LEGEND:

EXISTING	PROPOSED	DESCRIPTION
W W W	W W	WATER MAIN
G G G	G G	GAS MAIN
S S S	S S	STORM SEWER
> > >	> >	SANITARY SEWER
E E E	E	ELECTRIC LINE
		UNDERDRAIN
OH OH OH	OH OH	OVERHEAD UTILITY
		FENCE
XX.XX	XX.XX	SPOT ELEVATIONS
812	812	CONTOUR
		VALVE VAULT
BB	BB	BUFFALO BOX
		STORM CATCH BASIN
		STORM INLET
		MANHOLE - OPEN LID
		MANHOLE - CLOSED LID
		TREE W/ SIZE
		LIGHT POLE
		BOLLARDS
		FIRE HYDRANTS
		UTILITY POLE
		HAND HOLE
		STREET SIGN
		B6-12 CURB & GUTTER
	XXX.XX / XXX.XX	TOP CURB ELEVATION / BOTTOM CURB ELEVATION
		SIDEWALK/ CONCRETE PAD

WATER

1. PROPOSED 60" VALVE VAULT W/ PRESSURE CONNECTION TO EXISTING MAIN RIM=703.00
2. PROPOSED FIRE HYDRANT FLANGE=706.30

STORM

A1 EXISTING CATCH BASIN RIM ELEVATION TO BE ADJUSTED AS NECESSARY
RIM=700.88 (EX)
INV=696.43 W 12" RCP
INV=696.58 SE 12"RCP
INV=697.00 N 12" (PR)

A2 PROPOSED 48" CATCH BASIN W/ RESTRICTOR GROUTED IN 12" SOUTHBOUND PIPE
RIM=706.00
INV=700.27 (E)
INV=697.27 (N)
INV=697.19 (S)

A3 PROPOSED 48" MANHOLE
RIM=705.00
INV=700.70

A4 PROPOSED 24" INLET
RIM=705.00
INV=701.00

B1 PROPOSED 48" CATCH BASIN
RIM=707.25
INV=701.66

B2 PROPOSED 48" MANHOLE
RIM=706.00
INV=702.10

B3 PROPOSED 24" INLET
RIM=706.00
INV=702.40

B4 PROPOSED 24" INLET
RIM=706.00
INV=702.70

C1 PROPOSED 48" CATCH BASIN
RIM=706.40
INV=701.78
(STORMTRAP TO PROVIDE SPLASH PAD WITH FINAL SYSTEM DESIGN.)

C2 PROPOSED 48" MANHOLE
RIM=705.70
INV=701.93

C3 PROPOSED 48" MANHOLE
RIM=705.70
INV=702.18

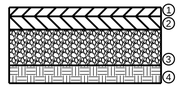
C4 PROPOSED 48" MANHOLE
RIM=705.70
INV=702.43

C5 PROPOSED 24" INLET
RIM=706.65
INV=702.68

Detention Requirements		
Increase in Impervious Area > 25,000 sf increase in impervious area therefore onsite detentions is required for this development.		
Drainage Area		
Total Area	2.295	acres
Impervious Area, Existing	0	acres
Impervious Area, Proposed	1.48	acres
Percent Hydraulically Impervious	64	%
Detention Volume per Acre (per nomograph)	0.44	ac-ft/ac
Release Rate per Acre	0.10	cfs/ac
Total Detention Volume Required		
0.44 ac-ft/ac X 2.295 acres	1.01	ac-ft
Total Release Rate		
0.10 cfs/ac X 2.295 acres	0.23	cfs
Volume Control		
Total Impervious Area	1.48	acres
Volumes Required		
(1.25" X 1.48 ac) / (12" per foot)	0.15	ac-ft

N

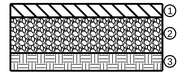
30' 15' 0 30'
1"=30'



1. 2" BIT. SURFACE COURSE CL I
2. 3" BIT. BINDER COURSE CL I
3. 8" BASE COURSE, CA-6 COMPACTED TO 95% PROCTOR
4. COMPACTED SUBGRADE

DESIGN CALCULATION:
(2")(.40)+(3")(.33)+(8")(.13)=2.83

FLEXIBLE PAVEMENT

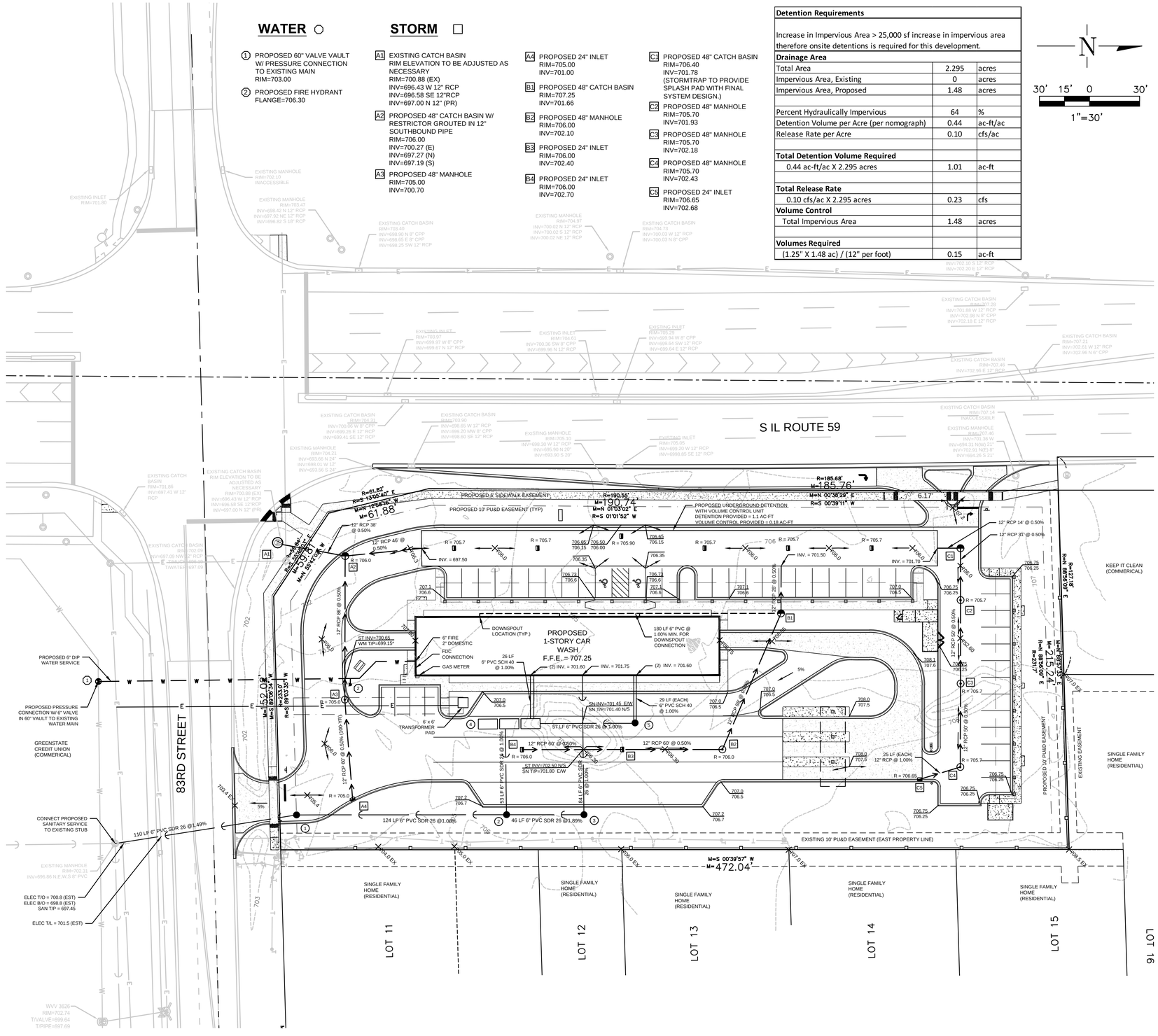


1. PCC CONCRETE PAVEMENT (8" ROW; 6" W/ 6"X6" W2.9 W.W.F. ONSITE)
2. 4" BASE COURSE, CA-6 COMPACTED TO 95% PROCTOR
3. COMPACTED SUBGRADE

NOTES:
1. MIX DESIGN TO COMPLY WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION SECTION 1020 FOR PCC PAVEMENT.
2. CONTRACTOR SHALL PROVIDE A JOINTING PLAN FOR ENGINEER APPROVAL.
3. CONTRACTOR SHALL PROVIDE APPROPRIATE JOINT TYPE AND LOAD TRANSFER IN ACCORDANCE WITH ACI 330.2R-17.
4. ALL PAVMENET STRUCTURE ELEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

RIGID PAVEMENT

PAVEMENT SECTION



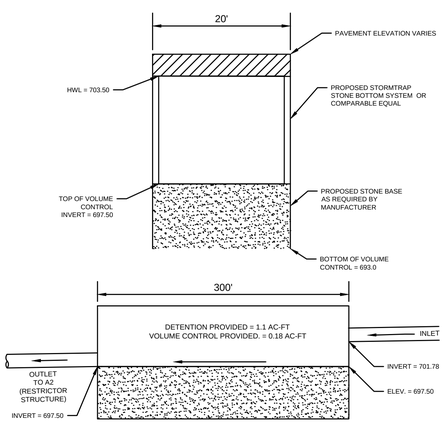
DEPARTMENT OF PUBLIC UTILITIES - ELECTRIC GENERAL NOTES

1. THE DPU-E ENGINEER FO THIS PROJECT IS GIOVANNI HERNANDEZ. PLEASE CONTACT HIM AT (630)-548-1212 WITH ANY QUESTIONS REGARDING THE ELECTRIC SERVICE.
2. THE DEVLOPER SHALL SUPPLY THE DPU-E ENGINEER WITH CATALOG CUTS FOR ALL CT/METER EQUIPMENT (INCLUDING BUT NOT LIMITED TO METER SOCKETS, PT CABINET, CT CABINET, DISCONNECT CABINET) AND TRANSOFRMER PAD/VAULT. THE CATALOG CUTS SHALL BE APPROVED BY DPU-E PRIOR TO PURCHASING.
3. THE CT/METER CABINET SHALL BE TOP FED.
4. CT/METER EQUIPMENT ARE LONG LEAD TIME ITEMS AND DPU-E SHALL NOT BE HELD RESPONSIBLE FOR DELAYS RESULTING FROM NON-COMPLIANT CT/METER EQUIPMENT. DEVELOPER TO PROVIDE NAME & CONTACT INFORMATION FOR ELECTRICAL CONTRACTOR FOR PROJECT.
5. DPUE WILL PROVIDE, INSTALL, AND MAINTAIN THE TRANSFORMERS, ALL PRIMARY (15KV) CABLE AND CONDUIT, AND THE METERS AND INSTRUMENT TRANSFORMERS. DPUE WILL ALSO MAKE THE FINALL CONNECTIONS IN THE TRANSFORMERS ONCE THE INSPECTION IS COMPLETE AND THE BUILDING IS READY TO BE ENERGIZED.
6. THE DEVELOPER IS RESPONSIBLE FOR PROVIDING, INSTALLING, AND MAINTAINING THE TRANSFORMER PAD/VAULT, ALL SERVICE LATERAL (480V) CABLE AND CONDUIT, THE SERVICE ENTRANCE EQUIPMENT INCLUDING THE CT/METER CABINET AND ALL BANKED METER SOCKETS.
7. AT ALL TIMES, THE CUSTOMER SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING A SUITABLE APPROACH TO THE METER LOCATION, WITH NO OBSTRUCTIONS WITHIN FOUR (4') FEET OF THE FRONT AND TWO (2') FEET OF THE SIDE OF THE METER. PER NAPERVILLE SERVICE RULES AND POLICIES 22.2.F.
8. CLEARANCE TO THE TRANSFORMER PAD SHALL BE 5' FROM ALL SIDES, 10' FROM THE FRONT, AND THE AREA ABOVE MUST BE COMPLETELY CLEAR OF OBSTRUCTIONS. NO TREES, SHRUBS, OR OTHER OBASTACLES WILL BE ALLOWED WITHIN THIS AREA. TRANSFORMER PAD SHALL MAINTAIN MINIMUM CLEARANCE OF 20' FROM EGRESS POINTS. PER DPUE SPECIFICATIONS C10-2130 AND C30-0016.
9. DPU-E REQUIRES A MINIMUM 5' OF SEPARATION BETWEEN ITS ELECTRIC FACILITIES AND ANY FIRE HYDRANTS, STORMS DRAINS, STORM SEWERS, WATER MAINS, GAS MAINS, ETC. THAT RUN PARALLEL TO ITS FACILITIES.
10. LABEL ALL METER SOCKETS WTH THE COMPLETE ADDRESS IN 1" LETTERS USING PERMANENT STICKERS. IN MULTIPLE METER BANKS, THE COMPLETE ADDRESS MAY BE ON THE DISCONNECT SWITCH AND THE SUITE NUMBERS ON THE METER SOCKETS. THE ELECTRICAL SERVICE EQUIPMENT WILL NOT PASS INSPECTION WITHOUT APPROPRIATE ADDRESS LABELING.
11. APPROVAL OF METERING EQUIPMENT BY DPU-E DOES NOT REMOVE YOUR RESPONSIBILITY TO COMPLY WITH THE LATEST VERSION OF THE NATIONAL ELETRICAL CODE AS ADOPTED BY THE CITY OF NAPERVILLE. DETERMINATION OF COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE WILL BE MADE BY THE TRANSPORTATION, ENGINEERING, AND DEVELOPMENT DEPARTMENT.
12. DUE TO SUPPLY CHAIN ISSUES DPU-E IS EXPERIENCING LONG LEAD TIMES (+400 DAYS) ON TRANSFORMERS. PLEASE TAKE THIS INTO CONSIDERATION WHEN PLANNING CONSTRUCTION.

NOTES:
1. PROPOSED DOMESTIC WATER SERVICE SHALL BE TAPPED FROM THE NEW FIRE SERVICE INSIDE THE BUILDING.
2. * WATER SEWER 18" MIN. VERTICAL SEPARATION REQUIRED AT CROSSING.
3. STOP SIGNS AND STOP BARS SHALL BE LOCATED A MINIMUM OF 4 FEET FROM THE CROSSWALK EDGE.
4. SITE DESIGN BASED OFF OF ALTA/NSPS LAND SURVEY PROVIDED BY KNIGHT ENGINEERS DATED 3/14/22.

SANITARY

1. PROPOSED 48" SANITARY MANHOLE
RIM=705.00
INV=698.60 (N)
INV=698.50 (S)
2. PROPOSED 48" SANITARY MANHOLE
RIM=708.00
INV=699.94 (N,W)
INV=699.84 (S)
3. PROPOSED 48" SANITARY MANHOLE
RIM=708.00
INV=700.91 (W)
INV=700.81 (S)
4. PROPOSED RECLAMATION SYSTEM REFER TO DETAIL FOR ALL INFORMATION
RIM=706.25
INV=701.34 (W)
INV=700.47 (E)
INV=700.64 (N)
5. PROPOSED 48" SANITARY MANHOLE
RIM=706.25
INV=701.31 (W)
INV=701.21 (S)



UNDERGROUND DETENTION

N.T.S.

DATE	REVISIONS		
12/14/22	REVISED PER CITY REVIEW 12/5/22	SCALE	AS NOTED
1/13/23	REVISED PER CITY REVIEW 1/11/23	DRAWN	C.A.B.
		CHECKED	L.G.K.
		APPROVED	
		DATE	11/4/22
		ISSUED FOR	ENTITLEMENT

VEENSTRA & KIMM INC.

JET BRITE CAR WASH
IL 59 AND 83RD STREET NAPERVILLE, IL

552 W. Boughton Road ● Bolingbrook, IL 60440
630-755-0293 ● 888-630-2034

PRELIMINARY ENGINEERING PLAN

DWG. NO. C-3
1 OF 1
PROJECT #6692

PLOTTED: Wednesday, January 18, 2023 9:03:14 AM

X-REFS: 7767.01 ALTA Survey Copy
FILE PATH: B:\0600\669 JET BRITE SERVICES, INC\6692 JET BRITE, NAPERVILLE CAR WASH\CADD\DRAWINGS\DESIGN DEVELOPMENT\CIVIL\X_SITE

JOB NO. 6662 VEENSTRA & KIMM, INC., DESIGN FIRM REGISTRATION NUMBER 184.001939