposed Gas Station

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed gas station, including the directional distribution and volumes of traffic that it will generate.

#### Proposed Site and Development Plan

As proposed, the site will be developed with a 7-Eleven gas station with an approximately 3,500 square-foot convenience store with 20 fueling positions and an automated car wash. Access to the gas station will be provided via the following:

- A right-in/right-out access drive off Harlem Avenue located approximately 200 feet south of 171<sup>st</sup> Street. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop-sign control. Turning movements at this access drive will be restricted to right-turns only via the existing raised median along Harlem Avenue and will be supplemented with appropriate striping and signage.
- A right-in/right-out access drive off 171<sup>st</sup> Street located approximately 225 feet west of
  Harlem Avenue. This access drive will provide one inbound lane and one outbound lane
  with outbound movements under stop-sign control. Turning movements at this access drive
  will be physically restricted to right-turns only via a raised triangular median, striping and
  signage.
- A cross access to the existing First Merchants Bank site that borders the west side of the site. This cross access will allow traffic generated by the subject site to access the existing full movement access drive serving the bank that is located approximately 275 feet west of Harlem Avenue and the existing three-quarter (rights in, rights out, lefts in) access drive off Oconto Avenue that is located approximately 110 feet south of 171<sup>st</sup> Street.

It should be noted that the site will be developed with an additional cross access curb cut along the southern frontage to provide additional site connectivity to the future development of the two residential homes located south of the site. A site plan depicting the proposed gas station layout and access is included in the Appendix.

#### **Directional Distribution**

The directions from which patrons and employees will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the gas station-generated traffic.



#### Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed gas station was based on vehicle trip generation rates contained in *Trip Generation Manual*, 10<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE). The "Convenience Market/Gas Station" (Land-Use Code 960) rate was utilized. In addition, it is important to note that surveys conducted by ITE have shown that approximately 60 percent of trips made to gas stations are diverted from the existing traffic on the roadway system. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips. Such diverted trips are referred to as pass-by traffic. **Table 2** summarizes the trips projected to be generated by the proposed gas station.

Table 2
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code			kday M Peak H	Iorning our		kday E eak Ho	vening our
Use Code	Type/Size	In	Out	Total	In	Out	Total
960	Convenience Market/Gas Station (3,500 s.f.)	146	145	291	121	121	242
	60% Pass-By Reduction	-87	-87	-174	-73	-73	-146
	<b>Total New Trips</b>	49	50	99	42	42	84

## 4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject gas station.

#### Gas Station Traffic Assignment

The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed gas station were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the traffic assignment of the new passenger vehicle trips. As previously indicated, a 60 percent pass-by reduction was applied, and **Figure 7** illustrates the traffic assignment of the pass-by trips.

#### **Background Traffic Conditions**

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes are projected to increase by a total of 4.3 percent (0.7 percent compounded annually) to represent Year 2025 total projected conditions (one-year buildout plus five years). **Figure 8** illustrates the Year 2025 no-build traffic volumes. A copy of the CMAP projections letter is included in the Appendix.

#### Total Projected Traffic Volumes

The gas station-generated traffic (Figures 6 and 7) was added to the existing traffic volumes increased by the regional growth factor (Figure 8) to determine the Year 2025 total projected traffic volumes, shown in **Figure 9**.



(00)

(00)

## 5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

#### Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing (Year 2019) and Year 2025 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6<sup>th</sup> *Edition* and analyzed using the Synchro/SimTraffic 10 software. The analysis for the traffic-signal controlled intersections were accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and total projected conditions are presented in **Tables 3** through **6**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.



Table 3
CAPACITY ANALYSIS RESULTS – HARLEM AVENUE WITH 171st STREET – SIGNALIZED

	D L II	F	Eastboun	d	V	Vestboun	ıd	N	orthbour	ıd	S	outhbou	nd	0 "
	Peak Hour	L	Т	R	L	T	R	L	Т	R	L	T	R	Overall
9 itions	Weekday Morning	D 40.2	50 50	_	C 34.9	1 54		B 16.4	20		B 11.2		C 5.9	C – 30.0
2019 Jond	Peak Hour		D - 46.5			D - 48.7			B – 19.6			C - 24.9	)	
Year 2019 Existing Conditions	Weekday Evening	E 64.4	I 99		F 92.4	64		E 67.0	43		D 54.0		E 3.8	E – 72.3
Exi.	Peak Hour		F - 99 +			E - 75.5			D – 46.9			E - 62.9	)	
Build	Weekday Morning	D 40.2	I 49		C 34.7	П 54		B 19.3	21		B 11.8		C 7.5	C – 30.9
N0-]	Peak Hour		D – 46.2			D - 48.2			C - 21.1			C - 26.3	}	
Year 2025 No-Build Traffic Volumes	Weekday Evening	E 73.9	I 99		F 99+	66		E 69.7	50		E 55.8		E 8.8	F – 82.5
Yea	Peak Hour		F – 99+ F – 80.4 D – 53.0		32.0									
Total nditions	Weekday Morning	D 42.4	I 49		C 34.9	Б 54		C 22.8	21		B 12.0		C 9.1	C – 31.9
5 To Yondi	Peak Hour		D – 46.8			D - 48.2			C - 21.9			C - 27.9	)	
Year 2025 Total Projected Conditions	Weekday Evening	F 85.2	I 99		F 99+	67		E 74.0	50		E 55.3		F 7.2	F – 86.7
Y. Proj	Peak Hour		F – 156.6	5		F – 82.1			D – 53.8			F – 84.4		1 - 80.7
Delay is me	asured in second	S.												

L-Left T-Through R-Right



Table 4
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – UNSIGNALIZED

	•	y Morning K Hour		y Evening Hour
Intersection	LOS	Delay	LOS	Delay
171st Street with Oconto Avenue/USPS Wester	ly Access	Drive		
Northbound Approach	В	13.7	C	15.0
Southbound Approach	C	17.6	E	47.0
Eastbound Left Turn			В	10.7
Westbound Left Turn	A	8.6	A	9.9
171st Street with First Merchants Bank Full A	ccess Driv	e		
Northbound Approach	В	10.1		
Westbound Left Turn				
171st Street with USPS Easterly Access Drive				
Southbound Approach	В	14.2	C	15.3
Eastbound Left Turn	A	8.8	A	9.8
LOS = Level of Service Delay is measured in seconds.				



Table 5
CAPACITY ANALYSIS RESULTS – NO-BUILD CONDITIONS – UNSIGNALIZED

		y Morning K Hour	•	y Evening Hour
Intersection	LOS	Delay	LOS	Delay
171st Street with Oconto Avenue/USPS Wester	ly Access	Drive		
Northbound Approach	В	14.1	C	15.6
Southbound Approach	С	18.6	F	55.7
Eastbound Left Turn			В	10.9
Westbound Left Turn	A	8.7	В	10.1
171st Street with First Merchants Bank Full Ad	ccess Driv	e		
Northbound Approach	В	10.2		
Westbound Left Turn				
171st Street with USPS Easterly Access Drive				
Southbound Approach	В	14.6	С	15.9
Eastbound Left Turn	A	8.8	В	10.0
LOS = Level of Service Delay is measured in seconds.				



Table 6 CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS – UNSIGNALIZED

CAPACITT ANALTSIS RESULTS – PROJECT	Weekday	y Morning K Hour	Weekda	y Evening Hour
Intersection	LOS	Delay	LOS	Delay
171st Street with Oconto Avenue/USPS Wester	ly Access	Drive		
Northbound Approach	В	14.2	C	15.8
Southbound Approach	C	19.0	F	57.7
Eastbound Left Turn			В	11.0
Westbound Left Turn	A	8.7	В	10.1
171st Street with First Merchants Bank Full A	ccess Driv	e		
Northbound Approach	C	22.6	Е	46.4
Westbound Left Turn	A	8.9	В	10.2
171st Street with USPS Easterly Access Drive/I	Proposed 1	Right-In/Righ	nt-Out	
Northbound Approach	В	10.5	В	12.4
Southbound Approach	С	16.8	С	18.4
Eastbound Left Turn	A	8.9	В	10.1
Harlem Avenue with Proposed Right-In/Right	t-Out Acce	ess Drive		
Eastbound Approach	В	13.7	С	20.3
LOS = Level of Service Delay is measured in seconds.				

#### Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the gas station-generated traffic.

#### Harlem Avenue with 171st Street

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS) LOS C during the weekday morning peak hour and at LOS E during the weekday evening peak hour. The level of service during the weekday evening peak hours is a result of the eastbound approach which operates at LOS F and the westbound and southbound approaches which operate at LOS E during the peak hour.

Under Year 2025 no-build conditions, this intersection overall is projected to operate at LOS C during the weekday morning peak hour and at LOS F during the weekday evening peak hour with increases in delay of less than one second and approximately 10 seconds, respectively. The eastbound and westbound approaches are projected to continue operating at LOS F and the southbound approach is projected to continue operating at LOS E during the weekday evening peak hour.

Under Year 2025 total projected conditions, the intersection overall is projected to continue operating at LOS C during the weekday morning peak hour and at LOS F during the weekday evening peak hour with increases in delay of approximately one second and four seconds over no build conditions.

Overall, the proposed development is only projected to increase the traffic traversing this intersection by approximately two percent during the weekday morning peak hour and approximately one percent during the weekday evening peak hour. As such, the proposed development traffic will have a limited impact on the operations of this intersection.

#### 171st Street with Oconto Avenue/USPS Westerly Access Drive

The results of the capacity analysis indicate that the northbound approach currently operates at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour. Outbound movements from the westerly USPS access drive onto 171st Street currently operate at LOS C during the weekday morning peak hour and at LOS E during the weekday evening peak hour.

Under Year 2025 no-build conditions, the northbound approach is projected to continue operating at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour with increases in delay of less than one second. Outbound movements from the westerly USPS access drive onto 171<sup>st</sup> Street are projected to operate at LOS C during the weekday morning peak hour and at LOS F during the weekday evening peak hour with increases in delay of approximately one and eight seconds, respectively. This level of service is expected for an access driveway that has an intersection with a major roadway such as 171<sup>st</sup> Street and the increases in delay are attributed to the background traffic growth.



Under Year 2025 total projected conditions, the northbound approach is projected to continue operating at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour with increases in delay of less than one second over no build conditions. Outbound movements from the westerly USPS access drive onto 171st Street are projected to operate at LOS C during the weekday morning peak hour and at LOS F during the weekday evening peak hour with increases in delay of less than one and approximately two seconds, respectively. As previously indicated, this level of service is expected for an access driveway that has an intersection with a major roadway such as 171st Street and the increases in delay are attributed to the background traffic growth. Eastbound and westbound left-turns onto the access drive/Oconto Avenue are projected to continue operating at LOS B or better during the peak hours with 95th percentile queues of one to two vehicles. As such, the traffic projected to be generated by the proposed gas station will have a limited impact on the operations of this intersection an no roadway or traffic control improvements will be required.

#### 171st Street with First Merchants Bank

The results of the capacity analysis indicate that outbound movements from the First Merchants Bank access drive onto 171<sup>st</sup> Street currently operate at LOS B during the weekday morning peak hour. Under Year 2025 no-build conditions, outbound movements from the access drive onto 171<sup>st</sup> Street are projected to continue operate at LOS B during the weekday morning peak hour with increases in delay of less than one second.

Under Year 2025 total projected conditions outbound movements from the access drive onto 171<sup>st</sup> Street are projected to operate at LOS C to the weekday morning peak hour and at LOS E during the weekday evening peak hour. However, this level of service is expected for an access driveway that has an unsignalized intersection with a major roadway such as 171<sup>st</sup> Street. Furthermore, it should be noted that this access drive will primarily accommodate left-turning movements to/from 171<sup>st</sup> Street given the proposed right-in/right-out access drive that serves the site directly. Westbound left-turning movements from 171<sup>st</sup> Street onto the access drive are projected to operate at LOS B or better during the peak hours with 95<sup>th</sup> percentile queues of one to two vehicles.

Overall, the traffic estimated to be generated by the proposed gas station will have a limited impact on the operations of First Merchants Bank, as the bank will generate a minimal volume of traffic during the peak hours. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

#### 171st Street with USPS Easterly Access Drive/Proposed Right-In/Right-Out Access Drive

The results of the capacity analysis indicate that outbound movements from the easterly USPS access drive currently operate at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour. Under Year 2025 no-build conditions, outbound movements from the easterly USPS access drive are projected to continue operating at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour with increases in delay of less than one second.



Under Year 2025 total projected conditions, outbound movements from the easterly USPS access drive are projected to continue operating at LOS C during the weekday morning peak hour weekday evening peak hours with increases in delay of approximately two seconds or less. Eastbound left-turning movements onto the access drive are projected to continue operating at LOS B or better during the peak hours with 95<sup>th</sup> percentile queues of one to two vehicles.

Outbound movements from the proposed right-in/right-out access drive onto 171<sup>st</sup> Street are projected to operate at LOS B during the peak hours with 95<sup>th</sup> percentile queues of one to two vehicles. As such, the proposed right-in/right-out access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will have a limited impact n the operations of the USPS easterly access drive.

#### Harlem Avenue with Proposed Right-In/Right-Out Access Drive

The results of the capacity analysis indicate that outbound movements from the proposed access drive onto Harlem Avenue are projected to operate at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour with 95<sup>th</sup> percentile queues of one to two vehicles. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.



## 6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic projected to be generated by the proposed gas station will be reduced due to the volume of pass-by traffic generated by the gas station.
- The proposed access system, including cross access to the First Merchants Bank, will be adequate in accommodating the traffic projected to be generated by the proposed gas station with limited impact on the external roadway system.
- The proposed gas station is only projected to increase the traffic traversing the intersection of Harlem Avenue with 171<sup>st</sup> Street by approximately two percent during the weekday morning peak hour and approximately one percent during the weekday evening peak hour and as such will have a limited impact on the operations of the intersection.



# Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
ITE Trip Generation Sheets
CMAP Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets

**Traffic Count Summary Sheets** 

Count Name: Harlem Avenue with 171st Street Site Code: Start Date: 08/06/2019 Page No: 1

0

0

0

0

0

Bicycles on Road



						V	II	L	A	GI	Ξ (	ЭF	7]	$\Gamma$	NΙ	LΕ	Y	•••																P	2
		Int. Total	520	658	673	785	2636	638	741	703	661	2743		1026	1016	1135	1112	4289	1138	1199	1112	1183	4632	14300			13964	7.76	49	0.3	170	1.2	117	8.0	
		App. Total	182	236	262	311	991	198	266	200	216	880	-	361	338	375	345	1419	404	408	355	380	1547	4837	-	33.8	4708	97.3	17	0.4	68	1.4	44	0.9	
		Peds	0	0	_	0	1	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	-					-	-	-				
	Harlem Avenue	Right	15	24	26	46	111	28	38	39	41	146		26	51	58	43	208	61	99	52	59	238	703	14.5	4.9	685	97.4	8	1.1	7	1.0	ε	0.4	
	Harlem	Thru	156	205	220	240	821	157	211	145	166	629		269	256	289	267	1081	313	295	273	287	1168	3749	77.5	26.2	3641	97.1	6	0.2	59	1.6	40	1.1	
		Left	1	7	16	25	59	13	17	16	6	22		36	31	28	35	130	30	47	30	34	141	385	8.0	2.7	382	99.2	0	0.0	2	0.5	-	0.3	
		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		
		App. Total	167	252	216	268	903	246	270	233	254	1003		341	326	427	391	1485	403	402	394	442	1641	5032		35.2	4898	97.3	18	0.4	62	1.2	42	1.1	
		Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	'	1	,	'		-					
	Harlem Avenue	Right	2	13	11	14	40	10	13	13	11	47		23	28	33	36	120	38	31	22	29	120	327	6.5	2.3	319	97.6	2	9.0	5	1.5	-	0.3	
	Harlem	Thru	136	211	177	208	732	194	205	178	195	772		277	262	332	302	1173	325	314	303	350	1292	3969	78.9	27.8	3858	97.2	11	0.3	54	1.4	46	1.2	
)ata		Left	29	28	27	46	130	42	52	42	48	184		41	36	62	53	192	40	22	69	62	228	734	14.6	5.1	719	98.0	2	0.7	3	0.4	7	1.0	
rning Movement Data		U-Tum	0	0	1	0	1	0	0	0	0	0		0	0	0	0	0	0	0	0	1	1	2	0.0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	
Jover		App. Total	71	63	82	98	302	100	69	112	89	370		145	157	150	170	622	145	164	165	152	929	1920		13.4	1890	98.4	2	0.3	21	1.1	4	0.2	
ling Ν	)	Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0		1			-	-					
Tur	171st Street	Right	6	8	12	12	41	13	7	19	20	29		16	29	14	22	81	17	14	15	10	26	237	12.3	1.7	230	97.0	1	0.4	5	2.1	-	0.4	
	171st West	Thru	31	25	36	47	139	63	31	09	43	197		92	98	80	80	338	71	98	88	81	327	1001	52.1	7.0	982	98.4	4	0.4	10	1.0	2	0.2	
		Left	31	30	34	27	122	24	31	33	26	114		37	42	55	89	202	22	64	61	61	243	681	35.5	4.8	674	0.66	0	0.0	9	6.0	-	0.1	
		U-Turn	0	0	0	0	0	0	0	0	0	0		0	0	1	0	1	0	0	0	0	0	-	0.1	0.0	-	100.0	0	0.0	0	0.0	0	0.0	
		App. Total	100	107	113	120	440	94	136	158	102	490		179	195	183	206	763	186	225	198	209	818	2511	•	17.6	2468	98.3	6	0.4	19	8.0	15	9.0	
		Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	,		٠	,		1		i			
	171st Street Fastbound	Right	23	40	26	35	124	32	36	37	31	136		35	52	41	92	193	46	52	29	61	218	671	26.7	4.7	959	8.76	0	0.0	8	1.2	7	1.0	
	171st Fast	Thru	42	45	53	46	186	27	49	59	41	176		93	81	92	98	352	06	107	85	87	369	1083	43.1	7.6	1072	0.66	4	0.4	9	9.0	-	0.1	
		Left	35	22	34	39	130	35	51	62	30	178		51	62	20	22	218	20	99	54	61	231	757	30.1	5.3	740	97.8	2	0.7	5	0.7	7	6.0	
		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	'	0		0	-	0	•	
		Start Time	7:00 AM	7:15 AM	7:30 AM	7:45 AM	Hourly Total	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Hourly Total	*** BREAK ***	4:00 PM	4:15 PM	4:30 PM	4:45 PM	Hourly Total	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Hourly Total	Grand Total	Approach %	Total %	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	

																									j
% Bicycles on Road		0.0	0.0	0.0	,	0.0	0.0	0.0	0:0	0.0	,	0.0	0.0	0.0	0.0	0.0	0 -	0.0	0 -	0.0 0.0	0.0	,	0.0	0.0	EN
Pedestrians					0	-					0	-		-	-	-	0	-	-		•	1		-	D
% Pedestrians	_																	_			•	100.0	٠	-	A

Count Name: Harlem Avenue with 171st Street Site Code: Start Date: 08/06/2019 Page No: 3



Int. Total 0.913 2742 92.6 785 638 741 703 2867 59 1.0 22 2.0 4. 0.0 39 0 App. Total 0.784 34.0 94.4 266 975 920 311 198 200 0.0 12 1.2 22 2.3 2.2 Peds Right Harlem Avenue 15.5 5.3 0.821 140 46 38 39 151 92.7 4.6 2.0 0.7 0.0 Thru 0.784 77.2 26.3 94.2 240 753 709 2.5 211 145 19 2.7 0.0 157 2 0.7 20 0 0.710 100.0 Left 7.3 2.5 0.0 0.0 0.0 0.0 25 7 13 17 16 7 0 0 0 0 U-Turn 0.000 0.0 0.0 0 0.942 App. Total 268 270 233 1017 35.5 95.5 246 971 1.5 0.0 0.8 ω 23 15 Peds Turning Movement Peak Hour Data (7:45 AM) Right 0.893 94.0 4 13 20 4.9 1.7 2.0 0.0 0.0 13 47 Northbound Thru 0.944 208 205 785 77.2 27.4 747 95.2 2.5 6.1 0.0 194 178 0.4 20 15 0 0.875 17.9 97.3 182 6.3 Left 46 52 42 177 2.2 0.5 0.0 0.0 42 0 0 U-Tum 0.000 0.0 0.0 0.819 97.0 12.8 86 100 69 112 367 356 1.6 0.3 0.0 Peds 0 Right 98.0 13.9 6. 0.671 51 20 0.0 2.0 0.0 0.0 0 Thru 0.798 54.8 95.5 192 47 201 7.0 2.0 2.0 0.5 0.0 63 9 0 0.871 31.3 99.1 115 4.0 114 0.9 0.0 0.0 Left 0.0 31 27 24 33 0 0 0 U-Turn 0.000 0.0 0.0 0 0 0 0 0.804 17.7 97.4 120 136 158 508 495 0.0 1.0 94 2 0.4 Peds 0.946 Right 27.6 140 99.3 4.9 139 0.0 0.0 0.0 35 32 38 37 0 0.7 171st Street 0.767 Thr 35.6 97.8 181 6.3 177 9.0 1.7 0.0 0.0 46 49 59 27 0 0.754 Left 187 36.8 6.5 179 95.7 2.1 7. 7. 0.0 39 35 51 62 0 U-Tum 0.000 0.0 0.0 Single-Unit Trucks Articulated Trucks Bicycles on Road % Bicycles on Road % Articulated Trucks % Pedestrians % Single-Unit Trucks Approach % Pedestrians 8:00 AM % Lights % Buses 8:30 AM 8:15 AM Total % Lights Buses Total PHF



Count Name: Harlem Avenue with 171st Street Site Code: Start Date: 08/06/2019 Page No: 4

								Turn	ing M	ovem	ent P	eak F	Turning Movement Peak Hour Data (5:00 PM	)ata (	5:00 F	(Mc									
_			171st	171st Street					171st Street	treet				•	, Harlem Avenue	, venue					Harlem Avenue	enne			
_			East	Eastbound					Westbound	punc					Northbound	pun		-			Southbound	pur			
Start Time	U-Tum	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Right	Peds	App. Total	U-Tum	Left	Thru	Right	Peds <sup>/</sup>	App. Int.	Int. Total
5:00 PM	0	20	06	46	0	186	0	22	71	17	0	145	0	40	325	38	0	403	0	30	313	61	0	404	1138
5:15 PM	0	99	107	52	0	225	0	64	98	14	0	164	0	22	314	31	0	402	0	47	295	99	0	408   1	1199
5:30 PM	0	54	85	29	0	198	0	61	89	15	0	165	0	69	303	22	0	394	0	30	273	52	0	355   1	1112
5:45 PM	0	61	87	61	0	209	0	61	81	10	0	152	1	62	350	29	0	442	0	34	287	59	0	380 1	1183
Total	0	231	369	218	0	818	0	243	327	26	0	626	1	228	1292	120	0	1641	0	141	1168	238	0 1	1547 4	4632
Approach %	0.0	28.2	45.1	26.7			0.0	38.8	52.2	8.9			0.1	13.9	78.7	7.3			0.0	9.1	75.5	15.4	-	-	ىل <i>ار</i> '
Total %	0.0	5.0	8.0	4.7		17.7	0.0	5.2	7.1	1.2		13.5	0.0	4.9	27.9	2.6		35.4	0.0	3.0	25.2	5.1	-	33.4	A.\ 
PHF	0.000	0.875	0.862	0.893		0.909	0.000	0.949	0.919	0.824	-	0.948	0.250	0.826	0.923	0.789		0.928	0.000	0.750	0.933	0.902	0 -	0.948 0	996.0
Lights	0	228	368	211		807	0	239	327	26		622	1	226	1272	118		1617	0	141	1155	237	-	1533 4	4579
% Lights		98.7	99.7	96.8		98.7		98.4	100.0	100.0		99.4	100.0	99.1	98.5	98.3		98.5		100.0	98.9	9.66	3 -	99.1	6.86
Buses	0	-	0	0		1	0	0	0	0		0	0	0	2	0		2	0	0	1	0		1	4
% Buses		0.4	0.0	0.0	٠	0.1		0.0	0.0	0.0		0.0	0.0	0.0	0.2	0.0	,	0.1	,	0.0	0.1	0.0	,	0.1	0.1
Single-Unit Trucks	0	0	0	3		3	0	3	0	0		3	0	-	10	-	1	12	0	0	7	-		8	26
% Single-Unit Trucks	٠	0.0	0.0	1.4		0.4		1.2	0.0	0:0		0.5	0.0	0.4	8.0	8.0		0.7		0.0	9.0	0.4		0.5	9.0
Articulated Trucks	0	2	-	4	٠	7	0	-	0	0		-	0	1	8	-	,	10	0	0	5	0	,	5	23
% Articulated Trucks		6.0	0.3	1.8		6.0		0.4	0.0	0.0		0.2	0.0	9.0	9.0	8.0		9.0		0.0	9.0	0.0		0.3	0.5
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0
% Bicycles on Road		0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	-	0.0	0.0
Pedestrians					0						0						0		,				0		
% Pedestrians	•				,						,	,		,	,		,	•						_	

Count Name: 171st Street with Oconto Avenue Site Code: Start Date: 08/06/2019 Page No: 1



						V	II	LL	A	Gl	Ξ (	ЭF	7]	ГП	NI	LΕ	Y	•••																P	age
		Int. Total	176	193	201	261	831	204	258	288	250	1000		389	365	414	408	1576	416	418	444	428	1706	5113			5015	98.1	28	0.5	49	1.0	21	0.4	0
		App. Total	9	5	6	6	29	7	13	14	7	41		27	26	28	30	111	23	27	23	23	96	277		5.4	274	98.9	0	0.0	0	0.0	3	1.1	0
		Peds	0	0	0	0	0	0	0	0	0	0		0	0	1	0	1	-	0	0	0	1	2						-		,			
	ess Drive	Right	3	1	4	3	11	4	4	2	4	17		14	11	18	19	62	10	14	8	12	44	134	48.4	5.6	134	100.0	0	0.0	0	0.0	0	0:0	0
	USPS Access Drive Southbound	Thru	0	0	0	-	1	0	1	0	0	1		0	0	1	0	1	2	0	1	0	3	9	2.2	0.1	9	100.0	0	0.0	0	0.0	0	0.0	0
		Left	3	4	5	2	17	3	8	6	3	23		13	15	6	11	48	=	13	14	11	49	137	49.5	2.7	134	8.76	0	0.0	0	0.0	3	2.2	0
		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
		App. Total	-	1	4	2	8	2	3	2	0	7		9	9	3	4	19	1	5	1	0	17	51		1.0	49	96.1	1	2.0	1	2.0	0	0:0	0
		Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	,	,				-		,	,	-	
	venue	Right	-	0	2	2	2	1	2	1	0	4		3	4	2	3	12	10	5	0	0	15	36	9.07	0.7	35	97.2	1	2.8	0	0.0	0	0.0	0
	Oconto Avenue Northbound	Thru	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0	,	0		0
ata		Left	0	1	2	0	3	1	1	1	0	3		3	2	1	1	7	-	0	1	0	2	15	29.4	0.3	14	93.3	0	0.0	1	6.7	0	0.0	0
ent D		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
rning Movement Data		App. Total	92	72	82	130	360	111	103	122	125	461		182	151	189	174	969	175	184	209	192	260	2277	,	44.5	2231	0.86	19	8.0	19	8.0	8	0.4	0
Ing M	)	Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0						-	-	,			
Turn		Right	-	0	0	0	1	3	0	1	0	4		0	1	0	0	1	-	0	1	2	4	10	0.4	0.2	10	100.0	0	0.0	0	0.0	0	0.0	0
	171st Street Westbound	Thru	75	72	81	130	358	107	86	121	123	449		180	149	184	170	683	166	181	204	185	736	2226	8.76	43.5	2182	98.0	19	6.0	17	8.0	8	0.4	0
		Left	0	0	1	0	1	0	4	0	2	9		2	1	5	4	12	8	3	4	3	18	37	1.6	0.7	35	94.6	0	0.0	2	5.4	0	0.0	0
		U-Turn	0	0	0	0	0	1	1	0	0	2		0	0	0	0	0	0	0	0	2	2	4	0.2	0.1	4	100.0	0	0.0	0	0.0	0	0.0	0
		App. Total	93	115	106	120	434	84	139	150	118	491		174	182	194	200	750	207	202	211	213	833	2508		49.1	2461	98.1	8	0.3	29	1.2	10	0.4	0
		Peds	0	0	0	0	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	_	,	,			-	-	-	,		-	
	reet	Right	0	1	1	0	2	0	1	0	2	3		3	5	4	7	19	2	2	7	5	16	40	9.1	8.0	40	100.0	0	0.0	0	0.0	0	0.0	0
	171st Street Eastbound	Thru	93	114	104	120	431	84	138	150	116	488		169	177	187	189	722	203	200	202	208	813	2454	97.8	48.0	2410	98.2	8	0.3	26	<del>.</del> .	10	0.4	0
		Left	0	0	1	0	1	0	0	0	0	0		2	0	3	4	6	2	0	1	0	3	13	0.5	0.3	10	6.92	0	0.0	3	23.1	0	0.0	0
		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	-	0	1	-	0.0	0.0	-	100.0	0	0.0	0	0.0	0	0.0	0
		Start Time	7:00 AM	7:15 AM	7:30 AM	7:45 AM	Hourly Total	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Hourly Total	*** BREAK ***	4:00 PM	4:15 PM	4:30 PM	4:45 PM	Hourly Total	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Hourly Total	Grand Total	Approach %	Total %	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road

j	EN.	D.	<b>A</b> -	-
	0.0	-	-	
	0.0		•	
	,	2	100.0	
	0.0	-	-	
	0.0	-	•	
	0.0		-	
		-	-	
	0.0	-	•	
	,	0	-	
	0.0		-	
	,	-		
	0.0		-	
		-	-	
	0.0	-	•	
	,	0	-	
	0.0	-	•	
	0.0	-	-	
	0.0		•	
	0.0	-	-	
	0.0			
	,	1	100.0	
	0.0	-	-	
	0.0		-	
	0.0			
	0:0		-	
	% Bicycles on Road	Pedestrians	% Pedestrians	

Count Name: 171st Street with Oconto Avenue Site Code: Start Date: 08/06/2019 Page No: 3



Rosemont, Illinois, United States 60018 (847)518-9990

Turning Movement Peak Hour Data (7:45 AM)

						V	Ή	LL	A	Gl	Ε(	ЭF	7 ]	ГП	NI	EY	<i>7</i>					
		Int. Total	261	204	258	288	1011			0.878	974	6.3	21	2.1	13	1.3	3	0.3	0	0.0		
		App. Total	6	7	13	14	43	-	4.3	0.768	42	7.76	0	0.0	0	0.0	1	2.3	0	0.0	-	
		Peds	0	0	0	0	0			1				1		,		ı		1	0	
ess Drive	puno	Right	3	4	4	5	16	37.2	1.6	0.800	16	100.0	0	0.0	0	0.0	0	0.0	0	0.0	-	
USPS Access Drive	Southbound	Thru	-	0	1	0	2	4.7	0.2	0.500	2	100.0	0	0.0	0	0:0	0	0:0	0	0.0		
		Left	5	3	8	6	25	58.1	2.5	0.694	24	0.96	0	0.0	0	0.0	1	4.0	0	0.0		
		U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0	ı	0		-	
		App. Total	2	2	3	2	6		6.0	0.750	8	88.9	1	11.1	0	0.0	0	0.0	0	0.0	-	
		Peds	0	0	0	0	0		-	-		-		-	-		-				0	
venue	punc	Right	2	1	2	1	9	2.99	9.0	0.750	2	83.3	1	16.7	0	0.0	0	0.0	0	0.0		
Oconto Avenue	Northbound	Thru	0	0	0	0	0	0.0	0.0	0.000	0	-	0	1	0		0	,	0			
•		Left	0	1	1	1	က	33.3	0.3	0.750	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
		U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
		App. Total	130	111	103	122	466		46.1	968.0	443	95.1	16	3.4	9	1.3	-	0.2	0	0.0		
		Peds	0	0	0	0	0		-	-		-		-	-						0	
treet	pun	Right	0	3	0	1	4	6.0	0.4	0.333	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
171st Street	Westbound	Thru	130	107	86	121	456	6.76	45.1	0.877	433	95.0	16	3.5	9	1.3	1	0.2	0	0.0		
		Left	0	0	4	0	4	6.0	0.4	0.250	4	100.0	0	0.0	0	0.0	0	0:0	0	0.0		
		U-Turn	0	1	1	0	2	0.4	0.2	0.500	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
-		App. Total	120	84	139	150	493		48.8	0.822	481	97.6	4	8.0	7	4.1	1	0.2	0	0.0		
		Peds	0	0	0	0	0		-	-		-	-	-							0	
reet	pun	Right	0	0	1	0	-	0.2	0.1	0.250	-	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
171st Street	Eastbound	Thru	120	84	138	150	492	8.66	48.7	0.820	480	97.6	4	8.0	7	4.1	1	0.2	0	0.0		
		Left	0	0	0	0	0	0.0	0.0	0.000	0	-	0	•	0		0	,	0	,	-	
		U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0	,	0			
		Start Time	7:45 AM	8:00 AM	8:15 AM	8:30 AM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

Count Name: 171st Street with Oconto Avenue Site Code: Start Date: 08/06/2019 Page No: 4



							V	II	L	A	Gl	Ξ(	ЭF	7 7	Π	NI	EY	·					
			Int. Total	416	418	444	428	1706	•		0.961	1692	99.2	0	0.0	6	0.5	5	6.0	0	0.0	•	
			App. Total	23	27	23	23	96	-	5.6	0.889	95	99.0	0	0.0	0	0.0	1	1.0	0	0.0	-	-
			Peds	1	0	0	0	1	-		-	-						-				1	100.0
	USPS Access Drive	punoc	Right	10	14	8	12	44	45.8	2.6	0.786	44	100.0	0	0.0	0	0:0	0	0.0	0	0.0		
	USPS Acc	Southbound	Thru	2	0	1	0	3	3.1	0.2	0.375	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			Left	11	13	14	11	49	51.0	2.9	0.875	48	98.0	0	0.0	0	0.0	1	2.0	0	0.0		
			U-Turn	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0	-	0	-	0		-	-
			App. Total	11	5	1	0	17	•	1.0	0.386	17	100.0	0	0.0	0	0.0	0	0.0	0	0.0	•	
			Peds	0	0	0	0	0	-		-	-						-				0	1
PM	Oconto Avenue	Northbound	Right	10	5	0	0	15	88.2	6.0	0.375	15	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
Turning Movement Peak Hour Data (5:00 PM	Oconto	North	Thru	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
Data			Left	1	0	1	0	2	11.8	0.1	0.500	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
Hour			U-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0	-	0	-	0		-	•
eak l			App. Total	175	184	209	192	260	•	44.5	0.909	759	6.66	0	0.0	1	0.1	0	0.0	0	0.0		
nent F			Peds	0	0	0	0	0	1	1	1	1			,			-			-	0	1
loven	171st Street	Westbound	Right	1	0	1	2	4	0.5	0.2	0.500	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
ling δ	171st	West	Thru	166	181	204	185	736	8.96	43.1	0.902	736	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
Turr			Left	8	3	4	3	18	2.4	1.1	0.563	17	94.4	0	0.0	1	5.6	0	0.0	0	0.0		
			U-Turn	0	0	0	2	2	0.3	0.1	0.250	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0		•
			App. Total	207	202	211	213	833	•	48.8	0.978	821	98.6	0	0.0	8	1.0	4	0.5	0	0.0	•	•
			Peds	0	0	0	0	0	-		-	-			,			-				0	1
	171st Street	Eastbound	Right	2	2	7	5	16	1.9	6.0	0.571	16	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
	171st	East	Thru	203	200	202	208	813	97.6	47.7	0.977	802	98.6	0	0.0	7	6.0	4	0.5	0	0.0		'
			Left	2	0	1	0	3	0.4	0.2	0.375	2	66.7	0	0.0	1	33.3	0	0.0	0	0.0		•
			U-Turn	0	0	1	0	1	0.1	0.1	0.250	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	-	•
		į	Start Time	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

Count Name: 171st Street with USPS/First Merchants Bank Access Drives Site Code: Start Date: 08/06/2019 Page No: 1



						V	II	LL	A	Gl	Ξ (	ЭF	7]	ГП	NI	LΕ	Y	•••																P	age
		Int. Total	184	200	204	273	861	234	284	302	262	1082		388	386	404	407	1585	405	441	439	442	1727	5255			5162	98.2	28	0.5	43	8.0	22	0.4	0
		App. Total	0	3	2	4	6	5	2	2	2	11		9	9	12	7	31	80	9	6	9	29	80		1.5	80	100.0	0	0.0	0	0.0	0	0.0	0
		Peds	0	0	0	0	0	0	0	0	0	0	,	0	0	1	0	1	-	0	0	0	1	2			,	-	,	-	-	,	,		
	ess Drive	Right	0	1	1	2	4	3	1	1	2	7		4	1	8	5	18	7	5	7	9	25	54	67.5	1.0	54	100.0	0	0.0	0	0.0	0	0.0	0
	USPS Access Drive Southbound	Thru	0	0	0	0	0	0	0	0	0	0		0	0	1	0	1	0	0	0	0	0	-	1.3	0.0	-	100.0	0	0.0	0	0:0	0	0.0	0
		Left	0	2	1	2	2	2	1	1	0	4		2	5	3	2	12	-	1	2	0	4	25	31.3	0.5	25	100.0	0	0.0	0	0.0	0	0.0	0
		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
	·	App. Total	-	0	0	0	1	0	0	1	1	2		0	0	2	2	4	0	0	0	0	0	7		0.1	7	100.0	0	0.0	0	0.0	0	0.0	0
	Drive	Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0				-		-	-	,		-	
	ank Access ound	Right	-	0	0	0	1	0	0	1	1	2		0	0	2	1	3	0	0	0	0	0	9	85.7	0.1	9	100.0	0	0.0	0	0.0	0	0.0	0
	First Merchants Bank Access Drive Northbound	Thru	0	0	0	0	0	0	0	0	0	0		0	0	0	1	1	0	0	0	0	0	-	14.3	0.0	-	100.0	0	0.0	0	0.0	0	0.0	0
ata	First Me	Left	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
ent D		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
rning Movement Data		App. Total	85	92	91	143	395	133	128	142	132	535		197	171	201	185	754	193	202	225	202	822	2506		47.7	2459	98.1	18	0.7	19	8:0	10	0.4	0
ing N	)	Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0		1	,	-	,	-	-	,		-	
Turn		Right	9	2	7	13	31	21	26	18	11	92		27	23	26	20	96	18	24	18	15	75	278	11.1	5.3	275	98.9	0	0.0	1	4.0	2	0.7	0
	171st Street Westbound	Thru	62	71	84	130	364	111	102	124	121	458		170	148	175	165	658	175	178	207	187	747	2227	88.9	42.4	2183	98.0	18	8.0	18	8.0	8	0.4	0
		Left	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
		U-Turn	0	0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0	0	-	0.0	0.0	_	100.0	0	0.0	0	0.0	0	0.0	0
•		App. Total	98	121	111	126	456	96	154	157	127	534		185	209	189	213	962	204	233	205	234	876	2992		50.7	2616	98.3	10	0.4	24	6.0	12	0.5	0
		Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0				-		-	-	,		-	
	Street	Right	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0		0
	171st Street Eastbound	Thru	92	117	106	122	440	91	145	149	122	202		175	202	182	196	755	197	223	198	228	846	2548	95.7	48.5	2502	98.2	10	0.4	24	6.0	12	0.5	0
		Left	3	4	5	4	16	5	6	8	2	27		10	7	7	17	41	7	10	7	9	30	114	4.3	2.2	114	100.0	0	0.0	0	0.0	0	0.0	0
		U-Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0		0		0		0	-	0
		Start Time	7:00 AM	7:15 AM	7:30 AM	7:45 AM	Hourly Total	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Hourly Total	*** BREAK ***	4:00 PM	4:15 PM	4:30 PM	4:45 PM	Hourly Total	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Hourly Total	Grand Total	Approach %	Total %	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road

																							j
% Bicycles on Road		0.0	0.0	,	,	0.0	0.0	0:0	0.0		0.0		0.0	0.0	)	0.0	-	0.0	0.0	0.0	0 -	0.0	EN
Pedestrians					0	-				0	-				0	-	-		-		2		D.
% Pedestrians	•					-										_				- 10	0.001		A



Count Name: 171st Street with USPS/First Merchants Bank Access Drives Site Code: Start Date: 08/06/2019 Page No: 3

# Turning Movement Peak Hour Data (7:45 AM)

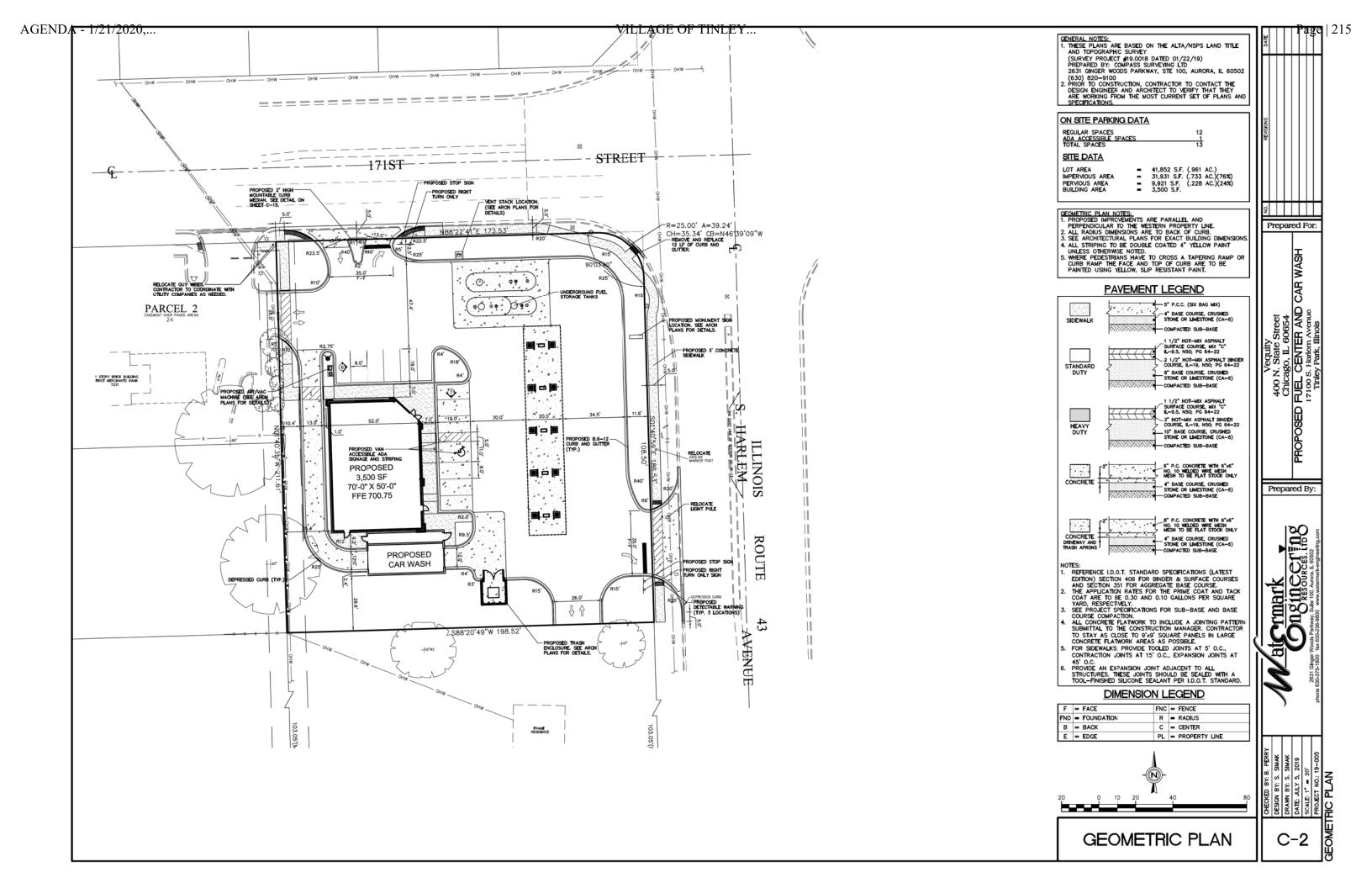
		Int. Total	273	234	284	302	1093	بار	A	0.905	1057	)I	21	6. II	Έ NΤ	6 5 5 5	4	0.4	0	0.0	.	,
		App. Total	4	5	2	2	13	ì	1.2	0.650	13	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
		Peds	0	0	0	0	0					,	,	,							0	
ss Drive	punc	Right	2	3	1	1	7	53.8	9.0	0.583	7	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
USPS Access Drive	Southbound	Thru	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
_		Left	2	2	1	1	9	46.2	0.5	0.750	9	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
		U-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
		App. Total	0	0	0	1	1	-	0.1	0.250	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
Drive		Peds	0	0	0	0	0	-	-	-	-		,		,				-	-	0	,
First Merchants Bank Access Drive	pund	Right	0	0	0	1	1	100.0	0.1	0.250	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
rchants Ba	Northbound	Thru	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
First Mer		Left	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
		U-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
		App. Total	143	133	128	142	546		50.0	0.955	522	92.6	16	2.9	9	1.1	2	9.0	0	0.0		
		Peds	0	0	0	0	0	-	-		-								-	-	0	
treet	pund	Right	13	21	56	18	78	14.3	7.1	0.750	77	98.7	0	0.0	0	0.0	1	1.3	0	0.0		
171st Street	Westbound	Thru	130	111	102	124	467	85.5	42.7	0.898	444	95.1	16	3.4	9	1.3	1	0.2	0	0.0		
		Left	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
		U-Turn	0	1	0	0	1	0.2	0.1	0.250	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
		App. Total	126	96	154	157	533	-	48.8	0.849	521	7.76	2	6.0	2	6.0	2	0.4	0	0.0		
		Peds	0	0	0	0	0	-	-	-	-				,				-	-	0	
treet	pun	Right	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
171st Street	Eastbound	Thru	122	91	145	149	202	95.1	46.4	0.851	495	9.76	5	1.0	5	1.0	2	0.4	0	0.0		
		Left	4	5	6	8	26	4.9	2.4	0.722	26	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
		U-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
		Start Time	7:45 AM	8:00 AM	8:15 AM	8:30 AM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

Count Name: 171st Street with USPS/First Merchants Bank Access Drives Site Code: Start Date: 08/06/2019 Page No: 4



							V	II	L	A(	Gl	Ξ(	ЭF	7	Π	NΙ	LEY	•	•				
			Int. Total	405	441	439	442	1727			0.977	1711	99.1	-	0.1	6	0.5	9	0.3	0	0.0		
			App. Total	8	9	6	9	59	-	1.7	0.806	29	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			Peds	1	0	0	0	1	1			1			1	-		,	,			1	0 0
	ess Drive	puno	Right	7	2	7	9	25	86.2	1.4	0.893	25	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
	USPS Access Drive	Southbound	Thru	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
			Left	1	1	2	0	4	13.8	0.2	0.500	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0		0			
			App. Total	0	0	0	0	0	-	0.0	0.000	0		0	-	0	-	0		0	-		
	s Drive		Peds	0	0	0	0	0	-	-		-			-	-			-		-	0	
PM	First Merchants Bank Access Drive	Northbound	Right	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0	•	0			
(5:00	erchants B	North	Thru	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0		0			
Data	First M		Left	0	0	0	0	0	0.0	0.0	0.000	0		0	ı	0		0		0			
Turning Movement Peak Hour Data (5:00 PM			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0	-	0		0	-	0		-	
Peak I			App. Total	193	202	225	202	822	•	47.6	0.913	819	9.66	0	0.0	2	0.2	1	0.1	0	0.0		
nent F			Peds	0	0	0	0	0	-			-			-							0	
loven	171st Street	Westbound	Right	18	24	18	15	75	9.1	4.3	0.781	74	98.7	0	0.0	0	0.0	-	1.3	0	0.0		
ا ping ∿	171st	West	Thru	175	178	207	187	747	6.06	43.3	0.902	745	99.7	0	0.0	2	0.3	0	0.0	0	0.0		
Tur			Left	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0		0			
			U-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0			
			App. Total	204	233	205	234	876	•	50.7	0.936	863	98.5	1	0.1	7	8.0	2	9.0	0	0.0		
			Peds	0	0	0	0	0	-			-			-							0	
	171st Street	Eastbound	Right	0	0	0	0	0	0.0	0.0	0.000	0		0	•	0		0		0			
	171st	East	Thru	197	223	198	228	846	9.96	49.0	0.928	833	98.5	1	0.1	7	8.0	2	9.0	0	0.0		
			Left	7	10	7	9	30	3.4	1.7	0.750	30	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0	-	0		0	•	0		-	
			Start Time	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	

# Preliminary Site Plan



# ITE Trip Generation Sheets

Page | 217

# Super Convenience Market/Gas Station

(960)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

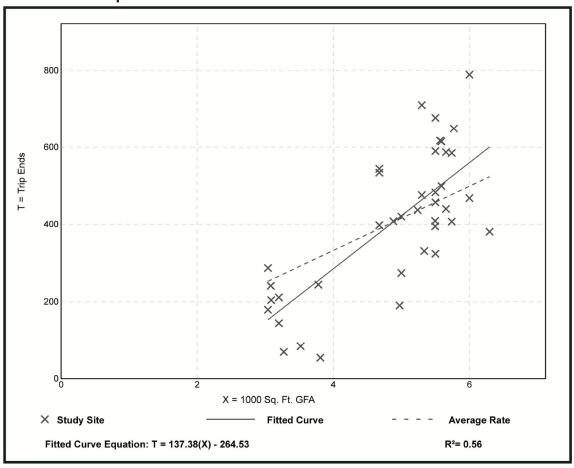
Number of Studies: 39 1000 Sq. Ft. GFA: 5

Directional Distribution: 50% entering, 50% exiting

### Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
83.14	14.17 - 133.96	28.07

## **Data Plot and Equation**



# Super Convenience Market/Gas Station

(960)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

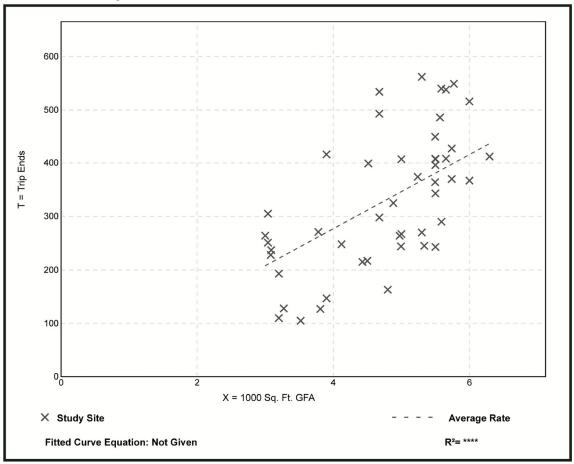
Number of Studies: 48 1000 Sq. Ft. GFA: 5

Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
69.28	29.83 - 114.20	21.07

## **Data Plot and Equation**



# **CMAP Projections Letter**



233 South Wacker Drive Suite 800 Chicago, Illinois 60606

312 454 0400 www.cmap.illinois.gov

August 21, 2019

Brendan May Consultant Kenig Lindgren, O'Hara and Aboona, Inc. 9575 West Higgins Road Suite 400 Rosemont, IL 60018

Subject: Harlem Avenue (IL 43) @ 171st Street

**IDOT** 

Dear Mr. May:

In response to a request made on your behalf and dated August 20, 2019, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Harlem Avenue North of 171st St	32,500	42,800
Harlem Avenue South of 171st St	35,300	43,200
171st Street West of Harlem Avenue	16,000	20,700
171 <sup>st</sup> Street East of Harlem Avenue	11,800	14,100

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2019 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP

Senior Planner, Research & Analysis

cc: Quigley (IDOT)

 $S: \label{lem:coups} Research Analysis \colored a Forecasts Traffic \colored Tinley Park \ck-108-19 \colored Analysis \colored Analysis$ 

# Level of Service Criteria

# LEVEL OF SERVICE CRITERIA

LEVEL OF SI	Signalized Intersections	
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
В	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
С	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
Е	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0
	<b>Unsignalized Intersections</b>	
	Level of Service Average Total De	elay (SEC/VEH)
	A 0	- 10
	B > 10	- 15
	C > 15	- 25
	D > 25	- 35
	E > 35	- 50
	F > 5	50
Source: Highwa	y Capacity Manual, 2010.	

# <u>Capacity Analysis Summary Sheets</u> Existing Weekday Morning Peak Hour Conditions

# Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

08/21/2019

Lane Group	1: Hariem Avenue	α 1/15t	Succ	L								007	21/2019
Lane Configurations		٠	<b>→</b>	•	•	<b>←</b>	•	4	†	/	<b>/</b>	ţ	4
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	ሻ	<b>∱</b> Љ		ሻ	<b>↑</b> 1≽		ሻ	<b>↑</b> ↑		ሻ	<b>↑</b> 1≽	
Future Volume (volth)		187		140	115		51			50			151
Lane Width (ft)		187	187	140	115		51	182	785	50	71	753	151
Lane Width (III)	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (II)   160						12	12				12		
Storage Length (ft)			0%			0%			0%			0%	
Storage Lanes		160		0	150		0	160		0	190		0
Taper Length (ft)		1		0	1		0	1		0	1		0
Lane Util. Factor		145			145			125			125		
Ped Bike Factor   Fit		1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Fith Protected   0.950   0.9	Ped Bike Factor												
Satd. Flow (prot)   1736   3327   0   1787   3383   0   1752   3405   0   1805   3315   0	Frt		0.936			0.971			0.991			0.975	
Fit Permitted	Flt Protected	0.950			0.950			0.950			0.950		
Fit   Permitted   Permitted   Fit   Permitted   Fit   Permitted   Fit   Permitted	Satd. Flow (prot)	1736	3327	0	1787	3383	0	1752	3405	0	1805	3315	0
No		0.371			0.504			0.183			0.261		
No			3327	0	948	3383	0	338	3405	0	496	3315	0
Said. Flow (RTOR)				No			No			No			
Link Speed (mph)         40         35         40         40           Link Distance (ft)         212         789         383         516           Travel Time (s)         3.6         15.4         6.5         8.8           Confl. Peds. (#/hr)         V													
Link Distance (ft)			40			35			40			40	
Travel Time (s)   3.6   15.4   6.5   8.8			212						383			516	
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor													
Growth Factor         100%         6%         7%           Bus Blockages (#/hr)         0 </td <td></td> <td>0.91</td>		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	Growth Factor	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Heavy Vehicles (%)		2%	1%	1%					6%	0%	6%	
Parking (#hr)         Mid-Block Traffic (%)         0%         0				0	0	0			0				
Mid-Block Traffic (%)         0%         0%         0%         0%           Shared Lane Traffic (%)         Lane Group Flow (vph)         205         359         0         126         289         0         200         918         0         78         993         0           Turn Type         pm+pt         NA         pm+pt         NA         pm+pt         NA         pm+pt         NA           Permitted Phases         7         4         3         8         5         2         1         6           Permitted Phases         7         4         3         8         5         2         1         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase         Winimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         15.0         15.0         15.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Lane Group Flow (vph)         205         359         0         126         289         0         200         918         0         78         993         0           Turn Type         pm+pt         NA         pm+pt         NA         pm+pt         NA         pm+pt         NA           Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         7         4         3         8         5         2         1         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase         Winimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0 <td></td> <td></td> <td>0%</td> <td></td> <td></td> <td>0%</td> <td></td> <td></td> <td>0%</td> <td></td> <td></td> <td>0%</td> <td></td>			0%			0%			0%			0%	
Turn Type         pm+pt         NA         pm+pt         NA         pm+pt         NA         pm+pt         NA           Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         7         4         3         8         5         2         1         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase         Winimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.	Shared Lane Traffic (%)												
Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         4         8         2         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase           Minimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0           Lost Time Adjust (s)         0.0         0.0         0.0         0.0         0.0         0.0           Lead/Lag         Lead         Lag <td>Lane Group Flow (vph)</td> <td>205</td> <td>359</td> <td>0</td> <td>126</td> <td>289</td> <td>0</td> <td>200</td> <td>918</td> <td>0</td> <td>78</td> <td>993</td> <td>0</td>	Lane Group Flow (vph)	205	359	0	126	289	0	200	918	0	78	993	0
Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         4         8         2         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase           Minimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0           Lost Time (s)         3.5         6.0         3.5         6.0         3.5         6.0           Lead/Lag         Lead         Lag	Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Detector Phase       7       4       3       8       5       2       1       6         Switch Phase         Minimum Initial (s)       3.0       8.0       3.0       15.0       3.0       15.0         Minimum Split (s)       9.5       24.0       9.5       24.0       9.5       24.0         Total Split (s)       19.0       36.0       14.0       31.0       14.0       56.0       14.0       56.0         Total Split (%)       15.8%       30.0%       11.7%       25.8%       11.7%       46.7%       11.7%       46.7%         Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0         Lost Time Adjust (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0         Total Lost Time (s)       3.5       6.0       3.5       6.0       3.5       6.0       3.5       6.0         Lead/Lag       Lead       Lag       Lead       Lag       Lead       Lag	Protected Phases	7	4		3	8		5	2		1	6	
Switch Phase         Minimum Initial (s)       3.0       8.0       3.0       8.0       3.0       15.0       3.0       15.0         Minimum Split (s)       9.5       24.0       9.5       24.0       9.5       24.0       9.5       24.0         Total Split (s)       19.0       36.0       14.0       31.0       14.0       56.0       14.0       56.0         Total Split (%)       15.8%       30.0%       11.7%       25.8%       11.7%       46.7%       11.7%       46.7%         Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0         Lost Time Adjust (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0         Total Lost Time (s)       3.5       6.0       3.5       6.0       3.5       6.0       3.5       6.0         Lead/Lag       Lead       Lag       Lead       Lag       Lead       Lag	Permitted Phases	4			8			2			6		
Minimum Initial (s)         3.0         8.0         3.0         8.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0           Lost Time Adjust (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0           Total Lost Time (s)         3.5         6.0         3.5         6.0         3.5         6.0         3.5         6.0           Lead/Lag         Lead         Lag         Lead         Lag         Lead         Lag	Detector Phase	7	4		3	8		5	2		1	6	
Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0           Lost Time Adjust (s)         0.0         0.0         0.0         0.0         0.0         0.0           Total Lost Time (s)         3.5         6.0         3.5         6.0         3.5         6.0           Lead/Lag         Lead         Lag         Lead         Lag         Lead         Lag	Switch Phase												
Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0           Lost Time Adjust (s)         0.0         0.0         0.0         0.0         0.0         0.0           Total Lost Time (s)         3.5         6.0         3.5         6.0         3.5         6.0           Lead/Lag         Lead         Lag         Lead         Lag         Lead         Lag	Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0           Lost Time Adjust (s)         0.0         0.0         0.0         0.0         0.0         0.0           Total Lost Time (s)         3.5         6.0         3.5         6.0         3.5         6.0           Lead/Lag         Lead         Lag         Lead         Lag         Lead         Lag	Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0         Lost Time Adjust (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0         Total Lost Time (s)       3.5       6.0       3.5       6.0       3.5       6.0         Lead/Lag       Lead       Lag       Lead       Lag       Lead       Lag	Total Split (s)	19.0	36.0		14.0	31.0		14.0	56.0		14.0	56.0	
All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0         Lost Time Adjust (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0         Total Lost Time (s)       3.5       6.0       3.5       6.0       3.5       6.0         Lead/Lag       Lead       Lag       Lead       Lag       Lead       Lag	Total Split (%)	15.8%	30.0%		11.7%	25.8%		11.7%	46.7%		11.7%	46.7%	
Lost Time Adjust (s)       0.0	Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
Total Lost Time (s)         3.5         6.0         3.5         6.0         3.5         6.0           Lead/Lag         Lead         Lag         Lead         Lag         Lead         Lag	All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lead/Lag Lead Lag Lead Lag Lead Lag	Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Lead/Lag Lead Lag Lead Lag Lead Lag	Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
		Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes	Lead-Lag Optimize?	Yes			Yes			Yes			Yes		
Recall Mode None None None None C-Min None C-Min		None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s) 36.9 21.0 28.8 16.4 76.1 64.4 68.5 58.4	Act Effct Green (s)	36.9	21.0		28.8	16.4		76.1	64.4		68.5	58.4	
Actuated g/C Ratio 0.31 0.18 0.24 0.14 0.63 0.54 0.57 0.49	Actuated g/C Ratio	0.31	0.18		0.24	0.14		0.63	0.54		0.57	0.49	

# Lanes, Volumes, Timings

# 1: Harlem Avenue & 171st Street

08/21/2019

	•	-	•	•	•	•	1	<b>†</b>	~	-	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.61	0.62		0.43	0.63		0.57	0.50		0.21	0.62	
Control Delay	40.2	50.2		34.9	54.8		16.4	20.3		11.2	25.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.2	50.2		34.9	54.8		16.4	20.3		11.2	25.9	
LOS	D	D		С	D		В	С		В	С	
Approach Delay		46.5			48.7			19.6			24.9	
Approach LOS		D			D			В			С	
Queue Length 50th (ft)	123	136		72	112		61	240		22	294	
Queue Length 95th (ft)	182	180		115	154		105	335		46	411	
Internal Link Dist (ft)		132			709			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	344	831		305	704		358	1827		409	1613	
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	0.60	0.43		0.41	0.41		0.56	0.50		0.19	0.62	

## **Intersection Summary**

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 30.0
Intersection Capacity Utilization 70.2%

Intersection LOS: C
ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Harlem Avenue & 171st Street



# 2: 171st Street & USPS Easterly Access Drive

Intersection						
Int Delay, s/veh	0.5					
		<b>E</b> F.	14/5=	14/55	051	055
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4₽	ħβ		¥	
Traffic Vol, veh/h	26	508	467	78	6	7
Future Vol, veh/h	26	508	467	78	6	7
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	91	91	91	91	91	91
Heavy Vehicles, %	0	2	5	1	0	0
Mvmt Flow	29	558	513	86	7	8
		-000			•	
	lajor1		/lajor2		Minor2	
Conflicting Flow All	599	0	-	0	893	300
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	337	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	_	-	5.8	-
Follow-up Hdwy	2.2	_	_	-	3.5	3.3
Pot Cap-1 Maneuver	988	-	_	-	285	702
Stage 1	-	_	_	_	544	- 102
Stage 2	-	_			701	_
Platoon blocked, %				-	701	
	000	-	-	-	272	702
Mov Cap-1 Maneuver	988	-	-	-	273	702
Mov Cap-2 Maneuver	-	-	-	-	273	-
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	701	-
Approach	EB		WB		SB	
	0.6		0		14.2	
HCM Control Delay, s	0.0		U			
HCM LOS					В	
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR :	SBLn1
Capacity (veh/h)		988			-	
HCM Lane V/C Ratio		0.029	-	-		0.035
HCM Control Delay (s)		8.8	0.2	-	-	
HCM Lane LOS						
HCM 95th %tile Q(veh)		A	А	-	-	В
HUIVI YAIN WIIIA (JIVAN)		0.1	-	-	-	0.1

# 3: First Merchant Bank Access Drive & 171st Street

Intersection						
Int Delay, s/veh	0					
		EDD	14/51	MOT	ND	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<b>†</b>			41	¥	
Traffic Vol, veh/h	533	0	0	474	0	1
Future Vol, veh/h	533	0	0	474	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
	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	91	91	91	91	91	91
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	586	0	0	521	0	1
		_				
	ajor1		Major2		/linor1	
Conflicting Flow All	0	0	586	0	847	293
Stage 1	-	-	-	-	586	-
Stage 2	-	-	-	-	261	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	999	-	305	709
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	765	-
Platoon blocked, %	_	-		-		
Mov Cap-1 Maneuver	-	_	999	_	305	709
Mov Cap-2 Maneuver	_	_	-	_	305	-
Stage 1				_	525	_
Stage 2		_	_		765	_
Staye 2	-	-	-	-	703	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.1	
HCM LOS					В	
Minard ana/Maiar M	N.	UDI1	EDT	EDD	MDI	WDT
Minor Lane/Major Mvmt		VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		709	-	-	999	-
HCM Lane V/C Ratio		0.002	-	-	-	-
HCM Control Delay (s)		10.1	-	-	0	-
HCM Lane LOS		В	-	-	Α	-
HCM 95th %tile Q(veh)		0	-	-	0	-

# 4: Oconto Avenue/USPS Westerly Access Drive & 171st Street

Intersection												
Int Delay, s/veh	0.9											
		EDT	EDD	MDI	WDT	M/DD	NDI	NDT	NDD	0.01	ODT	000
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	<b>€</b>	1	<u> </u>	<b>†</b> }		0	4	,	٥٦	4	4.
Traffic Vol, veh/h	0	502	1	6	464	4	3	0	6	25	2	16
Future Vol, veh/h	0	502	1	6	464	4	3	0	6	25	2	16
Conflicting Peds, #/hr	0	0	0	0	0	0	O Cton	O Cton	O Ctop	O Cton	O Cton	O Cton
Sign Control RT Channelized	Free	Free	Free None	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
		-	None	50	-	None	-	-	None	-	-	None
Storage Length Veh in Median Storage	.# -	0	-	- 50	0		-	0	-		0	-
Grade, %	,# -	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	2	0	0	5	0	0	0	17	4	0	0
Mvmt Flow	0	570	1	7	527	5	3	0	7	28	2	18
WWW. Tiow	U	070	•	,	021	U	J	U	,	20		10
Major/Minor	10:5-1			Malera			No ca1			Aine 2		
	/lajor1	^		Major2			Minor1	1117		/linor2	1115	2//
Conflicting Flow All	532	0	0	571	0	0	850	1117	286	829	1115	266
Stage 1	-	-	-	-	-	-	571	571	-	544	544	-
Stage 2 Critical Hdwy	4.1	-	-	4.1	-	-	279 7.5	546 6.5	7.24	285 7.58	571 6.5	6.9
Critical Hdwy Stg 1	4.1	-	-	4.1	-	-	6.5	5.5	7.24	6.58	5.5	0.9
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.58	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-		3.5	4	3.47	3.54	4	3.3
Pot Cap-1 Maneuver	1046	_	_	1012	_	_	257	209	668	260	210	738
Stage 1	-	_	_	1012	_	_	478	508	-	486	522	- 730
Stage 2	_	_	_	_	_	_	710	521	_	693	508	_
Platoon blocked, %		-	-		-	-	, 10	021		070	- 500	
Mov Cap-1 Maneuver	1046	-	-	1012	-	-	247	208	668	256	209	738
Mov Cap-2 Maneuver	-	-	_	-	-	-	247	208	-	256	209	-
Stage 1	-	-	-	-	-	-	478	508	-	486	518	-
Stage 2	-	-	-	-	-	-	685	517	-	686	508	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			13.7			17.6		
HCM LOS	U			0.1			13.7 B			17.0 C		
TICIVI EOS							D			C		
							==					
Minor Lane/Major Mvm	t l	VBLn1	EBL	EBT	EBR	WBL	WBT	WBR S				
Capacity (veh/h)		426	1046	-		1012	-	-	334			
HCM Lane V/C Ratio		0.024	-	-	-	0.007	-	-	0.146			
HCM Control Delay (s)		13.7	0	-	-	8.6	-	-	17.6			
HCM Lane LOS		В	A	-	-	A	-	-	С			
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.5			

# <u>Capacity Analysis Summary Sheets</u> Existing Weekday Evening Peak Hour Conditions

# Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

1. Hallelli Avellue d	x 17 130	Olicci										20/2017
	ၨ	-	$\rightarrow$	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>∱</b> ∱		*	<b>↑</b> ₽		ሻ	<b>↑</b> ↑		ሻ	<b>↑</b> ↑	
Traffic Volume (vph)	231	402	218	243	327	56	228	1292	120	141	1168	238
Future Volume (vph)	231	402	218	243	327	56	228	1292	120	141	1168	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			145			125			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.947			0.978			0.987			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3407	0	1787	3423	0	1770	3385	0	1770	3395	0
Flt Permitted	0.279			0.173			0.060			0.063		
Satd. Flow (perm)	515	3407	0	325	3423	0	112	3385	0	117	3395	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			789			346			516	
Travel Time (s)		3.6			15.4			5.9			8.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	1%	1%	3%	4%	2%	5%	8%	2%	4%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	254	682	0	267	421	0	251	1552	0	155	1546	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s)	20.0	29.0		20.0	29.0		24.0	73.0		18.0	67.0	
Total Split (%)	14.3%	20.7%		14.3%	20.7%		17.1%	52.1%		12.9%	47.9%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	41.9	23.0		42.1	23.1		87.5	69.4		77.7	63.1	
Actuated g/C Ratio	0.30	0.16		0.30	0.16		0.62	0.50		0.56	0.45	

## Lanes, Volumes, Timings

## 1: Harlem Avenue & 171st Street

08/20/2019

	•	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	-	-	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.85	1.22		0.99	0.75		0.87	0.92		0.75	1.01	
Control Delay	64.4	162.5		92.4	64.7		67.0	43.7		54.0	63.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	64.4	162.5		92.4	64.7		67.0	43.7		54.0	63.8	
LOS	Е	F		F	Е		Е	D		D	Е	
Approach Delay		135.9			75.5			46.9			62.9	
Approach LOS		F			Е			D			Е	
Queue Length 50th (ft)	183	~400		193	194		170	687		86	~802	
Queue Length 95th (ft)	#283	#527		#376	256		#305	#878		163	#942	
Internal Link Dist (ft)		132			709			266			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	300	559		269	565		312	1678		238	1530	
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	0.85	1.22		0.99	0.75		0.80	0.92		0.65	1.01	

## **Intersection Summary**

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.22

Intersection Signal Delay: 72.3 Intersection LOS: E
Intersection Capacity Utilization 100.7% ICU Level of Service G

Analysis Period (min) 15

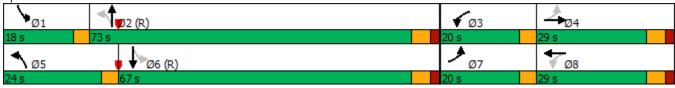
~ Volume exceeds capacity, queue is theoretically infinite.

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: Harlem Avenue & 171st Street



# 2: 171st Street & USPS Easterly Access Drive

Intersection						
Int Delay, s/veh	0.6					
			14/5=	14/5-5	05:	055
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	6.5	41	<b>↑</b> ↑		¥	
Traffic Vol, veh/h	30	847	778	15	4	25
Future Vol, veh/h	30	847	778	15	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0
	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	91	91	91	91	91	91
Heavy Vehicles, %	0	2	1	2	0	0
Mvmt Flow	33	931	855	16	4	27
Major/Minor M	ajor1	N	Major2	N	Minor2	
Conflicting Flow All	871	0		0	1395	436
Stage 1	-	-	_	-	863	-
Stage 2	_	_	_	_	532	_
Critical Hdwy	4.1	_	_	_	6.8	6.9
Critical Hdwy Stg 1	-	_	_	_	5.8	-
Critical Hdwy Stg 2	_	_	_	_	5.8	_
Follow-up Hdwy	2.2	_	_	_	3.5	3.3
Pot Cap-1 Maneuver	783	-	_	_	135	574
Stage 1	-	_	_	_	378	-
Stage 2	_	_	_	_	559	_
Platoon blocked, %		_	_	_	007	
Mov Cap-1 Maneuver	783		_		123	574
Mov Cap-1 Maneuver	-	_			123	-
Stage 1	-	-	-	-	345	
Stage 2	-	-	-	-	559	-
Staye 2	-	-	-	-	559	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.7		0		15.3	
HCM LOS					С	
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR S	SRI n1
			LDI	VVDI		
Capacity (veh/h)		783	-	-	-	
HCM Central Dalay (c)		0.042	- 0.4	-		0.084
HCM Long LOS		9.8	0.4	-	-	
HCM Lane LOS HCM 95th %tile Q(veh)		A 0.1	A -	-	-	0.3
					-	

# 3: First Merchant Bank Access Drive & 171st Street

Intersection						
Int Delay, s/veh	0					
		EDD	WDI	WDT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<b>†</b>	0	^	41	¥	٥
Traffic Vol, veh/h	877	0	0	803	0	0
Future Vol, veh/h	877	0	0	803	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	1	0	0
Mvmt Flow	895	0	0	819	0	0
Major/Minor N	1ajor1	N	Major2	N	Minor1	
Conflicting Flow All	0	0	895	0	1305	448
Stage 1	-	-	- 075	-	895	-
Stage 2	_	_	_	_	410	_
Critical Hdwy	-		4.1	-	6.8	6.9
Critical Hdwy Stg 1	_	-	4.1	-	5.8	0.7
		-	-		5.8	
Critical Hdwy Stg 2	-	-	2.2	-		3.3
Follow-up Hdwy		-		-	3.5	
Pot Cap-1 Maneuver	-	-	767	-	154	564
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	767	-	154	564
Mov Cap-2 Maneuver	-	-	-	-	154	-
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	644	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS	U		U		A	
HOW LOS						
Minor Lane/Major Mvmt	:	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		-	-	-	767	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s)		0	-	-	0	-
HCM Lane LOS		Α	-	-	Α	-
HCM 95th %tile Q(veh)		-	-	-	0	-

# 4: Oconto Avenue/USPS Westerly Access Drive & 171st Street

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414		ሻ	<b>↑</b> ⊅			4	11211	002	4	05.1
Traffic Vol, veh/h	3	813	16	18	781	4	2	0	15	49	3	44
Future Vol, veh/h	3	813	16	18	781	4	2	0	15	49	3	44
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	-	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	33	1	0	6	0	0	0	0	0	2	0	0
Mvmt Flow	3	847	17	19	814	4	2	0	16	51	3	46
Major/Minor N	1ajor1		1	Major2		N	Minor1		N	Minor2		
Conflicting Flow All	818	0	0	864	0	0	1309	1718	432	1284	1724	409
Stage 1	-	-	-	-	-	-	862	862	-	854	854	-
Stage 2	-	-	-	-	-	-	447	856	-	430	870	-
Critical Hdwy	4.76	-	-	4.22	-	-	7.5	6.5	6.9	7.54	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Follow-up Hdwy	2.53	-	-	2.26	-	-	3.5	4	3.3	3.52	4	3.3
Pot Cap-1 Maneuver	634	-	-	750	-	-	119	91	577	122	90	597
Stage 1	-	-	-	-	-	-	320	375	-	320	378	-
Stage 2	-	-	-	-	-	-	566	377	-	574	372	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	634	-	-	750	-	-	104	88	577	116	87	597
Mov Cap-2 Maneuver	-	-	-	-	-	-	104	88	-	116	87	-
Stage 1	-	-	-	-	-	-	317	372	-	317	369	-
Stage 2	-	-	-	-	-	-	505	368	-	553	369	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			15			47		
HCM LOS							С			Ε		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
Capacity (veh/h)		376	634	-	-	750	_	-	181			
HCM Lane V/C Ratio				-	_	0.025	-	_	0.552			
HCM Control Delay (s)		15	10.7	0	-	9.9	-	-	47			
HCM Lane LOS		С	В	A	-	Α	-	-	E			
HCM 95th %tile Q(veh)		0.1	0	-	-	0.1	-	-	2.9			

# <u>Capacity Analysis Summary Sheets</u> No-Build Weekday Morning Peak Hour Conditions

# Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

Lane Group   EBL   EBT   EBR   WBL   WBT   WBR   NBL   NBT   NBR   SBL   SBT   SBR   Lane Configurations   1
Lane Configurations
Traffic Volume (vph)
Traffic Volume (vph)
Future Volume (vph)
Incident   Incident
Lane Width (fit)   12
Strage Length (II)
Storage Length (ft)   160   0   150   0   160   0   190   0   10
Taper Length (ft)
Lame Utili. Factor
PedBike Factor   Fit
Fith
Fit Protected   0.950   0.95
Satid. Flow (prot)         1736         3327         0         1787         3357         0         1752         3405         0         1805         3315         0           Flt Permitted         0.365         0.485         0.485         0.164         0.242         3315         0           Satd. Flow (perm)         667         3327         0         912         3357         0         303         3405         0         460         3315         0           Right Turn on Red         No         10         10         40         10
Fit Permitted   0.365
Fit Permitted   0.365   0.485   0.164   0.242   0.242   0.245   0.24
No
Said. Flow (RTOR)         Link Speed (mph)         40         35         40         40           Link Distance (ft)         212         789         383         516           Travel Time (s)         3.6         15.4         5.5         8.8           Confl. Peds. (#/hr)         50         5.5         8.8         5.5         8.8           Confl. Bikes (#/hr)         50         5.5         8.8         5.5         8.8         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.5         8.8         5.5         5.0         6.6         0.9         0.91
Link Speed (mph)         40         35         40         40           Link Distance (ft)         212         789         383         516           Travel Time (s)         3.6         15.4         6.5         8.8           Confl. Peds. (#/hr)         8.8         50         8.8           Confl. Bikes (#/hr)         8.8         8.8         8.8           Peak Hour Factor         0.91         0
Link Distance (ft)         212         789         383         516           Travel Time (s)         3.6         15.4         6.5         8.8           Confl. Peds. (#/hr)         Confl. Bikes (#/hr)           Confl. Bikes (#/hr)         Peak Hour Factor         0.91         <
Link Distance (ft)         212         789         383         516           Travel Time (s)         3.6         15.4         6.5         8.8           Confl. Peds. (#/hr)         Confl. Bikes (#/hr)           Peak Hour Factor         0.91         0.92         98         6         0.92         0.92         0.92
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91
Confl. Bikes (#/hr)
Peak Hour Factor         0.91         0.90         100%         0.00
Growth Factor         100%         6%         7%           Bus Blockages (#/hr)         0
Heavy Vehicles (%)         4%         2%         1%         1%         5%         2%         3%         5%         6%         0%         6%         7%           Bus Blockages (#/hr)         0 <td< td=""></td<>
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Parking (#/hr)         Mid-Block Traffic (%)         0%         0%         0%         0%         0%         0%         0%         Shared Lane Traffic (%)         Lane Group Flow (vph)         214         374         0         132         301         0         209         957         0         81         1036         0           Turn Type         pm+pt         NA         1         0         2         1         6         2
Mid-Block Traffic (%)         0%         0%         0%           Shared Lane Traffic (%)         0         0         0         957         0         81         1036         0           Lane Group Flow (vph)         214         374         0         132         301         0         209         957         0         81         1036         0           Turn Type         pm+pt         NA         1         3
Shared Lane Traffic (%)         Lane Group Flow (vph)         214         374         0         132         301         0         209         957         0         81         1036         0           Turn Type         pm+pt         NA         pm+pt         NA         pm+pt         NA         pm+pt         NA           Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         7         4         3         8         5         2         1         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase         8         2         1         6         6         5         2         1         6         6         5         2         1         6         6         5         2         1         6         6         5         2         1         6         6         5         2         1         6         5         2         1         6         5         2         1         6         5         2         1         6         5         2         1<
Lane Group Flow (vph)         214         374         0         132         301         0         209         957         0         81         1036         0           Turn Type         pm+pt         NA         pm+pt         NA         pm+pt         NA         pm+pt         NA           Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         7         4         3         8         5         2         1         6           Switch Phase         7         4         3         8.0         3.0         15.0         3.0         15.0           Minimum Initial (s)         3.0         8.0         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         9.5         24.0         14.0         56.0         14.0         56.0         14.0         56.0         14.0         56.0         14.0         56.0         11.7%         46.7%         11.7%         46.7%         11.7%         46.7%         11.7%         46.7%
Turn Type         pm+pt         NA         pm+pt         NA         pm+pt         NA         pm+pt         NA           Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         4         8         2         6         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase         Minimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0
Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         4         8         2         6         6         6         6         6         7         4         3         8         5         2         1         6         6         6         7         4         3         8         5         2         1         6         6         7         4         3         8         5         2         1         6         6         7         4         3         8         5         2         1         6         6         8         5         2         1         6         6         7         4         3         8         5         2         1         6         6         8         5         2         1         6         6         7         4         3         8         5         2         1         6         8         5         2         1         6         8         5         2         1         6         7         4         8         3         9         9         5         24.0         9         5
Protected Phases         7         4         3         8         5         2         1         6           Permitted Phases         4         8         2         6           Detector Phase         7         4         3         8         5         2         1         6           Switch Phase           Minimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0
Detector Phase         7         4         3         8         5         2         1         6           Switch Phase           Minimum Initial (s)         3.0         8.0         3.0         15.0         3.0         15.0           Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0
Switch Phase         Minimum Initial (s)       3.0       8.0       3.0       15.0       3.0       15.0         Minimum Split (s)       9.5       24.0       9.5       24.0       9.5       24.0         Total Split (s)       19.0       36.0       14.0       31.0       14.0       56.0       14.0       56.0         Total Split (%)       15.8%       30.0%       11.7%       25.8%       11.7%       46.7%       11.7%       46.7%         Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0
Minimum Initial (s)       3.0       8.0       3.0       8.0       3.0       15.0         Minimum Split (s)       9.5       24.0       9.5       24.0       9.5       24.0         Total Split (s)       19.0       36.0       14.0       31.0       14.0       56.0       14.0       56.0         Total Split (%)       15.8%       30.0%       11.7%       25.8%       11.7%       46.7%       11.7%       46.7%         Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0
Minimum Split (s)         9.5         24.0         9.5         24.0         9.5         24.0           Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0
Total Split (s)         19.0         36.0         14.0         31.0         14.0         56.0         14.0         56.0           Total Split (%)         15.8%         30.0%         11.7%         25.8%         11.7%         46.7%         11.7%         46.7%           Yellow Time (s)         3.5         4.0         3.5         4.0         3.5         4.0           All-Red Time (s)         0.0         2.0         0.0         2.0         0.0         2.0
Total Split (%)       15.8%       30.0%       11.7%       25.8%       11.7%       46.7%       11.7%       46.7%         Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0
Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0
Yellow Time (s)       3.5       4.0       3.5       4.0       3.5       4.0         All-Red Time (s)       0.0       2.0       0.0       2.0       0.0       2.0
Loct Time Adjust (c) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Total Lost Time (s) 3.5 6.0 3.5 6.0 3.5 6.0 3.5
Lead/Lag Lead Lag Lead Lag Lead Lag
Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes
Recall Mode None None None None C-Min None C-Min
Act Effct Green (s) 37.7 21.8 29.6 17.1 75.3 63.5 67.6 57.4
Actuated g/C Ratio 0.31 0.18 0.25 0.14 0.63 0.53 0.56 0.48

# Lanes, Volumes, Timings

## 1: Harlem Avenue & 171st Street

08/22/2019

	•	<b>→</b>	•	1	←	•	•	<b>†</b>	1	-	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.63	0.62		0.44	0.63		0.63	0.53		0.23	0.65	
Control Delay	40.2	49.6		34.7	54.2		19.3	21.5		11.8	27.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.2	49.6		34.7	54.2		19.3	21.5		11.8	27.5	
LOS	D	D		С	D		В	С		В	С	
Approach Delay		46.2			48.2			21.1			26.3	
Approach LOS		D			D			С			С	
Queue Length 50th (ft)	128	141		75	117		65	257		23	318	
Queue Length 95th (ft)	186	184		118	157		115	364		49	436	
Internal Link Dist (ft)		132			709			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	347	831		305	699		338	1800		387	1585	
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	0.62	0.45		0.43	0.43		0.62	0.53		0.21	0.65	

## **Intersection Summary**

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 30.9
Intersection Capacity Utilization 72.5%

Intersection LOS: C
ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Harlem Avenue & 171st Street



# 2: 171st Street & USPS Easterly Access Drive

Intersection						
Int Delay, s/veh	0.5					
		EDT	WDT	WDD	CDI	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	27	41	<b>†</b>	70	¥	7
Traffic Vol, veh/h	26	530	490	78	6	7
Future Vol, veh/h	26	530	490	78	6	7
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	91	91	91	91	91	91
Heavy Vehicles, %	0	2	5	1	0	0
Mvmt Flow	29	582	538	86	7	8
Major/Minor N	/lajor1	N	Major2	N	Minor2	
Conflicting Flow All	624	0		0	930	312
Stage 1	-	-	_	-	581	-
Stage 2	_	-	_	_	349	_
Critical Hdwy	4.1	-	_	_	6.8	6.9
Critical Hdwy Stg 1		_	_	_	5.8	-
Critical Hdwy Stg 2	_	_	_	_	5.8	_
Follow-up Hdwy	2.2	_	_	_	3.5	3.3
Pot Cap-1 Maneuver	967	_	_	_	270	690
Stage 1	-	_	_	_	528	-
Stage 2	_	_	_	_	691	_
Platoon blocked, %		_	_	_	071	
Mov Cap-1 Maneuver	967	_	_	_	258	690
Mov Cap-1 Maneuver	-	_	_	_	258	- 070
Stage 1	_			_	505	_
Stage 2	-	-	-	-	691	-
Stage 2	-	-	-	-	091	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.6		0		14.6	
HCM LOS					В	
Minor Lane/Major Mvm	t	EBL	EBT	WBT	WBR S	SBI n1
Capacity (veh/h)		967				389
HCM Lane V/C Ratio		0.03	_	_	_	0.037
HCM Control Delay (s)		8.8	0.2	_	-	14.6
HCM Lane LOS		Α	Α	_	_	В
HCM 95th %tile Q(veh)		0.1	-	_	_	0.1
110111 70111 701110 (2(1011)		U. 1				0.1

# 3: First Merchant Bank Access Drive & 171st Street

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<b>†</b>	LDIX	****	41	¥	HUIT
Traffic Vol, veh/h	555	0	0	497	0	1
Future Vol, veh/h	555	0	0	497	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
	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	91	91	91	91	91	91
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	610	0	0	546	0	1
IVIVIIILIIIOW	010	U	U	340	U	
Major/Minor M	ajor1	N	Major2	N	Minor1	
Conflicting Flow All	0	0	610	0	883	305
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	979	-	289	697
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	754	-
Platoon blocked, %	-	_		_		
Mov Cap-1 Maneuver	-	_	979	_	289	697
Mov Cap-2 Maneuver	_	_	-	_	289	-
Stage 1	_	_	_	_	510	_
Stage 2	_	_	_	_	754	_
Stage 2					754	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.2	
HCM LOS					В	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
	<u> </u>	697			979	
Capacity (veh/h) HCM Lane V/C Ratio		0.002	-	-		-
			-	-	-	-
HCM Long LOS		10.2	-	-	0	-
HCM Lane LOS		В	-	-	A	-
HCM 95th %tile Q(veh)		0	-	-	0	-

# 4: Oconto Avenue/USPS Westerly Access Drive & 171st Street

Intersection												
Int Delay, s/veh	0.9											
				=						05:	0==	0.5.5
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		€Î}•			<b>∱</b> ⊅			4			4	
Traffic Vol, veh/h	0	524	1	6	487	4	3	0	6	25	2	16
Future Vol, veh/h	0	524	1	6	487	4	3	0	6	25	2	16
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	-	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage,	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	2	0	0	5	0	0	0	17	4	0	0
Mvmt Flow	0	595	1	7	553	5	3	0	7	28	2	18
Major/Minor N	/lajor1		ı	Major2			Minor1		Λ	/linor2		
Conflicting Flow All	558	0	0	596	0	0	888	1168	298	868	1166	279
Stage 1	550	-	U	J7U 		-	596	596	290	570	570	219
Stage 2		-		_		-	292	572	-	298	596	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	7.24	7.58	6.5	6.9
Critical Hdwy Stg 1	4.1	_		4.1	-	-	6.5	5.5	7.24	6.58	5.5	0.9
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.58	5.5	
Follow-up Hdwy	2.2	-	_	2.2	-	-	3.5	4	3.47	3.54	4	3.3
Pot Cap-1 Maneuver	1023	-	-	990	-	-	241	195	656	243	196	724
Stage 1	1023			770		_	462	495	- 030	469	509	124
Stage 2		-	-	<u>-</u>	-	<u>-</u>	697	508		680	495	-
Platoon blocked, %						-	071	300		000	<del>1</del> 73	
Mov Cap-1 Maneuver	1023	_		990	_	_	232	194	656	239	195	724
Mov Cap-1 Maneuver	1023	_	_	770	_	_	232	194	- 030	239	195	124
Stage 1	-	_	_		_	_	462	495		469	505	
Stage 2						_	672	504	-	673	495	_
Jiago Z							012	304		013	7/3	
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			14.1			18.6		
HCM LOS							В			С		
Minor Lane/Major Mvm		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		408	1023		-	990	-	-	314			
HCM Lane V/C Ratio		0.025	1023	-		0.007	-		0.156			
HCM Control Delay (s)		14.1	0	-	-	8.7	-	-	18.6			
HCM Lane LOS		14.1 B	A	-	-	0. <i>1</i>	-	-	10.0 C			
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.5			
HOW FOUT TOUTE Q(VEH)		0.1	U		_	U		-	0.5			

# <u>Capacity Analysis Summary Sheets</u> No-Build Weekday Evening Peak Hour Conditions

# Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

1. Hallelli Avenue	Q 17 13	. Oli CC									001	00/22/2017		
	۶	<b>→</b>	$\rightarrow$	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	4		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	*	<b>∱</b> }		ች	<b>↑</b> ₽		ሻ	<b>↑</b> ↑		ች	<b>↑</b> ↑			
Traffic Volume (vph)	241	419	227	253	341	58	238	1348	125	147	1218	248		
Future Volume (vph)	241	419	227	253	341	58	238	1348	125	147	1218	248		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12		
Grade (%)		0%			0%			0%			0%			
Storage Length (ft)	160		0	150		0	160		0	190		0		
Storage Lanes	1		0	1		0	1		0	1		0		
Taper Length (ft)	145			145			125			125				
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95		
Ped Bike Factor														
Frt		0.947			0.978			0.987			0.975			
Flt Protected	0.950			0.950			0.950			0.950				
Satd. Flow (prot)	1752	3407	0	1787	3423	0	1770	3385	0	1770	3395	0		
Flt Permitted	0.254			0.174			0.061			0.064		-		
Satd. Flow (perm)	469	3407	0	327	3423	0	114	3385	0	119	3395	0		
Right Turn on Red			No			No			No			No		
Satd. Flow (RTOR)														
Link Speed (mph)		40			35			40			40			
Link Distance (ft)		212			789			346			516			
Travel Time (s)		3.6			15.4			5.9			8.8			
Confl. Peds. (#/hr)		0.0						0.7			0.0			
Confl. Bikes (#/hr)														
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91		
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	3%	0%	1%	1%	3%	4%	2%	5%	8%	2%	4%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0		
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%			0%			
Shared Lane Traffic (%)														
Lane Group Flow (vph)	265	709	0	278	439	0	262	1618	0	162	1611	0		
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA			
Protected Phases	7	4		3	8		5	2		1	6			
Permitted Phases	4			8			2			6				
Detector Phase	7	4		3	8		5	2		1	6			
Switch Phase														
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0			
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0			
Total Split (s)	20.0	29.0		20.0	29.0		24.0	73.0		18.0	67.0			
Total Split (%)	14.3%	20.7%		14.3%	20.7%		17.1%	52.1%		12.9%	47.9%			
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0			
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0			
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0			
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0			
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes			
Recall Mode	None	None		None	None		None	C-Min		None	C-Min			
Act Effct Green (s)	42.0	23.0		42.0	23.0		87.5	69.1		77.5	62.6			
Actuated g/C Ratio	0.30	0.16		0.30	0.16		0.62	0.49		0.55	0.45			
ricidated gro Italio	0.50	0.10		0.50	0.10		0.02	0.47		0.00	0.40			

#### Lanes, Volumes, Timings

#### 1: Harlem Avenue & 171st Street

08/22/2019

	۶	<b>→</b>	•	1	←	•	4	<b>†</b>	/	-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.91	1.27		1.03	0.78		0.89	0.97		0.77	1.06	
Control Delay	73.9	180.7		101.8	66.8		69.7	50.4		55.8	78.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	73.9	180.7		101.8	66.8		69.7	50.4		55.8	78.8	
LOS	Е	F		F	Е		Е	D		Е	Е	
Approach Delay		151.7			80.4			53.0			76.7	
Approach LOS		F			F			D			Е	
Queue Length 50th (ft)	192	~426		~212	204		180	750		91	~866	
Queue Length 95th (ft)	#323	#555		#398	267		#326	#943		#179	#1005	
Internal Link Dist (ft)		132			709			266			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	291	559		270	562		313	1671		238	1518	
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	0.91	1.27		1.03	0.78		0.84	0.97		0.68	1.06	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 82.5 Intersection Capacity Utilization 104.3% Intersection LOS: F
ICU Level of Service G

Analysis Period (min) 15

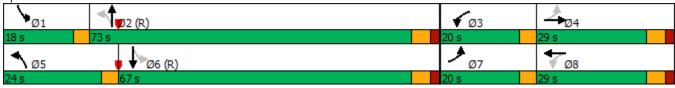
~ Volume exceeds capacity, queue is theoretically infinite.

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: Harlem Avenue & 171st Street



## 2: 171st Street & USPS Easterly Access Drive

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	\M/DT	WBR	SBL	SBR
	EBL		WBT	WBK		SBR
Lane Configurations		41	<b>†</b> }		¥	
Traffic Vol, veh/h	30	883	812	15	4	25
Future Vol, veh/h	30	883	812	15	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0
	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	91	91	91	91	91	91
Heavy Vehicles, %	0	2	1	2	0	0
Mymt Flow	33	970	892	16	4	27
IVIVIIII I IOW	33	710	072	10	4	21
Major/Minor Ma	ajor1	N	Najor2	N	Minor2	
Conflicting Flow All	908	0	-	0	1451	454
Stage 1	-	-	-	-	900	-
Stage 2	_	_	_	_	551	_
Critical Hdwy	4.1		_	_	6.8	6.9
Critical Hdwy Stg 1	-		_	_	5.8	-
		-			5.8	
Critical Hdwy Stg 2	-	-	-	-		-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	758	-	-	-	124	559
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	547	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	758	-	-	-	112	559
Mov Cap-2 Maneuver	-	-	-	-	112	-
Stage 1	-	-	-	-	328	-
Stage 2		_	_	_	547	_
Olugo Z					UT1	
Approach	EB		WB		SB	
HCM Control Delay, s	0.7		0		15.9	
HCM LOS					С	
Minar Lang/Majar Mumat		EDI	EDT	WDT	WDD	CDI n1
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR S	
Capacity (veh/h)		758	-	-	-	361
HCM Lane V/C Ratio		0.043	-	-	-	0.088
HCM Control Delay (s)		10	0.4	-	-	
HCM Lane LOS		Α	Α	-	-	С
HCM 95th %tile Q(veh)		0.1	-	-	-	0.3

## 3: First Merchant Bank Access Drive & 171st Street

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<b>†</b>	LDIX	******	41	¥	HUIT
Traffic Vol, veh/h	913	0	0	837	0	0
Future Vol, veh/h	913	0	0	837	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	1	0	0
Mvmt Flow	932	0	0	854	0	0
Major/Minor V	1ajor1	N	Major2		/linor1	
	<u>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>	0	932		1359	466
Conflicting Flow All Stage 1		U	932	0	932	400
Stage 2	-	-	-		427	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	4.1	-	5.8	0.9
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	743	-	142	549
Stage 1		-	743		348	J49 -
Stage 2	-	-	-	-	632	
Platoon blocked, %	-	-	-	-	032	-
Mov Cap-1 Maneuver		-	743	-	142	549
Mov Cap-2 Maneuver	-	-		-	142	
•	-	-	-	-	348	-
Stage 1	-	-	-	-	632	
Stage 2	-	-	-	-	032	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		0	
HCM LOS					Α	
Minor Lane/Major Mvmt	· •	NBLn1	EBT	EBR	WBL	WBT
	. 1	NDLIII			743	
Capacity (veh/h) HCM Lane V/C Ratio		-	-	-		-
HCM Control Delay (s)		0	-	-	0	-
HCM Lane LOS		A	-	-	A	-
HCM 95th %tile Q(veh)		- A	-	-	0	-
HOW FOUR MURE Q(VeH)		-	-		U	-

## 4: Oconto Avenue/USPS Westerly Access Drive & 171st Street

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414		ች	<b>†</b> \$			4			4	
Traffic Vol, veh/h	3	849	16	18	815	4	2	0	15	49	3	44
Future Vol, veh/h	3	849	16	18	815	4	2	0	15	49	3	44
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	-	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage,	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	33	1	0	6	0	0	0	0	0	2	0	0
Mvmt Flow	3	884	17	19	849	4	2	0	16	51	3	46
Major/Minor N	/lajor1		١	Major2		N	Minor1		N	Minor2		
Conflicting Flow All	853	0	0	901	0	0	1363	1790	451	1337	1796	427
Stage 1	-	-	-	-	-	-	899	899	-	889	889	-
Stage 2	-	-	-	-	-	-	464	891	-	448	907	-
Critical Hdwy	4.76	-	-	4.22	-	-	7.5	6.5	6.9	7.54	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Follow-up Hdwy	2.53	-	-	2.26	-	-	3.5	4	3.3	3.52	4	3.3
Pot Cap-1 Maneuver	612	-	-	725	-	-	109	82	561	111	81	582
Stage 1	-	-	-	-	-	-	304	360	-	304	364	-
Stage 2	-	-	-	-	-	-	553	363	-	560	357	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	612	-	-	725	-	-	95	79	561	105	78	582
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	79	-	105	78	-
Stage 1	-	-	-	-	-	-	301	356	-	301	355	-
Stage 2	-	-	-	-	-	-	492	354	-	539	353	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.2			15.6			55.7		
HCM LOS							С			F		
Minor Lane/Major Mvmt	t ſ	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
Capacity (veh/h)		356	612	_	-	725	_	-	165			
HCM Lane V/C Ratio			0.005	-	_	0.026	-	_	0.606			
HCM Control Delay (s)		15.6	10.9	0.1	-	10.1	-	-	55.7			
HCM Lane LOS		С	В	A	_	В	-	-	F			
HCM 95th %tile Q(veh)		0.2	0	-	-	0.1	-	-	3.3			

# <u>Capacity Analysis Summary Sheets</u> Projected Weekday Morning Peak Hour Conditions

# Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

1: Hariem Avenue	<u>α 1718ι</u>	Siree									00/2	22/2019
	۶	-	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }		ሻ	<b>↑</b> ₽		ሻ	<b>↑</b> ↑		ሻ	<b>∱</b> }	
Traffic Volume (vph)	213	203	146	125	223	53	205	819	52	74	798	161
Future Volume (vph)	213	203	146	125	223	53	205	819	52	74	798	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			145			125			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.937			0.971			0.991			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3330	0	1787	3357	0	1752	3405	0	1805	3315	0
Flt Permitted	0.362			0.481			0.152			0.247		-
Satd. Flow (perm)	661	3330	0	905	3357	0	280	3405	0	469	3315	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			789			218			516	
Travel Time (s)		3.6			15.4			3.7			8.8	
Confl. Peds. (#/hr)		0.0			10.1			0.7			0.0	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	2%	1%	1%	5%	2%	3%	5%	6%	0%	6%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	-	-		-	-			-	-			
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	234	383	0	137	303	0	225	957	0	81	1054	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s)	19.0	36.0		14.0	31.0		14.0	56.0		14.0	56.0	
Total Split (%)	15.8%	30.0%		11.7%	25.8%		11.7%	46.7%		11.7%	46.7%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	38.1	22.1		29.7	17.2		74.9	63.1		66.0	55.8	
Actuated g/C Ratio	0.32	0.18		0.25	0.14		0.62	0.53		0.55	0.46	
, istaatoa gi o Matto	0.02	0.10		0.20	0.17		0.02	0.00		0.00	0.70	

#### Lanes, Volumes, Timings

#### 1: Harlem Avenue & 171st Street

08/22/2019

	•	<b>→</b>	•	1	←	•	•	<b>†</b>	1	-	<b>↓</b>	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.68	0.63		0.46	0.63		0.67	0.53		0.24	0.68	
Control Delay	42.4	49.5		34.9	54.2		22.8	21.7		12.0	29.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.4	49.5		34.9	54.2		22.8	21.7		12.0	29.1	
LOS	D	D		С	D		С	С		В	С	
Approach Delay		46.8			48.2			21.9			27.9	
Approach LOS		D			D			С			С	
Queue Length 50th (ft)	142	145		78	117		71	258		23	335	
Queue Length 95th (ft)	203	188		121	158		144	364		49	447	
Internal Link Dist (ft)		132			709			138			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	349	832		304	699		336	1790		386	1542	
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	0.67	0.46		0.45	0.43		0.67	0.53		0.21	0.68	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 31.9
Intersection Capacity Utilization 74.9%

Intersection LOS: C
ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Harlem Avenue & 171st Street



## 2: Proposed Right-In/Right-Out Access Drive/USPS Easterly Access Drive & 171st Street/22/2019

Note   Note
Movement   EBL   EBT   EBR   WBL   WBT   WBR   NBL   NBT   NBR   SBL   SBT   SBR
Traffic Vol, veh/h   26   506   34   0   511   78   0   0   50   6   0   7
Traffic Vol, veh/h         26         506         34         0         511         78         0         0         50         6         0         7           Future Vol, veh/h         26         506         34         0         511         78         0         0         50         6         0         7           Conflicting Peds, #/hr         0
Traffic Vol, veh/h         26         506         34         0         511         78         0         0         50         6         0         7           Future Vol, veh/h         26         506         34         0         511         78         0         0         50         6         0         7           Conflicting Peds, #/hr         0
Future Vol, veh/h         26         506         34         0         511         78         0         0         50         6         0         7           Conflicting Peds, #/hr         0<
Conflicting Peds, #/hr         0
Sign Control         Free         None         -         0         -         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         0         0         0         0         0         0         0         0         0
RT Channelized         -         None         -         None         -         None         -         None           Storage Length         -         -         -         -         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0
Veh in Median Storage, #         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         0         -         0         -         -         0
Grade, %         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0<
Grade, %         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0<
Major/Minor         Major1         Major2         Minor1         Minor2           Conflicting Flow All         648         0         0         -         -         0         -
Mvmt Flow         29         556         37         0         562         86         0         0         55         7         0         8           Major/Minor         Major1         Major2         Minor1         Minor2           Conflicting Flow All         648         0         0         -         -         0         -         297         941         1256         324           Stage 1         -         -         -         -         -         -         -         605         605         -           Stage 2         -         -         -         -         -         -         -         336         651         -           Critical Hdwy         4.1         -         -         -         -         -         6.9         7.5         6.5         6.9           Critical Hdwy Stg 1         -         -         -         -         -         -         -         6.5         5.5         -           Critical Hdwy Stg 2         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - </td
Major/Minor         Major1         Major2         Minor1         Minor2           Conflicting Flow All         648         0         0         -         0         -         297         941         1256         324           Stage 1         -         -         -         -         -         -         605         605         -           Stage 2         -         -         -         -         -         -         -         336         651         -           Critical Hdwy         4.1         -         -         -         -         -         6.9         7.5         6.5         6.9           Critical Hdwy Stg 1         -         -         -         -         -         -         6.5         5.5         -           Critical Hdwy Stg 2         -         -         -         -         -         -         6.5         5.5         -
Conflicting Flow All         648         0         0         -         0         -         297         941         1256         324           Stage 1         -         -         -         -         -         -         -         605         605         -           Stage 2         -         -         -         -         -         -         -         -         -         -         336         651         -           Critical Hdwy         4.1         -         -         -         -         -         -         6.9         7.5         6.5         6.9           Critical Hdwy Stg 1         -         -         -         -         -         -         -         6.5         5.5         -           Critical Hdwy Stg 2         -         -         -         -         -         -         -         6.5         5.5         -
Conflicting Flow All         648         0         0         -         0         -         297         941         1256         324           Stage 1         -         -         -         -         -         -         -         605         605         -           Stage 2         -         -         -         -         -         -         -         -         -         336         651         -           Critical Hdwy         4.1         -         -         -         -         -         -         6.9         7.5         6.5         6.9           Critical Hdwy Stg 1         -         -         -         -         -         -         -         6.5         5.5         -           Critical Hdwy Stg 2         -         -         -         -         -         -         -         6.5         5.5         -
Conflicting Flow All         648         0         0         -         0         -         297         941         1256         324           Stage 1         -         -         -         -         -         -         -         605         605         -           Stage 2         -         -         -         -         -         -         -         -         336         651         -           Critical Hdwy         4.1         -         -         -         -         -         6.9         7.5         6.5         6.9           Critical Hdwy Stg 1         -         -         -         -         -         -         6.5         5.5         -           Critical Hdwy Stg 2         -         -         -         -         -         -         6.5         5.5         -
Stage 1       -       -       -       -       -       -       605       605       -         Stage 2       -       -       -       -       -       -       -       -       336       651       -         Critical Hdwy       4.1       -       -       -       -       -       -       6.9       7.5       6.5       6.9         Critical Hdwy Stg 1       -       -       -       -       -       -       6.5       5.5       -         Critical Hdwy Stg 2       -       -       -       -       -       6.5       5.5       -
Stage 2       -       -       -       -       -       -       -       -       336       651       -         Critical Hdwy       4.1       -       -       -       -       -       -       -       6.5       6.5       6.9         Critical Hdwy Stg 1       -       -       -       -       -       -       -       6.5       5.5       -         Critical Hdwy Stg 2       -       -       -       -       -       -       6.5       5.5       -
Critical Hdwy       4.1       -       -       -       -       -       6.9       7.5       6.5       6.9         Critical Hdwy Stg 1       -       -       -       -       -       -       -       6.5       5.5       -         Critical Hdwy Stg 2       -       -       -       -       -       -       6.5       5.5       -
Critical Hdwy Stg 1 6.5 5.5 - Critical Hdwy Stg 2 6.5 5.5 -
Critical Hdwy Stg 2 6.5 5.5 -
Pot Cap-1 Maneuver 947 0 0 0 705 221 173 678
Stage 1 0 0 0 - 456 491 -
Stage 2 0 0 0 - 657 468 -
Platoon blocked, %
Mov Cap-1 Maneuver 947 705 197 165 678
Mov Cap-2 Maneuver 197 165 -
Stage 1 435 491 -
Stage 2 578 446 -
Approach EB WB NB SB
HCM Control Delay, s 0.6 0 10.5 16.8
HCM LOS B C
Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBT WBR SBLn1
Capacity (veh/h) 705 947 319
Capacity (veh/h) 705 947 319 HCM Lane V/C Ratio 0.078 0.03 0.045
HCM Lane V/C Ratio 0.078 0.03 0.045

## 3: First Merchant Bank Access Drive & 171st Street

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	ħβ			414	¥	
Traffic Vol, veh/h	565	0	43	475	31	1
Future Vol, veh/h	565	0	43	475	31	1
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	91	91	91	91	91	91
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	621	0	47	522	34	1
	02.	ŭ	• •	022	0.	•
		_		-		
	lajor1		/lajor2		Minor1	
Conflicting Flow All	0	0	621	0	976	311
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	969	-	252	691
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	969	-	235	691
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	_	-	470	-
Stage 2	_	_	_	_	686	_
Jugo 2					500	
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		22.6	
HCM LOS					С	
Minor Lane/Major Mvmt	N	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	<u> </u>	240	-	LDIK	969	
HCM Lane V/C Ratio		0.147	-		0.049	-
HCM Control Delay (s)		22.6	-	-	8.9	0.3
HCM Lane LOS		22.0 C	-		0.9 A	0.3 A
HCM 95th %tile Q(veh)		0.5	<del>-</del>	-	0.2	A -
HOW FOUT MILE Q(VEH)		0.5	-	-	U.Z	-

## 4: Oconto Avenue/USPS Westerly Access Drive & 171st Street

Movement	Intersection												
Movement		0.9											
Lane Configurations		EDI	CDT	EDD	\M/DI	\MDT	\M/DD	NIDI	NDT	NIDD	CDI	CDT	CDD
Traffic Vol, veh/h		EDL		EDK			WDK	INDL		INDIX	SDL		SDK
Future Vol, veh/h Conflicting Peds, #hh O O O O O O O O O O O O O O O O O O		Λ		1			1	2		6	25		16
Conflicting Peds, #/hr				-									
Sign Control   Free   Free   Free   Free   Free   Free   Free   Free   None   None				•									
RT Channelized													
Storage Length												-	
Veh in Median Storage, # - 0		_	-	-	50			_	_		_	_	-
Grade, %         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         0         -         -         0         0         -         -         0<		# -	0	_		0	_	_	0	-	_	0	-
Heavy Vehicles, %			0	-	-	0	-	-	0	-	-	0	-
Mymit Flow         0         607         1         7         564         5         3         0         7         28         2         18           Major/Minor         Major1         Major2         Minor1         Minor2           Conflicting Flow All         569         0         0         608         0         905         1191         304         885         1189         285           Stage 1         -         -         -         -         -         608         608         -         581         581         -           Stage 2         -         -         -         -         -         608         608         -         581         581         -           Critical Hdwy Stg 1         -         -         -         -         6.5         5.5         -         6.58         5.5         -         -         -         6.6         6.5         5.5         -         6.58         5.5         -		88	88	88	88	88	88	88	88	88	88	88	88
Major/Minor         Major1         Major2         Minor1         Minor2         Minor1         Minor2         M	Heavy Vehicles, %	0	2	0	0	5	0	0	0	17	4	0	0
Conflicting Flow All   569   0   0   608   0   0   905   1191   304   885   1189   285	Mvmt Flow	0	607	1	7	564	5	3	0	7	28	2	18
Conflicting Flow All   569   0   0   608   0   0   905   1191   304   885   1189   285   Stage 1   608   608   - 581   581   - Stage 2   608   608   - 581   581   - Stage 2   297   583   - 304   608   - Critical Hdwy   4.1   4.1   7.5   6.5   7.24   7.58   6.5   6.9   Critical Hdwy Stg 1   6.5   5.5   - 6.58   5.5   - Critical Hdwy Stg 2   6.5   5.5   - 6.58   5.5   - Critical Hdwy Stg 2   6.5   5.5   - 6.58   5.5													
Conflicting Flow All   569   0   0   608   0   0   905   1191   304   885   1189   285	Major/Minor M	1ajor1		ľ	Major2		N	Minor1		N	Minor2		
Stage 1         -         -         -         -         608         608         -         581         581         -           Stage 2         -         -         -         -         297         583         -         304         608         -           Critical Hdwy         4.1         -         -         4.1         -         -         7.5         6.5         7.24         7.58         6.5         6.9           Critical Hdwy         Stg 1         -         -         -         -         6.5         5.5         -         6.58         5.5         -           Critical Hdwy         Stg 2         -         -         -         -         6.5         5.5         -         6.58         5.5         -           Critical Hdwy Stg 2         -         -         -         -         6.5         5.5         -         6.58         5.5         -           Follow Hdwy         2.2         -         -         2.2         -         -         3.5         4         3.47         3.54         4         3.3           Pot Cap-1 Maneuver         1013         -         -         809         -         - <t></t>			0			0			1191			1189	285
Stage 2         -         -         -         -         -         297         583         -         304         608         -           Critical Hdwy         4.1         -         -         4.1         -         -         7.5         6.5         7.24         7.58         6.5         6.9           Critical Hdwy Stg 1         -         -         -         -         6.5         5.5         -         6.58         5.5         -           Critical Hdwy Stg 2         -         -         -         -         6.5         5.5         -         6.58         5.5         -           Follow-up Hdwy         2.2         -         2.2         -         3.5         4         3.47         3.54         4         3.3           Pot Cap-1 Maneuver         1013         -         980         -         -         235         189         649         236         190         718           Stage 2         -         -         -         -         -         -         663         502         -         675         489         -           Platoon blocked, %         -         -         -         -         226         188 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>					-								-
Critical Hdwy       4.1       -       4.1       -       -       7.5       6.5       7.24       7.58       6.5       6.9         Critical Hdwy Stg 1       -       -       -       -       -       6.5       5.5       -       6.58       5.5       -         Critical Hdwy Stg 2       -       -       -       -       6.5       5.5       -       6.58       5.5       -         Follow-up Hdwy       2.2       -       -       2.2       -       -       3.5       4       3.47       3.54       4       3.3         Pot Cap-1 Maneuver       1013       -       980       -       -       235       189       649       236       190       718         Stage 1       -       -       -       -       -       693       502       -       675       489       -         Platoon blocked, %       -       -       -       -       693       502       -       675       489       -         Mov Cap-1 Maneuver       1013       -       980       -       -       226       188       649       232       189       -       -       318       - <t< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td>-</td></t<>		-	-	-	-	-	-			-			-
Critical Hdwy Stg 2         -         -         -         -         6.5         5.5         -         6.58         5.5         -           Follow-up Hdwy         2.2         -         -         2.2         -         -         3.5         4         3.47         3.54         4         3.3           Pot Cap-1 Maneuver         1013         -         980         -         -         235         189         649         236         190         718           Stage 1         -         -         -         -         -         454         489         -         462         503         -           Stage 2         -         -         -         -         -         693         502         -         675         489         -           Platoon blocked, %         -         -         -         -         -         -         -         226         188         649         232         189         -         18         -         232         189         -         -         226         188         -         232         189         -         -         8         -         232         189         -         -         -		4.1	-	-	4.1	-	-			7.24			6.9
Follow-up Hdwy 2.2 2.2 3.5 4 3.47 3.54 4 3.3  Pot Cap-1 Maneuver 1013 980 235 189 649 236 190 718  Stage 1 454 489 - 462 503 - 5189 649 236 190 718  Stage 2 693 502 - 675 489 - 718  Mov Cap-1 Maneuver 1013 - 980 226 188 649 232 189 718  Mov Cap-2 Maneuver 226 188 649 232 189 718  Mov Cap-2 Maneuver 226 188 - 232 189 - 718  Stage 1 454 489 - 462 499 - 718  Stage 2 668 498 - 668 498 - 668 489 - 718  Approach EB WB NB SB  HCM Control Delay, s 0 0.1 14.2 19  HCM LOS B C  Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1  Capacity (veh/h) 400 1013 - 980 - 306  HCM Lane V/C Ratio 0.026 0.007 - 0.16  HCM Control Delay (s) 14.2 0 - 8.7 - 19  HCM Lane LOS B A - A - C		-	-	-	-	-	-	6.5	5.5	-	6.58	5.5	-
Pot Cap-1 Maneuver   1013	Critical Hdwy Stg 2		-	-	-	-	-	6.5	5.5	-		5.5	
Stage 1         -         -         -         454         489         -         462         503         -           Stage 2         -         -         -         -         693         502         -         675         489         -           Plation blocked, %         -<			-	-		-	-						
Stage 2         -         -         -         693         502         -         675         489         -           Platoon blocked, %         -         <	•	1013	-	-	980	-	-			649			718
Platoon blocked, %       -       <		-	-	-	-	-	-			-			-
Mov Cap-1 Maneuver         1013         -         -         980         -         -         226         188         649         232         189         718           Mov Cap-2 Maneuver         -         -         -         -         -         226         188         -         232         189         -           Stage 1         -         -         -         -         454         489         -         462         499         -           Stage 2         -         -         -         -         -         668         498         -         668         489         -           Approach         EB         WB         NB         NB         SB         SB           HCM Control Delay, s         0         0.1         14.2         19         - <t< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>693</td><td>502</td><td>-</td><td>675</td><td>489</td><td>-</td></t<>		-	-	-	-	-		693	502	-	675	489	-
Mov Cap-2 Maneuver         -         -         -         -         226         188         -         232         189         -           Stage 1         -         -         -         -         -         454         489         -         462         499         -           Stage 2         -         -         -         -         668         498         -         668         489         -           Approach         EB         WB         NB         NB         SB         NB         N		1010	-	-	000	-		007	100	( 10	000	100	740
Stage 1         -         -         -         -         454         489         -         462         499         -           Stage 2         -         -         -         -         -         668         498         -         668         489         -           Approach         EB         WB         NB         NB         SB           HCM Control Delay, s         0         0.1         14.2         19           HCM LoS         B         C    Minor Lane/Major Mvmt  NBLn1  EBL  EBT  EBR  WBL  WBT  WBR SBLn1  Capacity (veh/h)  400  1013  306  HCM Lane V/C Ratio  0.026  0.007  0.16  HCM Control Delay (s)  14.2  0  8.7  19  HCM Lane LOS  B  A  C			-	-	980	-							
Stage 2			-	-	-	-							
Approach         EB         WB         NB         SB           HCM Control Delay, s         0         0.1         14.2         19           HCM LOS         B         C           Minor Lane/Major Mvmt         NBLn1         EBL         EBT         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         400         1013         -         -         980         -         -         306           HCM Lane V/C Ratio         0.026         -         -         -         0.007         -         -         0.16           HCM Control Delay (s)         14.2         0         -         -         8.7         -         19           HCM Lane LOS         B         A         -         A         -         C	· ·		-	-	-	-	-						
HCM Control Delay, s   0   0.1   14.2   19     HCM LOS	Slaye 2	-	-	-	-	-	-	000	470	-	000	407	-
HCM Control Delay, s   0   0.1   14.2   19     HCM LOS								=					
Minor Lane/Major Mvmt         NBLn1         EBL         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         400         1013         -         -         980         -         -         306           HCM Lane V/C Ratio         0.026         -         -         -         0.007         -         -         0.16           HCM Control Delay (s)         14.2         0         -         -         8.7         -         -         19           HCM Lane LOS         B         A         -         A         -         C													
Minor Lane/Major Mvmt         NBLn1         EBL         EBR         WBL         WBT         WBR SBLn1           Capacity (veh/h)         400         1013         -         -         980         -         -         306           HCM Lane V/C Ratio         0.026         -         -         -         0.007         -         -         0.16           HCM Control Delay (s)         14.2         0         -         -         8.7         -         -         19           HCM Lane LOS         B         A         -         -         A         -         -         C		0			0.1								
Capacity (veh/h) 400 1013 980 306  HCM Lane V/C Ratio 0.026 0.007 - 0.16  HCM Control Delay (s) 14.2 0 - 8.7 - 19  HCM Lane LOS B A - A - C	HCM LOS							В			С		
Capacity (veh/h) 400 1013 980 306  HCM Lane V/C Ratio 0.026 0.007 - 0.16  HCM Control Delay (s) 14.2 0 - 8.7 - 19  HCM Lane LOS B A - A - C													
HCM Lane V/C Ratio       0.026       -       -       0.007       -       -       0.16         HCM Control Delay (s)       14.2       0       -       -       8.7       -       -       19         HCM Lane LOS       B       A       -       A       -       C	Minor Lane/Major Mvmt	<u> </u>	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
HCM Control Delay (s) 14.2 0 - 8.7 - 19 HCM Lane LOS B A - A - C			400	1013	-	-	980	-	-	306			
HCM Lane LOS B A A C					-	-		-	-				
					-	-		-	-				
HCM 95th %tile Q(veh) 0.1 0 0.6					-	-		-	-				
	HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.6			

## 5: Harlem Avenue & Proposed Right-In/Right-Out Access Drive

Interception						
Intersection	0.3					
Int Delay, s/veh						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		7			<b>∱</b> ∱	
Traffic Vol, veh/h	0	56	0	1076	1010	59
Future Vol, veh/h	0	56	0	1076	1010	59
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	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	5	5	0
Mvmt Flow	0	59	0	1133	1063	62
	linor2		Major1		Major2	
Conflicting Flow All	-	563	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	475	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	475	-	-	-	-
Mov Cap-2 Maneuver	_	, .	_	-	_	_
Stage 1	_	_	_	_	_	_
Stage 2	_	_	_	_	_	_
Jiugo Z						
Approach	EB		NB		SB	
HCM Control Delay, s	13.7		0		0	
HCM LOS	В					
Minar Lana/Majar Mumt		NDT I	TDI n1	CDT	CDD	
Minor Lane/Major Mvmt		NBT E		SBT	SBR	
Capacity (veh/h)		-	475	-	-	
HCM Lane V/C Ratio			0.124	-	-	
HCM Control Delay (s)		-	13.7	-	-	
HCM Lane LOS		-	В	-	-	
HCM 95th %tile Q(veh)			0.4			

# <u>Capacity Analysis Summary Sheets</u> Projected Weekday Evening Peak Hour Conditions

# Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

1. Hallelli Avellue	Q 17 13	Succi								00/22/2017		
	۶	<b>→</b>	$\rightarrow$	•	<b>←</b>	•	4	<b>†</b>	<b>/</b>	<b>&gt;</b>	<b>↓</b>	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>†</b> }		ሻ	<b>↑</b> ↑		ሻ	<b>↑</b> ↑		ሻ	<b>↑</b> 1>	•
Traffic Volume (vph)	256	425	227	257	343	58	251	1348	125	147	1229	252
Future Volume (vph)	256	425	227	257	343	58	251	1348	125	147	1229	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			145			125			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.948			0.978			0.987			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3410	0	1787	3423	0	1770	3385	0	1770	3392	0
Flt Permitted	0.252			0.174			0.061			0.065		
Satd. Flow (perm)	465	3410	0	327	3423	0	114	3385	0	121	3392	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			789			218			516	
Travel Time (s)		3.6			15.4			3.7			8.8	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	0%	1%	1%	3%	4%	2%	5%	8%	2%	4%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	716	0	282	441	0	276	1618	0	162	1628	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s)	20.0	29.0		20.0	29.0		24.0	73.0		18.0	67.0	
Total Split (%)	14.3%	20.7%		14.3%	20.7%		17.1%	52.1%		12.9%	47.9%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	42.0	23.0		42.0	23.0		87.5	69.1		76.8	62.0	
Actuated g/C Ratio	0.30	0.16		0.30	0.16		0.62	0.49		0.55	0.44	
v/c Ratio	0.97	1.28		1.04	0.78		0.92	0.97		0.76	1.08	
Control Delay	85.2	184.6		105.7	67.0		74.0	50.4		55.3	87.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	85.2	184.6		105.7	67.0		74.0	50.4		55.3	87.2	
LOS	F	F		F	Е		E	D		E	F	
Approach Delay		156.6			82.1			53.8			84.4	
Approach LOS		F			F			D			F	
Queue Length 50th (ft)	206	~433		~220	205		195	750		90	~884	
Queue Length 95th (ft)	#358	#561		#408	268		#359	#943		#173	#1024	

#### Lanes, Volumes, Timings

#### 1: Harlem Avenue & 171st Street

08/22/2019

	•	-	•	€	•	•	1	Ť	/	-	¥	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			709			138			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	291	560		270	562		313	1671		239	1501	
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	0.97	1.28		1.04	0.78		0.88	0.97		0.68	1.08	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 86.7 Intersection LOS: F
Intersection Capacity Utilization 105.8% ICU Level of Service G

Analysis Period (min) 15

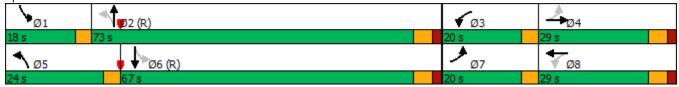
Volume exceeds capacity, queue is theoretically infinite.

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: Harlem Avenue & 171st Street



## 2: Proposed Right-In/Right-Out Access Drive/USPS Easterly Access Drive & 171st Street/22/2019

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414			ħβ				7		4	
Traffic Vol, veh/h	30	863	28	0	831	15	0	0	41	4	0	25
Future Vol, veh/h	30	863	28	0	831	15	0	0	41	4	0	25
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	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	2	0	0	1	2	0	0	0	0	0	0
Mvmt Flow	33	948	31	0	913	16	0	0	45	4	0	27
Major/Minor Major/Minor	ajor1		N	/lajor2		N	/linor1		N	/linor2		
Conflicting Flow All	929	0	0	-	-	0	-	_	490	1461	1966	465
Stage 1	-	-	-	-	_	-	-	_	-	921	921	-
Stage 2	_	-	_	_	_	_	_	_	_	540	1045	_
Critical Hdwy	4.1	-	-	-	-	-	-	_	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	_	_	_	_	_	_	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	_	-	_	_	-	_	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	744	-	-	0	-	-	0	0	529	92	64	550
Stage 1	-	-	-	0	-	-	0	0	-	295	352	-
Stage 2	-	-	-	0	-	-	0	0	-	499	308	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	744	-	-	-	-	-	-	-	529	78	58	550
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	78	58	-
Stage 1	-	-	-	-	-	-	-	-	-	266	352	-
Stage 2	-	-	-	-	-	-	-	-	-	412	278	-
ŭ												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0			12.4			18.4		
HCM LOS	0.0						В			C		
TOW LOO							U					
Minor Lang/Major Mumt		IDI n1	EDI	EDT	EDD	WDT	WDD	CDI n1				
Minor Lane/Major Mvmt	ľ	VBLn1	EBL	EBT	EBR	WBT	WBR S					
Capacity (veh/h)		529	744	-	-	-	-	300				
HCM Cantral Dalay (a)		0.085		- 0 F	-	-	-	0.106				
HCM Control Delay (s)		12.4	10.1	0.5	-	-	-	18.4				
HCM Lane LOS		В	В	Α	-	-	-	C				
HCM 95th %tile Q(veh)		0.3	0.1	-	-	-	-	0.4				

## 3: First Merchant Bank Access Drive & 171st Street

Intersection						
Int Delay, s/veh	1.1					
		EDD	WDI	WDT	NDI	NDD
	EBT ▲↑	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<b>†</b>	0	20	<b>₹</b> ↑	27	0
	921	0	38	818	27	0
	921	0	38	818	27	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized		None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	1	0	0
Mvmt Flow	940	0	39	835	28	0
Major/Minor Ma	ajor1	١	/lajor2	N	/linor1	
Conflicting Flow All	0	0	940	0	1436	470
Stage 1	-	-	-	-	940	-
Stage 2	_	_	_	_	496	_
Critical Hdwy		_	4.1	_	6.8	6.9
Critical Hdwy Stg 1			4.1		5.8	0.7
Critical Hdwy Stg 2	-	-	_	-	5.8	_
Follow-up Hdwy	-	_	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	737	-	127	545
Stage 1	-	-	131	-	345	- 545 -
Stage 2	-	-	-	-	583	-
Platoon blocked, %	-	-	-	-	203	•
	-	-	737		111	545
Mov Cap-1 Maneuver	-	-		-	114	
Mov Cap-2 Maneuver	-	-	-	-	114	-
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	583	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.9		46.4	
HCM LOS					Ε	
						MPT
Ndiana Lana (Ndaian Nda		IDI1	EDT	EDD		
Minor Lane/Major Mvmt	N	IBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		114	EBT -	-	737	-
Capacity (veh/h) HCM Lane V/C Ratio		114 0.242	EBT - -	-	737 0.053	-
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		114 0.242 46.4	-	-	737 0.053 10.2	- - 0.5
Capacity (veh/h) HCM Lane V/C Ratio		114 0.242	-	-	737 0.053	-

## 4: Oconto Avenue/USPS Westerly Access Drive & 171st Street

Intersection												
Int Delay, s/veh	3.3											
	EDI	EBT	EDD	WDI	WDT	WBR	NIDI	NDT	NDD	CDI	CDT	CDD
Movement	EBL		EBR	WBL	WBT	WBK	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	<b>€17</b>	1/	<b>أ</b>	<b>↑</b> ↑	1	2	4	15	40	4	1.1
Traffic Vol, veh/h	3	857	16	18	823	4	2	0	15	49	3	44
Future Vol, veh/h	3	857 0	16	18	823 0	4	0	0	15 0	49	3	44
Conflicting Peds, #/hr Sign Control	Free	Free	Free	Free	Free					Stop	Stop	Stop
RT Channelized	riee -	riee	None	riee -	riee -	Free None	Stop -	Stop -	Stop None	Siup -	Stop -	None
Storage Length	-	-	None	50	-	None -	-	-	None -	-	-	None
Veh in Median Storage,		0	-	-	0			0	-		0	-
Grade, %	π -	0		-	0	-	-	0	-	_	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	33	1	0	6	0	0	0	0	0	2	0	0
Mymt Flow	3	893	17	19	857	4	2	0	16	51	3	46
IVIVIIIL I IOW	J	073	17	17	007	7	2	U	10	JI	J	70
N A /N A									-	4' 0		
	Najor1			Major2			/linor1	1055		/linor2	40:5	40.
Conflicting Flow All	861	0	0	910	0	0	1376	1807	455	1350	1813	431
Stage 1	-	-	-	-	-	-	908	908	-	897	897	-
Stage 2	-	-	-	4.00	-	-	468	899	-	453	916	-
Critical Hdwy	4.76	-	-	4.22	-	-	7.5	6.5	6.9	7.54	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Critical Hdwy Stg 2	- 2 F2	-	-	2.27	-	-	6.5	5.5	-	6.54	5.5	- 2 2
Follow-up Hdwy	2.53	-	-	2.26	-	-	3.5	4	3.3	3.52	4	3.3
Pot Cap-1 Maneuver	608	-	-	720	-	-	106	80	558	109	79	578
Stage 1	-	-	-	-	-	-	301	357	-	301 556	361 354	-
Stage 2 Platoon blocked, %	-	-	-	-	-	-	550	360	-	220	334	-
Mov Cap-1 Maneuver	608	-	-	720	-	-	92	77	558	103	76	578
Mov Cap-1 Maneuver	000	-	-	720	-	-	92	77	228	103	76	5/8
Stage 1	-	-	-	-	-	-	298	353	-	298	352	-
Stage 2		-	-	_		-	489	351	-	535	350	-
Staye 2	-	-	-	-	-	<del>-</del>	407	J) I	-	555	330	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.2			15.8			57.7		
HCM LOS							С			F		
Minor Lane/Major Mvmt	t I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
Capacity (veh/h)		350	608	-	-	720	-	-	162			
HCM Lane V/C Ratio		0.051	0.005	-	-	0.026	-	_	0.617			
HCM Control Delay (s)		15.8	11	0.1	-		-	-	57.7			
HCM Lane LOS		С	В	А	-	В	-	-	F			
HCM 95th %tile Q(veh)		0.2	0	-	-	0.1	-	-	3.4			

## 5: Harlem Avenue & Proposed Right-In/Right-Out Access Drive

Intersection						
Int Delay, s/veh	0.3					
		EDD	NDL	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	^	<b>7</b>		<b>^</b>	<b>†</b>	40
Traffic Vol, veh/h	0	47	0		1664	49
Future Vol, veh/h	0	47	0	1724	1664	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	49	0	1815	1752	52
Major/Minor N	1inor2	Λ	Major1	N	Major2	
Conflicting Flow All	-	902	<u>- viajoi i</u>	0	viajoi z	0
Stage 1	-	902	-	-	-	-
Stage 2	-	-	_	_	_	-
Critical Hdwy	-	6.9	-	-	-	-
	-	0.9	-	-	-	-
Critical Hdwy Stg 1		-		-		
Critical Hdwy Stg 2	-	2.2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	285	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	285	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
	20.3		0		0	
HCM Control Delay, s HCM LOS	20.3 C		U		U	
HOW LUS	C					
Minor Lane/Major Mvmt		NBT E	EBLn1	SBT	SBR	
Capacity (veh/h)		-	285	-	-	
HCM Lane V/C Ratio		_	0.174	-	-	
HCM Control Delay (s)		-	20.3	-	-	
HCM Lane LOS		-	С	-	-	
HCM 95th %tile Q(veh)		_	0.6	-	-	

## THE VILLAGE OF TINLEY PARK

**Cook County, Illinois Will County, Illinois** 

# **ORDINANCE NO. 2020-O-005**

CONSIDER ADOPTING ORDINANCE NUMBER 2020-O-005 GRANTING VARIATIONS FROM THE ZONING ORDINANCE RELATED TO THE LOT SIZE, LOT WIDTH, LOT DEPTH, DRIVE AISLE WIDTH AND FREESTANDING SIGN SETBACK FOR THE PROPOSED 7-ELEVEN GAS STATION AND CONVENIENCE STORE SITE LOCATED AT 17100 HARLEM AVENUE IN THE B-1 (NEIGHBORHOOD SHOPPING) ZONING DISTRICT

JACOB C. VANDENBERG, PRESIDENT KRISTIN A. THIRION, VILLAGE CLERK

CYNTHIA A. BERG
WILLIAM P. BRADY
WILLIAM A. BRENNAN
DIANE M. GALANTE
MICHAEL W. GLOTZ
MICHAEL G. MUELLER
Board of Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tinley Park
Peterson, Johnson, & Murray Chicago, LLC, Village Attorneys
200 W. Adams, Suite 2125 Chicago, IL 60606

#### VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

#### **ORDINANCE NO. 2020-O-005**

# AN ORDINANCE GRANTING CERTAIN VARIATIONS FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)

WHEREAS, Section 6(a) of Article VII of the 1970 Constitution of the State of Illinois provides that any municipality which has a population of more than 25,000 is a home rule unit, and the Village of Tinley Park, Cook and Will Counties, Illinois, with a population in excess of 25,000 is, therefore, a home rule unit and, pursuant to the provisions of said Section 6(a) of Article VII, may exercise any power and perform any function pertaining to its government and affairs, including, but not limited to, the power to tax and to incur debt; and

WHEREAS, a petition for granting certain bulk variations ("Variations") to construct a gas station and convenience store at 17100 Harlem Avenue Tinley, Park, Illinois 604577 ("Subject Property") has been filed by Vequity, LLC ("Petitioner") with the Village Clerk of this Village and has been referred to the Plan Commission of the Village and has been processed in accordance with the Tinley Park Zoning Ordinance; and

**WHEREAS**, said Plan Commission held a public hearing on the question of whether the Variations should be granted on January 2, 2020 at the Village Hall of this Village, at which time all persons present were afforded an opportunity to be heard; and

WHEREAS, public notice in the form required by law was given of said public hearing by publication not more than thirty (30) days nor less than fifteen (15) days prior to said public hearing in the Daily Southtown, a newspaper of general circulation within the Village of Tinley Park; and

WHEREAS, the Plan Commission vote 5-0 and has filed its report and findings and recommendations that the proposed Variations be approved with this President and Board of Trustees, and this Board of Trustees has duly considered said report of findings and recommendations; and

WHEREAS, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interest of the Village of Tinley Park and its residents to approve said Variations; and

**NOW, THEREFORE, BE IT ORDAINED** BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS, STATE AS FOLLOWS:

**SECTION 1**: The foregoing recitals shall be and are hereby incorporated as findings of facts as if said recitals were fully set forth herein.

**SECTION 2**: That the report of findings and recommendations of the Plan Commission are herein incorporated by reference as the findings of this President and the Board of Trustees, as complete as if fully set forth herein at length. This Board finds that the Petitioner has provided evidence establishing that they have met the standards for granting the Variations as set forth in Section X.G.4 of the Zoning Ordinance, and the proposed granting of the Variations as set forth herein is in the public good and in the best interest of the Village and its residents and is consistent with and fosters the purpose and spirit of the Tinley Park Zoning Ordinance.

Section X.G.4. of the Zoning Ordinance states the Plan Commission shall not recommend a Variation of the regulations of the Zoning Ordinance unless it shall have made Findings of Fact, based upon the evidence presented for each of the Standards for Variations listed below. The Plan Commission must provide findings for the first three standards; the remaining standards are provided to help the Plan Commission further analyze the request. Staff has provided the following draft Findings of the Statutorily required Standards for the Commission's review.

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located.

The property is an infill site with limited ability to expand its size, dimensions, and setbacks. The overall area on the west side of Harlem Avenue will eventually meet the intent of the Zoning Code's minimum lot requirements upon its full redevelopment. The Variations allow the fairly small and limited sized lot to be reasonably developed with a commercial use.

2. The plight of the owner is due to unique circumstances.

The small properties offer a challenging situation for redevelopment as they were originally residential lots. Residential uses on the lots are no longer preferred or marketable along the heavily traveled Harlem Avenue commercial corridor.

3. The Variation, if granted, will not alter the essential character of the locality.

The lot Variations will be similar to other properties that have redeveloped along Harlem Avenue in regards to the lot size and sign setbacks. The drive aisle width is a standard width in many other municipalities and is not expected to be noticeable.

**SECTION 3**: That the Variations as set forth herein below shall be applicable to the following described property

**LEGAL DESCRIPTION:** LOTS 1 AND 2 IN BLOCK 1 IN ARTHUR T. MCINTOSH AND COMPANY'S SPUTHLANDS IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL IDENTIFICATION NUMBER: 27-25-403-013-0000 and 27-25-403-014-0000

**COMMONLY KNOWN AS:** 17100 – 17110 Harlem Avenue, Tinley Park, Illinois

**SECTION 4:** That the following Variations are hereby granted to the Petitioner in the B-1 (Neighborhood Shopping) Zoning District at the above-mentioned property to construction a gas station and convenience store:

- 1. A five-foot Variation from Section IX-D-2-c, to permit a freestanding sign to be located five feet from the property instead of the required minimum of ten feet.
- 2. A two-foot Variation from Section VIII-C-Table 2 (Parking Lot Dimension Guidelines) to permit a 24-foot wide two-way drive aisle instead of the required 26-foot minimum.
- 3. A 3.039 sq. ft Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot size of .961 acres, instead of the required minimum 4 acres.
- 4. A 413.47-foot variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot width of 186.53 feet instead of the required minimum 600 feet.
- 5. A 51.47 foot Variation from Section V-B-Schedule II (Schedule of District Requirements) to permit a lot depth of 198.52 feet instead of the required minimum of 250 feet.

**SECTION 5**: Any policy, resolution, or ordinance of the Village that conflicts with the provisions of this Ordinance shall be and is hereby repealed to the extent of such conflict.

**SECTION 6:** That this Ordinance shall be in full force and effect from and after its adoption and approval.

**SECTION 7:** That the Village Clerk is hereby ordered and directed to publish this Ordinance in pamphlet form, and this Ordinance shall be in full force and effect from and after its passage, approval, and publication as required by law.

PASSED THIS 21st day of January, 2020.	
AYES:	
NAYS:	
ABSENT:	
APPROVED THIS 21st day of January, 2020.	
A TOTAL COT	VILLAGE PRESIDENT
ATTEST:	
VILLAGE CLERK	

STATE OF ILLINOIS )
COUNTY OF COOK ) SS
COUNTY OF WILL )

#### **CERTIFICATE**

I, KRISTIN A. THIRION, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 2020-O-005, "AN ORDINANCE GRANTING CERTAIN VARIATIONS FOR AN AUTOMOBILE SERVICE (GAS) STATION LOCATED AT 17100 HARLEM AVENUE (VEQUITY, LLC, PETITIONER)," which was adopted by the President and Board of Trustees of the Village of Tinley Park on January 21, 2020.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 21st day of January, 2020.

KRISTIN A. THIRION, VILLAGE CLERK



Date: January 7, 2020

**To:** Kevin Workowski, Public Works Director

**From:** Kelly Mulqueeny, Street Superintendent

**Subject:** Recommended Bid Award: Irrigation Maintenance

Presented for January 21st 2020 Village Board Meeting Agenda for consideration and possible action:

#### Description/Scope of Work:

Public Works, in its role of maintaining village-owned properties seeks the services of a capable contractor to provide start up, winterization, and repair services to our irrigation systems at 3 Streets Department locations and 4 Facilities Department locations.

- LaGrange Rd.
- Harlem Avenue
- 171<sup>st</sup> Medians
- Fire Station #4
- Oak Park Ave Metra Station
- Village Hall
- Police Station

<u>Background:</u> This service contract was advertised on December 12<sup>th</sup>, 2019 in accordance with state bidding laws; three (3) sealed bids were received. Bids were opened and read publicly on Monday, January 6th, 2020 at 10:00 a.m. and received as follows:

<u>Contractor</u>	<u>Location</u>	Base Bid Amount	Est. Repair Costs	<u>TOTAL</u>
Aquamist	Dolton, IL	\$31,744.00	\$7,525.10	\$39,269.10
Central	Elk Grove Village, IL	\$46,372.00	\$17,231.50	\$63,603.50
*H&Y	Lake Forest, IL	\$25,870.00	\$11,655.00	\$37,525.00

#### **Recommendation:**

Bids were submitted by Halloran & Yauch, Inc. (H&Y), Aquamist Plumbing and Lawn Sprinkling Co., Inc. (Aquamist), and Central Lawn Sprinklers, Inc. (Central). H&Y was the apparent low bidder. \*However, after considering past experiences with H&Y and recommendations from both Site Design Group, Ltd. (landscape architect consultant) and FRS Design Group (irrigation consultant), our recommendation is to pursue a service contract with Aquamist at this time.



#### Budget / Finance:

Funding is budgeted in the FY21 Budget.

Budget Available \$49,960.00
Anticipated Costs \$39,269.10
Difference (under **budget**) \$10,690.90

#### **Staff Direction Request:**

- 1. Approve the service contract for Irrigation Maintenance in the amount of \$39,269.10.
- 2. Direct Staff as necessary.

#### **Attachments**

- 1. Bid tabulations
- 2. Recommendation letter from Site Design Group, Ltd.
- 3. Recommendation letter from FRS Design Group LLC



#### Irrigation Maintenance Bid Opening 1/6/2020 10:00 AM

#### Repair Services:

	Install 4	" spray	Est.	Est	t. Cost	Inst	all 12"	Est.	E	st. Cost	Install 4	4" rotor	Est.	Est	Cost	Inst	:all 2.5"	Est.	Est.	Cost	SUB	TOTAL
	nozzle		Qty.			spra	ay nozzle	Qty.			nozzle		Qty.			iso.	valve	Qty.				
H&Y	\$	130.00	8	\$	1,040.00	\$	140.00		8	\$ 1,120.00	\$	145.00	4	\$	580.00	\$	615.00	2	\$	1,230.00	\$ :	3,970.00
Aquamist	\$	91.20	8	\$	729.60	\$	107.30		8	\$ 858.40	\$	107.65	4	\$	430.60	\$	250.00	2	\$	500.00	\$	2,518.60
Central	\$	152.00	8	\$	1,216.00	\$	175.00		8	\$ 1,400.00	\$	189.00	4	\$	756.00	\$	495.00	2	\$	990.00	\$ 4	4,362.00
	Donlaco	10"	Ec+	Го	t Cost	Dan	Jaco 12"	Ec+	Г	ct Cost	Install '	2" Main	Γα±	+	Cost	l io o t	יבון ביי	Ec+	+	Cost	CLID	TOTAL

	Repl	ace 10"	Est.	Est.	Cost	Rep	lace 12"	Est.	Est.	Cost	Insta	all 2" Main	Est.	Est.	Cost	Insta	all 2"	Est.	Est. 0	Cost	SUB	BTOTAL
	valve	e box	Qty.			valv	e box	Qty.					Qty.			Late	ral	Qty.				
H&Y	\$	140.00	2	\$	280.00	\$	150.00	2	\$	300.00	\$	15.00	10	\$	150.00	\$	14.00	15	\$	210.00	\$	940.00
Aquamist	\$	117.50	2	\$	235.00	\$	153.50	2	\$	307.00	\$	13.00	10	\$	130.00	\$	11.50	15	\$	172.50	\$	844.50
Central	\$	151.25	2	\$	302.50	\$	179.00	2	\$	358.00	\$	19.50	10	\$	195.00	\$	18.00	15	\$	270.00	\$	1,125.50

	Install 1	." elec.	Est.	Est	. Cost	Insta	all 1.5"	Est.	Est	. Cost	Install	2" elec.	Est.	Es	t. Cost	Fore	eman	Est.	Est.	Cost	SUB	TOTAL
	valve		Qty.			elec.	. valve	Qty.			valve		Qty.					Qty.				
H&Y	\$	250.00	8	\$	2,000.00	\$	295.00	3	\$	885.00	\$	300.00	3	3 \$	900.00	\$	120.00	8	\$	960.00	\$ 4	4,745.00
Aquamist	\$	135.00	8	\$	1,080.00	\$	155.00	3	\$	465.00	\$	175.00	3	3 \$	525.00	\$	110.00	8	\$	880.00	\$ :	2,950.00
Central	\$	449.00	8	\$	3,592.00	\$	636.00	3	\$	1,908.00	\$	780.00		3 \$	2,340.00	\$	162.00	8	\$	1,296.00	\$ 9	9,136.00

	Labore	er	Est.	Est	. Cost	Tren	cher/	Est.	Est.	Cost	Sodi	installed	Est.	Est	. Cost	Service	Truck	Est.	Est. (	Cost	SUBTO	TAL
			Qty.			Plow	/ Oper.	Qty.					Qty.					Qty.				
H&Y	\$	115.00	16	\$	1,840.00	\$	160.00	0	\$	-	\$	5.00	0	\$	-	\$	20.00	8	\$	160.00	\$ 2,0	00.00
Aquamist	\$	60.00	16	\$	960.00	\$	150.00	0	\$	-	\$	18.50	0	\$	-	\$	31.50	8	\$	252.00	\$ 1,2	12.00
Central	\$	145.00	16	\$	2,320.00	\$	255.20	0	\$	-	\$	22.00	0	\$	-	\$	36.00	8	\$	288.00	\$ 2,6	08.80

#### **Estimated Repair Totals**

 H&Y
 \$ 11,655.00

 Aquamist
 \$ 7,525.10

 Central
 \$ 17,231.50

Lowest Bid is Highlighted

#### THE VILLAGE OF TINLEY PARK

Cook County, Illinois Will County, Illinois

# RESOLUTION NO. 2020-R-005

A RESOLUTION AUTHORIZING A CONTRACT WITH AQUAMIST PLUMBING AND LAWN SPRINKLING, CO. FOR IRRIGATION MAINTENANCE

JACOB C. VANDENBERG, PRESIDENT KRISTIN A. THIRION, VILLAGE CLERK

CYNTHIA A. BERG
WILLIAM P. BRADY
WILLIAM A. BRENNAN
DIANE M. GALANTE
MICHAEL W. GLOTZ
MICHAEL G. MUELLER
Board of Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tinley Park

#### **RESOLUTION NO. 2020-R-005**

## A RESOLUTION AUTHORIZING A CONTRACT WITH AQUAMIST PLUMBING AND LAWN SPRINKLING, CO. FOR IRRIGATION MAINTENANCE

**WHEREAS,** the Village of Tinley Park, Cook and Will Counties, Illinois, is a Home Rule Unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have considered entering into a Job Order Contract with Aquamist Plumbing and Lawn Sprinkling, Co., a true and correct copy of such Contract being attached hereto and made a part hereof as **EXHIBIT 1**; and

**WHEREAS**, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interests of said Village of Tinley Park that said Contract be entered into by the Village of Tinley Park;

**NOW, THEREFORE, Be It Resolved** by the President and Board of Trustees of the Village of Tinley Park, Cook and Will Counties, Illinois, as follows:

<u>Section 1</u>: The Preambles hereto are hereby made a part of, and operative provisions of, this Resolution as fully as if completely repeated at length herein.

Section 2: That this President and Board of Trustees of the Village of Tinley Park hereby find that it is in the best interests of the Village of Tinley Park and its residents that the aforesaid "Contract" be entered into and executed by said Village of Tinley Park, with said Contract to be substantially in the form attached hereto and made a part hereof as **EXHIBIT 1**, subject to review and revision as to form by the Village Attorney.

Section 3: That the President and Clerk of the Village of Tinley Park, Cook and Will Counties, Illinois are hereby authorized to execute for and on behalf of said Village of Tinley Park the aforesaid Contract.

**Section 4:** That this Resolution shall take effect from and after its adoption and approval.

**ADOPTED** this 21st day of January 2020, by the Corporate Authorities of the Village of Tinley Park on a roll call vote as follows:

AYES:	
NAYS:	
ABSENT:	
APPROVED this 21st day of January 2020, by	y the President of the Village of Tinley Park.
ATTEST:	Village President
ATTEST.	

Village Clerk

## **EXHIBIT 1**

## Aquamist Plumbing and Lawn Sprinkling, Co. Contract

STATE OF ILLINOIS	)	
COUNTY OF COOK	)	SS
COUNTY OF WILL	)	

#### **CERTIFICATE**

I, KRISTIN A. THIRION, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 2020-R-005, "A RESOLUTION AUTHORIZING A CONTRACT WITH AQUAMIST PLUMBING AND LAWN SPRINKLING, CO. FOR IRRIGATION MAINTENANCE." which was adopted by the President and Board of Trustees of the Village of Tinley Park on January 21, 2020.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 17<sup>th</sup> day of September, 2019.

KRISTIN A. THIRION, VILLAGE CLERK

#### VILLAGE OF TINLEY PARK

#### **SERVICE CONTRACT**

This contract is by and between the **Village of Tinley Park**, a Illinois home-rule municipal corporation (the "Village"), and **Aquamist Plumbing and Lawn Sprinkling.**, **Co** (the "Contractor"), for the project or work described in Exhibit A, attached hereto and made a part hereof.

- 1. In consideration of the compensation stated in paragraph 2, the Contractor shall provide all the services described in the Scope of Services attached hereto as Exhibit "A" and incorporated herein by reference. The express terms of this Contract shall take precedence and control over any term or provision of the Scope of Services (Exhibit A) that in any way conflicts with, differs from, or attempts to alter the terms of this Contract.
- 2. Except in the event of a duly authorized change order approved by the Village as provided in this Contract, and in consideration of the Contractor's final completion of all work in conformity with this Contract, the Village shall pay the Contractor an amount not to exceed Forty nine thousand nine hundred and sixty and 00/100 Dollars (\$49,960.00). Within seven (7) calendar days of completion of the work, the Contractor shall submit his application for payment to the Village, and the Village shall pay Contractor for the work performed no later than thirty (30) calendar days from the date of the Village's receipt and the Village's approval of the work and the application for payment. No payment shall be made by the Village until the Contractor has submitted to the Village (i) a Contractor's Affidavit listing all subcontractors and material suppliers utilized on the project and (ii) final waivers of lien from the Contractor, all subcontractors and all material suppliers.
- 3. No changes shall be made, nor will invoices for changes, alterations, modifications, deviations, or extra work or services be recognized or paid except upon the prior written order from authorized personnel of the Village. The Contractor shall not execute change orders on behalf of the Village or otherwise alter the financial scope of the Project.
- 4. Written change orders may be approved by the Village Manager or his designee provided that the change order does not increase the amount set forth in paragraph 2 of this Contract to more than \$10,000.00. Changes in excess of this amount must be approved by the Village Board prior to commencement of the services or work. Any request by the Contractor for an increase in the Scope of Services and an increase in the amount listed in paragraph 2 of this Contract shall be made and approved by the Village prior to the Contractor providing such services or the right to payment for such additional services shall be waived.
- 5. **Time is of the essence on this Contract.** The Contractor shall complete all work under this Contract by the dates set forth below:
- 6. No "Notice to Proceed" may be given nor any work commenced until this Contract is fully executed and all exhibits and other attachments are completely filled out and attached hereto.
- 7. It is understood and agreed by the parties that the Contractor is an independent contractor retained for the above-mentioned purpose. The Village shall not control the manner nor the means of the Contractor's performance, but shall be entitled to a work product as described herein. The term "subcontractor" shall mean and include only those hired by and

having a direct contract with Contractor for performance of work on the Project. The Village shall have no responsibility to any subcontractor employed by a Contractor for performance of work on the Project, and all subcontractors and material suppliers shall look exclusively to the Contractor for any payments due. The Village will **not** be responsible for reporting or paying employment taxes or other similar levies that may be required by the United States Internal Revenue Service or other State or Federal agencies. Every subcontractor shall be bound by the terms and provisions of this Contract as far as applicable to their work. The Contractor shall be fully responsible to the Village for the acts and omissions of its subcontractors, and shall ensure that any subcontractors perform in accordance with the requirements of this Contract. Nothing contained herein shall create any contractual or employment relations between any subcontractor and the Village. The Contractor is solely responsible for the safety procedures, programs and methods of its employees and agents and shall hold the Village harmless for any and all damages resulting from violations thereof. The Contractor shall comply with all applicable federal, State and local safety laws and regulations.

- 8. It is further agreed that the Contractor shall indemnify, hold harmless, and defend the Village, its officers, agents, and employees from and against any and all claims, losses, damages, causes of action, suits, and liability of every kind, including all expenses of litigation, court costs, and attorneys' fees, for injury to or death of any person or for damage to any property arising out of or in connection with the work done by the Contractor under this Contract. Such indemnity shall apply regardless of whether the claims, losses, damages, causes of action, suits, or liability arise in whole or in part from the negligence of the Village, any other party indemnified hereunder, the Contractor, or any third party.
- 9. The Contractor assumes full responsibility for the work to be performed hereunder and hereby releases, relinquishes, and discharges the Village, its officers, agents, and employees from all claims, demands, and causes of action of every kind and character, including the cost of defense thereof, for any injury to or death of any person and any loss of or damage to any property that is caused by, alleged to be caused by, arising out of, or in connection with the Contractor's work to be performed hereunder. This release shall apply regardless of whether said claims, demands, and causes of action are covered in whole or in part by insurance and regardless of whether such injury, death, loss, or damage was caused in whole or in part by the negligence of the Village, any other party released hereunder, the Contractor, or any third party. The Contractor shall maintain insurance coverage in an amount and from a carrier suitable to the Village, and the Village shall be named as an additional insured where required. Certificates of Insurance are attached hereto as Exhibit B.
- 10. The Village is exempt from payment of state and local sales and use of taxes on labor and materials incorporated into the project. If necessary, it is the Contractor's responsibility to obtain a sales tax permit, resale certificate, and exemption certificate that shall enable the Contractor to buy any materials to be incorporated into the project and then resale the aforementioned materials to the Village without paying the tax on the materials at the time of purchase. In no event will the Village be liable for or pay any sales or use taxes incurred by the Contractor in performing the services under this contract.
- 11. The Contractor shall comply with all applicable federal, state, and local statutes, regulations, ordinances, and other laws, including but not limited to the Immigration Reform and Control Act (IRCA). The Contractor may not knowingly obtain the labor or services of an unauthorized alien. The Contractor, not the Village, must verify eligibility for employment as required by IRCA.

- 12. At any time, the Village may terminate this Contract for convenience, upon written notice to the Contractor. The Contractor shall cease work immediately upon receipt of such notice. The Contractor shall be compensated for services performed and accepted by the Village up to the date of termination.
- 13. No waiver or deferral by either party of any term or condition of this Contract shall be deemed or construed to be a waiver or deferral of any other term or condition or subsequent wavier or deferral of the same term or condition.
- 14. This Contract may only be amended by written instrument approved and executed by the parties.
- 15. This Contract and the rights and obligations contained herein may not be assigned by the Contractor without the prior written approval of Village.
- 16. The parties hereby state that they have read and understand the terms of this Contract and hereby agree to the conditions contained herein.
- 17. This Contract has been made under and shall be governed by the laws of the State of Illinois. The parties agree that performance and all matters related thereto shall be in Cook County, Illinois.
- 18. Contractor, its employees, associates or subcontractors shall perform all the work hereunder. Contractor agrees that all of its associates, employees, or subcontractors who work on this Project shall be fully qualified and competent to do the work described hereunder. Contractor shall undertake the work and complete it in a timely manner.
- 19. If any provision of this Contract shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court of competent jurisdiction finds that any provision of this Contract is invalid or unenforceable, but that by limiting such provision it may become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.
- 20. This Contract represents the entire and integrated agreement between the Village and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral.
- 21. This Contract will be effective when signed by the last party whose signing makes the Contract fully executed.
- 22. The Contractor agrees to comply with the Illinois Prevailing Wage Act, if the work to be performed under this Contract is covered by said Act.

This contract calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq*. ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <a href="http://labor.illinois.gov/">http://labor.illinois.gov/</a>. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, *including but not limited to*, all wage requirements and notice and record keeping duties.

23. The Contractor agrees to comply with the Illinois Substance Abuse Prevention on Public Works Projects Act.

# **CERTIFICATIONS BY CONTRACTOR**

# **Eligibility to Contract**

	Submitted by (signature)
Title	
cate of Compliance with Illinois Hum	an Rights Act
	ne Contractor is in compliance with Title 7 of the Illinois Human Rights Act as amended.
Name of Contractor (please print)	Submitted by (signature)
Title	
cate of Compliance with Illinois Drug	-Free Workplace Act
of the Illinois Drug Free Workplace Ac workplace for all employees engaged in complying with the requirements of the certifies, that it is not ineligible for away	mployees, does hereby certify pursuant to sect t (30 ILCS 580/3) that it shall provide a drug-father performance of the work under the contract Illinois Drug-Free Workplace Act and, further of this contract by reason of debarment for a kplace Act.
violation of the Illinois Drug-Free Worl	

# **Certificate Regarding Sexual Harassment Policy**

	The undersigned does hereby certify pursuant to section 2-105 of the Illinois Human Rig Act (775 ILCS 5/2-105) that it has a written sexual harassment policy that includes, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under State law; (iii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Department of Human Rights and Human Rights Commission; (vi) direction on how to contact the Department Human Rights and Human Rights Commission; and (vii) protection against retaliation.			
	Name of Contractor (please print)	Submitted by (signature)		
	Title			
Certifi	cate of Compliance with Substance A	buse Prevention on Public Works Projects Act		
The un	dersigned hereby certifies that:			
A.		ch meets or exceeds the program requirements of the Works Projects Act (P.A. 95-0635), and has provided Tinley Park.		
В.	There is in place a collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (P.A. 95-0635)			
(Cross	out either A or B depending upon which	n certification is correct)		
	Name of Contractor (please print)	Submitted by (signature)		
	Title			

# [NAME OF CONTRACTOR]

BY:	Date
Printed Name:	Date
Title:	
VILLAGE OF TINLEY PARK	
BY:	
Mayor (required if Contract is \$10,000 or more)	Date
ATTEST:	
Village Clerk (required if Contract is \$10,000 or more)	Date
VILLAGE OF TINLEY PARK	
BY:	
Village Manager	Date

# Exhibit A

# **SCOPE OF SERVICES**

# Exhibit B

# INSURANCE REQUIREMENTS

(See Risk Manager for Insurance Requirements)

## 01010 - SUMMARY OF WORK

#### PART 1 - GENERAL

## 1.01 Project Description

- A. The project consists of landscape irrigation maintenance work throughout the Village of Tinley Park. Project related information is as follows:
  - 1. Project Name: Tinley Park Irrigation Maintenance
  - 2. Project Locations: Seven sites throughout the Village of Tinley Park, Illinois
    - a. Village Hall- 16250 Oak Park Avenue
    - b. Police Station- 7850 W.183<sup>rd</sup> St
    - c. Fire Station #4- 7801 W.191st St
    - d. Oak park Avenue Train Station
    - e. Harlem Avenue Medians- 4 sections.
      - 1) Just north of 163<sup>rd</sup> St
      - 2) Between 163<sup>rd</sup> and 167<sup>th</sup> Streets
      - 3) Just south of Hickory St/ Metra Tracks
      - 4) Just South of 183<sup>rd</sup> St
    - f. 171st St Median- Just east of 80th Ave
    - g. LaGrange Rd Medians- From 171st St to 179th St
  - 3. Owner: Village of Tinley Park (the Village)
  - 4. Landscape Architect: site design group, ltd. (site)
- B. The irrigation maintenance work consists of, but is not limited to:
  - 1. Spring startups on Village owned or Village maintained irrigation systems.
  - 2. Monthly Inspections, adjustments, alignments, routine repairs and reports covering Village owned or Village maintained irrigation systems.
  - 3. Winterization services on Village owned or Village maintained irrigation systems.
  - 4. Additional repairs beyond the standard contract scope as approved by the Village.

## 1.02 Contractor use of Premises

- A. General: During the project period the Contractor shall have full use of the premises for maintenance operations, including use of the sites. The Contractor's use of the premises is limited only by the Owner's right to perform maintenance operations with its own forces or to employ separate contractors on portions of the project.
- B. The Contractor is responsible for the repair and/or replacement of areas damaged by project operations.
- C. All damaged areas shall be restored to the existing condition prior to the damage.
- 1.03 Contractor Responsibilities
  - A. The Contractor's responsibilities include, but are not limited to:

- 1. Minimizing disruption to curbs, pavement and street traffic.
- 2. When required, provide traffic protection and control.
- 3. Secure all required work permits.

**END OF SECTION** 

# Village of Tinley Park 16250 S. Oak Park Ave Tinley Park, IL

# **Seasonal Irrigation System Maintenance**

# **GENERAL SPECIFICATIONS**

#### **PART ONE • GENERAL**

#### 1.1 SUMMARY

A. The Village of Tinley Park, known as the Owner, requests bids for irrigation systems seasonal and preventive maintenance and repairs at various Village sites for a period of one (1) year with two (2) options for renewal for a total of three (3) years possible. First year to be May 1<sup>st</sup> to December 31<sup>st</sup> 2020.

#### 1.2 QUALITY ASSURANCE

- A. The Contractor warrants to the Owner that the materials used and furnished for the work will be new and that the work will be good quality and free from defects for a period of one year from the date of installation.
- B. No service or repairs will be performed without prior approval from the owner that is not included in the seasonal adjustments, start up and winterization. Any additional repair service and /or parts that the winning contractor deems necessary, beyond the original repair request, must first be approved by the owner. All warranty claims shall be completed within 24 48 hours at no additional cost to the owner.
- C. All repairs and service shall be completed within the time frame as defined by the owner. Any extension of this time must have prior approval from the Owner. Every effort must be made to meet appointment schedules and promised completion times.

## 1.3 IRRIGATION CONTRACTOR QUALIFICATIONS

A. Each bidder shall have maintained at least 5 (five) irrigation systems of similar

- size scope within the last 3 (three) years. The Contractor must submit a list of projects which meet this requirement along with the proper contact name, address and telephone number of the parties that can verify the reference.
- B. The Contractor shall be certified by the State of Illinois and the Irrigation Association as a Certified Irrigation Contractor (CIC). The contractor shall provide with submittals, a copy of their current CIC certificate.
- C. The Contractor shall designate a competent project superintendent and any necessary assistants to oversee the maintenance for the entire phase of the contract. The superintendent shall have the authority to represent the Contractor in his absence and all directives given to the superintendent shall be as binding as if given to the Contractor. The contractor's superintendent must be proficient in the use and interpretation of the English language.
- D. The contractor is to have experience with Baseline control systems for at least 1 year and have successfully installed and programmed these control systems. The Contractor must submit a list of projects which meet this requirement along with the proper contact name, address and telephone number of the parties that can verify the information.
- E. The contractor shall have a tablet or smart phone with web service to access the control systems on-site and remotely. The contractor shall set up the Baseline controllers with the correct email settings for notifications for the client and the contractor. The contractor is to monitor the Baseline system and address any errors that arise.

## 1.4 CODES AND INSPECTIONS

A. The entire maintenance work shall fully comply with all local and state laws and ordinances, and with all the established codes applicable thereto.

## 1.5 CONTRACTOR REQUIREMENTS

- A. The contractor shall comply with the prevailing wage act and any associated filing requirements.
- B. The contractor shall be Licensed and Bonded in the Village of Tinley Park. Contact the Building Department (708)444-5100 for requirements.

# **PART TWO • EXECUTION**

# 2.1 System Repairs

A. SCOPE OF WORK FOR PREVENTIVE MAINTENANCE AND REPAIR The Village of Tinley Park requests bids for preventive maintenance and repair

and winterization, spring start up, on-call maintenance, and emergency repair support services for existing irrigation systems throughout the Village for a period of one (1) year. All work shall be completed within 48 hours of notice.

- B. The services provided are intended to supplement and complement the efforts of the Village maintaining the serviceability of the existing systems. The successful Contractors shall be required to perform base services, and related supplemental services at any of the irrigation zones on an as needed basis, as directed by the Owner.
- C. The Contractor shall provide all equipment required to provide preventive maintenance and repair. When needed for sprinkler system repairs such as broken or missing heads, leaking lines, head straightening, malfunctioning controllers, or other problems are included in this bid.
- D. For any repairs or product installations, the contractor shall follow the Village's standard section 328400 materials and installation requirements for irrigation systems.
- E. Please supply a per-hour rate for crews to perform work on these repairs as they are needed throughout the service period. Materials will be in addition to the labor. The contractor shall carry replacement components and proper tools for execution of the maintenance and repair of the irrigation systems at each site visit.
- F. TIME AND MATERIAL HOURS Quotes for any work shall include a cost breakdown submitted by the contractor as follows: labor rate, quantity of hours, materials list, wholesale cost (with evidence of same) and mark up, at applicable contract rates. Each call shall generate a separate invoice detailing the labor charge and the parts/materials as outlined above. All invoices are required to include the proper purchase order number, which can be obtained by calling the owner.
- G. HOURLY LABOR RATE The Village does not guarantee any minimum number of hours and will pay only for the actual number of hours authorized and worked at the bid rate. The labor charge should include all travel time. No additional travel will be honored.
- H. The work is to be performed at all of the Village of Tinley Park's sites that have an irrigation system.
  - 1. Police Station- 7850 183<sup>rd</sup> St One controller, One interior RPZ
  - 2. Village Hall- 16250 Oak Park Av One controller, Rainbird ESP 32, 32 zones – interior 2" RPZ, small booster
  - 3. Oak Park Av Metra Station- Oak Park Av, North St, South St Three controllers, Hunter ProC, 6 zones, 7 zones, 12 zones – two exterior RPZ's, 1" and 1.5"
  - 4. Harlem Ave Medians- From just south of 183<sup>rd</sup> St to 161<sup>st</sup> St

Hunter XC Battery operated controllers, five total, 3 stations, 6 stations, 6 stations, 11 stations and 10 stations

Exterior RPZ, 1" (3) Exterior RPZ 1.5" (1)

- 5. 171st St Medians- 80th Av to 78th Av
  One Controller, Baseline 3200 DC 24v–14 zones, one exterior 1.5" RPZ
- 6. Fire Station #4- 7801 191st St One controller, RainBird ESP-LX 12, 12 zones— one interior 1.5" RPZ
- 7. LaGrange Rd Medians- 171<sup>st</sup> to 179<sup>th</sup>
  One controller, Baseline web access, 2 wire with Watertronics 5hp booster station one exterior 2" RPZ built into pump enclosure. 68 zones
- I. PERMITS AND RESPONSIBILITIES The Contractor shall be responsible for obtaining all necessary licenses and permits. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's negligence and shall take proper safety and health precautions to protect the work, the workers, the public and the property of others. In addition, the Contractor shall be responsible for all materials delivered and work performed until completion and acceptance of the entire work.

The Contractor shall comply with all applicable revisions, additions, changes and/or upgrades to any Federal, state, and municipal laws, codes, and regulations which are in effect on the date of Contract and which affect the performance of the work. The Contractor shall also obtain and pay the costs of any royalties and licenses for any patented or copyrighted items used in the performance of the work.

- J. The Contractor shall repair and maintain all equipment covered under this Contract in compliance with the requirements of all local codes and manufacturers installation specifications and guidelines. The Contractor shall perform all services utilizing, at a minimum, the following guidelines:
  - 1. Monitoring All underground irrigation zones shall be operated and visually checked for leaks, broken heads, heads out of adjustment and improperly functioning electric valves.
  - 2. Broken Irrigation Lines Broken underground irrigation lines shall be repaired in accordance with all applicable codes.
  - 3. Broken Heads Broken heads shall be replaced with new identical heads or repaired with original manufacturer's parts, to function according to the manufacturer's specifications.
  - 4. Faulty Valves Faulty valves shall be replaced with new identical valves or repaired to original manufacturer's specifications.
  - 5. Clogged Heads Any head that is not properly functioningshall be examined for material(s) lodged in the head. The head shall be disassembled, cleaned, reassembled, and checked.
  - 6. Wiring Problems An underground wire tracer shall be used to locate wiring breaks. Breaks shall be repaired in accordance with all applicable local codes and with 3M DBY-6 waterproof connectors.
  - 7. Underground Installation repairs underground main pipe repairs shall be marked with metallic tape or low voltage wires prior to backfill (if applicable). Underground irrigation repairs shall be performed in accordance with applicable codes.
  - 8. The Contractor shall restore landscape to its original condition, including

- sodding all disturbed areas, re planting shrubs and mulching.
- 9. The Contractor shall remove all debris resulting from installation and repair of irrigation systems.
- 10. All work is to follow Tinley Park's irrigation section 328400, planting irrigation.

## K. SAFETY

- 1. The contractor is responsible for taking every precaution to protect their employees, the public and Village property.
- 2. All work to be performed shall comply with all Tinley Park and IDOT flagging, traffic control and protection requirements while working at sites. All work to conform to the applicable Highway Standards, Standard Specifications for Road and Bridge Construction. All traffic control devices shall conform to the Standard Specifications for Traffic Control Devices and the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways. The contractor shall follow all OSHA and EPA standards.
- 3. The CONTRACTOR is responsible for all site safety, not the Village of Tinley Park. The contractor is responsible for all means, methods and site safety. This is to be incidental in the bid numbers.

#### 2.2 IRRIGATION SEASONAL MAINTENANCE

- A. **Preseason/Spring start-up** completed by May 15th of each calendar year.
  - 1. Install RPZ devices.
  - 2. Test RPZ and certify the RPZ by a certified backflow prevention device testing plumber. Provide plumbers license and his certified BPD/backflow prevention or inspectors license. RPZ inspection tag shall be placed on the unit by the inspecting plumber. All plumbing codes must be followed.
  - 3. Open system valves and fill system.
  - 4. Check system for leaks.
  - 5. Replace non-rechargeable batteries (9volt) per controller.
  - 6. Clean nozzles on all heads.
  - Align irrigation heads ensuring the heads are at proper elevation and is vertical.
  - 8. Operate entire system through an abbreviated cycle.
  - 9. Check operation of rain and/or soil sensors and verify they are working.
  - 10. Activate program schedule for entire system.
  - 11. Replace any missing parts such as nozzles or valve box covers.
  - 12. Inspect the system and prepare a report indicating any repairs that are needed.
  - 13. Provide a written report to the Village with all that was done to the system and the report shall indicate any repairs that are needed that are beyond normal maintenance and service by the contractor.
- B. The Contractor shall provide a minimum of one crew for Spring Start-up and make needed repairs.

Repairs identified beyond the seasonal services during spring start up inspection maybe performed under the additional services portion of this proposal.

Contractor to get owner's approval prior to performing and additional services. Neither Spring Start-up nor shall repairs be delayed or postponed due to lack of Contractor manpower.

If broken and/or damaged parts are found during spring start up inspection, an Owner's representative and the Contractor shall determine if breakage is the result of freezing caused by faulty Winterization, or if others cause the breakage or damage to the system. If breakage is the result of freezing, due to improper Contractor Winterization, the Contractor shall make the needed repairs at no cost.

- 1. Provide a written report to the Village by the 15<sup>th</sup> with all that was done to the system and the report shall indicate any repairs that are needed that are beyond normal maintenance and service by the contractor.
- 2. If any repairs beyond the contract are needed, prepare a proposal for repairs and get the Village's approval for such repairs prior to completing them.

# C. Monthly inspections

- 1. Inspections to be completed June, July, August and September. Site inspection are to be completed by the 15<sup>th</sup> of each month.
- 2. Monthly inspections to include:
  - a. Inspect controllers time and programming.
  - b. Make necessary adjustments to controller with approval of owner.
  - c. Check operation of sensors.
  - d. Walk site to check plant condition related to irrigation.
  - e. Check valves for leaks.
  - f. Inspect for broken or damaged pipes, heads, and components.
  - g. Check and clean clogged heads.
  - h. Check the irrigation heads in for proper elevation.
  - i. Adjust and align all irrigation heads for proper and consistent watering.
  - j. Inspect turf for even coverage by irrigation system.
  - k. Run system through an abbreviated cycle.
  - I. Provide a written report to the Village by the 15<sup>th</sup> of the month with all that was done to the system and the report shall indicate any repairs that are needed that are beyond normal maintenance and service by the contractor.
  - m. If any repairs beyond the contract are needed, prepare a proposal for repairs and get the Village's approval for such repairs prior to completing them.

# D. Irrigation winterizing

- 1. Winterization to be completed by October 15<sup>th</sup> of each calendar year.
- 2. Turn water source off.
- 3. Remove RPZ Devices when outdoors, store for the winter as directed by the Village. Cap all ends where the backflow unit is removed.
- 4. Remove all required filters
- 5. Blow out all lines with compressed air.
- 6. Turn off controller.
- 7. Winterize system and booster pumps or pump stations.
- 8. The Contractor shall monitor and provide systems adjustment recommendations and physical inspections of the irrigation areas prior to winterization. The Contractor shall make any system adjustments as needed.
- 9. Provide a written report to the Village by the 15<sup>th</sup> of the month with all that was done to the system and the report shall indicate any repairs that are needed that are beyond normal maintenance and service by the contractor.
- 10. If any repairs beyond the contract are needed, prepare a proposal for repairs and get the Village's approval for such repairs prior to completing them.
- 11. Remove pressure transducer (if applicable) and store as directed by the Village.

The Contractor shall provide a minimum of one crew for winterization. The Contractor shall have the capacity to provide a second crew for support and to make any as needed repairs.

The Owner's Maintenance Personnel may make needed repairs to all irrigation zones and systems prior to winterization and spring start up. In the event that all repairs are not made, the Owner may request the Contractor to make the repairs under Additional Services. Neither Winterization nor required repairs shall be delayed or postponed due to a lack of Contractor manpower.

Winterization and preventive maintenance shall include the following procedures that shall be performed in accordance with manufactures specifications for each system zone:

Blow out water using appropriate size air compressor. The compressor shall have a minimum capacity range of 100 to 250 CFM, and shall be regulated to an industry acceptable range of 40-45PSI, by use of a pressure regular. Contractor shall take measures to preclude excessive friction and heat build-up, due in part, to the rapid induction of forced pressurized air into the irrigation system during blowout.

#### **2.3** PAYMENT

A. This work shall be paid for at the contract lump sum rate and shall include all labor, materials, and equipment necessary to complete the work. Monthly invoicing shall be broken out based on services provided April through October or as agreed upon with the Village and submitted monthly for approval. Should additional work be required, the approved amounts should be submitted as part of the regular monthly invoicing during the month the work was performed.

## 2.4 CLEANING THE PREMISES

- A The contractor shall at all times keep the premises on which the work is being done and the adjoining premises clean of rubbish caused by the work, and will be responsible for repair of any damage to Village property caused by his work.
- B. The Contractor and each of its employees shall comply with all applicable OSHA and Village rules and practices while on the job site. The Owner reserves the right to inspect all areas for safety violations at its discretion, direct the Contractor to make immediate improvement of necessary conditions and/or procedures, and/or stop the work if other hazards are deemed to exist.

In the event that the Village should elect to stop work because of any type of existing safety hazards after the Contractor has been notified and provided ample time to correct, the Contractor shall bear all costs for eliminating the hazard(s) and shall not be granted compensation for the work stoppage. The Contractor shall pay all additional expenses.

The operation of the Contractor's vehicles or private vehicles by the Contractor's employees on or about the property shall conform to posted regulations and safe driving practices. Aisles, passageways, alleyways, entrances or exits to fire protection equipment must be kept unobstructed at all times.

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall take all necessary precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to persons, properties, equipment and vehicles. Damage caused by the Contractor to any properties shall be repaired or replace to the satisfaction of the Owner at the expense of the Contractor. The Owner, at its sole direction, may elect to repair or replace the damaged property, and deduct such costs from monies due the Contractor.

# PART THREE: CONTRACT TERM

# 3.1 CONTRACT TERM

- A. The term of the Contract shall be from May 1<sup>st</sup> to December 31, 2020. Each following year (2 optional) will be January 1<sup>st</sup> to December 31<sup>st</sup>.
- B. This contract may be extended at the Village's discretion for two (2), one (1) year extensions.
- C. The Village reserves the right to cancel and terminate the same at any time giving a 30 day (30) day notice in writing to the contractor. Termination may occur if the Village observes poor performance and /or unacceptable below standards as call for in the contract.

# **Irrigation System Maintenance Checklist**

#### Controller

Controller cabinet Open the cabinet for the irrigation controller and make sure it is free of debris such as cobwebs or dirt.

Replaced controller battery

Wiring Check all wiring connections for wear and breakage. Repair if necessary.

Time/day settings -Check the time/day settings on your controller to make sure they are correct.

# Sprinkler System

Flush system before running the system, remove the last sprinkler head in each line and let the water run for a few minutes to flush out any dirt and debris. Replace the sprinkler heads and turn the system on, running one valve at a time.

Broken or clogged heads- Look for obviously broken or clogged heads and make the necessary repairs.

Broken/leaking valve or pipe- Observe the lowest head in each station for leaks.

High pressure - Look for a very fine mist from spray heads caused by excessive pressure in the system. Correct the problem by turning the flow control down.

Low pressure- Check to see if the sprinklers are covering the desired area uniformly.

Incorrect spray arc- Check to see that irrigated areas are being covered completely. Consider adjusting the spray pattern if possible, or replace the spray nozzle(s) with another that has the correct spray pattern.

Over-spray- Look for over-spray of sprinklers onto sidewalks, driveways, and streets. The sprinklers' spray patterns should either be adjusted or changed to a pattern that will stay within the planting area.

Spray pattern blocked or misdirected- Look for blocked spray patterns. Remove vegetation and other obstructions that may be blocking the spray.

Sunken heads/short pop-ups -Check each head to see that it is at ground level. Raise sunken heads to grade or replace existing short pop-up heads in the lawn with taller pop-ups, as necessary.

Tilted heads - Heads should be aligned vertically, except in sloped areas. In a sloped area, heads should be aligned perpendicular to the slope to achieve proper coverage. Tilted heads can cause ponding and uneven coverage.

## SECTION 32 84 00- PLANTING IRRIGATION

The following specification is related to the underground irrigation sprinkler system. These guidelines are to be followed in either a Design/Build or Design/Bid approach and are considered as minimum standards.

#### PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

A. Attention is directed to the Bidding and Contract Requirements and General and Supplemental Requirements, which are hereby made a part of this Section.

#### 1.2 DESCRIPTION OF WORK

- A. Furnish all labor, materials, supplies, equipment, tools, and transportation, and perform all operations in connection with and reasonably incidental to the complete installation of a complete irrigation system, and guarantee/warranty, and as specified herein. The system shall be constructed to grades and conform to areas and locations as shown on the drawings. Removal and or restoration of existing improvements, excavation and back-fill, and all other related work. Contractor to acquire all registrations, inspections and permits, controller fees to complete the irrigation system.
- B. Extent of irrigation system work is shown on drawings and by provisions of this Section.
- C. Final spacing of the sprinkler heads or quick coupling valves are shown on the final drawing and shall be exceeded only with the permission of the Owner's authorized representative.
- D. The irrigation system shall include a controlled valve distribution system.
- E. Items of work specifically included, but not limited to are:
  - 1) Procurement of all applicable licenses, permits, and fees.
  - 2) Coordination of all utilities.
  - 3) Connection of electrical power supply to the irrigation control system.
  - 4) Sleeving for irrigation pipe and wire.
  - 5) As-Built Drawings

# 1.3 QUALITY ASSURANCE

- A. Design Criteria
  - 1. Design sprinklers to provide head to head coverage of areas indicated.
  - 2. Provide minimum of 30 PSI at base of spray sprinklers and 40 PSI for fixed stream spray sprinkler heads.
  - 3. Design for prevailing wind of 5 MPH and local soil types.
  - 4. Adjust sprinkling time to soil type to reduce water runoff.
  - 5. Follow the Village's water restriction for allowable watering time.
  - 6. The system is to be sized to compensate for water restrictions.
  - 7. Avoid overspray onto adjacent walks, drives, parking areas, and buildings. Throwing over walks is not allowed.

- 8. Provide 100% head to head full coverage of turf and planting areas. Head to head coverage means that one head throws back to another head with double rows of sprinklers. A single row of sprinklers is not full coverage. It is 50% coverage.
- 9. Design is to provide 1.5" per week for turf and 1" week for plantings.
- 10. The system design shall not exceed 5 fps for mainlines or laterallines.
- 11. If Design/Build, provide all calculations of pressure losses through the system for each zone.
- 12. Turf and plantings are to be separated and are not to run on the same zones.
- 13. Planting areas are to use 12" pop-ups and turf areas are to use 4" pop-ups.
- 14. Specifications are to use this document as a basis of the section.
- 15. Drip is to be avoided unless it is the only option to irrigate an area. Discuss with owner the areas and go over the life span and extra maintenance associated with drip irrigation.

# B. Drawing Criteria

- 1. The drawing is to be set up using the Owner's provided drawings or created sheets. The minimum sheet size shall be 24"x36" and should be readable at 11"x17" sheet size.
- 2. The drawing is to include all drawing components, legends and scales.
- 3. The drawing shall at a minimum include:
  - a) Mainlines, lateral lines, pipe sizes, sleeving and sizing, electric valves, quick couplers, gate valves, sprinkler heads, wire color charts, run times, controller and sensor locations, electric valve call out numbering and valve sizes and design GPM, system installation details for all major components to be installed.
- C. The "Contractor" shall maintain continuously a competent superintendent, satisfactory to the Owner, with authority to act for him in all matters pertaining to the work. The "Contractor" shall coordinate his work with the other trades.
- D. The "Contractor" shall confine his operations to the area to be improved and to the areas allotted him by the Owner's representative for material and equipment storage.
- E. The "Contractor" shall have a minimum of 5 years' experience installing irrigation systems of comparable size and complexity. The contractor shall also have suitable financial status to meet obligations for this project.
- F. The contractor shall be a Certified Irrigation Contractor (CIC) in the state of Illinois.

#### 1.4 SUMBITTALS

- B. Materials List: At a minimum include the following, valves, sprinklers, controller, wire, wire connectors, pipe, fittings, valve boxes, swing joints, pipe hangers, electric valves, wire splices, sprinklers, nozzles, fusing devices, grounding components and quick couplers to be used on the project prior to purchasing materials. Quantities of material need not be included.
- C. Manufacturer's Data: Submit manufacturer's catalog cuts, specifications, and operating instructions for the equipment mentioned above and equipment shown on the materials list.
- D. Shop Drawings: Submit shop drawings for acceptance, submit written operating and maintenance instructions. Include instruction sheets and parts lists for all operating equipment.
- E. Project Record (As-Built) Drawings
  - 1) The CONTRACTOR is to provide the OWNER a scaled drawing of the completed field

- "As-Built" of the system.
- 2) All components of the system are to be drawn and referenced/dimensioned to 2 fixed locations on the site. The contractor may use GPS survey grade data collector to locate all of the system mainline and associated components on the mainline. GPS to use sub-meter accuracy. The contractor may use GPS data collection for the entire system if he finds it is easier in creating the as-built.
- 3) Components of the system but not limited to, sprinkler heads, electric valves, isolation valves, all PVC piping, quick couplers, PVC pipe sizing, grounding, power wire routes and size and decoder routes from the controller to the electric valves including common wire runs, sensors, grounding locations, decoder fusing devices and any other installed components. For decoders, all decoder ID's and numbering must be documented and provided to the Owner.
- 4) All PVC piping shall be referenced in the trench for lengths of run, change in direction and distance and locations of all components referenced in feet from two known points.
- 5) Two final hard copies of the overall drawings with dimension and notes are to be provided to the OWNER and one copy of the As-Built in AutoCAD 2015 or newer, digital format at the same scale drawing as the original drawings. The contractor is to provide individual controller sequencing sheets in the same format as original drawings and 11" x 17" format. Both submittals shall be laminated and placed as directed by Owner.
- 6) The contractor is to provide proof of daily field As-Builts and notes with pay submittal for each area the pay submittal is being submitted for. Payment will not be approved if progress drawings are not submitted.
- 7) The contractor is to provide a daily picture documentation of all work completed and components installed for that day. The picture log shall be provided to the owner in sequential order on a memory stick.
- 8) The as-built shall also be provided to the owner on the memory stick.

#### 1.5 RULES AND REGULATIONS

- A. Work and materials shall be in accordance with the latest edition of the National Electric Code, the Uniform Plumbing Code as published by the Western Plumbing Officials Association, and applicable laws and regulations of the federal, state and local governing authorities.
- B. When the contract documents call for materials or construction of a better quality or larger size than required by the above-mentioned rules and regulations, provide the quality and size required by the contract documents.

## 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver irrigation system components in manufacturer's original undamaged and unopened containers with labels intact and legible.
- B. Deliver plastic piping in bundles, packaged to provide adequate protection of pipe ends either threaded or plain.
- C. Store and handle materials to prevent damage and deterioration.
- D. Provide secure, locked storage for valves, sprinkler heads and similar components that cannot be immediately replaced, to prevent installation delays.

#### 1.7 CODES AND STANDARDS

- A. The entire installation shall fully comply with local and state laws and ordinances and with all established codes applicable thereto. Contractor to provide final documents with all licenses and certifications needed for the work in this location.
- B. Any permits for the installation or construction of the work included under this contract which are required by any of the legally constituted authorities having jurisdiction, shall be obtained and paid for by the "Contractor", each at the proper time. He shall also arrange for and pay all costs concerning any inspections and examinations required by these authorities.
- C. In all cases where inspection of the sprinkler system work is required and/or where portions of the work are specified to be performed under the direction and/inspection of the Owner's authorized representative, the "Contractor" shall notify the Owner's authorized representative at least 72 hours in advance of the time and such inspection and/or direction is required.
- D. Any necessary re-excavation or alterations to the system needed because of failure of the "Contractor" to have the required inspections, in the opinion of the Owner, shall be performed at the "Contractor's" own expense.

#### 1.8 TESTING

- A. Notify the owner a minimum of three days in advance of testing.
- B. Pipelines jointed with rubber gaskets or threaded connections may be subjected to a pressure test at any time after partial completion of backfill. Pipelines jointed with solvent-welded PVC joints shall be allowed to cure at least 24 hours before testing.
- C. Subsections of mainline pipe may be tested independently, subject to the review of the Owner's Representative.
- D. Furnish clean, clear water, pumps, labor, fittings, and equipment necessary to conduct test orretests.
- E. Volumetric Leakage Test:
  - 1) Cap riser of mainline components for volumetric pressure tests. Backfill to prevent pipe from moving under pressure. Expose coupling and fitting.
  - 2) Purge all air from the pipeline before test.
  - 3) Subject mainline pipe to the anticipated operating pressure of the system. Maintain constant pressure. Test complete system under full line pressure. Pressure must be maintained with less than 2lbs loss in the system for 4 hours. If the system does not hold pressure, repair leaks and retest system until the system maintains pressure.
  - 4) All necessary testing equipment shall be furnished by CONTRACTOR.
  - 5) Cement or caulking to seal leaks is prohibited.

# F. Operational Test:

- 1) Activate each remote control valve in sequence from controller. The owner's representative will visually observe operation, water application patterns, and leakage.
- 2) Replace defective remote control valve, solenoid, wiring, or appurtenance to correct operational deficiencies.
- 3) Replace, adjust, or move water emission devices to correct operational or coverage deficiencies.
- 4) Replace defective pipe, fitting, joint, valve, sprinkler, or appurtenance to correct leakage

- problems. Cement or caulking to seal leaks is prohibited.
- 5) Repeat test(s) until each lateral passes all tests. Repeat tests, replace components, and correct deficiencies at no additional cost to the owner.

## 1.9 CONSTRUCTION REVIEW

- A. The purpose of on-site reviews by the owner's representative is to periodically observe the work in progress, the "Contractor's" interpretation of the construction documents, and to address questions with regard to the installation.
- B. Scheduled reviews such as those for irrigation system layout or testing must be scheduled with the Owner's Representative's/owner's representative as required by these specifications.
- C. Impromptu reviews may occur at any time during the project.
- A review may occur at the completion of the irrigation systeminstallation and project record (asbuilt) drawing submittal.

#### 1.10 GUARANTEE/WARRANTY AND REPLACEMENT

- A. It shall be the "Contractor's" responsibility to ensure and guarantee satisfactory operation of the entire system and the workmanship and restoration of the area. The entire system shall be guaranteed to be complete and perfect in every detail for a period of one year from the final acceptance by the Owner and he hereby agrees to repair or replace any such defects occurring within that year, free of expense to the Owner.
- B. Minor maintenance and adjustment shall be by the Owner.
- C. For a period of one year from commencement of the final acceptance, fill and repair depressions or settling more than one inch (1"). Restore landscape or structural features damaged by the settlement of irrigation trenches or excavation. Repair damage to the premises caused by a defective item.
- D. Make repairs with in seven (7) days of notification from the Owner's Representative.
- E. Contract documents govern replacements identically as with new work. Make replacements at no additional cost to the contract price.
- F. Guarantee/warranty applies to originally installed materials, equipment, and replacements made during the guarantee/warranty period. Equipment salvaged and re-used shall not be warranted unless the original warranty is still in effect. The workmanship shall be warranted.

# 1.11 START-UP AND SEASONAL MAINTENANCE

- A. Coordinate the start-up with the Owner's landscape maintenance personnel.
- B. "Contractor" shall provide seasonal maintenance of the system the first year after acceptance as part of this contract, and will provide written instructions to the Owner for future service and maintenance.
- D. Return to the site during the subsequent spring season and demonstrate to the Owner the proper procedures for the system start-up, operation and proper maintenance. Repair any damage caused

within the warranty period, adjust pressures, adjust nozzles at no additional cost to the owner.

E. Contractor to train the Owner's personnel in the operation and maintenance of the system.

#### 1.12 LEED Certification

- A. When a project calls out for LEED certification, the design is to attempt to achieve all point available.
  - 1. LEED Credit WE 1: Submit product data and calculations indicating the irrigation efficiency has reduced the demands of water consumption by 50%.
  - 2. Submit that the design has used 100% non-potable water.
  - 3. When directed by the Owner to achieve one or both of these avenues, the design shall provide for a base calculation and a calculated calculation sheet supporting the 50% reduction of water use.
  - 4. The designer will be required to assist in any water collection and re-use with calculation of water usage to assist in sizing the collection tank.
  - 5. The designer will need to also assist with the pre-filtration needs.
  - 6. The pump station, station filtration and UV treatment will be required to be provided by the irrigation designer unless directed otherwise by the Owner.
  - 7. The designer will be required to assist in assembling the submittal packet that will have all of the necessary irrigation drawings, pump station information and written descriptions of the system and maintenance operations.
  - 8. The packet will need to be signed by and architect or engineer.

#### PART 2 - MATERIALS

#### 2.1 GENERAL

Use materials that are new and without flaws or defects of any type, and which are the best of their class and kind. All material overages at the completion of the installation are the property of the "Contractor" and are to be removed from the site.

After completion, testing and acceptance of the system, the "Contractor" will instruct the Owner's

- A. Each major component of equipment shall have manufacturer's name, address, catalog and serial number permanently attached in a conspicuous place.
- B. The same brand or manufacturer shall be used for each specific application of valves, fittings, controls, and other equipment.
- C. All materials shall be new and of the quality specified.
- D. All equipment shall be listed, approved or rated by a nationally recognized testing and rating bureau of recognized manufacturer's association responsible for setting industry standards. All electrical equipment and apparatus shall be U.L. listed.

# 2.2 SUBSTITUTIONS

- A. Equipment Substitutions
  - 1) Whenever a piece of equipment or material is identified by a manufacturer's trade name, catalog number, etc., it is intended merely to establish a standard; and any equipment of another manufacturer which will perform adequately the requirements of design and is of equal or greater quality than the specifications in the opinion of the Owner's representative

- will be considered equally acceptable.
- 2) The specifications shall permit use of materials of any nationally recognized manufacturer so long as they are fully equal to quality and performance of named item in opinion of Owner's representative. Materials or equipment of other manufacturers may be used upon following conditions.
  - a. Proposed substitute is equal in design, materials, construction and performance in opinion of OWNER'S REPRESENTATIVE. No compromise in quality level will be allowed.
  - b. Service capabilities, availability of service parts, and stability of manufacturer are adequate in opinion of OWNER'S REPRESENTATIVE.
  - c. CONTRACTOR assumes responsibility for any modifications required for installation of substitute equipment and for accommodation of such substitution by work of other contractors. Any additional expense on part of other contractors or OWNER due to substitution of equipment shall be borne by CONTRACTOR making such substitution.
  - Substitute equipment shall fit into space provided with adequate provisions for service and maintenance.

The Contractor shall use materials as specified. Material other than specified will be permitted only after written application by the "Contractor" and written approval by the Owner's Representative. Substitutions will only be allowed when in the best interest of the Owner. Substitutions shall be approved equal prior to bidding.

## 2.3 SLEEVING

- A. Install separate sleeve beneath paved areas to route each run of irrigation pipe or wiring bundle.
  - 1) Sleeving material beneath pedestrian pavements shall be SDR21 PVC Class 200 pipe with solvent welded joints.
  - 2) Sleeving beneath drives and streets shall be SDR21 PVC Class 200 pipe with solvent welded joints.
  - 3) Sleeving diameter: equal to twice that of the pipe or an indicated on drawings. Minimum wire sleeve to be 2" unless indicated.
  - 4) Sleeve pipe and wire separately, minimum wire sleeve is to be 2".
  - 5) All piping in sleeves are to be glued, no gasketed pipe will be allowed in the sleeve.
  - 6) Contractor to coordinate sleeving with other trades for the landscaping, building penetrations and interior irrigation piping runs.
  - 7) Minimum sleeve depth to be 18".

## 2.4 PIPE AND FITTINGS

- A. Mainline Pipe, Large Sports Field sprinklers and Fittings,
  - 1) Use rigid, unplasticized polyvinyl chloride (PVC) 1120, 1220 National Sanitation Foundation (NSF) approved pipe, extruded from material meeting the requirements of Cell Classification 12454-A or 12454-B, ASTM Standard D1784, with an integral belled end.
  - 2) Use Class 200, SDR-21, rated at 200 PSI, conforming to the dimensions and tolerances established by ASTM Standard D2241. Use PVC pipe rated at higher pressures than Class 200 in the case of small nominal diameters that are not manufactured in Class 200.
  - 3) Use rubber-gasketed pipe equipped with Reiber Gasket System for mainline pipe with a nominal diameter 3-inches and greater. Contractor may also use gasketed pipe on 2.5" if desired. Use rubber-gasketed deep bell ductile iron fitting conforming to ASTM A-536 and ASTM F-477 by LEEMCO or approved equal for all fittings 4" and larger. Use lubricant

- approved by the pipe manufacturer. Size slip fitting socket taper to permit a dry unsoftened pipe end to be inserted no more than halfway into the socket. Saddle and cross fittings are not permitted. Mainline pipe going through sleeves shall be solvent weld. No gasketed pipe is allowed in sleeves.
- 4) Use solvent weld pipe for mainline pipe with a nominal diameter 1.5", 2" and 2.5" and less or where a pipe connection occurs in a sleeve.

  Use Schedule 40, Type 1, PVC solvent weld fittings conforming to ASTM Standard D2466 and D1784. Use primer approved by the pipe manufacturer. Solvent cement to conform to ASTM Standard D2564. S-40 fitting may be used on 3" diameter and less.

  4" and larger fittings shall be ductile iron fittings by LEEMCO.
- 5) Provide pipe homogeneous throughout and free from visible cracks, holes, foreign materials, blisters, wrinkles and dents.
- Provide pipe continuously and permanently marked with manufacturer's name and trademark, size schedule and type of pipe working pressure at 73 degrees F. and (NSF) approval.
- 7) Pipe sizes referenced in the construction documents are minimum sizes, and may be increased at the option of the "Contractor" at no cost to the Owner.
- 8) All pipes damaged or rejected because of defects shall be removed from the site at the time of said rejection.
- 9) All mainlines and sleeves are to have a metallic tracer tape placed 3-6" from the surface. The tape shall be 3" wide and indicate "Buried water below". Sleeves shall have tape brought just below the surface at the ends for ease of locating or terminated in valve boxes. Loop tape into and out of all valve boxes.
- B. Lateral Pipe and Fitting (Ground Plain, Spray heads and small rotor heads)
  - 1) Design Criteria: Maximum lateral pipe size is 2".
  - 2) All sprinkler laterals pipe downstream from the zone valves, sized 21/2" and smaller shall be flexible non-toxic polyethylene (PE) pipe. Use SDR-15, HD100 rated at 100 PSI that is National Sanitation Foundation (NSF) approved, conforming to ASTM Standard D2239. Use Type 1, PVC insert fitting conforming to ASTM Standard D2609 designed for use with flexible polyethylene (PE) pipe. Use stainless steel worm gear clamps (including stainless steel screw) to join pipe and fittings. Saddle fittings are not allowed.
  - 3) Lateral piping on spray heads and small gear drives shall be PE pipe.
- C. Specialized Pipe and Fittings:
  - 1) Assemblies calling for threaded pipe connections shall use PVC Schedule 80 nipples and PVC Schedule 40 threaded fittings.
  - 2) Joint sealant: Use only Teflon-type tape on plastic threads.
  - Ductile iron fittings: Joint Restraints all isolation valves 2" and larger shall have a joint restraint system by LEEMCO or approved equal. All ductile iron fittings shall be slanted, deep bell, gasketed style made in accordance with ASTM-A-536, Grade 65-45-12. Fittings shall have four lugs to accommodate joint restraints and other fittings. Bell sections shall allow 5 degree freedom of pipe deflection within the bell end. Gasket design shall be ribenforced "U-Cup" configuration to seal and assist in restraining pipe at all pressures. Fittings shall be manufactured by LEEMCO or approved equal.
  - 1) When called for on main lines, use joint restraints on pipe to pipe gasketed joints by LEEMCO or approved equal.
  - 2) Contractor may substitute joint restraints in place of thrust blocks. If joint restraints were to be used, a joint restraint plan must be submitted for approval prior to construction.
- D. Thrust Blocks:

- 1) Use thrust blocks for fitting on pipe utilizing a rubber gasket pipe.
- 2) Use 3,000 –PSI concrete.
- 3) Use 2-mil plastic to encapsulate the fitting or valve.
- 4) Follow pipe manufacturer's requirements for thrust blocking.

#### 2.5 SPRINKLER COMPONENTS

- A. Sprinkler Assembly: as presented in the drawings and installation details. When required use the sprinkler manufacturer's pressure compensating bodies to achieve operating conditions on each spray head sprinkler and to control excessive operating pressures.
- B. DO NOT THROW ON STREETS, BUILDINGS OR HARD SURFACES

## 2.6 CONTROL SYSTEM COMPONENTS:

Depending on the site application, one of the following controllers are to be used to coincide with the existing Baseline control system the Village has in place. Contractor to add controllers to the Owner's existing Baseline accounts and activate.

- A. Controller 2 wire Baseline BL-3200XS Stainless steel wall mount controller or BL-3200P pedestal mount with Ethernet connection. Decoder Controller.
  - 1) If Ethernet is not available, use BL-CM cell modem 3G-X or –P, one per controller.
- B. Controller 2 Wire/24 volt Baseline 3200XS –RXX, 2 wire and 24 volt controller combination stainless steel wall mount controller or 3200P-RXX pedestal controller.
- C. Controller 2 Wire Baseline 3200P-DC 2 wire solar powered controller with BL-DC-85WPanel. Mount panel on black powder coated post.
- D. Controller
  - 1) The controller shall be mounted as directed by the OWNER.
  - 2) Controller shall operate 2 wire decoders.
  - 3) Controller is to be installed and grounded per manufacturer recommendations.
  - 4) Power to the controllers will be provided by the Owner. The contractor will be responsible for making the connection from the power drop to the controller. The controller will be mounted as directed by the Owner. Provide and install a Paige Electric 250090LED lightning surge arrestor on the power to the controller.
  - 5) Product manufacturer and local distributor are to provide base training for the operation of the controllers at no cost to the owner. The distributor and contractor shall have complete knowledge of the operation and programming background of the Baseline system.
  - 6) Contractor to fill out the 5 year warranty application and provide approved copies to the owner for all Baseline products prior to final acceptance.
  - 7) Controllers to have mobile access.
  - 8) Use Baseline Bicoder #BL-5201 single station bicoder as required.
  - 9) Contractor to coordinate and provide electrical conduit from controller out to the landscape.

# Central Web Based Package

- 1) Provide and setup Base manager PLUS Web-based service, one per controller.
- 2) Contractor to coordinate with owner for mobile devices needed, computer hardware required to operate the system from a computer.
- 3) The contractor is to also set up the Baseline controls on any Web based smart phone and computer that the owner will operate this system from. The controller will operate through the campus Ethernet from the controller to the office computer. Coordinate with owner on the Ethernet connection.
- 4) The contractor is to provide training of the system to the owner. Contractor/ Distributor to

work with the irrigation consultant in setting up temporary programs during the installation.

### E. Control Wire: 2 wire path

- 1) Design Criteria: Final wire gauge to be determined by the final design.
- 2) 2 wire decoder wire shall be Maxi wire #14 ga minimum by Paige wire or equal. If the controller has more than one direction of 2 wire runs, it shall be color coordinated with more than one different color per leg.
- Color: Wire color shall be continuous over its entire length. See drawing for color coding of control wire.
- 4) Splices: Use 3M DBR/Y-6 wire connector with waterproof sealant. Wire connector to be of plastic construction.
- 5) Wire markers: pre-numbered or labeled with indelible non-fading ink, made of permanent, non-fading material.
- 6) All wiring to be installed following existing local and state codes. All wiring within the building is to be in electrical conduit.
- Provide and install 2-wire Decoder Cable Switch Device on the 2-wire path for long runs or changes in direction. If a straight short run is provided, then a switching device is not needed. See plans for locations and if they are 2 or 3 way devices. Switches to be located in valve boxes, Use only 3MDBY-R wire connectors. Switches are to be by Paige DCSD2 and DCSD3.

## F. Control Wire: 24 volt

- 1) All 24 volt wiring shall be done with an UL listed 3M DBY/R-6 splice kit. All wiring is to be installed following existing local and state codes.
- 2) All signal wire shall include a solid copper conductor and polyethylene (PE) insulation for direct bury UL Listed. It shall be rated for 600 volts and manufactured by Paige Electric or equal. Minimum wire size shall be #16 gauge.
- 3) Multi strand #18 gauge wire is not allowed.
- 4) Provide signal wires in the following color chart.
- 5) Red, Orange, Blue, Yellow. Repeat colors and zone numbers.
- 6) Use white as the common wire.

## G. Tracer Wire:

- 1) Use a #14 gauge wire as a tracer wire in all mainline runs. Bring wire to valve boxes and label.
- 2) Tracer wire shall include a solid copper conductor and polyethylene (PE) insulation for direct bury UL Listed. It shall be rated for 600 volts and manufactured by Paige Electric or equal.
- 3) Wire to be continuous in runs, splices are allowed in valve boxes only.

#### H. Instrumentation:

- 1) Design Criteria: Minimum 1 per controller, see below for further direction.
- 2) As presented in the drawing and installation details.
- 3) Baseline soil sensor BL-5315B; see plan for locations. Similar zones will be tied to the sensors located in landscape for programming.
- 4) Hunter Rain Click system. One per controller; hard wire to controller. Use a Baseline Pause Bicoder with the Rain Click system on 2 wire path if the sensor is not directly tied to the controller.
- 5) The rain sensor shall be mounted in a location that will be vandal resistant and is able to gather all of the necessary data without interference. Coordinate with Owner for proposed

- mounting location. (minimum 1 per controller). If there is sunny turf and plantings on the project, then a soil sensor in the planting and turf will be required. If there are shade turf and plantings, one will be required in each condition.
- 6) Soils sensors shall be installed in areas open turf or planting areas with head to head coverage. Install planting sensors in beds that have head to head coverage. It is extremely important that the sensor not be installed any deeper than 2" from the finished surface.
- 7) Surge suppression devices at a minimum shall be installed per the manufacturer's requirements. At a minimum, all dead ends, every 500 feet or twelve bicoders, whichever is more restrictive. Use BL-LA01 devices at each location.

#### I. Power Wire:

- 1) The owner will provide power to the site, the contractor will need to coordinate this with them. The irrigation contractor will need to run the wire from the point of power drop to the controller.
- 2) Electric wire from the power source to control unit shall be solid or stranded copper. Type UF single-conductor cable, UL approved for direct underground burial. Power wires shall be black, white and green in color.
- 3) Splices: Use approved connectors.
- 4) Conduit: PVC Schedule 80 electrical conduit.
- 5) Follow all local and state codes.

## J. Master Valve / Flow Meter

- 1) Design Criteria: One per tap location
- 2) The flow meter and normally open master valve shall be a single unit. It shall be a Baseline BHM series Hydrometer, normally open, with built in BiCoder; tie in to two-wire. Sizing to be determined by the design. Set shut off flow rates in the controller.
- 3) An alternate to the BHM is a Baseline Flow meter BL-PFS series, sized to the design with a normally open electric valve and if needed a BL-5201MV master valve bicoder.

# K. Electric Control Valves

1) Design Criteria: 1-20 gpm to be 1"

21-45 gpm to be 1.5"

46-80gpm to be 2"

- 2) All valves shall be of globe or globe/angle configuration with a female pipe thread inlet and outlet connections. Diaphragm assembly shall be sonically welded to form a solid-piece component. The diaphragm shall be of rubber construction to retain flexibility and provide maximum sealing throughout its area.
- 3) Electric valves shall be Hunter PGV-R 1.5 and 2" series electric valves or approved equal. 1" valves shall be Hunter PGV-101G valves. The valve shall have a manual flow control with a hand-operated, rising-type flow control stem with control wheel/handle and an internal manual bleed assembly. Size per plan.
- 4) All parts shall be serviceable without removing valve from line. Valve may be installed at any angle without affecting valve operation.
- 5) 22" solenoid lead wires shall be attached to a 24 VAC solenoid with waterproof molded coil capable of being removed by turning coil. Valve shall be held normally closed by internal water pressure with manual bleed screw.
- 6) The legend and flow arrow shall be applied at all valve locations. Valve numbering shall be located so as to be conspicuous and legible. The controller and valve numbering can be engraved in black on a yellow plastic tag, by Christy's Enterprise or equal. The tag size shall be standard size of 2.25" x 2.66".

## L. Valve Boxes

- 1) Valve boxes shall be manufactured by RainBird VB series or approved equal and shall be rectangular, 12" /w 6" extension or 6" and 10" round and have locking "T" lid tops. Valve box lids in turf areas to be green; valve box lids in plantings to be black.
- Valve box shall be of a size that provides adequate space for valve repairs. For decoder systems and valve boxes with the decoder, two valves per 12" rectangular box, other wise 1 electric valve per smaller valve box. A 10" round valve box may be used for isolation valves, quick couplers and wire drops only. For all decoder valves with the decoder, leave 5' of excess wire coiled to allow the removal of the decoder. 7" round valve boxes are to be used on the green roof as detailed.
- The valve box cover shall have the component markings heat stamped into the cover with minimum 1.5" high, maximum 2" high lettering. Use the following symbols for corresponding components in the valve box.

GV - for Gate Valves

EV – for Electric Valves

WS – for Wire Splice

QC – for Quick Coupler

**GR-** for Grounding

SEN- for sensor connections

Other- Label as needed

The final valve numbering shall also be branded into the tops with electric valves. Contractor may find an example of the branding tool at Brand New Industries Inc., Product # VB2x3.

4) Contractor to coordinate location of valve boxes that are ganged together in clusters of three or more in planting beds with the Owner's Representative. Receive his approval of locations prior to installation.

## M. Quick Coupler Valves

- 1) Design Criteria: Quick couplers are to be spaced at a maximum of 150'from one another.
- 2) There is to be a minimum of one per site. If around a building, there shall be one on each side of the building. Coordinate with Owner as to the final number of quick couplers.
- 3) Valves shall be 1" Hunter HQ-44LRC-AW series valves or approved equal. The quick coupling shall have a locking vinyl cover. The matching Key shall be Hunter HK44 and HS-1. The quick coupler is to have stabilizer wings. If the valve does not have stabilizers originally installed, use attachable stabilizers manufactured by LEEMCO.
- 4) Quick coupler valves are to be mounted on a Lasco swing joint with brass MIPT threads and placed in a 10" round valve box. The valve box is to be filled with 3/8" clear chip stone gravel.

## N. Swing Joints

- 1) Design Criteria: All large sprinklers and quick couplers
- 2) The Swing Joint and Heavy Turf Products shall be rated for use with water at 315 p.s.i. maximum working pressure @ 73°F when tested in accordance with A STM D3139 & F1970. LASCO Swing Joint and Heavy Turf Products shall be molded of rigidpoly(vinyl) chloride (PVC). Type I, Cell classification 12454-B per ASTM specification D 1784, with pipe sockets per ASTM D 2464.
- 3) Suggested Swing Joint Specifications Swing Joints shall have modified stub threads with elastomeric O-ring seals at each rotating joint and meets ASTM Standard F2768 Each rotating joint shall be sealed with an elastomeric O-ring, installed pre-compressed in a sealing groove free of parting lines to prevent leakage as manufactured by LASCO Fittings,

Inc

- 4) Warranty LASCO Swing Joint and Heavy Turf Products and their individual component parts are warranted to be free from defects in manufacturing and workmanship for a period of five (5) years from the date of installation. Swing Joints riser assemblies shall have a working pressure rating of 315 psi @73F. The swing joint shall have one O-ring at each swivel joint. The inlet and outlet sockets and threads conforming to ASTM standards D 2467 and D 2464, respectively. The body wall thickness of all components conforming to ASTM D 2464.
- The sprinkler swing joint shall have a minimum length 10" riser and quick coupler swing joints shall have a minimum 12" riser for quick couplers and be by Lasco or approved equal. The threads shall correlate to sprinklers, quick couplers and related components. Quick Coupler Swing Joints are to have a brass male threaded outlet 90 ell outlet to enter the bottom of the quick coupler.
- 6) Contractor is responsible for final lay length of the riser to ensure a 45 degree lay angle.
- O. Sprinkler Heads Spray Heads
  - 1) Design Criteria: Design Criteria: Radius 2' to 15'
  - 2) The spray head sprinklers shall be a 4" or 12" Hunter PROS-PRS30-CV series, 4" or 12" riser spray head or approved equal. Sprinkler shall be mounted flush with final finish grade.
  - 3) Retraction shall be achieved by a heavy-duty stainless steel retraction spring. Sprinkler shall have a riser seal and a wiper. Sprinkler housing shall be of high impact molded plastic. Sprinkler shall have a large strainer so as to prevent nozzle clogging. Sprinkler shall be constructed such that it is serviceable from top in that drive assembly, screen, and all internal components are accessible throughout top of sprinkler without disturbing case installation. The sprinkler shall have a built-in pressure regulation device to regulate nozzle pressure regardless of the inlet pressure. The sprinkler shall have a drain check valve for up to 14 feet of elevation change.
  - 4) Type and location of nozzles shall be Rainbird MPR, HEVAN or Hunter Pro-Sprays, PRO adjustable, nozzle patterns vary, see design plan for arcs and radius.
  - 5) DO NOT THROW ON STREETS, BUILDINGS OR HARD SURFACES
- P. Sprinkler heads shall be mounted on funny/flex pipe flexible connection. Maximum funny pipe length to be 18". Appropriate saddles may be used on lateral piping. Contractor may use a Hunter SJ-012 series swing joint or approved equal in place of the flex pipe and barb fitting.
- O. Sprinkler Heads MP Rotators
  - 1) Design Criteria: Radius 12' to 28'
  - 2) The MP rotator sprinklers shall be a 4" or 12" Hunter PROS-PRS40-CV or approved equal, w/check Series pop up sprinkler or approved equal. Sprinkler shall be mounted flush with final grade.
  - 3) Retraction shall be achieved by a heavy-duty stainless steel retraction spring. Sprinkler shall have a riser seal and a wiper. Sprinkler housing shall be of high impact molded plastic. Sprinkler shall have a large strainer so as to prevent nozzle clogging. Sprinkler shall be constructed such that it is serviceable from top in that drive assembly, screen, and all internal components are accessible throughout top of sprinkler without disturbing case installation. The sprinkler shall have a built-in pressure regulation devise to regulate nozzle pressure regardless of the inlet pressure. The sprinkler shall have a drain check valve for up to 14 feet of elevation change. Type and location of nozzles shall be Hunter MP Rotator.
  - 4) MP Nozzles to be 1000, 2000 or 3000. Size per charts. Reduce design radius by 10% to accommodate for actual nozzle throws.

# 5) DO NOT THROW ON STREETS, BUILDINGS OR HARD SURFACES

- R. Sprinkler Heads –Small Rotors
  - 1) Design Criteria: Radius to be from 25' to 40'
  - 2) The small diameter gear drive sprinklers shall be 6" Hunter I-20-PRB series w/check pop up and pressure regulation sprinkler or approved equal. Sprinkler shall be mounted flush with final grade.
  - 3) Retraction shall be achieved by a heavy-duty steel retraction spring. Sprinkler shall have a rubber cover. Sprinkler housing shall be of high impact molded plastic. Sprinkler shall have a large strainer so as to prevent nozzle clogging. Sprinkler shall be constructed such that it is serviceable from top in that drive assembly, screen, and all internal components are accessible throughout top of sprinkler without disturbing case installation. The sprinkler shall be capable of stopping water flow through the head without turning off the entire zone. The drive shall be water lubricated and have a drain check valve. Radius reductions shall be adjustable by up to 25% by means of adjustment screws accessible from top of cap when sprinkler is properly installed.
  - 4) Type and location of heads shall be as shown on plan.
  - 5) Match nozzle for matched precipitation as closely as possible.
  - 6) Sprinkler heads shall be mounted on funny pipe, swing pipe or a pre-assembled flexible swing joint. Riser length of pipe to be 18". Appropriate saddles may be used on lateral piping.
  - 7) DO NOT THROW ON STREETS, BUILDINGS OR HARD SURFACES
- S. Sprinkler Heads Gear Drives 6" Hunter I-25-06-PBR
  - 1) Design Criteria: Radius to be from 45' to 50'
  - 2) The large diameter gear drive sprinklers shall be a Hunter I-25 w/check and pressure regulation Series pop up sprinkler or approved equal. Sprinkler shall be mounted flush with final grade.
  - 3) Retraction shall be achieved by a heavy-duty steel retraction spring. Sprinkler shall have a rubber cover. Sprinkler housing shall be of high impact molded plastic. Sprinkler shall have a large strainer so as to prevent nozzle clogging. Sprinkler shall be constructed such that it is serviceable from top in that drive assembly, screen, and all internal components are accessible throughout top of sprinkler without disturbing case installation. The drive shall be water lubricated and have a drain check valve. Radius reductions shall be adjustable by up to 25% by means of adjustment screws accessible from top of cap when sprinkler is properly installed.
  - 4) Type and location of heads shall be as shown on plan. Sprinkler heads shall be mounted on a double swing S-80 PVC swing joint by Lasco or approved equal. Riser length of pipe to be minimum 10". Contractor is responsible to verify lay length and provide the correct riser length for the pipe depth.
  - 5) Depth of lateral pipe to be determined by the swing joint lay length. Swing joints are to have a 45 degree angle providing positive drainage. Minimum latera and mainline depths for systems using I-25 is 22" top of pipe.
  - 6) DO NOT THROW ON STREETS, BUILDINGS OR HARD SURFACES
- T. Tree bubblers -for individual trees
  - 1) Design Criteria: 2, 1GPM stream bubblers per tree for 1" to 2"caliber tree.
    - 3, 1 GPM stream bubbler per tree for 2.5" caliber trees and larger.
  - 2) The tree bubblers shall be Hunter Multi-Stream nozzles, MSBN-10F mounted on a Hunter PROS-00-PRS30 Shrub adapter with inlet Hunter HSBE-050 spiral barb 90 and mount to a Hunter HS-B-Stk stake. Zip tie the shrub adapter to the stake and place at edge of root ball. Stake into root ball, not surrounding soils.
- U. Solvent Weld Fittings

- Solvent weld PVC fittings shall be Schedule 40, ASTM D-2466 and ASTM D-1784. PVC Schedule-40 fittings shall be produced from PVC Type 1, Cell Classification 1245B. Fittings shall be manufactured by Lasco or approved equal. All solvents and cements shall be that recommended by the manufacturer.
- 2) S-80 PVC fittings may be used and may be threaded or solvent weld. S-80 TOE Nipples with S-80 couplings for plastic to metal connections. (S-80 nipples cut in half will not be allowed)
- 6) TOE nipples shall be used with s-80 couplings entering the electric valve.
- 7) TOE nipples shall be used with s-80 couplings when entering a 1.5" and smaller gate valve.

#### P. Gate/Isolation Valves

1) Design Criteria: Any tee in the mainline isolating each direction and mainline isolation which is further than 200' inline.

Ball valves are not allowed.

- 2) Isolation valves 2", 2.5", 3" & 4" shall be ductile iron resilient seated globe valves. Valve body and restraint clamps shall be constructed of ductile iron per ASTM A-536, Grade 65-42-12. Epoxy coating on all interior and exterior surfaces shall be fusion bonded epoxy, 10-12 mil thickness. Valve mechanism and hardware shall be made of 100% 304-series stainless steel. The valve stem shall be fine threaded stainless steel, O-ring sealed for ease of operation. Valve outlet shall be deep bell gasket and equipped with integrally cast joint restraint clamps to securely fasten pipe to the valve. Restraint shall have blunt cast serrations. Valve shall be made by LEEMCO or approved equal.
- 3) Isolation valves 1.5" and smaller shall be bronze gate valves. The gate valve shall be 200lb rated WOG non-shock, solid disc, non-rising stem with threaded ends. Valve sizes shall be as shown on plan. Connections to the piping shall be made with a S-80 TOE nipple and a S-80 Coupling. Valves shall be Nibco T-113 with handle bronze gate valve or approved equal.
- 4) Isolation valves 4" and larger, shall be non-rising and conforming to AWWA C-515 standards rated for 250 psi. Valves shall be resilient seat body and bonnet are to be cast iron alloy ASTM A126 Class B or ductile Iron ASTM A536. Valve to be epoxy coated inside and outside. Stems to be stainless steel with a cast iron 2" square operating nut. The valve shall provide full diameter waterway, low torque operation and absolute shut-off. Valves shall be push-on type valves. Valves to be LEEMCO LMV-BB series gate valve with 2" nut or approved equal. Push on valves are to have joint restraints on both ends of the valve. All valves are to be by LEEMCO or approved equal.

## Q. Grounding -2 wire when used

- 1) Design Criteria: At a minimum, all dead ends, every 500 feet or twelve bicoders, whichever is more restrictive.
- 2) The contractor will be responsible to provide earth grounding of 2 –wire ohm reading of not more than 10 ohms. The contractor is to provide the Paige Electric equipment part # 182007 for the ground rod, part # 182199L for the grounding plate assemble part # 1820039 for the a pre-welded wire to rod and part # 1820058 for the PowerSet earth contact material This equipment shall be install by the contractor per the Paige Electric instructions. The supplying distributor to check all ohm readings with a megger and provide a document signed by the distributor that all readings are under 10ohms. Contractor is responsible for making adjustments to achieve this reading.
  - Use BL-LA01 devices at each location.
- 3) Grounding rods are to be in 6" round valve boxes.
- R. Backflow Unit/Water Meter

- 1) Design Criteria: Size per design requirements
- 2) Coordinate with the Village water department and owner as to the RPZ and water meter sizing and who is supplying these items.
- 3) Installation will be by the irrigation contractor.
- 4) All plumbing from the tap to through the meter and RPZ is to be completed by a licensed plumber in the state of Illinois.

## S. Enclosures

- 1) Design Criteria: Provide an enclosure that fits over all components.
- 2) An enclosure will be required for all outdoor RPZ/Meter connections.
- 3) The enclosure shall be an aluminum enclosure by Watersafe or approved equal.
- 4) Mount the enclosure on a concrete base and per manufacturer's requirements.

## 2.7 PUMP STATION

- A. Design Criteria: If after acquiring the static pressure from the Village, a boost in pressure is still required. Provide a booster pump, pump start and all associated plumbing components.
  - a. Submit all pump curves with the design for review.
  - b. Include the loss calculations for the worst condition zone, including static psi, losses and boost calculations.
  - 1) The pump shall be a Sta-rite or Berkley pump. Coordinate power requirements with the Owner.
  - 2) The pump shall have galvanized or brass unions
  - 3) A pressure gauge on the incoming and discharge sides of the pump.
  - 4) The pump shall have isolation valves.
  - 5) On larger systems over 80 gpm, use a pump station that is set to operate on pressure drop.
  - 6) Pump stations for this application are to be by Watertronics or approved equal.
  - 7) When located outside, it is to be in an aluminum enclosure. The enclosure is to house the irrigation controller, Meter and RPZ in the pump enclosure.

### 2.8 OTHER COMPONENTS

- B. Tools and Extra Equipment
  - 1) The contractor is to provide to the Owner, one (1) sets of tools to repair and work on all equipment specified in this irrigation section.
  - 2) The contractor is to provide the Owner with two (2) sprinkler heads and nozzles of each type specified and used, (1) electric valve of each size used.
  - 3) The contractor shall provide to the Owner, two (2) keys and two (2) hose swivel matching the quick coupling valve installed.
  - 4) Two (2) 5' 2" nut valve wrenches for gate valves 2" and larger are to be provided.
  - 5) Two (2) 3' valve wrenches for gate valves 1.5" and larger are to be provided
  - 6) When used, two (2) decoders of each size used.
- C. Other Materials: Provide imported fill material as required to complete this work. Provide other materials or equipment shown on the drawings or installation details, which are part of the irrigation system, although such items may not have been referenced in these specifications.

#### **PART 3 – EXECUTION**

#### 3.1 INSPECTION AND REVIEWS

#### A. Site Inspections:

- 1) The bidder acknowledges that he has examined the site, plans and specifications, and the submission of a proposal shall be considered evidence that examination has been made.
- 2) Verify construction site conditions and note irregularities affecting work of this section. It shall be the contracting installer's responsibility to report to the Owner's authorized representative any deviations between drawings, specifications and the site. Failure to do so before the installing of equipment and resulting in replacing and/or relocation of equipment shall be done at the "Contractor's" expense.
  - a. Examine final grades and installation conditions. Do not start irrigation system work until unsatisfactory conditions are corrected.
  - b. Beginning work of this section implies acceptance of existing conditions.

## B. Utility Locations:

- 1) The exact location of all existing utilities and structures and underground utilities are not indicated on the drawings; their locations shall be determined by the "Contractor", and he shall conduct his work so as to prevent interruption of service or damage to them.
- 2) Arrange for and coordinate with local authorities the location of all underground utilities.
- 3) Repair any underground utilities damaged during construction. Make repairs at no additional cost above the contract price.
- 4) The "Contractor" shall protect existing structures and utility services and be responsible for their replacement if damaged by him.

## C. Irrigation System Layout Review:

- Irrigation system layout review will occur after the staking has been completed unless specifically waived by the Owner's Representative. Notify the Owner's Representative one week in advance of review.
- 2) The Owner's Representative at this review will identify modifications.

#### 3.2 LAYOUT OF WORK

- A. Stake out the irrigation system. Items staked include: sprinklers, pipe, control valves, manual drains, quick coupling valves, controller, isolation valves and any misc. components.
- B. Install all mainline pipe and mainline components inside of project propertylines.
- C. Minor adjustments in system layout will be permitted to clear existing fixed obstructions. Final system layout shall be acceptable to the Owner's Representative.

# 4.3 EXCAVATION, TRENCHING, AND BACKFILLING

- A. Excavating shall be considered unclassified and shall include all materials encountered, except materials that cannot be excavated by normal mechanical means.
- B. Excavate to permit the pipes to be laid at the intended elevations and to permit work space for installing connections and fittings.

- C. Minimum cover (distance from top of pipe or control wire to finish grade):
  - 1) 12-inch over top of pipe mainline pipe.
  - 2) 10-inch over control wire, follow local and state requirements if they dictate a deeper bury depth.
  - 3) 12-inch over top of pipe lateral pipe to sprinklers I-20, PRS30, PRS40 and bubbler zones.
  - 4) 22" top of lateral line and mainlines for I-25 zones.
- D. PVC mainlines or PVC lateral pipes 21/2" and smaller may be pulled into the soil using a vibratory plow device specifically manufactured for pipe pulling, if in the opinion of the Owner's Representative that conditions are suitable. Minimum burial depths equals minimum cover listed above provided soil moisture content and other conditions are suitable to allow for full depth of the right to determine suitability or conditions.
- E. Backfill only after lines have been reviewed and tested.
- F. Excavated material is generally satisfactory for backfill. Backfill shall be free from rubbish, vegetable matter, and stones larger than 2 inches in maximum dimension. Remove material not suitable for backfill. Backfill placed next to pipe shall be free of sharp objects, which may damage the pipe.
- G. Backfill unsleeved pipe by depositing the backfill material equally on both sides of the pipe in 6-inch layers and compacting each layer to 90% Standard Proctor Density, ASTM D698-78. Use of water for compaction, "puddling," will not be permitted.
- H. Enclose pipe and wiring beneath roadways, walks, curbs, etc., in sleeves.
   Minimum compaction of backfill for sleeves shall reference geotechnical report for compaction requirements. Use of water for compaction around sleeve, "puddling," will not be permitted.
- I. Dress backfilled areas to original grade. Incorporate excess backfill into existing site grades.
- J. Where utilities conflict with irrigation trenching and pipe work, contact the engineer/landscape architect for trench depth adjustments.
- K. Provide approved fine grained earth fill or sand to point 4" above the top of pipe, where soil conditions are rocky or otherwise objectionable.
- L. Excavate trenches and install piping and backfill during the same working day. Do not leave open trenches or partially-filled trenches open over night.
- M. The CONTRACTOR will be responsible for all finish and fine grading of trenches, disturbed areas around sprinklers heads, electric valves and any other excavated or disturbed areas by the CONTRACTOR. Contractor will also be responsible for all trench settling throughout the project during the one-year warranty period. If settling occurs, the contractor will repair and bring back to originally set grade.
- N. When working in existing conditions, sod cut trenches and re-sod with cut sod, roll and water in until the irrigation system is operational. Timing is critical with this as to not heat up the sod. If this occurs, the contractor will be responsible for sod replacement. Sod around heads and valve box excavations.
- O. When additional backfill material is needed to replace the unsuitable materials, it will be the

CONTRACTOR'S responsibility and expense to supply such material. It will also be the CONTRACTOR'S responsibility to dispose of the unsuitable material.

### 3.4 WORKMANSHIP

A. All work shall be done by qualified irrigation installers that are knowledgeable and experienced in operations they are performing. Installation methods, procedures and materials shall be in accordance with accepted industry practice and with standards of manufacturing and contracting associations applicable to the work. All work shall be neatly done with special emphasis on appearance of work exposed to view.

### 3.5 SLEEVING AND BORING

- A. Install sleeving at a depth that permits the encased pipe or wiring to remain at the specified burial depth.
- B. Extend sleeve ends 2 feet beyond the edge of the paved surface. Cover pipe ends and mark with stakes. Place a small chiseled "X" on the vertical side of the hard surface to mark the location of the sleeve.
- C. Bore for sleeves under obstructions that cannot be removed. Employ equipment and methods designed for horizontal boring.

### 3.6 ASSEMBLING PIPE AND FITTING:

- A. General:
  - 1) Keep pipe free from dirt and pipe scale. Cut pipe ends square and debur. Clean pipe ends.
  - Keep ends of assembled pipe capped. Removed caps only when necessary to continue assembly.
  - 3) All mainline and continuously pressurized pipe is to be installed using open trenches. Lateral pipe may be installed by "Plowing" if soil conditions permit, and soils do not contain gravel, rock, construction debris, or other potential damaging material.
  - 4) Trenches may be curved to change direction or avoid obstructions within the limits of the curvature of the pipe.
- B. Mainline, lateral piping and Fittings:
  - 1) Use only strap-type friction wrenches for threaded plastic pipe.
  - 2) PVC Rubber-Gasketed Pipe:
    - a. Use pipe lubricant. Join pipe in the manner recommended by manufacturer and in accordance with accepted industry practices.
    - b. Epoxy-coated steel fittings shall not be struck with a metallic tool. Cushion blows with a wood block or similar shock absorber.
  - 3) PVC Solvent Weld Pipe:
    - a. Use a primer and solvent cement. Join pipe in a manner recommended by the manufacturer and in accordance with accepted industry practices.
    - b. Cure for 30 minutes before handling and 24 hours before allowing water in pipe.
    - c. Snake pipe from side to side within the trench.
  - 4) Fittings: the uses of cross type fittings are not permitted.
  - 5) Install thrust blocks on the mainline pipe work in accordance with pipe manufacturer's written instructions.

### D. Specialized Pipe and Fitting:

- 1) Low-Density Polyethylene Hose: Install per manufacturer's recommendations.
- 2) PVC Threaded Connections:
  - a. Use only factory-formed threads. Field-cut threads are not permitted.
  - b. Use only Teflon-type tape.
- 3) Threaded Connections:
  - a. Make metal-to-metal, threaded connections with Teflon-type tape applied to the male threads only.

### C. Thrust Blocks:

- 1) Use cast-in-place concrete bearing against undisturbed soil.
- 2) Orientation and placement shall be as shown on the installation details, size per manufacturer's recommendations.
- 3) Wrap fitting with plastic to protect bolts, joint and fitting from concrete.

### 3.7 INSTALLATION OF SPRINKLER AND IRRIGATION COMPONENTS:

- A. Remote Control Valve (RCV) Assembly:
  - 1) Flush mainline before installation of RCV assembly.
  - Install where indicated on the drawing. Wire connectors and waterproof sealant shall be used to connect control wires to remote control valve wire.
     Install connectors and sealant per the manufacturer's recommendations.
  - 3) Install only one RCV to a valve box. Locate valve box at least 12 inches from and align with nearby walls and edges of paved areas. Group RCV assemblies together where practical. Arrange grouped valve boxes in rectangular patterns. Allow at least 12 inches between valve boxes.
  - 4) Adjust RCV to regulate the downstream operating pressure.
  - 5) Attach ID tag with controller station number to control wiring.

### B. Sprinkler Assembly:

- 1) Flush lateral pipe before installing sprinkler assembly.
- 2) Install per the installation details at locations shown on the drawings.
- 3) Locate rotor sprinklers 6 inches from adjacent walls, fences or edges of paved areas.
- 4) Locate spray sprinklers 3 inches from adjacent walls, fences or edges of paved areas.
- 5) Install sprinklers perpendicular to the finish grade.
- 6) Supply appropriate nozzle or adjust arc of coverage of each sprinkler for best performance.
- 7) Adjust the radius of throw of each sprinkler for best performance.

### 3.8 INSTALLATION OF CONTROL SYSTEM COMPONENTS:

### A. Irrigation Controller Unit:

- 1) The location of the controller unit as depicted on the drawings is approximate the Owner's Representative will determine the exact site location during sprinkler layout review.
- 2) Attach wire markers to the ends of control wires inside the controller unit housing. Label wires with the identification numbers (see drawings) of the remote control valve to which the control wire is connected.
- 3) Connect control wires to the corresponding controller terminal.

### B. Control Wire:

1) For decoder systems, bundle control wires where two or more are in the same trench. Bundle with pipe wrapping tape at 15-foot intervals.

- 2) Control wiring may be chiseled into the soil using a vibratory plow device specifically manufactured for pipe pulling and wire installation. Appropriate chisel must be used so that wire is fed into a chute on the chisel, and wire is not subject to pulling tension. Minimum burial depth must equal minimum cover previously listed.
- Provide a 24-inch excess length of wire in an 8-inch diameter loop at 90-degree change of direction, at both ends of sleeves and at 100-foot intervals along continuous runs of wiring. Do not tie wiring loop. Coil 24-inch length of wire within each remote control valve box.
- 4) If a control wire must be spliced, make splice with wire connectors and waterproofsealant, installed per the manufacturer's instructions. Locate splice in a valve box that contains an irrigation valve assembly, or in a separate 10-inch round valve box.
- 5) Use same procedure for connection to valves as for in-line splices.
- Protect wire not installed with PVC mainline pipe with a continuous run of warning tape placed in the backfill six inches above the wiring.
- 7) Allow 5 feet of extra wire on the decoder cable and allow 5' of extra wire for decoder to solenoid wiring to allow for above grade maintenance.

### C. Instrumentation:

- 1) Install sensor per the installation details and manufacturer's recommendations. Install at locations shown on the drawings.
- Install electrical connections between central control unit components and sensors per manufacturer's recommendations.

### 3.9 INSTALLATION OF OTHER COMPONENTS:

- A. Tools and Spare Parts: Prior to the review at completion of construction, supply to the owner operating keys, servicing tools, spare parts, test equipment and any other items indicated ingeneral notes on the drawings.
- B. Other Materials: Install other materials or equipment shown on the drawings or installation details which are part of the irrigation system, even though such items may not have been referenced in these specifications.

### 3.10 BALANCING AND ADJUSTING

A. The Contractor will be responsible for the balancing and adjustments of the various components of the system so the overall operation of the system is the most efficient. Including, but not limited to, the synchronization of the controllers, adjustments to the pressure regulator valves and sprinkler adjustments. Coordinate controller setup with Owner's Representative.

### 3.11 REQUIREMENT FOR SUBSTANTIAL COMPLETION

- A. Cleaning Equipment and Premises
  - 1) Thoroughly clean all parts of the piping, valves and equipment.
  - 2) Remove all construction debris, excess materials and equipment.

### B. Operating and Maintenance Manuals

1) CONTRACTOR shall furnish to OWNER'S REPRESENTATIVE two operating manuals for furnished equipment. Information sheets shall be bound in standard three-ring binders labeled to show contractor's name, address, regular business phone number, emergency phone number and date. Operating manuals shall be submitted prior to completion of work to allow time for review. Manual shall contain following information:

List (keyed with identification numbers used) each item of equipment which requires service, giving the name of the item, model number, manufacturer's name and address, and providing the name, address and phone number of the nearest representative of authorized service organization.

Cut sheets to be included for the following, but not limited to: electric valves, isolation valves, swing joints, valve boxes, controllers and sprinkler heads.

- 2) A copy of the shop drawing for each item.
- 3) A complete operating and maintenance manual, parts list, wiring diagrams, lubrication requirements, and service instructions for each major item.
- 4) Complete control diagrams with description of all operation sequences and control devices.
- 5) Properly executed registrations and registered manufacturer's warranties.
- 6) After completion of work and when OWNER has had sufficient time to examine operating manuals and become somewhat familiar with operation of equipment, a meeting will be arranged by the Contractor with the Owner for purpose of instructing OWNER in proper maintenance of system and to answer questions he/she may have regarding its operation. Prior to this meeting, contractor shall have programmed a base program for all stations and run times.
- 7) Contractor to complete the irrigation submittal for all irrigation systems to the IL State Public Health. Provide the owner with a copy of the submitted form.

### 3.12 MAINTENANCE:

- A. Upon completion of construction and review by the Owner's Representative, maintain irrigation system for duration of 30 calendar days. Make periodic examinations and adjustments to irrigation system components to achieve the most desirable application of water.
- B. Following completion of the "Contractor's" maintenance period, the owner will be responsible for maintaining the system in working order during the remainder of the guarantee/warranty period, for performing necessary minor maintenance, for trimming around sprinklers, for protecting against vandalism, and for preventing damage after the landscape maintenance operation.

### 3.13 OBSERVATIONAND ACCEPTANCE:

- A. Periodic site visits will be made by the Owner's representative to review the quality and progress of the work. Work found to be unacceptable must be corrected within five (5) calendar days. Remove rejected materials promptly from the project.
- B. Upon completion of the work, the Architect or Irrigation Consultant will issue a punch list for work to be corrected. Where work does not comply with requirements, replace rejected Work.
- C. It will be the responsibility of the Irrigation Contractor to provide a reliable communication system (i.e.: Two way radios or remote radio control activation system) for Substantial Completion, final acceptance and all periodic site visits. Once the controllers are operational, the contractor will be required to have a tablet devise on site to operate the system. This tablet is to be accessible to the designer for any walk troughs that are scheduled.
- D. If a site visit to verify Substantial Completion and final acceptance has been scheduled and the Owner's representative arrives at the site and determines that the irrigation system is not substantially complete or ready for final acceptance (all system components in place, operational and checked and arc and radius adjustments made) the Contractor shall be responsible for all costs incurred by the Architect or Irrigation Consultant to visit the site. Reimbursable expenses include but are not limited

to the following: Mileage, airfare, consultants' time, parking fee, meals, rental car, etc. All incurred expenses will be deducted from the final contract amount.

### 3.14 CLEANING

A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soils, debris and equipment. Repair damage resulting from sprinkler system installation.

END OF SECTION 328400

Harlem Av Medians just north of 163rd St



Harlem Av Medians 163rd St to 167th St



Harlem Av Medians just south of Hickory St/ Metra



Harlem Av Medians just south of 183rd St



Approximate areas of coverage shown in turquoise

171st St Median- Just East of 80th Av



Oak Park Av Train Station- Oak Park Av btw North St & South St



Approximate areas of coverage shown in turquoise

Police Station- 7850 W 183rd St



Fire Station #4- 7801 W 191st St





Approximate areas of coverage shown in turquoise

LaGrange Rd- 171st St to 175th St



LaGrange Rd- 175th St to 179th St



## COMMENTS FROM THE STAFF

# COMMENTS FROM THE BOARD

## COMMENTS FROM THE PUBLIC

## **EXECUTIVE SESSION**

### **ADJOURN TO EXECUTIVE SESSION TO DISCUSS:**

- A. THE APPOINTMENT, EMPLOYMENT, COMPENSATION, DISCIPLINE, PERFORMANCE, OR DISMISSAL OF SPECIFIC EMPLOYEES OF THE PUBLIC BODY OR LEGAL COUNSEL FOR THE EMPLOYEES OF THE PUBLIC BODY OR LEGAL COUNSEL FOR THE PUBLIC BODY, INCLUDING HEARING TESTIMONY ON A COMPLAINT LODGED AGAINST AN EMPLOYEE OF THE PUBLIC BODY OR AGAINST LEGAL COUNSEL FOR THE PUBLIC BODY TO DETERMINE ITS VALIDITY.
- B. COLLECTIVE NEGOTIATING MATTERS BETWEEN THE PUBLIC BODY AND ITS EMPLOYEES OR THEIR REPRESENTATIVES, OR DELIBERATIONS CONCERNING SALARY SCHEDULES FOR ONE OR MORE CLASSES OF EMPLOYEES.
- C. LITIGATION, WHEN AN ACTION AGAINST, AFFECTING OR ON BEHALF OF THE PARTICULAR PUBLIC BODY HAS BEEN FILED AND IS PENDING BEFORE A COURT OR ADMINISTRATIVE TRIBUNAL, OR WHEN THE PUBLIC BODY FINDS THAT AN ACTION IS PROBABLE OR IMMINENT, IN WHICH CASE THE BASIS FOR THE FINDING SHALL BE RECORDED AND ENTERED INTO THE MINUTES OF THE CLOSED MEETING.