Mount Joy Borough
Council Meeting Agenda
7:00 PM, Monday, July 12, 2021

1. Call to Order
2. Roll Call—Councilors, Castaldi, Deering, Eichler, Fahndrich, Ginder, Reese, Ruschke, Youngerman, President Hall and Mayor Bradley
3. Invocation
4. Pledge of Allegiance
5. Announcement of Executive Sessions
6. Consider a motion to approve the July 12, 2021, Borough Council Meeting Agenda.
7. Public Input Period - Comments of Any Borough Resident or Property Owner. Time limit of three minutes per individual.
8. Reports
    a. Mayor
    b. Police Chief
    c. Fire Department Mount Joy
    d. SVEMS
    e. EMA
    f. Main Street Mount Joy
    g. Library
    h. Code Officer
    i. Stormwater Officer
    j. Public Works Department
    k. Borough Authority Manager
    l. Borough Manager
9. Approval of Minutes of the Regular Borough Council Meeting held on June 7, 2021.
10. Administration and Finance Committee
    a. Mount Joy Senior Housing, 240 W. Main Street, Mount Joy, PA.
        i. Consider a motion to recommend Council waive §240-43.H.1 to improve streets in which a subdivision or land development abuts and existing Borough and/or state street.
        ii. Consider a motion to recommend Council waive §240-43.I.(4) for street intersections with a local street to be a minimum radius of 20'.
        iii. Consider a motion to recommend Council waive §240-46.C.(1)requiring that curbing shall be provided along the edge of any landscaped portion of a parking facility.

iv. Consider a motion to recommend Council waive §240-57.D.(1) to dedicate recreation land to the Borough.

v. Consider a motion to recommend Council waive §240.57.G requiring a fee in lieu of dedication of recreation and accept the applicants proposed fee of $2,000 per unit for a total fee of $72,000.

vi. Consider a motion to recommend Council waive §240-62.B requiring that applications for all residential developments with 20 or more dwelling units and buildings containing 1000sf of usable space provide a traffic study and report.

vii. Consider a motion to recommend Council waive §226-32.A.(2)(c) requiring for the loading ratios in Karst areas to be a maximum of 3:1 impervious drainage area for infiltration area and 5:1 total draining area to infiltration area.

viii. Consider a motion to recommend Council waive §226-37.A.(6)(b) requiring that the use of the emergency spillway to convey flows greater than the 50-year storm is permitted, conditioned upon the post development total peak flow for the 100 year storm be less than the pre-development total peak flow for the 2 year storm of 3.10 cfs.

ix. Consider a motion to recommend Council approve a Preliminary/Final Plan for Mount Joy Senior Housing, LP in accordance with Chapter 240, to re-develop an existing building into 36 senior housing units consisting of 12 1-bedroom apartments, 24 2-bedroom apartments, 4000-6000 square feet of commercial space on the bottom floor elevation and 40 off-street parking spaces at the property located at 240 W. Main Street, Mount Joy, PA, conditioned upon Borough Solicitor and Borough Engineer comments being addressed, a Dedication Agreement and Ordinance being drafted at applicant's expense and Stormwater Management Agreement and Land Development Agreement being recorded.

b. Consider a motion to open a public hearing to amend Chapter 270, Zoning to revise general regulations governing special exception uses and to revise provisions governing signs, including signs exempt from permit requirements and personal expression signs.
    i. Public Comment
c. Consider a motion to close the public hearing.
d. Consider a motion to adopt Ordinance 8-21 to amend Chapter 270, Zoning to regulate personal expression signs and clarify regulations concerning special exceptions.
e. Consider a motion to approve Resolution No. 7-21 ; Authorization of signatures for the Amendment to the PennDOT Complete Streets Grant Reimbursement Agreement
f. Consider a motion to approve revised Job Descriptions for the Administrative Assistant and the Receptionist/Secretary (Part-Time).

g. Consider a motion that Council raises no objections to the conveyance of 820 Church Street, Mount Joy, PA from Susquehanna Valley EMS to Penn State Health Life Lion LLC.

h. Consider a motion to Bond the Borough Manager and the Finance and business Administrator in the amount of $500,000.00.

i. Consider a motion to rescind Resolution 10-20, Borough of Mount Joy Declaration of Disaster Emergency.

11. Public Safety Committee
    a. Consider a motion to approve Policy #326-Part-Time Officers, Policy #1019-Payroll Records, Policy #1020-Overtime Compensation, and Policy #1022-Work-Related Injury and Occupational Disease Reporting.
    b. Consider a motion to approve an increase in Part-Time Officer salaries from $23.00 per hour to $26.00 per hour.
12. Public Works Committee
    a. Consider a motion to authorize staff to move forward with a public bidding process for stormwater pipe replacement on Manheim Street (SR772), prior to PennDOT repaving Manheim Street.
13. Public Input Period - Comments of Any Borough Resident or Property Owner. Time limit of three minutes per individual.
14. Any other matter proper to come before Council.
15. Authorization to pay bills.
16. Meetings and dates of importance, see the white calendar.
17. Executive Session – to discuss personnel matter.
18. Adjourn

The next regular Borough Council meeting is scheduled for 7:00 PM, on Monday, August 2, 2021

Detective
Summary of Cases

CASE DESCRIPTION	Previous Month 2021	NEW CASES May 2021	Monthly CLOSED CASES	TOTAL
Accident, Hit & Run	0			0
Arson	2			2
Assault	2			2
Assist Other Agency	0			0
Burglaries	36			(5) 36
Criminal Mischief / Vandalism	7		2	5
Child & Family Offense (Abuse)	2		1	1
Death Investigation	4		1	3
Drug Offense	0			0
Harassment by Communication	1			1
Fraud (Forgery, Id Theft, etc.)	15		1	14
Receiving Stolen Property	1			1
Robbery	8			8
Suspicious Activity	0			0
Theft	40			(6) 40
Trespass	0			0
Miscellaneous	3			3
Threat to Official	1			1
Sex Offense				
Adult	0			0
Juvenile	2	2	5	0
TOTAL OPEN CASES	122	2	10	117
New Cases Assigned	2	MTH		
Closed Cases*	25	YTD		
Warrants Served	0	MTH		
Surveillance Hours Conducted**	0	MTH		

*cold cases are marked in ( )

MOUNT JOY POLICE DEPARTMENT

Calls for Service

May 2021

Code	Call for Service	Totals
0510	BURGLARY	1
0619	THEFT ALL OTHERS	1
0800	SIMPLE ASSAULT	1
1130	FRAUD ALL OTHERS	4
1440	CRIMINAL MISCHIEF ALL	7
1445	PROPERTY DAMAGE REPORT	1
1711	SEX OFFENSE ALL OTHERS	2
1720	INDECENT EXPOSURE	1
1810	DRUG POSSESSION OFFENSE	1
2020	FAMILY OFF-CHILD ABUSE	2
2040	FAMILY OFFENSES - DOMESTIC	8
2111	DUI-ALCOHOL/UNDER INFL	2
2310	PUBLIC INTOXICATION / DRUNKENESS	2
2450	NOISE COMPLAINT	7
2485	ALARM ALL OTHERS	1
2640	MUN ORD VIOLATIONS	4
2654	DISTURBANCE	11
2656	THREATS	2
2657	HARASSMENT	12
2660	TRESPASSING	3
2664	STALKING	1

MOUNT JOY POLICE DEPARTMENT

Calls for Service

May 2021

Code	Call for Service	Totals
2665	FIREWORKS	6
2670	ALL OTHER OFFENSES (EXCEPT TRAFFIC)	1
4018	STREET LIGHTS-OUT/REPAIRS	1
4021	SUSPICIOUS ACTIVITY	25
4028	OTHER NON-CRIMINAL INV GENERAL POLICE	1
4049	SURVEILLANCE	1
4051	ALARM BURGLARY OR HOLD UP RESIDENCE	1
4052	ALARM BURGLARY OR HOLDUP NON RESIDENCE	9
4101	FIRES (ALL WORKING FIRES)	3
4502	NON MV CRASH DEATHS	1
4504	ATTEMPTED SUICIDES	1
5004	FOUND ARTICLES	3
5008	LOST ARTICLES	3
5510	ANIMAL COMPLAINTS ALL	14
6006	REPORTABLE MV CRASH W/INJURY	1
6008	REPORTABLE MV CRASH NO INJURIES	2
6015	REPORTABLE MV CRASH HIT & RUN	6
6016	NON REPORTABLE MV CRASH	3
6303	TRAFFIC OFFENSE ALL OTHER	19
6305	SELECTIVE ENFORCEMENT TRAFFIC	9
6308	TRAFFIC MV COMPLAINT	8
6310	TRAFFIC ENFORCE / STOP	78

MOUNT JOY POLICE DEPARTMENT

Calls for Service

May 2021

Code	Call for Service	Totals
6335	TRAFFIC HAZARD	5
6336	DISABLED MV	2
6511	PARKING VIOLATION COMPLAINT	9
6602	ABANDONED IMPOUND/TOWAWAY	5
6612	SIGNALS SIGNS OUT	1
6615	TRAFFIC COUNTER DEPLOYMENT / RADAR SIGN	1
7002	BUILDING CHECK	54
7008	MEDICAL ASSISTANCE	59
7014	OTH PUB SERV/WELFARE CHK	13
7015	ASSIST CITIZEN	16
7025	EMOTIONALLY DISTURBED PERSON (EDP)	7
7502	ASSISTING-FIRE DEPT	2
7504	ASSISTING-OTHER POLICE DP	22
7522	ASSISTING OTHER OFFICER	1
7533	K-9 UNIT REQ / RESP ASSIST OTHER PD	1
8010	WARRANTS-LOCAL	4
9002	ADMINISTRATIVE DUTIES	3
9008	COURT	30
9016	LOCAL ADMIN USE	1
9020	POLICE INFORMATION	50
9021	TRAINING	3
9025	FIELD CONTACT INFORMATION	4

MOUNT JOY POLICE DEPARTMENT

Calls for Service

May 2021

Code	Call for Service	Totals
9028	FINGERPRINT	1
9030	SPECIAL DETAIL ASSIGNMENT	1
9068	COMMUNITY RELATIONS ACTIVITY	2
911	911 HANG UP / CHK WELFARE	1
9112	FOOT PATROL	18
9115	FOLLOW UP	127
9119	CHILD LINE / CYS	1
9130	PRESCRIPTION DRUG TAKE BACK	1
9137	EVIDENCE DUTIES	3
9192	VEHICLE MAINTENANCE	13
9989	CALL BY PHONE	8
9999	NON-CAT DATA	2
	Grand Total	**741**

MOUNT JOY POLICE DEPARTMENT

21 E MAIN ST, MOUNT JOY,
PA 17552

Phone: 717-653-1650 Fax: 717-653-0062

Citation Output By Charge

Starting Issue Date 5/1/2021 to Ending Issue Date 5/31/2021

Charge	Total
1515 A - FAIL TO NOTIFY CHANGE IN ADDRESS	1
4703 A - OPERAT VEH W/O VALID INSPECT	1
1301 - 1301 A - Dr Unregist Veh	2
1371 - 1371 A - Veh Reg Suspended	1
1501 - 1501 A - Driving W/O A License	2
1543 - 1543 A - Driv While Oper Priv Susp Or Revoked	7
1543 - 1543 B1i - Drg Lic Sus/Rev Purs to Sec 3802/1547B1	1
1786 - 1786 A - Required Financial Responsibility	2
3111 - 3111 A - Obedience to Traffic-Control Devices	3
3303 - 3303 A3 - Pass Left of Pedacycle	1
3323 - 3323 B - Duties At Stop Sign	6
3331 - 3331 E - Interference with Pedacycles	1
3345 - 3345 A - Meeting/Overtaking School Bus	2
3354 - 3354 A - Park Improp Two Way Highways	1
3361 - 3361 - Driving at Safe Speed	1
3362 - -	1
3745 - 3745 A - Acci Dam To Unattended Veh Or Propert	1
3746 - 3746 A1 - Fail To Not Police Of Accident\ Injury Or Death	1
4703 - 4703 A - Operat Veh W/O Valid Inspect	2
7124 - 7124 - Fraudulent Use/Removal Of Reg Plate	1
Total:	38

MOUNT JOY POLICE DEPARTMENT

21 E MAIN ST, MOUNT JOY,
PA 17552

Phone: 717-653-1650 Fax: 717-653-0062

Criminal Charges by Charge Type

Starting Issue Date 5/1/2021 to Ending Issue Date 5/31/2021

Charge Type: ARREST

Charge	Total
1501 A - DRIVING W/O A LICENSE	1
1543 B-1 - DRIVE WHILE DUI SUSP	1
1543 B1III - DRG LIC SUS/REV PURS TO SEC 3802/1547B1-3RD OR SUB	1
2701 A1 - SIMPLE ASSAULT - ATTEMPT	1
2706 A1 - TERRORISTIC THREATS W/ INT TO TERRORIZE ANOTHER	1
2709 A5 - HARASSMENT - COMM. REPEATEDLY IN ANONYMOUS MANNER	1
2709 A6 - HARASSMENT - COMM. REPEATEDLY @ INCONVENIENT HOURS	1
2709.1 A1 - STALKING - REPEATEDLY COMMIT ACTS TO CAUSE FEAR	2
3127 A - INDECENT EXPOSURE	1
3362 A3-5 - EXCEED MAX SPEED LIM ESTB BY 5 MPH	1
3743 A - ACCIDENT INVOLV DAMAGE ATTENDED VEHICLE/PROP	1
3744 A - FAIL STOP AND GIVE INFOR RENDER AID	1
3744 B - FAIL TO REPORT ACCIDENT TO POLICE	1
4581 A1 - IMPROP CHILD RESTRAINT SYSTEM	1
4952 A3 - INTIM WIT/VICT-WITHHOLD INFORMATION	1
6301 A1II - CORRUPTION OF MINORS - DEFENDANT AGE 18 OR ABOVE	1
Total:	17

Charge Type: COMPLAINT

Charge	Total
2709 A1 - HARASSMENT/STRIKE, SHOVE, KICK, ETC.	2
3503 (B)(1)(II) - DEF TRES POSTED	1
5505 - PUBLIC DRUNKENNESS AND SIMILAR MISCONDUCT	1
6321 A1 - TRANSMISSION OF SEXUALLY EXPLICIT IMAGES BY MINOR	1
Total:	5

MOUNT JOY BOROUGH POLICE DEPARTMENT
MONIES COLLECTED MAY 2021

	331.120	Borough Tickets (Other)	$60.00
	321.310	Bicycle Registration	$0.00
	380.010	Alarm Fees	$0.00
	321.600	Mercantile Licenses	$0.00
	362.100	Police Reports	$45.00
331.11	331.120	Clerk of Court Disbursement	$641.59
331.11	331.120	Magisterial Court Disbursement	$2,896.26
	331.300	AD Roving Reimbursement	$187.61
	331.300	AD Roving Reimbursement	$161.43
	331.300	AD Roving Reimbursement	$187.62

TOTAL May 2021 **$4,179.51**
Total May 2020 *$2,792.69*

Submitted by: _____

Received by: N. Scordo

New Detective Cases

	2013	2014	2015	2016	2017	2018	2019	2020	2021
January	11	0	6	8	7	5	3	4	2
February	4	8	12	6	9	5	3	7	2
March	5	6	11	6	8	7	7	6	2
April	8	4	5	8	6	6	4	6	3
May	7	1	13	2	3	14	5	7	2
June	8	3	10	2	7	3	10	5	
July	10	5	8	3	20	12	4	9	
August	8	4	10	12	7	3	3	6	
September	10	1	6	4	6	4	3	7	
October	9	11	6	13	7	6	6	9	
November	9	7	4	10	7	4	10	1	
December	4	12	6	10	9	4	3	5	

Police Activity Statistics
2021

	Citation Charges	Criminal Charges	Deposits	Incidents	Total Inc YTD	Total Inc Prev YTD
Jan	60	26	$2,716.89	589	589	574
Feb	86	34	$3,959.23	1118	1,118	1133
Mar	55	7	$6,065.89	674	1,792	1619
Apr	85	20	$5,491.40	763	2,555	1976
May	38	17	$4,179.51	741	3,296	2529
June						3229
July						3897
Aug						4615
Sept						5282
Oct						5806
Nov						6303
Dec						6802
TOTAL						6802

8-C

FDMJ Monthly Incident Report Summary

May 2021

Responded to **43 alarms** for the month of May 2021 – **215 total alarms** for year as of 5/31/21

Time in service for month: **48 hours and 48 minutes**

Average manpower per incident: **10 members per call for month - (6a-4p 18 calls/5 members per call)**

Total Man-hours: **173 hours & 51 minutes**

Calls by Municipality First Due: 36 first due alarms – 7 mutual aid alarms

- Mount Joy Borough - 17
- Rapho Township - 16
- Mount Joy Township - 2
- East Donegal Township – 1

Apparatus used

- Engine 75-1 -23
- Engine 75-2 - 18
- Truck 75 - 11
- Squad 75-1 - 4
- Traffic 75 - 6
- Duty Chief Vehicle - 19
- Duty Officer Vehicle – 8

Property pre-incident value: $ 1,805,500.00

Property fire loss: $2,500.00

Property post incident saved: $1,803,000.00

2021 FDMJ responds to a call every 16 hours & 49 min

Total Training hours of 24 members trained for 240 hours

Fire Prevention Details – 1 fire prevention detail for the month

Community Service Details for the month – 1 funeral of member, 2 duty crews , 4 public service events and 1 prearrenged standby.

Notable First Due Calls:

- 5/3 MJB – Harvestview S – Building fire (fire in dryer) - $2,500.00 fire loss

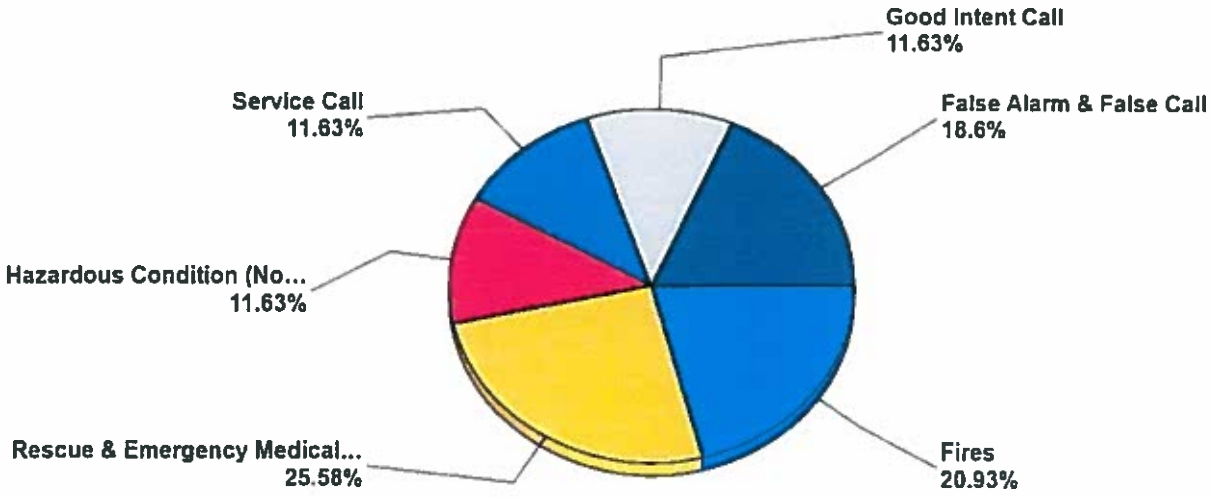
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:04:39 PM

Breakdown by Major Incident Types for Date Range

Zone(s): All Zones | Start Date: 05/01/2021 | End Date: 05/31/2021



MAJOR INCIDENT TYPE	# INCIDENTS	% of TOTAL
Fires	9	20.93%
Rescue & Emergency Medical Service	11	25.58%
Hazardous Condition (No Fire)	5	11.63%
Service Call	5	11.63%
Good Intent Call	5	11.63%
False Alarm & False Call	8	18.6%
TOTAL	43	100%

Only REVIEWED and/or LOCKED IMPORTED incidents are included. Summary results for a major incident type are not displayed if the count is zero.

Detailed Breakdown by Incident Type		
INCIDENT TYPE	**# INCIDENTS**	**% of TOTAL**
111 - Building fire	5	11.63%
121 - Fire in mobile home used as fixed residence	1	2.33%
140 - Natural vegetation fire, other	2	4.65%
143 - Grass fire	1	2.33%
311 - Medical assist, assist EMS crew	5	11.63%
322 - Motor vehicle accident with injuries	4	9.3%
324 - Motor vehicle accident with no injuries.	1	2.33%
353 - Removal of victim(s) from stalled elevator	1	2.33%
400 - Hazardous condition, other	2	4.65%
424 - Carbon monoxide incident	1	2.33%
440 - Electrical wiring/equipment problem, other	1	2.33%
442 - Overheated motor	1	2.33%
500 - Service Call, other	1	2.33%
511 - Lock-out	1	2.33%
521 - Water evacuation	1	2.33%
561 - Unauthorized burning	1	2.33%
571 - Cover assignment, standby, moveup	1	2.33%
631 - Authorized controlled burning	3	6.98%
671 - HazMat release investigation w/no HazMat	2	4.65%
733 - Smoke detector activation due to malfunction	1	2.33%
735 - Alarm system sounded due to malfunction	1	2.33%
743 - Smoke detector activation, no fire - unintentional	3	6.98%
744 - Detector activation, no fire - unintentional	1	2.33%
745 - Alarm system activation, no fire - unintentional	1	2.33%
746 - Carbon monoxide detector activation, no CO	1	2.33%
TOTAL INCIDENTS:	**43**	**100%**

Only REVIEWED and/or LOCKED IMPORTED incidents are included. Summary results for a major incident type are not displayed if the count is zero.

Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:03:50 PM

Incident Statistics

Zone(s): All Zones | Start Date: 05/01/2021 | End Date: 05/31/2021

INCIDENT COUNT	
INCIDENT TYPE	**# INCIDENTS**
EMS	11
FIRE	32
TOTAL	43

TOTAL TRANSPORTS (N2 and N3)			
APPARATUS	**# of APPARATUS TRANSPORTS**	**# of PATIENT TRANSPORTS**	**TOTAL # of PATIENT CONTACTS**
TOTAL			

PRE-INCIDENT VALUE	LOSSES
$1,805,500.00	$2,500.00

CO CHECKS	
424 - Carbon monoxide incident	1
746 - Carbon monoxide detector activation, no CO	1
TOTAL	2

MUTUAL AID	
Aid Type	**Total**
Aid Given	8
Aid Received	9

OVERLAPPING CALLS	
# OVERLAPPING	**% OVERLAPPING**
4	9.3

LIGHTS AND SIREN - AVERAGE RESPONSE TIME (Dispatch to Arrival)		
Station	**EMS**	**FIRE**
Station 75	0:08:43	0:08:04
	AVERAGE FOR ALL CALLS	0:08:31

LIGHTS AND SIREN - AVERAGE TURNOUT TIME (Dispatch to Enroute)		
Station	**EMS**	**FIRE**
Station 75	0:03:17	0:03:59
	AVERAGE FOR ALL CALLS	0:03:55

AGENCY	AVERAGE TIME ON SCENE (MM:SS)
Fire Department Mount Joy	24:40

Only Reviewed Incidents included. EMS for Incident counts includes only 300 to 399 Incident Types. All other incident types are counted as FIRE. CO Checks only includes Incident Types: 424, 736 and 734. # Apparatus Transports = # of incidents where apparatus transported. # Patient Transports = All patients transported by EMS. # Patient Contacts = # of PCR contacted by apparatus. This report now returns both NEMSIS 2 & 3 data as appropriate. For overlapping calls that span over multiple days, total per month will not equal Total count for year.

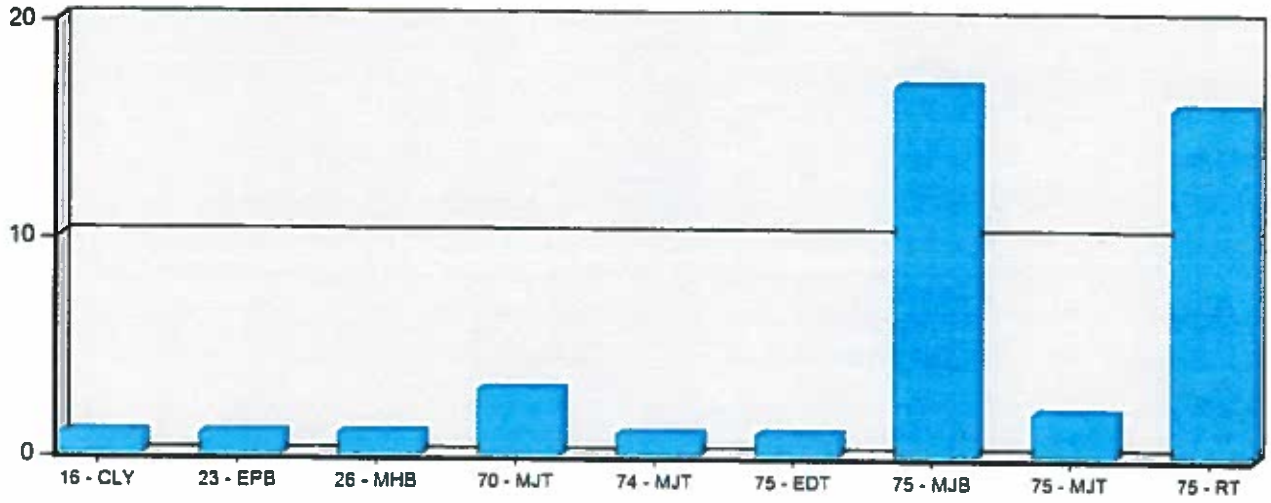
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:03:11 PM

Incident Count per Zone for Date Range

Start Date: 05/01/2021 | End Date: 05/31/2021



ZONE	# INCIDENTS
16 - CLY - 16 Clay Township	1
23 - EPB - 23 East Petersburg Borough	1
26 - MHB - 26 Manheim Borough	1
70 - MJT - 70 Mount Joy Township	3
74 - MJT - 74 Mount Joy Township	1
75 - EDT - 75 East Donegal Township	1
75 - MJB - 75 Mount Joy Borough	17
75 - MJT - 75 Mount Joy Township	2
75 - RT - 75 Rapho Township	16
TOTAL:	**43**

Zone information is defined on the Basic Info 3 screen of an incident. Only REVIEWED incidents included. Archived Zones cannot be unarchived.

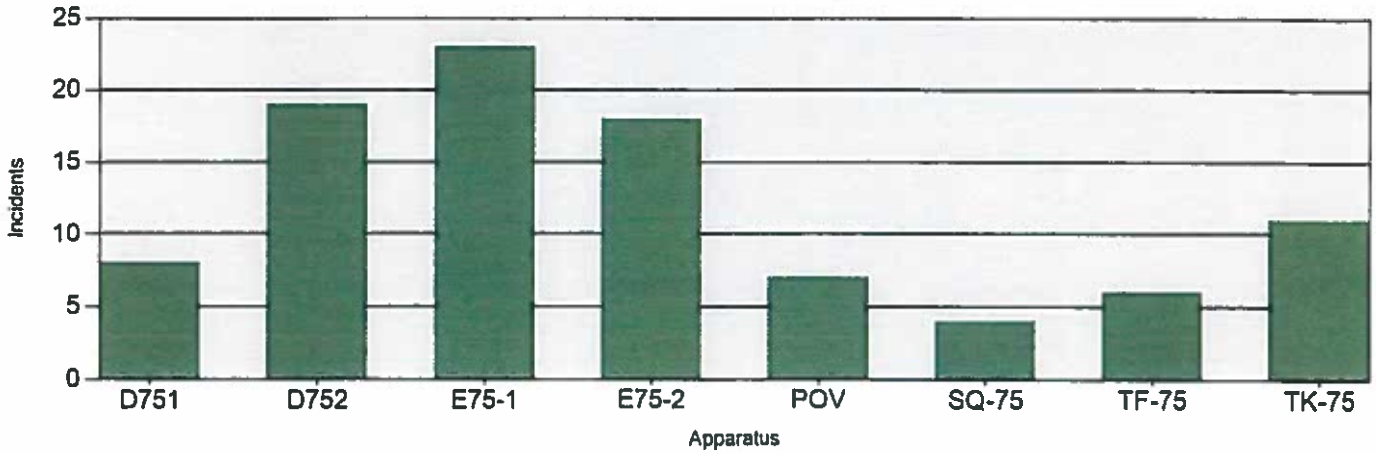
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:08:26 PM

Incident Count per Apparatus for Date Range

Start Date: 05/01/2021 | End Date: 05/31/2021



APPARATUS	# of INCIDENTS
D751	8
D752	19
E75-1	23
E75-2	18
POV	7
SQ-75	4
TF-75	6
TK-75	11

Canceled apparatus (per the THIS APPARATUS WAS CANCELLED checkbox on Basic Info 4) not included.
Only REVIEWED incidents included.

Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:09:02 PM

Incident Count with Man-Hours per Zone for Date Range

Incident Type(s): All Incident Types | Start Date: 05/01/2021 | End Date: 05/31/2021

ZONE	INCIDENT COUNT	MAN-HOURS
16 - CLY - 16 Clay Township	1	5:24
23 - EPB - 23 East Petersburg Borough	1	13:02
26 - MHB - 26 Manheim Borough	1	5:17
70 - MJT - 70 Mount Joy Township	3	12:12
74 - MJT - 74 Mount Joy Township	1	0:11
75 - EDT - 75 East Donegal Township	1	2:52
75 - MJB - 75 Mount Joy Borough	17	49:28
75 - MJT - 75 Mount Joy Township	2	13:24
75 - RT - 75 Rapho Township	16	72:00
TOTAL	43	173:51

NOTE that this report takes into consideration ONLY those Personnel that are associated with an Apparatus, and that only Reviewed incidents are included in the counts.

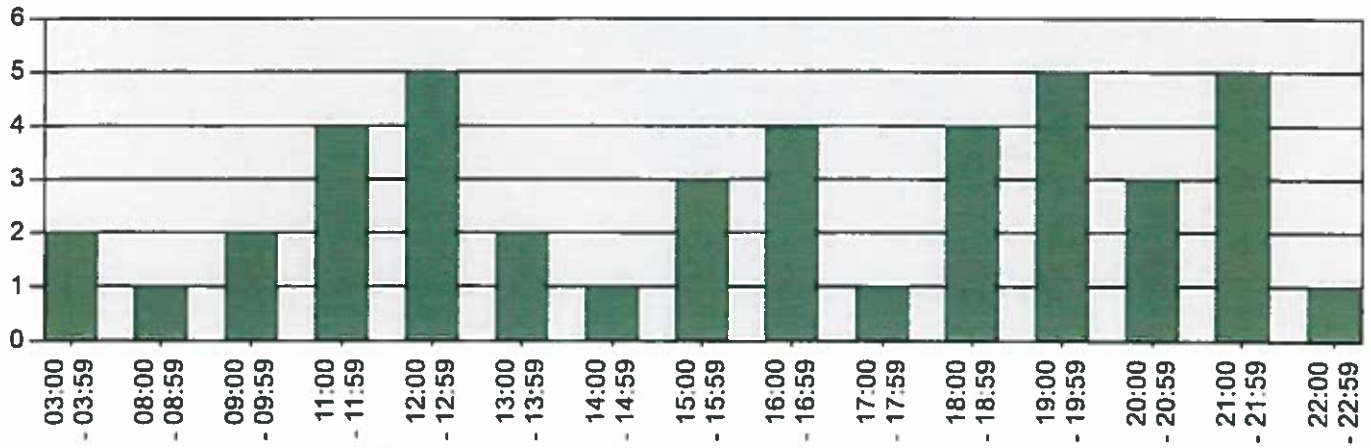
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:11:02 PM

Incidents by Hour for Date Range

Start Date: 05/01/2021 | End Date: 05/31/2021



HOUR	# of CALLS
03:00 - 03:59	2
08:00 - 08:59	1
09:00 - 09:59	2
11:00 - 11:59	4
12:00 - 12:59	5
13:00 - 13:59	2
14:00 - 14:59	1
15:00 - 15:59	3
16:00 - 16:59	4
17:00 - 17:59	1
18:00 - 18:59	4
19:00 - 19:59	5
20:00 - 20:59	3
21:00 - 21:59	5
22:00 - 22:59	1

Only REVIEWED incidents included

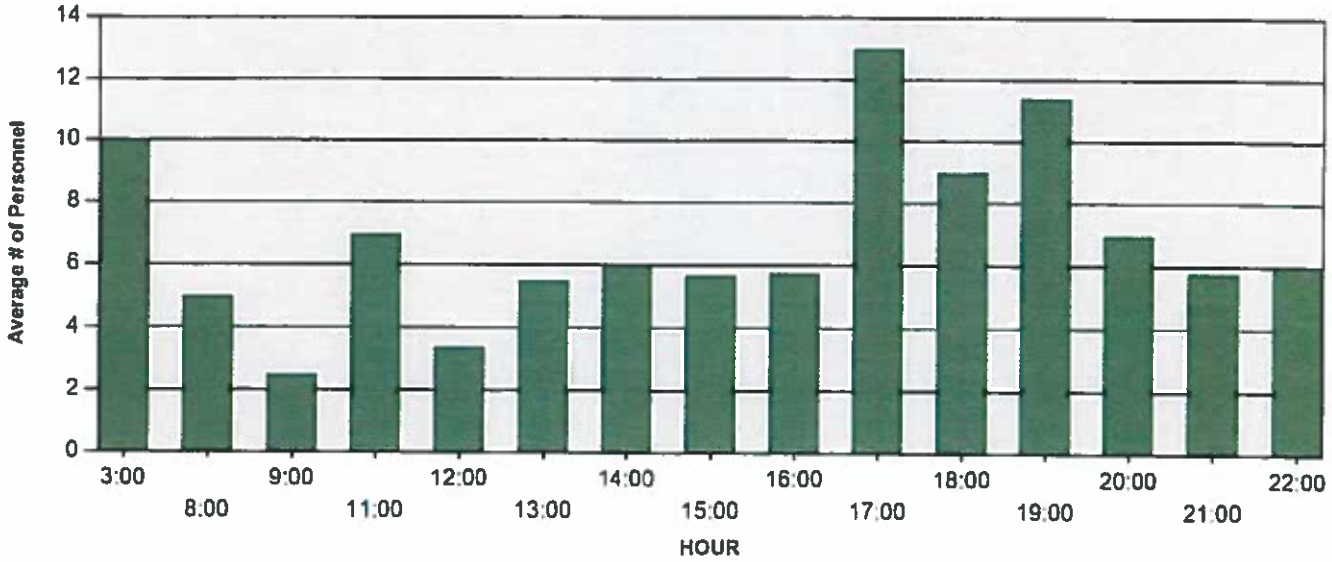
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:11:37 PM

Average Number of Responding Personnel per Hour for Date Range

Start Date: 05/01/2021 | End Date: 05/31/2021



HOUR	AVG. # PERSONNEL
03:00 - 03:59	10.00
08:00 - 08:59	5.00
09:00 - 09:59	2.50
11:00 - 11:59	7.00
12:00 - 12:59	3.40
13:00 - 13:59	5.50
14:00 - 14:59	6.00
15:00 - 15:59	5.67
16:00 - 16:59	5.75
17:00 - 17:59	13.00
18:00 - 18:59	9.00
19:00 - 19:59	11.40
20:00 - 20:59	7.00
21:00 - 21:59	5.80
22:00 - 22:59	6.00

AVE. # PERSONNEL calculated from total number of personnel responding to incidents begun at the HOUR divided by total number of REVIEWED incidents for that HOUR. Includes personnel that responded both on or off apparatus.

Fire Department Mount Joy

Mount Joy, PA

This report was generated on 6/5/2021 12:09:31 PM

Losses for Date Range

Start Date: 05/01/2021 | End Date: 05/31/2021

TOTAL INCIDENTS	TOTAL PROPERTY LOSS	TOTAL CONTENT LOSS	TOTAL LOSSES	AVERAGE LOSS
1	$1,500.00	$1,000.00	$2,500.00	$2,500.00

INCIDENT NUMBER	DATE	Incident Type	PROPERTY LOSS	CONTENT LOSS	TOTAL	% of Total
2021-180	05/03/2021	111 - Building fire	$1,500.00	$1,000.00	$2,500.00	100.00%

Only REVIEWED incidents included

8-f

55 East Main Street : Mount Joy, PA 17552 : 717.653.4227
mainstreetmountjoy.com : info@mainstreetmountjoy.com

MOUNT JOY BOROUGH COUNCIL REPORT FOR JUNE 2021 ACTIVITIES

- Held our first Craft / Maker / Art Show. 14 vendors, light traffic, but vendors were happy and plan on coming back next year. Would like to grow this event in the next few years to a street-closure event.
- 4th Friday was a Downtown Scavenger Hunt. Decided to keep the Scavenger Hunt running for the next few weeks as a free family event.
- Planning Car Show (July 24).
- Worked with several downtown businesses on finding employees. Still difficult to find them.
- Worked with downtown landlord to find new commercial tenant to fill opening (1 South Market). New tenant will be opening August 01.
- Attended 2-day statewide PA Downtown Center's Main Street Manager's conference.
- Met with Lancaster Newspapers on advertising specials/opportunities for Mount Joy.
- Worked with 1 business downtown on advertising plans and markets.
- Started creating a fundraiser program for flower planter replacement project. Kicking off the fundraising after the Car Show.
- Met with new management team at Higher Grounds Cafe.
- Met with new owners of Time 2 Eat (89 East Main – former Just Wing It).

Some of these things require large amounts of time and resources. Our downtown businesses get this support for free from MSMJ.

Web development may total 30 – 60 hours over a span of a few weeks to gather the content, write the copy, take photos and develop e-commerce tools. In the market, web development costs anywhere from $5,000 - $15,000 per website.

Strategic Plan development can total up to 80 hours of work and several long meetings (2+ hours each meeting) to talk about long range goals, gathering data, reviewing data and working out details of the steps on each plan. In the market, Strategic Plan development costs range from $5,000 - $20,000.

55 East Main Street : Mount Joy, PA 17552 : 717.653.4227
mainstreetmountjoy.com : info@mainstreetmountjoy.com

2021 Sponsorship Update

Festival of the Arts (postponed until April)
- Major Sponsor : T-Mobile

Chocolate Walk
- Major Sponsor : T-Mobile

Craft Show
- Major Sponsor : T-Mobile
- Major Sponsor : Sheetz Funeral Home

Car Show
- Major Sponsor : T-Mobile
- Major Sponsor : Members 1st Federal Credit Union
- Major Sponsor : Lanco Federal Credit Union
- Major Sponsor : Marietta Notary
- Sponsor: Knowlton Dental Associates

Winterfest
- Major Sponsor : T-Mobile

- T-Mobile is a Diamond Sponsor of MSMJ for 2021.

MILANOF-SCHOCK LIBRARY
1184 Anderson Ferry Road, Mount Joy, PA 17552
Tel: 717.653.1510 Fax: 717.653.4030
www.mslibrary.org

Milanof-Schock Library is a community resource that enriches lives through, education, information, exploration, and socialization.

Serving East Donegal Township, Marietta Boro, Mount Joy Boro, Mount Joy Township & Rapho Township

May 2021- Compiled by Joseph McIlhenney, Executive Director
Contributors: Susan Craine, Kim Beach, Jan Betty & Kirstin Rhoades

May 2021 Statistics	2021	2021 YTD	2020	2020 YTD	2019	2018
TOTAL CIRCULATION	**13,256**	71,162	**xx**	40,411	14,466	14,709
OVERDRIVE & E format	**1,372**	6,970	1,646	6,643	4,686	927
NEW PATRONS	**31**	208	**xx**	171	340	58
PATRON COUNT	**4,400**	17,796	**xx**	15,317	6,194	6,827
COMPUTER LOG-INS	**272**	1,472	**xx**	1,066	2,438	641
WIRELESS ACCESS	**271**	1,354	106	1,423	2,675	506
PASSPORTS	**59**	399	**xx**	341	656	113
WEBSITE USERS	**3,242**		1,546			
Facebook Followers	**2,044**		1,837			
Instagram Followers	**646**		486			

xx = Library Closed due to COVID-19

Executive Summary

- **May was a month of preparation.** Preparing for Summer Reading Programs for children and Adults. Meetings about the re-imagined Library Auction, planned for August 28. Planning for the end of COVID-19 restrictions with the Governor announcing the end of all COVID restrictions except masking on May 30. On May 17, the Office of Commonwealth Libraries sent a statement saying, in part: "*Understanding that not everyone is vaccinated, including some of your youngest users, the Office of Commonwealth Libraries (OCL) recommends you continue to follow your current mitigation strategies.*" Shortly after the statement MSL posted signs re-stating masking requirement and featuring OCL language. MSL staff referred to the sign when asked about mask requirements.
- **Circulation continues to be strong.** Total circulation in 2019 was only about 4% higher at 74,132.
- The library served as a polling place on May 18, 2021.
- **Donated books:** $156 given away as Youth Program Prizes, $376 added to the library collection, $853 in Lobby donations for **May total of $1,385 in monetary donations or savings from Donated Books & Materials**
- **22 Youth Programs in May** attended by 342 people for a YTD total of 87 programs and 1.266 people attending.
- **8 Adult Programs/Clubs in May** attended by 66 people for a YTD total of 35 programs/clubs and 179 people attending.
- **Our community volunteered 121 hours** to the library in May; shelving, weeding and other duties as assigned.

Joseph

- Re-write for the Chamber of Commerce Directory for 2022-2023
- Core4 meeting May 26 – Discussed moving things back to the library service floor [after June 1], check list for Service Desk staff for when things are slow, Lobby calendar, library messaging.
- Was on hand for Friend's Yard Sale, May 1
- Spoke to Karla Trout about changes to the District Negotiated Agreement, where big changes are happening.
- Planning for meetings with municipalities and local clubs in early June.

Community/Service Point (Susan)

- Added $376 of Donated Books to the library collection
- Attended core 4 and auction meetings
- Viewed Stig meeting
- Attended Barbara's bench dedication

Youth Services (Jan)

- Live program numbers are creeping upward; had some nicely attended outdoor storytimes
- Printed our events on one side of the LSLC county-wide SRP sheets. Delivered over 1000 to Donegal Primary and Intermediate Schools and Kraybill School to send home with the students.
- Created a Summer Reading Program skit to video and send to DPS and DIS for showing on their D-TV morning announcements. Very corny but, hopefully, memorable
- Did a live interview for the Merchandizer for Summer Reading Program coverage. Think it premiered the last week of May in color above the fold!
- Worked with Kim on setting up a mini-Makerfest for Saturday, June 12.
- Hung out with the nice polling people on election night...was a good chance to work on Summer stuff.
- Morgan created a wonderful stand up lion for the lobby, so the kids can get their picture taken with "Roary".
- Lego Challenge and Bingo were early this month because of the election, so the numbers were a bit lower
- Donated Books: 6 preschool (@$30), 18 juvenile (@ $126) for a total of $156 in donated book giveaways.

Public Relations/Promotions (Kirstin)

- CONSTANT CONTACT:
    - June 2021 Enews: sent to 2,882 contacts, added 19 new contacts; 612 opens (22.1%), 69 clicks (11.3%), 4 unsubscribes.
- SOCIAL MEDIA:
    - Facebook – Total Page Followers 2,044; **15 New Follows; 8,416 people reached; 2,918 post engagements**
    - Instagram – **646 followers = 17 NEW** followers
    - Created posts for National Calendar Days to tie in with what the Library has to offer the public
    - Kept patrons updated with new books on the shelves – Adults thru Children
    - Published 69 "Stories"; 387 unique opens, 41 engagements
    - Also publish to Friends FB page

- 2 PRESS RELEASES - Distributed via news media, municipalities, and Chamber of Commerce.
- WEBSITE
    - 3,242 website entrances; 6,075 page views; 808 page views of calendar; 206 views of Family Story Time; 98 views of Passport page
    - Created 3 new banner for the home page
    - Updated "Library News" page
    - Updated programs for June
    - Updated Summer Hours
- SUMMER READING
    - Began email conversation with ABC27's Ben Schad regarding Summer Reading and Libraries
    - Recorded/edited video of Jan for Summer Reading Program – was shared with the schools in the district and posted to social media
    - Updated the Summer Reading Program Calendar handout
    - Created/printed/put out signs for SRP Kickoff
    - Created signs for front promoting the Soft Pretzel Truck for SRP KO
- MISC
    - Created bookplates for books purchased for our volunteers
    - In contact with volunteer about putting together a pamphlet for our Pollinator Garden, to engage families and treat as educational resource
    - Images in Google profile received 17,388 views in May
    - Continued the emptying book donation shed and gathering books for sale in lobby; took 10 boxes donated books to DHS for students & 7 boxes of Readers' Digest Condensed Novels to the DHS Art Department for recycled art projects
    - Meeting with Senior Staff and Joseph; Staff Meeting
    - Listed sign changes for the street marquee
    - Helped the Library earn over $850 in donations from books in Lobby
    - Updated June print calendar

Volunteers/Programming/Fundraising (Kim)

- **Marietta Lions Club & Planter Project**
    - Three Lions Club members came and dug out each planter and lined them with heavy-duty plastic. They look much better!
- **Grounds Crew:** They have continued to keep the grounds weeded and watered.
- **Auction 2021**
    - DATE CHANGE: Saturday, August 28, at 10:00 am on the library grounds.
    - Confirmed new date with auctioneer.
    - Updated "Ask" letters and donation opportunities forms for mailing.
    - Updated mailing list from previous years.
- Set up 3 passive Adult programs. Working with Megan on these programs. She's a great collaborator!
- Hosted first in-person adult program since COVID!
- Devised and ran "Shabby to Chic" Make-It Monday program; asked Morgan, our resident artist, to assist in the meeting. She did a fabulous job guiding the "students"!
- Worked on programming for 2021.

8-h

Mount Joy Borough

Zoning & Code Department

REPORT

To: Borough Council; Borough Manager

From: Stacie Gibbs- Zoning, Codes and Planning Administrator

Date: June 2021

Re: June 2021 Zoning, Code and Planning Report

UPDATES

- Planning Commission meeting July 14, 2021.
- No new cases for July Zoning Hearing Board.

REPORT

- 6/3/21 -Conference call with Dennis, Dave and Borough Engineer regarding LCCTC plan to construct additional homes.
- 6/17/21- Conference call with DC Gohn to discuss Garber storage.
- Discussion with 2 potential interested buyers of vacant lot at 550 Clay Alley regarding uses and utilities.
- Discussion with Bernadette Hohenadel, Esquire regarding additional potential tenant and truck parking at 170 New Haven Street, Guardian Properties.
- Discussion with Quality Design regarding potential addition at 211 Poplar Street.
- Discussion with 1104 Collina Lane regarding fence installations.
- Discussion with MRC Sign regarding replacement of signs at BB&T Bank, 749 E. Main Street.
- Continued communication with Paramount Portfolio regarding payment of invoice and forwarding of ROW Agreement with original signatures for ARLE Grant.
- Prepared necessary correspondence to applicants after Council meeting on 6/7/21.
- Reviewed documents and correspondence for Mount Joy Senior Housing project revisions.
- Reviewed Solicitor correspondence and draft Resolution for Guidebook.
- Discussion with 345 Richland Lane regarding potential in-law quarters renovation.
- Reviewed email and responded to Laurel Harvest Labs regarding potential addition to building in near future along with Phase 2.
- Discussed permit submission process with owners for Mount Joy Senior Housing project.

- Reviewed and forwarded email from the PPL Forester regarding the trimming of trees in the Borough.
- Met with property manager at 827 Church Street to discuss condition of yard.
- Reviewed submission documents for LCCTC project.
- Met with Rob Stoner at St. Mark's to discuss grass play area.
- Fulfilled several RTKL requests.

MEETINGS

- 6/4/21-Met with Manager and staff to discuss Rotary Park lease and other park items.
- 6/7/21 -Attended Council Meeting (virtual)
- 6/8/21- Meeting with Mount Joy Township, Borough staff, LCCTC and other parties to discuss the LCCTC plan to construct additional homes.
- 6/24/21- Attended Administration and Finance Committee Meeting (virtual)

TRAINING

MOUNT JOY BOROUGH-Violations: " 6/1/2021 - 6/30/2021

JUNE 2021 VIOLATION REPORT

Building	
Open	
	Total number of Open Building Violations: 1
Property	
Closed	
	Total number of Closed Property Violations: 16
Open	
	Total number of Open Property Violations: 21
Trees/Bushes	
Closed	
	Total number of Closed Trees/Bushes Violations: 1
Zoning	
Open	
	Total number of Open Zoning Violations: 4
	43

MOUNT JOY BOROUGH Inspections by STACIE GIBBS: 6/1/2021 - 6/30/2021

JUNE 2021 RESIDENTIAL RENTAL INSPECTIONS

Type / No / TaxNo / Subtype / Task / Notes	Pass/Fail/Comp	Fee	Inspector	Date
Tenant - Property				
205 BIRCHLAND AVE - Tenant - Property		4502703900000		
Tenant Space	☑ ☐ ☐		SG	6/29/2021
617 CHURCH ST - Tenant - Property		4507376600000		
Tenant Space	☐ ☑ ☐		SG	6/16/2021
4 10-year lithium smokes required in basement, living room and 2 upstairs bedrooms.				
571 STAUFER CT - Tenant - Property		4508448800000		
Tenant Space	☑ ☐ ☐		SG	6/29/2021
730 CHURCH ST - Tenant - Property		4501956200000		
Tenant Space	☑ ☐ ☐		SG	6/17/2021
728 CHURCH ST - Tenant - Property		4501956200000		
Tenant Space	☑ ☐ ☐		SG	6/17/2021
726 CHURCH ST - Tenant - Property		4501956200000		
Tenant Space	☑ ☐ ☐		SG	6/17/2021
724 CHURCH ST - Tenant - Property		4501956200000		
Tenant Space	☑ ☐ ☐		SG	6/17/2021
121 COLUMBIA AVE - Tenant - Property		4507350700000		
Tenant Space	☐ ☑ ☐		SG	6/30/2021
1-10 year smoke needed in basement; 2A fire extinguisher needed; repair kitchen ceiling from previous leak				
119 COLUMBIA AVE - Tenant - Property		4507350700000		
Tenant Space	☐ ☑ ☐		SG	6/30/2021
2-10 yr lithium smokes needed in hallway and bedroom 1; 2A fire extinguisher needed				
940 CHURCH ST - Tenant - Property		4502731500000		
Tenant Space	☑ ☐ ☐		SG	6/17/2021
209 CHARLAN BLVD - Tenant - Property		4501938100000		
Tenant Space	☑ ☐ ☐		SG	6/28/2021
2A Fire extinguisher required				
410 BIRCHLAND AVE - Tenant - Property		4509929000000		
Tenant Space	☑ ☐ ☐		SG	6/9/2021
10-Year lithium smokes required in each bedroom and basement; electrical outlet cover in basement; repair basement ceiling from leak; 2A fire extinguisher required.				
562 W MAIN ST APT A - Tenant - Property		4500703600000		

Type / No / TaxNo / Subtype / Task / Notes	Pass/Fail/Comp	Fee	Inspector	Date
Tenant - Property				
562 W MAIN ST APT A - Tenant - Property		4500703600000		
Tenant Space	☑ ☐ ☐		SG	6/29/2021
205 CHARLAN BLVD - Tenant - Property		4501680500000		
Tenant Space	☑ ☐ ☐		SG	6/28/2021
2A Fire Extingisher required and repair rear wood step				
204 LAKESIDE XING - Tenant - Property		4509592800000		
Tenant Space	☑ ☐ ☐		SG	6/29/2021
206 LAKESIDE XING - Tenant - Property		4509530900000		
Tenant Space	☑ ☐ ☐		SG	6/29/2021
208 LAKESIDE XING - Tenant - Property		4509479000000		
Tenant Space	☑ ☐ ☐		SG	6/29/2021

Total Inspections: 17

MOUNT JOY BOROUGH-MultiSelect Permits App Date: 6/1/2021 - 6/30/2021

JUNE 2021 ZONING AND CONSTRUCTION PERMIT REPORT

PermitNo	App Date	Issue Date	Owner	Project Addr	Descript	Fee
Building						
Above ground pool						
Active						
210709	6/17/2021	6/23/2021	GERHART MERVIN AND LINDA	524 W MAIN ST	above ground pool	$40.00
210694	6/4/2021	6/9/2021	ROTHFUS MERLE AND PATRICIA	224 S BARBARA ST	Install above ground pool	$40.00
210726	6/30/2021	7/2/2021	KAMERMAN GAIL L	451 S PLUM ST	above ground pool	$40.00
					Total Above ground pool 3	$120.00
Com-Addition						
Pending						
210706	6/16/2021		DOGWOOD MOON PROPERTY LLC	537 W MAIN ST	Construct addition	$2,355.00
					Total Com-Addition 1	$2,355.00
deck with roof						
Active						
210711	6/18/2021	6/23/2021	SELCHER MYRNA AND WAYNE	529 SCHOOL LN	New deck with roof and electric	$193.00
					Total deck with roof 1	$193.00
Inground Pool						
Active						
210698	6/4/2021	6/14/2021	FLOYD MATTHEW M POSATKO PORTIA J	466 DONEGAL SPRINGS RD	Inground Pool	$273.00
					Total Inground Pool 1	$273.00
Res-Alterations						
Active						
210707	6/17/2021	6/23/2021	MILLER PHILIP	147 MANHEIM ST	Residential Renovations	$125.00
					Total Res-Alterations 1	$125.00
Res-Renovations						
Active						
210692	6/4/2021	6/9/2021	SCHRAMM EDWARD P	130 MANHEIM ST	Renovations	$65.00
210710	6/17/2021	6/23/2021	BARBER PAUL R BARBER JUDITH A	350 DONEGAL SPRINGS RD	Create recreation room above garage	$385.00
					Total Res-Renovations 2	$450.00
					Total Building 9	$3,516.00
Electrical						
Comm - electric						
Active						
210713	6/23/2021	6/29/2021	CHARTER HOMES AND NEIGHBORHOODS	W MAIN ST	Upgrade electric	$65.00
					Total Comm - electric 1	$65.00
Res-Electric						
Active						
210704	6/14/2021	6/23/2021	THOME SHANE	626 WOOD ST	Electrical Service Upgrade	$65.00
210712	6/18/2021	6/23/2021	LANTZ GREG A JR	214 PINKERTON RD	Service Upgrade	$65.00
					Total Res-Electric 2	$130.00
					Total Electrical 3	$195.00
Mechanical						
Comm Mech						
Active						
210695	6/4/2021	6/9/2021	ST LUKES EPISCOPAL CHURCH	209 S MARKET ST	Install minisplit for A/C	$239.00
					Total Comm Mech 1	$239.00
					Total Mechanical 1	$239.00

PermitNo	App Date	Issue Date	Owner	Project Addr	Descript	Fee
ROW						
cable						
Denied						
210693	6/4/2021		BREWER COLIN	486 S PLUM ST	For Comcast Cable	
					Total cable 1	$0.00
new service						
Active						
210691	6/2/2021	7/1/2021	WINGENROTH GRIFFIN	631 CHURCH ST	New gas service	
210716	6/23/2021	8/1/2021	ADAMS DALTON AND ASHLEY SULLIVAN	52 W DONEGAL ST	Install gas service	
					Total new service 2	$0.00
					Total ROW 3	$0.00
Use						
Use						
CO Issued						
210714	6/23/2021	6/25/2021	ZOU LANCE	89 E MAIN ST	New Business- Time 2 Eat	$60.00
					Total Use 1	$60.00
					Total Use 1	$60.00
Zoning						
Com-Storage						
Active						
210705	6/14/2021	6/14/2021	MELHORN J MICHAEL MELHORN WENDY	200 S PLUM	Construct outdoor storage lot	$60.00
					Total Com-Storage 1	$60.00
Fence						
Active						
210718	6/24/2021	6/24/2021	GROFF MARY A	1042 WOOD ST	Install fence	$40.00
210715	6/23/2021	6/23/2021	LYTER KELSEY	432 S PLUM ST	Install fence	$40.00
210725	6/29/2021	6/29/2021	GORDON TYLER AND TIM LEINHAUSER	130 N PLUM ST	Install fence	$40.00
					Total Fence 3	$120.00
Shed						
Active						
210702	6/14/2021	6/14/2021	RYDER ADAM AND KAYLYN	1066 DONEGAL SPRINGS RD	install shed	$40.00
210719	6/25/2021	6/25/2021	SHULTZ RICHARD M & DIANE M	322 LOCUST LN	Install shed	$40.00
					Total Shed 2	$80.00
Special Event						
Active						
210717	6/23/2021	8/20/2021	MOUNT JOY LIBRARY MILANOF-SCHOCK	1184 ANDERSON FERRY RD	Chicken BBQ	
					Total Special Event 1	$0.00
					Total Zoning 7	$260.00
					Total Permits: 24	$4,270.00

BUILDING PERMITS ANALYSIS OF FEES RECEIVED

MONTH	2018	2019	2020	2021
JANUARY	$ 496.00	$ 645.00	$ 4,874.00	$ 800.00
FEBRUARY	$ 837.00	$ 375.00	$ 525.00	$ 375.00
MARCH	$ 3,729.00	$1,293.00	$ 4,212.00	$4,275.00
APRIL	$ 2,980.80	$3,160.00	$ 631.00	$5,207.00
MAY	$ 7,371.00	$1,910.00	$ 967.00	$1,806.00
JUNE	$ 1,295.00	$3,058.00	$ 4,025.00	$4,270.00
JULY	$10,276.00	$1,905.00	$ 987.00	
AUGUST	$ 4,237.00	$5,645.00	$ 2,324.00	
SEPTEMBER	$ 2,273.00	$3,752.00	$ 2,457.00	
OCTOBER	$ 6,431.10	$1,714.00	$22,351.00	
NOVEMBER	$ 2,027.00	$1,994.00	$ 1,687.00	
DECEMBER	$ 593.68	$ 859.00	$ 4,161.00	
TOTALS	($42,546.58 Budgeted $35,000)	($26,310.00 Budgeted $35,000)	($49,201.00 Budgeted- $25,000)	($16,733.00 Budgeted $25,000)

MOUNT JOY BOROUGH-ROW Permits App Date: 6/1/2021 - 6/30/2021

JUNE 2021 STREET OPENING PERMIT REPORT

PermitNo	App Date	Issue Date	Owner	Project Addr	Descript	Fee
ROW						
cable						
Denied						
210693	6/4/2021		BREWER COLIN	486 S PLUM ST	For Comcast Cable	
					Total cable 1	
new service						
Active						
210716	6/23/2021	8/1/2021	ADAMS DALTON AND ASHLEY SULLIVAN	52 W DONEGAL ST	Install gas service	$75.00
210691	6/2/2021	7/1/2021	WINGENROTH GRIFFIN	631 CHURCH ST	New gas service	$75.00
					Total new service 2	$150.00
					Total ROW 3	$150.00
					Total Permits: 3	**$150.00**

STREET OPENING PERMITS COMPARISON SPREADSHEET

MONTH	2018	2019	2020	2021
JANUARY	$ 375.00	$ 300.00	$ 75.00	$ 300.00
FEBRUARY	$ 75.00	$ 150.00	X	$ 525.00
MARCH	$ 130.00	X	$ 150.00	$ 300.00
APRIL	X	$ 75.00	X	$ 225.00
MAY	$ 225.00	$ 220.00	X	$ 290.00
JUNE	$ 75.00	$ 75.00	X	$ 150.00
JULY	$ 150.00	$ 75.00	X	
AUGUST	$ 300.00	$ 75.00	$ 75.00	
SEPTEMBER	$ 150.00	$ 75.00	X	
OCTOBER	$ 75.00	$ 450.00	X	
NOVEMBER	$ 300.00	$ 450.00	$ 75.00	
DECEMBER	$ 225.00	$ 300.00	X	
TOTALS	($2,080.00 Budgeted $1,000)	($2,245.00 Budgeted $1,300)	($375.00 Budgeted - $1,500	($1,790.00 Budgeted $1,000)

MOUNT JOY BOROUGH-StormWater Permits App Date: 6/1/2021 - 6/30/2021

JUNE 2021 STORMWATER PERMIT REPORT

PermitNo	App Date	Issue Date	Owner	Project Addr	Descript	Fee
StormWater						
Exemption						
Active						
210720	6/25/2021	6/25/2021	SHULTZ RICHARD M & DIANE M	322 LOCUST LN	Install shed	$50.00
210703	6/14/2021	6/14/2021	RYDER ADAM AND KAYLYN	1066 DONEGAL SPRINGS RD	Install shed	$50.00
210699	6/4/2021	6/14/2021	FLOYD MATTHEW M POSATKO PORTIA J	466 DONEGAL SPRINGS RD	decking around pool	$50.00
					Total Exemption 3	$150.00
Small Project						
Active						
210700	6/8/2021	6/17/2021	BAKER FREDRICK AND SHELLEY	232 S MARKET ST	Infiltration Bed for garage and driveway	$175.00
					Total Small Project 1	$175.00
					Total StormWater 4	$325.00
					Total Permits: 4	$325.00

STORMWATER PERMITS COMPARISON SPREADSHEET

MONTH	2018	2019	2020	2021
JANUARY	X	$ 100.00	$ 50.00	X
FEBRUARY	$ 100.00	$ 200.00	$ 225.00	$ 50.00
MARCH	$ 325.00	$ 325.00	$ 600.00	$ 300.00
APRIL	$ 200.00	$ 500.00	$ 100.00	$ 625.00
MAY	$ 350.00	$ 450.00	$ 300.00	$ 350.00
JUNE	$ 250.00	$ 525.00	$ 675.00	$ 325.00
JULY	$ 375.00	$ 400.00	$ 300.00	
AUGUST	$ 150.00	$ 425.00	$ 300.00	
SEPTEMBER	$ 50.00	$ 250.00	$ 475.00	
OCTOBER	$ 200.00	$ 50.00	$ 575.00	
NOVEMBER	$ 50.00	X	$ 250.00	
DECEMBER	$ 50.00	$ 100.00	$ 50.00	
TOTALS	($2,100.00 Budgeted $2,500.00)	($3,325.00 Budgeted $2,000.00)	($ 3,900.00 Budgeted- $2,000)	($1,650.00 Budgeted $2,500.00)

RENTAL LICENSES COMPARISON SPREADSHEET

MONTH	2018	2019	2020	2021
JANUARY	$ 23,600.00	$ 32,100.00	$ 33,500.00	$ 36,300.00
FEBRUARY	$ 29,650.00	$ 18,375.00	$ 14,620.00	$ 12,000.00
MARCH	$ 14,250.00	$ 17,650.00	$ 19,200.00	$ 20,150.00
APRIL	$ 1,050.00	$ 450.00	$ 1,350.00	$ 600.00
MAY	$ 150.00	$ 50.00	$ 200.00	$ 250.00
JUNE	$ 100.00	$ 150.00	X	$ X
JULY	$ 150.00	$ 100.00	$ 200.00	
AUGUST	$ 400.00	$ 250.00	$ 100.00	
SEPTEMBER	$ 200.00	$ 50.00	$ 100.00	
OCTOBER	$ 100.00	$ 100.00	X	
NOVEMBER	X	X	X	
DECEMBER	X	$ 50.00	X	
TOTALS	$69,700+ $725 late fees = $70,425 (Budgeted $68,000)	$69,325.00 + $900.00= $70,225 late fees (Budgeted $70,000)	($69,270.00 + $750.00 late fees= $70,020 (Budgeted- $70,000)	($69,300 +$350 late fees=$69,650 $Budgeted $71,500)

8-1

BOROUGH OF MOUNT JOY
STORMWATER MANAGEMENT REPORT

TO: Mount Joy Borough Council

FROM: Dave Salley, Stormwater Enforcement Officer

DATE: July 7, 2021

RE: Stormwater Management Report for June

Stormwater/Public Works/Codes & Zoning:

- Lancaster County Conservancy Water Week MSForum
- Lancaster County Conservancy Water Week Creek Stomp
- Growing Greener Grant preperation and execution
- Little Chiques Park Small Watershed grant project walkthrough with consultant- Includes streambank restoration from 772 to 230 along Little Chiques creek, park drainage improvements, and accessibility for all users to the shoreline of the creek.
    - Wetland study, BMP concept plan, stream restoration design and survey work in progress
- LCCTC Subdivision MJB Deferral Submission meeting
- Wildflower meadow maintenance
- NFWF grant administraion
- Small SW project reviews
- Annual MS4 reporting
- Assist parks department with mowing and trimming.
- Meeting with East Donegal Township for future paving projects
- Public Works Committee meeting
- Staff meeting
- Council meeting

BOROUGH OF MOUNT JOY
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: Mark Pugliese, Borough Manager

FROM: Dennis Nissley, Public Works Director

DATE: July 7, 2021

RE: Public Works Department Activities for June 2021

Following is a list of activities for the Public Works Department for June 2021:

- Parks – Replace tennis and basketball nets
- Parks – Mowing
- Parks – General Parks maintenance,
- PW – Weed spraying along curbs
- PW – Remove logs from Little Chiques Park from tree removal project
- PW – Hang and remove 2 banners
- PW – Planning and preparation for paving of Springville Road and Cedar Lane
- PW – Spray weeds along curbs
- Stormwater – Clean and monitor facilities after significant rainfall events.
- Signs – Repair and replacement as needed
- Compost Site – Screen topsoil
- Compost Site – Manage and organize the processing of mulch and compost
- Attend virtual Public Works Committee meeting
- Attend virtual Borough Council meeting
- Continue to pursue additional ROW easements for 5 properties for the ARLE grant
- Meet with property owners on Charter Lane and Wood Street to discuss their curb and sidewalk requirements and repairs.
- Work on gathering and compiling information for 2021 DEP 902 grant application
- Attend staff meeting
- Attend webinar about Growing Greener grant
- Meet with LCCTC, Borough Engineer, DC Gohn and staff to discuss LCCTC stormwater plan for subdivision
- Attend webinar about Transportation Alternatives Set Aside program funds
- Meet with East Donegal Twp roadmaster to discuss alley paving and street repair.

8-K

To: Mount Joy Borough Councilors, Borough Manager Pugliese & Mayor Bradley

From: Joseph Ardini

June 2021 Authority Administrator Report

1. Clarifier/Thickener Project:
   - Bridge #2 was placed back onto the abutments.
   - Installation of the internal mechanism was completed.
   - New drive unit was installed along with the electrical.
   - Staff began filling the clarifier for startup.

2. Staff completed the EPA Risk and Resilience Assessment and submitted the plan.

3. Auditors were onsite to begin the 2020-2021 yearly audit.

4. New & Walnut Street Watermain Replacement:
   - The remaining waterline was installed on Walnut Street.
   - Both waterlines were tested for bacteria, which they passed. The waterlines were then pressure tested and passed.
   - Staff relocated all the customer service lines over onto the new watermains.
   - Staff cut and capped the existing 4-inch cast iron watermain for abandonment.
   - Final restoration will occur in the fall.

5. The wastewater plant was issued a new NPDES permit from PA DEP.

MOUNT JOY BOROUGH
MEMORANDUM

TO: Borough Council & Mayor

FROM: Mark G. Pugliese I, Borough Manager

DATE: June 17, 2021

RE: Manager's Report

I continue to become more acclimated with the functioning of Borough affairs. Again, I would mention to amount of support I have received from all the Borough's staff and hopefully for only a short period of time I will continue to rely on their expertise until I can get a better handle on things.

- I continue to review files from previous manager and sort out what is relevant and what is not. It is my intention to organize the closet that is in the Manager's Office and create room for the 3 cabinets of zoning files and create a file cabinet for borough information that I am actively working on and need immediate access to. Currently no such cabinet is present in the office.
- I have met with the Director of Public Works to include a ride around the Borough to look at current and future projects.
- I have reviewed the contract between the Borough and the Police Association and have discussed certain portions with Chief Goshen with regards to short-term disability. I have additionally discussed this with Finance and Business Director as we currently have a police officer on short term disability.
- I have continuously reviewed the budget, balance summary sheets and year-to-date expenses.
- As it appears that there may be a consensus among Councilors and the Mayor to continue to videoconference all the Borough's public meetings, I have started to price out equipment as well as started to make appointments with other municipalities to see what hardware and software they are utilizing to accomplish these hybrid meetings. I have complied a cost analysis for doing all the work inhouse and have obtained a vendor quote (EdgeUp recommended by 12:34 our IT vendor). All will be attached should Council wish to have any discussions on this matter.
- Finance Director and I have had a conference call with the Borough auditor and reviewed certain areas of their previous audit report. Additionally, a meeting has been scheduled for mid-July to review their latest report in detail.
- As approved at the June 7, 2021, Bourgh Council Meeting, an order was placed for 4 air purifiers. These items were received and are now utilized as specified by the Mayor. I would note that they came in under the approved price.
- As approved by Borough Council at the May 3, 2021, Borough Council meeting, I have made a conditional offer of employment to Linda Gainer as a part-time Receptionist/Secretary. Should Ms. Gainer fulfill all the conditions of the offer, she will start her employment with the Borough on July 14, 2021. Ms. Gainer is a 14-year resident of the Borough and will be retiring from Lancaster County Career & Technical Center at the end of June.
- I am working with the insurance company and completing the paperwork for bonding in the amount of $500,000.00.
- I have met with the following councilors during the past month; President B. Hall, D. Castaldi, M. Reese, and Mayor Bradley. I will continue to offer an open door to any Councilor who wishes to meet with me to discuss some of your priorities for the Borough.
- I attended all three committees meeting last month.
- I will be meeting with Jennie Granger, Deputy Secretary Multimodal Transportation – Penn DOT reference to the underground retention basin deed, PennDOT agreement for the train station, and paid parking.

- I have prepared and will forward to each of you an electronic grant tracking document which I plan on providing to you quarterly…the fact that this was not previously done received a negative comment on past year's audit reports. I have had a conference call with our auditor and plan an in-person meeting in an attempt to resolve all negative comments prior to the Borough's next audit.
- I attended a webinar sponsored by Benacon, our worker's compensation manager for Susquehanna Municipal Trust. I have identified several areas where we can improve how our worker's compensation claims are handled and will be implementing these changes shortly. These changes should result in an approved "Report Card" and may decrease our premiums or at least lower our yearly increase.
- We have received the first half of our grant under the American Rescue Plan Act (ARPA) of 2021 in the amount of $433,225.87. This money must be used for one of the following expenditures.
    - Support Public Health Expenditures
    - Address Negative Economic Impact Caused by the Pandemic
    - Replace Lost Public Sector Revenue
    - Provide premium Pay for Essential Workers
    - Invest in Water, Sewer, Broadband Infrastructure. (This would include storm water projects.)

  I will include some literature for your review that may help explain some ways that we can utilize the funds and plan on more discussion at the Administrative & Finance Committee Meeting. I would also mention that After discussion with the auditors along with the Finance and Business Director, the money will go into a separate, stand alone PLIGT account rather than a general fund account.
- The Borough's electrical supplier contract expires in November. I have been working with APPI, provider of choice from PSAB, to start putting together some numbers. I will take this to the Administrative & Finance Committee.
- I processed nine (9) Right-To-Know Requests in June.
- Lastly, I need to provide you with some situational awareness reference to the privately owned retention basin on Locust Lane. Due to property owners being deceased or otherwise failing to pay taxes, the Lancaster County Tax Collection Bureau (LCTCB) technically owns 2 of the three lots. There are several sink holes developing on the property that may need to be addressed. In March of 2019, our solicitor provided some guidance on actions that we can take. I requested that she review the letter to see if any of our options have changed and asked if she could draft a letter to the LCTCB advising them of the issues and potential danger. (Photographs Attached)

Addressing Agenda Items

- **Land Development, Zoning, and Codes** – I will aqueous to Zoning and Codes Enforcement Officer

- **Job Descriptions** - I am asking the Council to review the updated Job Descriptions for the Receptionist/Secretary (Part-Time) and the Administrative Assistant. The previous versions approved in 2015. A recent "desk audit" was conducted on several positions within the Borough. This audit showed that many of the current job descriptions were not up to date. As I review the desk audits and job descriptions, I will be bringing them to the Admin & Finance Committee and then to Council for approval. The above-mentioned Job Descriptions have been reviewed by Committee and forwarded to Council for approval.

- **Penn State Health (PSH) Life Lion LLC acquisition of Susquehanna Valley EMS (SVEMS)** - I will note that there will be representation from both organizations at the Council Meeting and they have asked to be on the agenda to speak to the Council and answer questions.

  This item is broken down into two specific areas. The first being the conveyance of the property at 820 Church St. and the second being the "Ground Ambulance Service Provider Agreement". The Administrative and Finance Committee moved to have Council consider the conveyance of the property. The Public Safety Committee has requested that changes be made to the Ground Ambulance Service Provider Aagreement. I have included at letter from Josele recommending some verbiage, but Public Safety has not met since to review the verbiage.

  Council may wish to table this until Public Safety Committee has an opportunity to review and make a recommendation.

- **Storm Water Bids** – Public Works will be asking permission to move forward on the public bidding process for a storm water project on Manheim Street. This project was not included in this year's budget as Penn DOT did not

inform the Borough of its intention to pave Manheim Street until after the budget was passed. I would note that storm water projects are an approved expenditure under ARPA.

- **Executive Session** – I have requested an Executive Session to discuss two personnel issues. A separate confidential memorandum will be forthcoming with regards to that session.

Video Conferencing Information

Borough of Mount Joy

21 East Main St
Mount Joy, PA 17552

EdgeUP Technology

605 Richmond Drive, Suite 105
Lancaster, PA 17601
(717) 392-9292
06/30/2021

CLIENT INFORMATION
Borough of Mount Joy
manager@mountjoypa.org
(717) 653-2300
21 East Main St
Mount Joy, PA 17552

COMPANY INFORMATION
EdgeUP Technology
(717) 392-9292
605 Richmond Drive, Suite 105
Lancaster, PA 17601
Dean Baugus
dean@edgeuptech.com
Mobile :(717) 723-0448

NAME/INFO	DESCRIPTION	UNIT PRICE	QTY	PRICE
CONFERENCE ROOM 1	NETWORKS			
PoE Injector	Provides Power over Ethernet to Compatible Devices Comment : Power for Camera	$96.00	1	$96.00
	DISPLAYS			
 Simple TV Mount	Simple TV Mounting with basic HD Cable/Sat TV box and remote control setup. Wires hidden and Cable/Sat box mounted behind TV Includes: - Professional TV Installation - Remote Control Programming - Complementary flat mount if necessary - Premium HDMI Cable (up to 1 meter) Comment : TV will connect to Zoom operator laptop in the back of the room via HDMI. Power for TV will come down from the ceiling	$595.00	1	$595.00
 75 Inch TV	SONY 75" 4K HDR LED TV XBR75X900H - Pricing reflects budget place-holder and is subject to model, availability and market conditions	$2,000.00	1	$2,000.00
	VIDEO DISTRIBUTION			
 HDMI .75M	AudioQuest HDMI Cable, Cinnamon Series 1.25% Silver HDMI 2.0 8K-10K, 48Gbps. 0.75m / 2'6"	$120.00	-1	($120.00)
 HDMI 10M	AudioQuest HDMI Cable, Cherry Cola Optical Series Quartz Glass, .5% Silver HDMI 2.0 4K-8K, 18Gbps. 10m / 33'0" Comment : From display to Zoom operator laptop	$800.00	1	$800.00
	COMMERCIAL AV			

	Video Teleconference for Medium Size Conference Room package with DSP Echo-Cancelling. Includes: PTZ Camera, Processor, Up to 2 Ceiling Mics, Speaker, Installation and Setup. *Requires PC Source / Dialer, and Display	$5,625.00	1	$5,625.00

VTC Medium

	Supports USB 3.0, USB 3.1 Gen-1 and USB 3.1 Gen-2. 20 m.65.6 feet. Includes installation	$1,067.00	1	$1,067.00

USB 3.0 Active Optical Cable

TRAVEL AND PROJECT MANAGEMENT	TECHNICIAN			
	Travel and first half hour of service. Per vehicle, within 5-25 miles of the EdgeUP home office.	$175.00	1	$175.00

Travel 525

SUB TOTAL	$10,238.00
TOTAL	$10,238.00

TERMS AND AGREEMENT/CONTRACT

A. The general project description is contained in the attached document and related documents from herein referred to as "Proposal. Spycom Technology Solutions, LLC; DBA: EdgeUP Technology from herein referred to as EdgeUP.

B. The scope of work to be performed by EdgeUP is the installation of the specified system as outlined in the Proposal.

C. The total amount to be paid (subject to additions and deductions by written change order) shall not exceed the total specified in the Proposal. This may be superseded as specified below in item G.

D. Progress payments will be made according to the payment schedule below. Electronic equipment will not be ordered until the sum of deposits meet or exceed 95 of the project total. These times are subject to the timing of the construction and the lead times required for the ordered equipment to be delivered.

E. Payment is due immediately at invoicing. Unpaid balance beyond 10 days after invoicing of completed tasks as outlined in item D shall bear interest payable to EdgeUP at a rate of 1.75 per month simple interest, minimum 5 per month. Any discounts will be forfeited and become due.

F. Proposal expires after 30 days without approval following the date stated on the top of the Proposal. No work will be scheduled without an initial deposit plus a signed copy of this agreement. Release of all system design specifications are contingent on agreement and retainer.

G. If project is of a retrofitremodel nature on an existing structure, andor scope of work exceeds time and material costs estimated to complete because of unforeseen circumstances, client agrees that heshe will be billed at the current EdgeUP installation rate for all extra labor and necessary parts involved in completing the project.

H. EdgeUP reserves the right to replace proposed models in the case of obsolescence, discontinuation, or unavailability with a comparable model of equal or greater value. EdgeUP will not be held responsible or liable in any way for any said product's obsolescence, discontinuation, or unavailability.

I. At times, EdgeUP will request personal WiFi information, door code passwords, alarm codes, usernames, passwords, and IP addresses. This information is used to program and maintain specific types of components. EdgeUP reserves the right to access your components remotely, for the sole purpose of updating and modifying system programming. EdgeUP will not be held responsible if logins, passwords, codes, or system programming are changed by client after completion. We do not transfer your personal identifiable information to outside parties. The security, integrity and confidentiality of your information is extremely important to us. We have implemented technical, administrative, and physical security measures that are designed to protect your information from unauthorized access, disclosure, use, and unnecessary modification.

J. Due to the complexity of the custom system programming provided by EdgeUP, the need for user preference changes and modifications are to be expected after system completion. Within a 30day period of completion, the client should provide EdgeUP, in writing, any system programmable preference changes requests. These requests will then be scheduled for fulfillment within the limitations of the provided system. This onetime visit, or remote system login, is to be considered part of the original proposed scope of work. Customer must be aware manufacturer firmware and software changesupdates may affect functionality of the system. This may require a service visit to resolve, and the resolution may result in a change of how to use the system. Rare cases and old equipment may require components to be updated or replaced. EdgeUP warranty does not cover costs associated with manufacturer changes.

K. EdgeUP may use photos and details specific to the system installation within social media posts andor other forms of advertising. Sensitive customer information, names, address, contact info, and photos will not be shared. Client agrees to notify EdgeUP in writing of any potential issues and allow 30 days to resolve the issue prior to posting an online review. Positive online reviews are appreciated and encouraged anytime.

1. Contract Documents and Details
The contract documents consist of this agreement, including all general provisions, special provisions, specifications, drawings, addenda, change orders, written interpretations, and written orders for minor changes in work. Work not covered by contract documents will not be required unless it is required by reasonable inference as being necessary to produce the intended result. The costs associated with any related work or materials, including, but not limited to electrical, drywall, painting, cabinets are not included unless specifically documented in the Proposal. EdgeUP is not responsible for any underground trenching or laying or supplying of conduit for outside wiring.

2. Time
With respect to schedule completion of the tasks in section D, time is of the essence. If Contractor is delayed at any time in the progress of the work by customer change orders, fire, labor disputes, acts of God or other causes beyond EdgeUP's control, the completion schedule for the work or affected parts of the work shall be extended by the same amount of the time caused by the delay. Customer will be responsible should the job site not be ready for EdgeUP to fulfill the scheduled work. The appointment must be cancelled or changed 3 business days before scheduled work to avoid additional charges for wasted time.

3. Payments and Completion
The below Payment Schedule is a guideline and approximation. Since EdgeUP will, if possible, open, test and burnin equipment before delivery, all components must be paid for before delivery to job site. Payments may not be withheld under any circumstances. Final payment shall be due immediately following completion of the project invoicing. Punch list items shall not delay invoice payment. EdgeUP will hold owner harmless with respect to claims of subcontractors and suppliers. Customer agrees to be responsible for all costs of collection on unpaid balances including, but not limited to 1.75 interest per month, collection fees (up to 50), court costs, reasonable attorney fees, and time spent by EdgeUP personnel to address the matter billed at our standard service rate.

4. Insurance
EdgeUP shall purchase and maintain such insurance necessary to protect from claims under workers compensation and from any damage to the customer property resulting from the conduct of this contract. Proof of insurance can be provided upon written request.

5. Changes in the Contract
The customer may order changes, additions, or modifications without invalidating the contract. Such changes must be in writing and approved. EdgeUP shall provide the owner in writing the amount of additional costs or cost reductions resulting from changes ordered within 15 working days unless this requirement is waived in writing by the customer. Change Orders shall be paid in full upon acceptance and shall not alter the above payment schedule.

6. Service Warranty
EdgeUP warrants the workmanship and installation of equipment for 30 days from the installation date. During this period, EdgeUP Technology Solutions will repair andor replace defective parts without an additional charge to you.
The above Service Warranty is subject to the following conditions:
1. This warranty extends only to products distributed andor sold by EdgeUP.
2. This warranty covers only normal use of the equipment. EdgeUP shall not be liable under this warranty if any damage or defect results from (i) misuse or neglect; (ii) disasters such as fire, flood, lightning or improper electrical current; or (iii) service or alteration by anyone other than an authorized EdgeUP representative.
For post warranty repair following the 30day period, the client is responsible for payment, at current hourly rates plus trip charge, for any service or repair outside the scope of this limited warranty. EdgeUP will aid the client in servicing their manufacturerwarrantied equipment throughout the life of said warranty, at these same applicable rates.

PAYMENT SCHEDULE

DUE UPON ACCEPTANCE	95.0%	$9,726.10
FINISH	5.0%	$511.90

Total Amount

$10,238.00

Deposit Amount

$9,726.10

Client Signature

Date Time

In-Person/ZOOM Hybrid Meetings

Item #	Hardware Description	QTY	Cost Per Unit	Total Cost
1	Jabra Pancast Camera with Table Stand - 180 Degree Coverage	1	$ 671.00	$ 671.00
2	4 Count Wireless Microphone System	1	$ 290.00	$ 290.00
3	Foam Mudder - 5 Pack	1	$ 8.00	$ 8.00
4	Rubber Microphone Clips	3	$ 9.00	$ 27.00
5	Sound Mixer/Pre-Amplifier *	1	$ 150.00	$ 150.00
6	Mircophone Stands	3	$ 22.00	$ 66.00
7	65" Vizio TV w/ Chromecast	1	$ 1,200.00	$ 1,200.00
8	Wall Mount for TV/Monitor	1	$ 30.00	$ 30.00
9	Misc wires & Connectors		$ 200.00	$ 200.00
10	PC/Laptop to attach Hardware to & Run Meeting**	1	$ 1,200.00	$ 1,200.00
SUB-TOTAL				**$ 3,842.00**

Item #	Software/Plateform Description **	QTY	Cost Per Unit	Total Cost
11	ZOOM Cloud Recording Storage (Monthly)	12	$ 40.00	$ 480.00
12	Zoom Webinar Plateform (Monthly)	12	$ 79.00	$ 948.00
SUB-TOTAL				**$ 1,428.00**

Optional Items

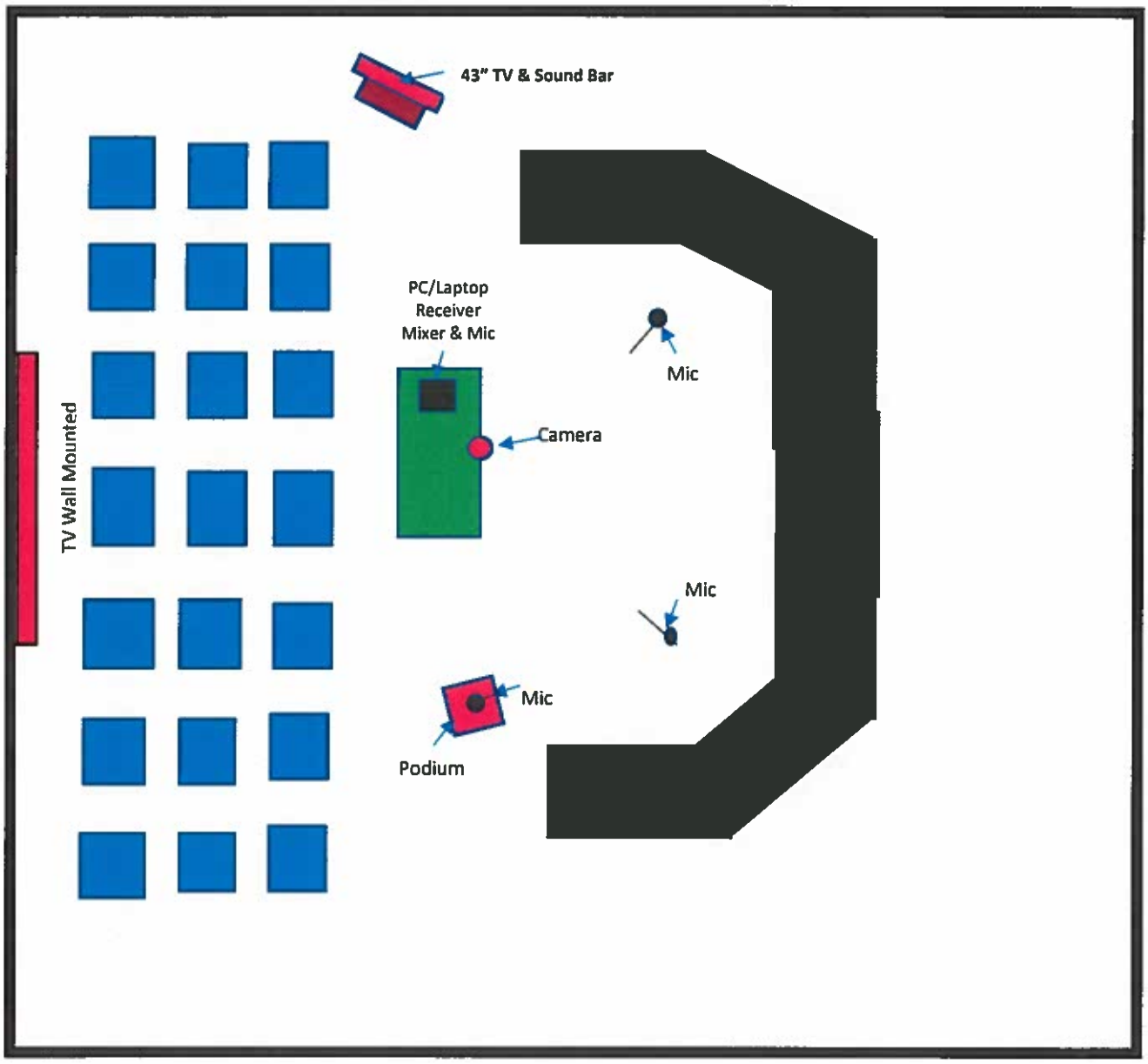
Item #	Description	QTY	Cost Per Unit	Total Cost
13	43" Vizio TV w/Chromecast	1	$ 420.00	$ 420.00
14	TV/Monitor Stand	1	$75.00	$ 75.00
15	External Speakers/Sound Bar	1	$ 50.00	$ 50.00
16	Tablets/Laptops for Mayor, Councilors, & Staff	10	$ 650.00	$ 6,500.00
SUB-TOTAL				**$ 7,045.00**
TOTAL				$ 12,315.00

* Attempting to determine our needs. Price may vary.

** Only if current laptops can't handle the set-up.

*** Youtube Plateform would be free or use current ZOOM Plateform but would need increased storage either way.

Note: Eliminate all PC/Laptops/Tablets $ 4,615.00


43" TV & Sound Bar
PC/Laptop
Receiver
Mixer & Mic
Mic
Camera
TV Wall Mounted
Mic
Mic
Podium

Grant Tracking Sheet

Mount Joy Borough Grant Tracking

Grant Name	Awarding Agency	Grant Manager	Amount	Borough Match	Period of Grant	Funding $ (Fed/State/ Local)	Program Audit Required	Amount Expended in 2020 (Subject to Grant Funding)	Amount Expended in 2021 (Subject to Grant Funding)	Amount Received in 2020	Amount Received in 2021	Receivables Outstanding	Cumulative Amounts Received	Status	Did Final Payment Received	Comments
2019-2020																
Automated Red Light Enforcement Program (ARLE)	PA Department of Transportation	D. Nissley	$ 219,060.00	$ -	Effective Date - 10/15/19	State	No	$ -	N/A	$ -		$ -	$ -	Active		Working on aquiring eassments
902 Recycling Grant (2020)	DEP	D. Nissley	$ 299,000.00	$ 33,245.00	Effective date - 2/2020 (3 year period)	State	None noted	$ 63,245.50	N/A	$ -	$ 295,898.94		$ 295,898.94	Closed	6/21/2021	Equipment purchased. All funding awards received.
Flood Mitigation Program (SW Detention Basin Improvement Project)	Commonwealth of PA	D. Nissley	$ 176,022.00	$ -	9/17/19 - 6/30/2022	State	No	$ -	N/A	$ -		$ -	$ -	Hold		On hold until Fall 2021 due to seeding.
Smart Growth Transportation Grant	LCTCC	S. Gibbs	$ 66,200.00	$ 16,550.00		Federal		$ 27,100.00	N/A	$ -		$ 27,100.00	$ -	Active		Council needs to take action.
DOJ NCS-X	Dept of Justice	Chief Goshen	$ 92,640.00	$ -	10/1/19-9/30/2021	Federal	No	$ 56,000.00	N/A	$ 15,516.00		$ 49,997.00	$ 15,516.00	Active		Deadline extended. $49,997.00 receipts submitted awaiting disbursement.
NFWF PA Local Government Implementation (Rotary Park)	National Fish & Wildlife Foundation (US	D. Salley	$ 100,000.00	$ 15,000.00	10/30/20 - 11/1/21	Federal	N/A	$ -	N/A	$ -		$ -	$ -	Submitted		
NFWF Grant (Stream Bank Restoration - Little Chiques Park)	National Fish & Wildlife Foundation (US	D. Salley	$ 50,000.00	$ 65,000.00	11/2/20 - 11/2/21	Federal	N/A	N/A	$ 3,837.40	$ -		$ -	$ -	Active		
CARES Act	Lanc County (pass thru Fed Funds)	M. Pugliese	$ 63,271.00	$ -	3/31/20 - 12/30/20	Federal	N/A	$ 63,271.00	N/A	$ 63,271.00			$ 63,271.00	Closed		
CARES Act (add'l funding awarded)	Lanc County (pass thru Fed Funds)	M. Pugliese	$ 66,224.00	$ -	3/31/20 - 12/30/20	Federal	N/A	$ 66,224.00	N/A	$ 66,224.00			$ 66,224.00	Closed		
2021																
Growing Greener Grant	PA Department of Enviromental protection	D. Salley	$ 65,000.00	15%	Nov 2021 to Nov 2024	State		N/A		N/A				Application Being Processed		
Growing Greener Grant	PA Department of Enviromental protection	D. Salley	$ 2,500,000.00	15%	Nov 2021 to Nov 2024	State		N/A		N/A				Submitted		Submitted 6/25/2021
American Rescue Plan Act (ARPA)	DCED (Pass thru Fed Funds	M. Pugliese	$ 866,451.74	$ -	7/1/2021 - 2024	Federal		N/A		N/A	$ 433,225.87			Received 1st installment		
Patrick Leahy Bulletproof Vest Partnership	DOJ	Chief Goshen	$ 5,555.11	$ -	Yearly	Federal			$ 5,555.11	N/A				Active		
Total			$ 4,569,423.85	$ 129,795.50				$ 275,840.50		$ 139,011.00		$ 77,097.00	$ 410,909.94			

MS4
Public Works
Zoning
Police
Administration

06.28.2021 - MGPI

American Rescue Plan Act Information

COMMONWEALTH OF PENNSYLVANIA
OFFICE OF THE GOVERNOR

Jill Frey
21 East Main Street
Mount Joy PA 17552

Dear Jill Frey:

The American Rescue Plan Act of 2021, signed by President Biden, has allocated $6.15 billion to Pennsylvania counties, metropolitan cities, and local government units to support COVID-19 response efforts, replace lost revenue, support economic stabilization for households and businesses, and address systemic public health and economic challenges.

MOUNT JOY BORO is entitled to a maximum allocation of up to $866,451.74 from this federal funding, but you must take action to request it. The U.S. Department of Treasury requires that local governments that are NOT metropolitan cities or counties – called non-entitlement units of local government (NEUs) – request the funds through the commonwealth by visiting the Pennsylvania Department of Community and Economic Development (DCED) website at **dced.pa.gov/LFRF**. You are receiving this letter because the U.S. Department of Treasury has identified your municipality as an NEU.

Due to Treasury's requirements that states disburse all funding within thirty days of the state receiving the local funds for distribution, **DCED strongly recommends local governments request their funding within five days of receiving this letter.**

Recipients may use these funds to **support public health expenditures**, funding for COVID-19 mitigation efforts, medical expenses, behavioral healthcare, and certain public health and safety staff; **address negative economic impacts caused by the public health emergency**, including economic harms to workers, households, small businesses, impacted industries, and the public sector; **replace lost public sector revenue**, using this funding to provide government services to the extent of the reduction in revenue experienced due to the pandemic; **provide premium pay for essential workers**, offering additional support to those who have and will bear the greatest health risks because of their service in critical infrastructure sectors, and to **invest in water, sewer, and broadband infrastructure**, to improve access to clean drinking water, support vital wastewater and stormwater infrastructure, and to expand access to broadband internet.

More information about the program, including further details on eligible uses of the funding and instructions on requesting the funds, can be found at **dced.pa.gov/LFRF**. This funding provides immediate relief for local governments that have seen unprecedented fiscal challenges due to COVID-19. I encourage you to take advantage of these funds that will help your municipality recover from the pandemic and chart a course for long-term growth.

Sincerely,

Tom Wolf

TOM WOLF
Governor

9014190101

Uses

The COVID-19 ARPA Local Fiscal Recovery Fund will provide eligible state, local, and territorial governments with a substantial infusion of resources to meet pandemic response needs.

Recipients may use these funds to:

- **Support public health expenditures**, funding for COVID-19 mitigation efforts, medical expenses, behavioral healthcare, and certain public health and safety staff
- **Address negative economic impacts caused by the public health emergency**, including economic harms to workers, households, small businesses, impacted industries, and the public sector
- **Replace lost public sector revenue**, using this funding to provide government services to the extent of the reduction in revenue experienced due to the pandemic
- **Provide premium pay for essential workers**, offering additional support to those who have and will bear the greatest health risks because of their service in critical infrastructure sectors
- **Invest in water, sewer, and broadband infrastructure**, making necessary investments to improve access to clean drinking water, support vital wastewater and stormwater infrastructure, and to expand access to broadband internet

Within these overall categories, recipients have broad flexibility to decide how best to use this funding to meet the needs of their communities. To learn more about the eligible uses of the program, reference the **Frequently Asked Questions for the Local Fiscal Recovery Funds program**.

Coronavirus State and Local Fiscal Recovery Funds

Frequently Asked Questions

AS OF JUNE 24, 2021

This document contains answers to frequently asked questions regarding the Coronavirus State and Local Fiscal Recovery Funds (CSFRF / CLFRF, or Fiscal Recovery Funds). Treasury will be updating this document periodically in response to questions received from stakeholders. Recipients and stakeholders should consult the Interim Final Rule for additional information.

- For overall information about the program, including information on requesting funding, please see https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments
- For general questions about CSFRF / CLFRF, please email SLFRP@treasury.gov
- Treasury is seeking comment on all aspects of the Interim Final Rule. Stakeholders are encouraged to submit comments electronically through the Federal eRulemaking Portal (https://www.regulations.gov/document/TREAS-DO-2021-0008-0002) on or before July 16, 2021. Please be advised that comments received will be part of the public record and subject to public disclosure. Do not disclose any information in your comment or supporting materials that you consider confidential or inappropriate for public disclosure.

Questions added 5/27/21: 1.5, 1.6, 2.13, 2.14, 2.15, 3.9, 4.5, 4.6, 10.3, 10.4 (noted with "[5/27]")

Questions added 6/8/21: 2.16, 3.10, 3.11, 3.12, 4.7, 6.7, 8.2, 9.4, 9.5, 10.5 (noted with "[6/8]")

Questions added 6/17/21: 6.8, 6.9, 6.10, 6.11 (noted with "[6/17]")

Questions added 6/23/21: 1.7, 2.17, 2.18, 2.19, 2.20, 3.1 (appendix), 3.13, 4.8, 6.12 (noted with "[6/23]")

Question added 6/24/21: 2.21 (noted with "[6/24]")

Answers to frequently asked questions on distribution of funds to non-entitlement units of local government (NEUs) can be found in this FAQ supplement, which is regularly updated.

1. Eligibility and Allocations

1.1. Which governments are eligible for funds?

The following governments are eligible:

- States and the District of Columbia
- Territories

- Tribal governments
- Counties
- Metropolitan cities
- Non-entitlement units, or smaller local governments

1.2. Which governments receive funds directly from Treasury?

Treasury will distribute funds directly to each eligible state, territory, metropolitan city, county, or Tribal government. Smaller local governments that are classified as non-entitlement units will receive funds through their applicable state government.

1.3. Are special-purpose units of government eligible to receive funds?

Special-purpose units of local government will not receive funding allocations; however, a state, territory, local, or Tribal government may transfer funds to a special-purpose unit of government. Special-purpose districts perform specific functions in the community, such as fire, water, sewer or mosquito abatement districts.

1.4. How are funds being allocated to Tribal governments, and how will Tribal governments find out their allocation amounts?[1]

$20 billion of Fiscal Recovery Funds was reserved for Tribal governments. The American Rescue Plan Act specifies that $1 billion will be allocated evenly to all eligible Tribal governments. The remaining $19 billion will be distributed using an allocation methodology based on enrollment and employment.

There will be two payments to Tribal governments. Each Tribal government's first payment will include (i) an amount in respect of the $1 billion allocation that is to be divided equally among eligible Tribal governments and (ii) each Tribal government's pro rata share of the Enrollment Allocation. Tribal governments will be notified of their allocation amount and delivery of payment 4-5 days after completing request for funds in the Treasury Submission Portal. The deadline to make the initial request for funds is June 21, 2021.

The second payment will include a Tribal government's pro rata share of the Employment Allocation. There is a $1,000,000 minimum employment allocation for Tribal governments. In late-June, Tribal governments will receive an email notification to re-enter the Treasury Submission Portal to confirm or amend their 2019 employment numbers that were submitted to the Department of the Treasury for the CARES Act's Coronavirus Relief Fund. To receive an Employment Allocation, including the minimum employment allocation, Tribal governments must confirm employment numbers by July 16, 2021. Treasury will calculate employment allocations for those Tribal governments that confirmed or submitted amended employment numbers by the deadline. In August,

[1] The answer to this question was updated on June 29, 2021.

Treasury will communicate to Tribal governments the amount of their portion of the Employment Allocation and the anticipated date for the second payment.

1.5. My county is a unit of general local government with population under 50,000. Will my county receive funds directly from Treasury? [5/27]

Yes. All counties that are units of general local government will receive funds directly from Treasury and should apply via the online portal. The list of county allocations is available here.

1.6. My local government expected to be classified as a non-entitlement unit. Instead, it was classified as a metropolitan city. Why? [5/27]

The American Rescue Plan Act defines, for purposes of the Coronavirus Local Fiscal Recovery Fund (CLFRF), metropolitan cities to include those that are currently metropolitan cities under the Community Development Block Grant (CDBG) program but also those cities that relinquish or defer their status as a metropolitan city for purposes of the CDBG program. This would include, by way of example, cities that are principal cities of their metropolitan statistical area, even if their population is less than 50,000. In other words, a city that is eligible to be a metropolitan city under the CDBG program is eligible as a metropolitan city under the CLFRF, regardless of how that city has elected to participate in the CDBG program.

Unofficial allocation estimates produced by other organizations may have classified certain local governments as non-entitlement units of local government. However, based on the statutory definitions, some of these local governments should have been classified as metropolitan cities.

1.7. In order to receive and use Fiscal Recovery Funds, must a recipient government maintain a declaration of emergency relating to COVID-19? [6/23]

No. Neither the statute establishing the CSFRF/CLFRF nor the Interim Final Rule requires recipients to maintain a local declaration of emergency relating to COVID-19.

2. Eligible Uses – Responding to the Public Health Emergency / Negative Economic Impacts

2.1. What types of COVID-19 response, mitigation, and prevention activities are eligible?

A broad range of services are needed to contain COVID-19 and are eligible uses, including vaccination programs; medical care; testing; contact tracing; support for isolation or quarantine; supports for vulnerable populations to access medical or public health services; public health surveillance (e.g., monitoring case trends, genomic sequencing for variants); enforcement of public health orders; public communication

efforts; enhancement to health care capacity, including through alternative care facilities; purchases of personal protective equipment; support for prevention, mitigation, or other services in congregate living facilities (e.g., nursing homes, incarceration settings, homeless shelters, group living facilities) and other key settings like schools; ventilation improvements in congregate settings, health care settings, or other key locations; enhancement of public health data systems; and other public health responses. Capital investments in public facilities to meet pandemic operational needs are also eligible, such as physical plant improvements to public hospitals and health clinics or adaptations to public buildings to implement COVID-19 mitigation tactics.

2.2. If a use of funds was allowable under the Coronavirus Relief Fund (CRF) to respond to the public health emergency, may recipients presume it is also allowable under CSFRF/CLFRF?

Generally, funding uses eligible under CRF as a response to the direct public health impacts of COVID-19 will continue to be eligible under CSFRF/CLFRF, with the following two exceptions: (1) the standard for eligibility of public health and safety payrolls has been updated; and (2) expenses related to the issuance of tax-anticipation notes are not an eligible funding use.

2.3. If a use of funds is not explicitly permitted in the Interim Final Rule as a response to the public health emergency and its negative economic impacts, does that mean it is prohibited?

The Interim Final Rule contains a non-exclusive list of programs or services that may be funded as responding to COVID-19 or the negative economic impacts of the COVID-19 public health emergency, along with considerations for evaluating other potential uses of Fiscal Recovery Funds not explicitly listed. The Interim Final Rule also provides flexibility for recipients to use Fiscal Recovery Funds for programs or services that are not identified on these non-exclusive lists but which meet the objectives of section 602(c)(1)(A) or 603(c)(1)(A) by responding to the COVID-19 public health emergency with respect to COVID-19 or its negative economic impacts.

2.4. May recipients use funds to respond to the public health emergency and its negative economic impacts by replenishing state unemployment funds?

Consistent with the approach taken in the CRF, recipients may make deposits into the state account of the Unemployment Trust Fund up to the level needed to restore the pre-pandemic balances of such account as of January 27, 2020, or to pay back advances received for the payment of benefits between January 27, 2020 and the date when the Interim Final Rule is published in the Federal Register.

2.5. What types of services are eligible as responses to the negative economic impacts of the pandemic?

Eligible uses in this category include assistance to households; small businesses and non-profits; and aid to impacted industries.

Assistance to households includes, but is not limited to: food assistance; rent, mortgage, or utility assistance; counseling and legal aid to prevent eviction or homelessness; cash assistance; emergency assistance for burials, home repairs, weatherization, or other needs; internet access or digital literacy assistance; or job training to address negative economic or public health impacts experienced due to a worker's occupation or level of training.

Assistance to small business and non-profits includes, but is not limited to:

- loans or grants to mitigate financial hardship such as declines in revenues or impacts of periods of business closure, for example by supporting payroll and benefits costs, costs to retain employees, mortgage, rent, or utilities costs, and other operating costs;
- Loans, grants, or in-kind assistance to implement COVID-19 prevention or mitigation tactics, such as physical plant changes to enable social distancing, enhanced cleaning efforts, barriers or partitions, or COVID-19 vaccination, testing, or contact tracing programs; and
- Technical assistance, counseling, or other services to assist with business planning needs

2.6. May recipients use funds to respond to the public health emergency and its negative economic impacts by providing direct cash transfers to households?

Yes, provided the recipient considers whether, and the extent to which, the household has experienced a negative economic impact from the pandemic. Additionally, cash transfers must be reasonably proportional to the negative economic impact they are intended to address. Cash transfers grossly in excess of the amount needed to address the negative economic impact identified by the recipient would not be considered to be a response to the COVID-19 public health emergency or its negative impacts. In particular, when considering appropriate size of permissible cash transfers made in response to the COVID-19 public health emergency, state, local, territorial, and Tribal governments may consider and take guidance from the per person amounts previously provided by the federal government in response to the COVID crisis.

2.7. May funds be used to reimburse recipients for costs incurred by state and local governments in responding to the public health emergency and its negative economic impacts prior to passage of the American Rescue Plan?

Use of Fiscal Recovery Funds is generally forward looking. The Interim Final Rule permits funds to be used to cover costs incurred beginning on March 3, 2021.

2.8. May recipients use funds for general economic development or workforce development?

Generally, not. Recipients must demonstrate that funding uses directly address a negative economic impact of the COVID-19 public health emergency, including funds used for economic or workforce development. For example, job training for unemployed workers may be used to address negative economic impacts of the public health emergency and be eligible.

2.9. How can recipients use funds to assist the travel, tourism, and hospitality industries?

Aid provided to tourism, travel, and hospitality industries should respond to the negative economic impacts of the pandemic. For example, a recipient may provide aid to support safe reopening of businesses in the tourism, travel and hospitality industries and to districts that were closed during the COVID-19 public health emergency, as well as aid a planned expansion or upgrade of tourism, travel and hospitality facilities delayed due to the pandemic.

Tribal development districts are considered the commercial centers for tribal hospitality, gaming, tourism and entertainment industries.

2.10. May recipients use funds to assist impacted industries other than travel, tourism, and hospitality?

Yes, provided that recipients consider the extent of the impact in such industries as compared to tourism, travel, and hospitality, the industries enumerated in the statute. For example, nationwide the leisure and hospitality industry has experienced an approximately 17 percent decline in employment and 24 percent decline in revenue, on net, due to the COVID-19 public health emergency. Recipients should also consider whether impacts were due to the COVID-19 pandemic, as opposed to longer-term economic or industrial trends unrelated to the pandemic.

Recipients should maintain records to support their assessment of how businesses or business districts receiving assistance were affected by the negative economic impacts of the pandemic and how the aid provided responds to these impacts.

2.11. How does the Interim Final Rule help address the disparate impact of COVID-19 on certain populations and geographies?

In recognition of the disproportionate impacts of the COVID-19 virus on health and economic outcomes in low-income and Native American communities, the Interim Final Rule identifies a broader range of services and programs that are considered to be in response to the public health emergency when provided in these communities. Specifically, Treasury will presume that certain types of services are eligible uses when provided in a Qualified Census Tract (QCT), to families living in QCTs, or when these services are provided by Tribal governments.

Recipients may also provide these services to other populations, households, or geographic areas disproportionately impacted by the pandemic. In identifying these disproportionately-impacted communities, recipients should be able to support their determination for how the pandemic disproportionately impacted the populations, households, or geographic areas to be served.

Eligible services include:

- Addressing health disparities and the social determinants of health, including: community health workers, public benefits navigators, remediation of lead paint or other lead hazards, and community violence intervention programs;

- Building stronger neighborhoods and communities, including: supportive housing and other services for individuals experiencing homelessness, development of affordable housing, and housing vouchers and assistance relocating to neighborhoods with higher levels of economic opportunity;

- Addressing educational disparities exacerbated by COVID-19, including: early learning services, increasing resources for high-poverty school districts, educational services like tutoring or afterschool programs, and supports for students' social, emotional, and mental health needs; and

- Promoting healthy childhood environments, including: child care, home visiting programs for families with young children, and enhanced services for child welfare-involved families and foster youth.

2.12. May recipients use funds to pay for vaccine incentive programs (e.g., cash or in-kind transfers, lottery programs, or other incentives for individuals who get vaccinated)?

Yes. Under the Interim Final Rule, recipients may use Coronavirus State and Local Fiscal Recovery Funds to respond to the COVID-19 public health emergency, including expenses related to COVID-19 vaccination programs. See 31 CFR 35.6(b)(1)(i). Programs that provide incentives reasonably expected to increase the number of people who choose to get vaccinated, or that motivate people to get vaccinated sooner than they otherwise would have, are an allowable use of funds so long as such costs are reasonably proportional to the expected public health benefit.

2.13. May recipients use funds to pay "back to work incentives" (e.g., cash payments for newly employed workers after a certain period of time on the job)? [5/27]

Yes. Under the Interim Final Rule, recipients may use Coronavirus State and Local Fiscal Recovery Funds to provide assistance to unemployed workers. See 31 CFR 35.6(b)(4). This assistance can include job training or other efforts to accelerate rehiring and thus reduce unemployment, such as childcare assistance, assistance with transportation to and from a jobsite or interview, and incentives for newly employed workers.

2.14. The Coronavirus Relief Fund (CRF) included as an eligible use: "Payroll expenses for public safety, public health, health care, human services, and similar employees whose services are substantially dedicated to mitigating or responding to the COVID-19 public health emergency." What has changed in CSFRF/CLFRF, and what type of documentation is required under CSFRF/CLFRF? [5/27]

Many of the expenses authorized under the Coronavirus Relief Fund are also eligible uses under the CSFRF/CLFRF. However, in the case of payroll expenses for public safety, public health, health care, human services, and similar employees (hereafter, public health and safety staff), the CSFRF/CLFRF does differ from the CRF. This change reflects the differences between the ARPA and CARES Act and recognizes that the response to the COVID-19 public health emergency has changed and will continue to change over time. In particular, funds may be used for payroll and covered benefits expenses for public safety, public health, health care, human services, and similar employees, including first responders, to the extent that the employee's time that is dedicated to responding to the COVID-19 public health emergency.

For administrative convenience, the recipient may consider a public health and safety employee to be entirely devoted to mitigating or responding to the COVID-19 public health emergency, and therefore fully covered, if the employee, or his or her operating unit or division, is primarily dedicated (e.g., more than half of the employee's time is dedicated) to responding to the COVID-19 public health emergency.

Recipients may use presumptions for assessing whether an employee, division, or operating unit is primarily dedicated to COVID-19 response. The recipient should maintain records to support its assessment, such as payroll records, attestations from supervisors or staff, or regular work product or correspondence demonstrating work on the COVID-19 response. Recipients need not routinely track staff hours. Recipients should periodically reassess their determinations.

2.15. What staff are included in "public safety, public health, health care, human services, and similar employees"? Would this include, for example, 911 operators, morgue staff, medical examiner staff, or EMS staff? [5/27]

As discussed in the Interim Final Rule, funds may be used for payroll and covered benefits expenses for public safety, public health, health care, human services, and similar employees, for the portion of the employee's time that is dedicated to responding to the COVID-19 public health emergency.

Public safety employees would include police officers (including state police officers), sheriffs and deputy sheriffs, firefighters, emergency medical responders, correctional and detention officers, and those who directly support such employees such as dispatchers and supervisory personnel. Public health employees would include employees involved in providing medical and other health services to patients and supervisory personnel, including medical staff assigned to schools, prisons, and other such institutions, and other

support services essential for patient care (e.g., laboratory technicians, medical examiner or morgue staff) as well as employees of public health departments directly engaged in matters related to public health and related supervisory personnel. Human services staff include employees providing or administering social services; public benefits; child welfare services; and child, elder, or family care, as well as others.

2.16. May recipients use funds to establish a public jobs program? [6/8]

Yes. The Interim Final Rule permits a broad range of services to unemployed or underemployed workers and other individuals that suffered negative economic impacts from the pandemic. That can include public jobs programs, subsidized employment, combined education and on-the-job training programs, or job training to accelerate rehiring or address negative economic or public health impacts experienced due to a worker's occupation or level of training. The broad range of permitted services can also include other employment supports, such as childcare assistance or assistance with transportation to and from a jobsite or interview.

The Interim Final Rule includes as an eligible use re-hiring public sector staff up to the government's level of pre-pandemic employment. "Public sector staff" would not include individuals participating in a job training or subsidized employment program administered by the recipient.

2.17. The Interim Final Rule states that "assistance or aid to individuals or businesses that did not experience a negative economic impact from the public health emergency would not be an eligible use under this category." Are recipients required to demonstrate that each individual or business experienced a negative economic impact for that individual or business to receive assistance? [6/23]

Not necessarily. The Interim Final Rule allows recipients to demonstrate a negative economic impact on a population or group and to provide assistance to households or businesses that fall within that population or group. In such cases, the recipient need only demonstrate that the household or business is within the population or group that experienced a negative economic impact.

For assistance to households, the Interim Final Rule states, "In assessing whether a household or population experienced economic harm as a result of the pandemic, a recipient may presume that a household or population that experienced unemployment or increased food or housing insecurity or is low- or moderate-income experienced negative economic impacts resulting from the pandemic." This would allow, for example, an internet access assistance program for all low- or moderate-income households, but would not require the recipient to demonstrate or document that each individual low- or -moderate income household experienced a negative economic impact from the COVID-19 public health emergency apart from being low- or -moderate income.

For assistance to small businesses, the Interim Final Rule states that assistance may be provided to small businesses, including loans, grants, in-kind assistance, technical

assistance or other services, to respond to the negative economic impacts of the COVID-19 public health emergency. In providing assistance to small businesses, recipients must design a program that responds to the negative economic impacts of the COVID-19 public health emergency, including by identifying how the program addresses the identified need or impact faced by small businesses. This can include assistance to adopt safer operating procedures, weather periods of closure, or mitigate financial hardship resulting from the COVID-19 public health emergency.

As part of program design and to ensure that the program responds to the identified need, recipients may consider additional criteria to target assistance to businesses in need, including to small businesses. Assistance may be targeted to businesses facing financial insecurity, with substantial declines in gross receipts (e.g., comparable to measures used to assess eligibility for the Paycheck Protection Program), or facing other economic harm due to the pandemic, as well as businesses with less capacity to weather financial hardship, such as the smallest businesses, those with less access to credit, or those serving disadvantaged communities. For example, a recipient could find based on local data or research that the smallest businesses faced sharply increased risk of bankruptcy and develop a program to respond; such a program would only need to document a population or group-level negative economic impact, and eligibility criteria to limit access to the program to that population or group (in this case, the smallest businesses).

In addition, recognizing the disproportionate impact of the pandemic on disadvantaged communities, the Interim Final Rule also identifies a set of services that are presumptively eligible when provided in a Qualified Census Tract (QCT); to families and individuals living in QCTs; to other populations, households, or geographic areas identified by the recipient as disproportionately impacted by the pandemic; or when these services are provided by Tribal governments. For more information on the set of presumptively eligible services, see the Interim Final Rule section on *Building Stronger Communities through Investments in Housing and Neighborhoods* and FAQ 2.11.

2.18. Would investments in improving outdoor spaces (e.g. parks) be an eligible use of funds as a response to the public health emergency and/or its negative economic impacts? [6/23]

There are multiple ways that investments in improving outdoor spaces could qualify as eligible uses; several are highlighted below, though there may be other ways that a specific investment in outdoor spaces would meet eligible use criteria.

First, in recognition of the disproportionate negative economic impacts on certain communities and populations, the Interim Final Rule identifies certain types of services that are eligible uses when provided in a Qualified Census Tract (QCT), to families and individuals living in QCTs, or when these services are provided by Tribal governments. Recipients may also provide these services to other populations, households, or geographic areas disproportionately impacted by the pandemic.

These programs and services include services designed to build stronger neighborhoods and communities and to address health disparities and the social determinants of health. The Interim Final Rule provides a non-exhaustive list of eligible services to respond to the needs of communities disproportionately impacted by the pandemic, and recipients may identify other uses of funds that do so, consistent with the Rule's framework. For example, investments in parks, public plazas, and other public outdoor recreation spaces may be responsive to the needs of disproportionately impacted communities by promoting healthier living environments and outdoor recreation and socialization to mitigate the spread of COVID-19.

Second, recipients may provide assistance to small businesses in all communities. Assistance to small businesses could include support to enhance outdoor spaces for COVID-19 mitigation (e.g., restaurant patios) or to improve the built environment of the neighborhood (e.g., façade improvements).

Third, many governments saw significantly increased use of parks during the pandemic that resulted in damage or increased maintenance needs. The Interim Final Rule recognizes that "decrease[s to] a state or local government's ability to effectively administer services" can constitute a negative economic impact of the pandemic.

2.19. Would expenses to address a COVID-related backlog in court cases be an eligible use of funds as a response to the public health emergency? [6/23]

The Interim Final Rule recognizes that "decrease[s to] a state or local government's ability to effectively administer services," such as cuts to public sector staffing levels, can constitute a negative economic impact of the pandemic. During the COVID-19 public health emergency, many courts were unable to operate safely during the pandemic and, as a result, now face significant backlogs. Court backlogs resulting from inability of courts to safely operate during the COVID-19 pandemic decreased the government's ability to administer services. Therefore, steps to reduce these backlogs, such as implementing COVID-19 safety measures to facilitate court operations, hiring additional court staff or attorneys to increase speed of case resolution, and other expenses to expedite case resolution are eligible uses.

2.20. Can funds be used to assist small business startups as a response to the negative economic impact of COVID-19? [6/23]

As discussed in the Interim Final Rule, recipients may provide assistance to small businesses that responds to the negative economic impacts of COVID-19. The Interim Final Rule provides a non-exclusive list of potential assistance mechanisms, as well as considerations for ensuring that such assistance is responsive to the negative economic impacts of COVID-19.

Treasury acknowledges a range of potential circumstances in which assisting small business startups could be responsive to the negative economic impacts of COVID-19,

including for small businesses and individuals seeking to start small businesses after the start of the COVID-19 public health emergency. For example:

- A recipient could assist small business startups with additional costs associated with COVID-19 mitigation tactics (e.g., barriers or partitions; enhanced cleaning; or physical plant changes to enable greater use of outdoor space).
- A recipient could identify and respond to a negative economic impact of COVID-19 on new small business startups; for example, if it could be shown that small business startups in a locality were facing greater difficult accessing credit than prior to the pandemic, faced increased costs to starting the business due to the pandemic, or that the small business had lost expected startup capital due to the pandemic.
- The Interim Final Rule also discusses eligible uses that provide support for individuals who have experienced a negative economic impact from the COVID-19 public health emergency, including uses that provide job training for unemployed individuals. These initiatives also may support small business startups and individuals seeking to start small businesses.

2.21. Can funds be used for eviction prevention efforts or housing stability services? [6/24]

Yes. Responses to the negative economic impacts of the pandemic include "rent, mortgage, or utility assistance [and] counseling and legal aid to prevent eviction or homelessness." This includes housing stability services that enable eligible households to maintain or obtain housing, such as housing counseling, fair housing counseling, case management related to housing stability, outreach to households at risk of eviction or promotion of housing support programs, housing related services for survivors of domestic abuse or human trafficking, and specialized services for individuals with disabilities or seniors that supports their ability to access or maintain housing.

This also includes legal aid such as legal services or attorney's fees related to eviction proceedings and maintaining housing stability, court-based eviction prevention or eviction diversion programs, and other legal services that help households maintain or obtain housing.

Recipients may transfer funds to, or execute grants or contracts with, court systems, non-profits, and a wide range of other organizations to implement these strategies.

3. Eligible Uses – Revenue Loss

3.1. How is revenue defined for the purpose of this provision? [appendix added 6/23]

The Interim Final Rule adopts a definition of "General Revenue" that is based on, but not identical, to the Census Bureau's concept of "General Revenue from Own Sources" in the Annual Survey of State and Local Government Finances.

General Revenue includes revenue from taxes, current charges, and miscellaneous general revenue. It excludes refunds and other correcting transactions, proceeds from issuance of debt or the sale of investments, agency or private trust transactions, and revenue generated by utilities and insurance trusts. General revenue also includes intergovernmental transfers between state and local governments, but excludes intergovernmental transfers from the Federal government, including Federal transfers made via a state to a locality pursuant to the CRF or the Fiscal Recovery Funds.

Tribal governments may include all revenue from Tribal enterprises and gaming operations in the definition of General Revenue.

Please see the appendix for a diagram of the Interim Final Rule's definition of General Revenue within the Census Bureau's revenue classification structure.

3.2. Will revenue be calculated on an entity-wide basis or on a source-by-source basis (e.g. property tax, income tax, sales tax, etc.)?

Recipients should calculate revenue on an entity-wide basis. This approach minimizes the administrative burden for recipients, provides for greater consistency across recipients, and presents a more accurate representation of the net impact of the COVID- 19 public health emergency on a recipient's revenue, rather than relying on financial reporting prepared by each recipient, which vary in methodology used and which generally aggregates revenue by purpose rather than by source.

3.3. Does the definition of revenue include outside concessions that contract with a state or local government?

Recipients should classify revenue sources as they would if responding to the U.S. Census Bureau's Annual Survey of State and Local Government Finances. According to the Census Bureau's Government Finance and Employment Classification manual, the following is an example of current charges that would be included in a state or local government's general revenue from own sources: "Gross revenue of facilities operated by a government (swimming pools, recreational marinas and piers, golf courses, skating rinks, museums, zoos, etc.); auxiliary facilities in public recreation areas (camping areas, refreshment stands, gift shops, etc.); lease or use fees from stadiums, auditoriums, and community and convention centers; and rentals from concessions at such facilities."

3.4. What is the time period for estimating revenue loss? Will revenue losses experienced prior to the passage of the Act be considered?

Recipients are permitted to calculate the extent of reduction in revenue as of four points in time: December 31, 2020; December 31, 2021; December 31, 2022; and December 31, 2023. This approach recognizes that some recipients may experience lagged effects of the pandemic on revenues.

Upon receiving Fiscal Recovery Fund payments, recipients may immediately calculate revenue loss for the period ending December 31, 2020.

3.5. What is the formula for calculating the reduction in revenue?

A reduction in a recipient's General Revenue equals:

$$\text{Max } \{[\text{Base Year Revenue}^* (1+\text{Growth Adjustment})^{\left(\frac{n_t}{12}\right)}] - \text{Actual General Revenue}_t ; 0\}$$

Where:

Base Year Revenue is General Revenue collected in the most recent full fiscal year prior to the COVD-19 public health emergency.

Growth Adjustment is equal to the greater of 4.1 percent (or 0.041) and the recipient's average annual revenue growth over the three full fiscal years prior to the COVID-19 public health emergency.

n equals the number of months elapsed from the end of the base year to the calculation date.

Actual General Revenue is a recipient's actual general revenue collected during 12-month period ending on each calculation date.

Subscript *t* denotes the calculation date.

3.6. Are recipients expected to demonstrate that reduction in revenue is due to the COVID-19 public health emergency?

In the Interim Final Rule, any diminution in actual revenue calculated using the formula above would be presumed to have been "due to" the COVID-19 public health emergency. This presumption is made for administrative ease and in recognition of the broad-based economic damage that the pandemic has wrought.

3.7. May recipients use pre-pandemic projections as a basis to estimate the reduction in revenue?

No. Treasury is disallowing the use of projections to ensure consistency and comparability across recipients and to streamline verification. However, in estimating the revenue shortfall using the formula above, recipients may incorporate their average annual revenue growth rate in the three full fiscal years prior to the public health emergency.

3.8. Once a recipient has identified a reduction in revenue, are there any restrictions on how recipients use funds up to the amount of the reduction?

The Interim Final Rule gives recipients broad latitude to use funds for the provision of government services to the extent of reduction in revenue. Government services can include, but are not limited to, maintenance of infrastructure or pay-go spending for building new infrastructure, including roads; modernization of cybersecurity, including hardware, software, and protection of critical infrastructure; health services; environmental remediation; school or educational services; and the provision of police, fire, and other public safety services.

However, paying interest or principal on outstanding debt, replenishing rainy day or other reserve funds, or paying settlements or judgments would not be considered provision of a government service, since these uses of funds do not entail direct provision of services to citizens. This restriction on paying interest or principal on any outstanding debt instrument, includes, for example, short-term revenue or tax anticipation notes, or paying fees or issuance costs associated with the issuance of new debt. In addition, the overarching restrictions on all program funds (e.g., restriction on pension deposits, restriction on using funds for non-federal match where barred by regulation or statute) would apply.

3.9. How do I know if a certain type of revenue should be counted for the purpose of computing revenue loss? [5/27]

As discussed in FAQ #3.1, the Interim Final Rule adopts a definition of "General Revenue" that is based on, but not identical, to the Census Bureau's concept of "General Revenue from Own Sources" in the Annual Survey of State and Local Government Finances.

Recipients should refer to the definition of "General Revenue" included in the Interim Final Rule. See 31 CFR 35.3. If a recipient is unsure whether a particular revenue source is included in the Interim Final Rule's definition of "General Revenue," the recipient may consider the classification and instructions used to complete the Census Bureau's Annual Survey.

For example, parking fees would be classified as a Current Charge for the purpose of the Census Bureau's Annual Survey, and the Interim Final Rule's concept of "General Revenue" includes all Current Charges. Therefore, parking fees would be included in the Interim Final Rule's concept of "General Revenue."

The Census Bureau's Government Finance and Employment Classification manual is available here.

3.10. In calculating revenue loss, are recipients required to use audited financials? [6/8]

Where audited data is not available, recipients are not required to obtain audited data. Treasury expects all information submitted to be complete and accurate. See 31 CFR 35.4(c).

3.11. In calculating revenue loss, should recipients use their own data, or Census data? [6/8]

Recipients should use their own data sources to calculate general revenue, and do not need to rely on published revenue data from the Census Bureau. Treasury acknowledges that due to differences in timing, data sources, and definitions, recipients' self-reported general revenue figures may differ somewhat from those published by the Census Bureau.

3.12. Should recipients calculate revenue loss on a cash basis or an accrual basis? [6/8]

Recipients may provide data on a cash, accrual, or modified accrual basis, provided that recipients are consistent in their choice of methodology throughout the covered period and until reporting is no longer required.

3.13. In identifying intergovernmental revenue for the purpose of calculating General Revenue, should recipients exclude all federal funding, or just federal funding related to the COVID-19 response? How should local governments treat federal funds that are passed through states or other entities, or federal funds that are intermingled with other funds? [6/23]

In calculating General Revenue, recipients should exclude all intergovernmental transfers from the federal government. This includes, but is not limited to, federal transfers made via a state to a locality pursuant to the Coronavirus Relief Fund or Fiscal Recovery Funds. To the extent federal funds are passed through states or other entities or intermingled with other funds, recipients should attempt to identify and exclude the federal portion of those funds from the calculation of General Revenue on a best-efforts basis.

4. Eligible Uses – General

4.1. May recipients use funds to replenish a budget stabilization fund, rainy day fund, or similar reserve account?

No. Funds made available to respond to the public health emergency and its negative economic impacts are intended to help meet pandemic response needs and provide immediate stabilization for households and businesses. Contributions to rainy day funds and similar reserves funds would not address these needs or respond to the COVID-19 public health emergency, but would rather be savings for future spending needs. Similarly, funds made available for the provision of governmental services (to the extent of reduction in revenue) are intended to support direct provision of services to citizens. Contributions to rainy day funds are not considered provision of government services, since such expenses do not directly relate to the provision of government services.

4.2. May recipients use funds to invest in infrastructure other than water, sewer, and broadband projects (e.g. roads, public facilities)?

Under 602(c)(1)(C) or 603(c)(1)(C), recipients may use funds for maintenance of infrastructure or pay-go spending for building of new infrastructure as part of the general provision of government services, to the extent of the estimated reduction in revenue due to the public health emergency.

Under 602(c)(1)(A) or 603(c)(1)(A), a general infrastructure project typically would not be considered a response to the public health emergency and its negative economic impacts unless the project responds to a specific pandemic-related public health need (e.g., investments in facilities for the delivery of vaccines) or a specific negative economic impact of the pandemic (e.g., affordable housing in a Qualified Census Tract).

4.3. May recipients use funds to pay interest or principal on outstanding debt?

No. Expenses related to financing, including servicing or redeeming notes, would not address the needs of pandemic response or its negative economic impacts. Such expenses would also not be considered provision of government services, as these financing expenses do not directly provide services or aid to citizens.

This applies to paying interest or principal on any outstanding debt instrument, including, for example, short-term revenue or tax anticipation notes, or paying fees or issuance costs associated with the issuance of new debt.

4.4. May recipients use funds to satisfy nonfederal matching requirements under the Stafford Act? May recipients use funds to satisfy nonfederal matching requirements generally?

Fiscal Recovery Funds are subject to pre-existing limitations in other federal statutes and regulations and may not be used as non-federal match for other Federal programs whose statute or regulations bar the use of Federal funds to meet matching requirements. For example, expenses for the state share of Medicaid are not an eligible use. For information on FEMA programs, please see here.

4.5. Are governments required to submit proposed expenditures to Treasury for approval? [5/27]

No. Recipients are not required to submit planned expenditures for prior approval by Treasury. Recipients are subject to the requirements and guidelines for eligible uses contained in the Interim Final Rule.

4.6. How do I know if a specific use is eligible? [5/27]

Fiscal Recovery Funds must be used in one of the four eligible use categories specified in the American Rescue Plan Act and implemented in the Interim Final Rule:

a) To respond to the public health emergency or its negative economic impacts, including assistance to households, small businesses, and nonprofits, or aid to impacted industries such as tourism, travel, and hospitality;

b) To respond to workers performing essential work during the COVID-19 public health emergency by providing premium pay to eligible workers;

c) For the provision of government services to the extent of the reduction in revenue due to the COVID–19 public health emergency relative to revenues collected in the most recent full fiscal year prior to the emergency; and

d) To make necessary investments in water, sewer, or broadband infrastructure.

Recipients should consult Section II of the Interim Final Rule for additional information on eligible uses. For recipients evaluating potential uses under (a), the Interim Final Rule contains a non-exclusive list of programs or services that may be funded as responding to COVID-19 or the negative economic impacts of the COVID-19 public health emergency, along with considerations for evaluating other potential uses of Fiscal Recovery Funds not explicitly listed. See Section II of the Interim Final Rule for additional discussion.

For recipients evaluating potential uses under (c), the Interim Final Rule gives recipients broad latitude to use funds for the provision of government services to the extent of reduction in revenue. See FAQ #3.8 for additional discussion.

For recipients evaluating potential uses under (b) and (d), see Sections 5 and 6.

4.7. Do restrictions on using Coronavirus State and Local Fiscal Recovery Funds to cover costs incurred beginning on March 3, 2021 apply to costs incurred by the recipient (e.g., a State, local, territorial, or Tribal government) or to costs incurred by households, businesses, and individuals benefiting from assistance provided using Coronavirus State and Local Fiscal Recovery Funds? [6/8]

The Interim Final Rule permits funds to be used to cover costs incurred beginning on March 3, 2021. This limitation applies to costs incurred by the recipient (i.e., the state, local, territorial, or Tribal government receiving funds). However, recipients may use Coronavirus State and Local Fiscal Recovery Funds to provide assistance to households, businesses, and individuals within the eligible use categories described in the Interim Final Rule for economic harms experienced by those households, businesses, and individuals prior to March 3, 2021. For example,

- Public Health/Negative Economic Impacts – Recipients may use Coronavirus State and Local Fiscal Recovery Funds to provide assistance to households – such as rent, mortgage, or utility assistance – for economic harms experienced or costs incurred by the household prior to March 3, 2021 (e.g., rental arrears from

preceding months), provided that the cost of providing assistance to the household was not incurred by the recipient prior to March 3, 2021.

- Premium Pay – Recipients may provide premium pay retrospectively for work performed at any time since the start of the COVID-19 public health emergency. Such premium pay must be "in addition to" wages and remuneration already received and the obligation to provide such pay must not have been incurred by the recipient prior to March 3, 2021.
- Revenue Loss – The Interim Final Rule gives recipients broad latitude to use funds for the provision of government services to the extent of reduction in revenue. The calculation of lost revenue begins with the recipient's revenue in the last full fiscal year prior to the COVID-19 public health emergency and includes the 12-month period ending December 31, 2020. However, use of funds for government services must be forward looking for costs incurred by the recipient after March 3, 2021.
- Investments in Water, Sewer, and Broadband – Recipients may use Coronavirus State and Local Fiscal Recovery Funds to make necessary investments in water, sewer, and broadband. See FAQ Section 6. Recipients may use Coronavirus State and Local Fiscal Recovery Funds to cover costs incurred for eligible projects planned or started prior to March 3, 2021, provided that the project costs covered by the Coronavirus State and Local Fiscal Recovery Funds were incurred after March 3, 2021.

4.8. How can I use CSFRF/CLFRF funds to prevent and respond to crime, and support public safety in my community? [6/23]

Under Treasury's Interim Final Rule, there are many ways in which the State and Local Fiscal Recovery Funds ("Funds") under the American Rescue Plan Act can support communities working to reduce and respond to increased violence due to the pandemic. Among the eligible uses of the Funds are restoring of public sector staff to their pre-pandemic levels and responses to the public health crisis and negative economic impacts resulting from the pandemic. The Interim Final Rule provides several ways for recipients to "respond to" this pandemic-related gun violence, ranging from community violence intervention programs to mental health services to hiring of public safety personnel.

Below are some examples of how Fiscal Recovery Funds can be used to address public safety:

- In all communities, recipients may use resources to rehire police officers and other public servants to restore law enforcement and courts to their pre-pandemic levels. Additionally, Funds can be used for expenses to address COVID-related court backlogs, including hiring above pre-pandemic levels, as a response to the public health emergency. See FAQ 2.19.

- In communities where an increase in violence or increased difficulty in accessing or providing services to respond to or mitigate the effects of violence, is a result of the pandemic they may use funds to address that harm. This spending may include:

  - Hiring law enforcement officials – even above pre-pandemic levels – or paying overtime where the funds are directly focused on advancing community policing strategies in those communities experiencing an increase in gun violence associated with the pandemic
  - Community Violence Intervention (CVI) programs, including capacity building efforts at CVI programs like funding and training additional intervention workers
  - Additional enforcement efforts to reduce gun violence exacerbated by the pandemic, including prosecuting gun traffickers, dealers, and other parties contributing to the supply of crime guns, as well as collaborative federal, state, and local efforts to identify and address gun trafficking channels
  - Investing in technology and equipment to allow law enforcement to more efficiently and effectively respond to the rise in gun violence resulting from the pandemic

  As discussed in the Interim Final Rule, uses of CSFRF/CLFRF funds that respond to an identified harm must be related and reasonably proportional to the extent and type of harm experienced; uses that bear no relation or are grossly disproportionate to the type or extent of harm experienced would not be eligible uses.

- Recipients may also use funds up to the level of revenue loss for government services, including those outlined above.

Recognizing that the pandemic exacerbated mental health and substance use disorder needs in many communities, eligible public health services include mental health and other behavioral health services, which are a critical component of a holistic public safety approach. This could include:

- Mental health services and substance use disorder services, including for individuals experiencing trauma exacerbated by the pandemic, such as:
  - Community-based mental health and substance use disorder programs that deliver evidence-based psychotherapy, crisis support services, medications for opioid use disorder, and/or recovery support
  - School-based social-emotional support and other mental health services
- Referrals to trauma recovery services for crime victims.

Recipients also may use Funds to respond to the negative economic impacts of the public health emergency, including:

- Assistance programs to households or populations facing negative economic impacts of the public health emergency, including:
  - Assistance to support economic security, including for the victims of crime;
  - Housing assistance, including rent, utilities, and relocation assistance;
  - Assistance with food, including Summer EBT and nutrition programs; and
  - Employment or job training services to address negative economic or public health impacts experienced due to a worker's occupation or level of training.

- Assistance to unemployed workers, including:

- Subsidized jobs, including for young people. Summer youth employment programs directly address the negative economic impacts of the pandemic on young people and their families and communities;
- Programs that provide paid training and/or work experience targeted primarily to (1) formerly incarcerated individuals, and/or (2) communities experiencing high levels of violence exacerbated by the pandemic;
- Programs that provide workforce readiness training, apprenticeship or pre-apprenticeship opportunities, skills development, placement services, and/or coaching and mentoring; and
- Associated wraparound services, including for housing, health care, and food.

Recognizing the disproportionate impact of the pandemic on certain communities, a broader range of services are eligible in those communities than would otherwise be available in communities not experiencing a pandemic-related increase in crime or gun violence. These eligible uses aim to address the pandemic's exacerbation of public health and economic disparities and include services to address health and educational disparities, support neighborhoods and affordable housing, and promote healthy childhood environments. The Interim Final Rule provides a non-exhaustive list of eligible services in these categories.

These services automatically qualify as eligible uses when provided in Qualified Census Tracts (QCTs), low-income areas designated by HUD; to families in QCTs; or by Tribal governments. Outside of these areas, recipient governments can also identify and serve households, populations, and geographic areas disproportionately impacted by the pandemic.

Services under this category could include:

- Programs or services that address or mitigate the impacts of the COVID-19 public health emergency on education, childhood health and welfare, including:
  - Summer education and enrichment programs in these communities, which include many communities currently struggling with high levels of violence;
  - Programs that address learning loss and keep students productively engaged;
  - Enhanced services for foster youths and home visiting programs; and
  - Summer camps and recreation.

- Programs or services that provide or facilitate access to health and social services and address health disparities exacerbated by the pandemic. This includes Community Violence Intervention (CVI) programs, such as:
  - Evidence-based practices like focused deterrence, street outreach, violence interrupters, and hospital-based violence intervention models, complete with wraparound services such as behavioral therapy, trauma recovery, job training, education, housing and relocation services, and financial assistance; and,
  - Capacity-building efforts at CVI programs like funding more intervention workers; increasing their pay; providing training and professional development for intervention workers; and hiring and training workers to administer the programs.

Please refer to Treasury's Interim Final Rule for additional information.

5. Eligible Uses – Premium Pay

5.1. What criteria should recipients use in identifying essential workers to receive premium pay?

Essential workers are those in critical infrastructure sectors who regularly perform in-person work, interact with others at work, or physically handle items handled by others.

Critical infrastructure sectors include healthcare, education and childcare, transportation, sanitation, grocery and food production, and public health and safety, among others, as provided in the Interim Final Rule. Governments receiving Fiscal Recovery Funds have the discretion to add additional sectors to this list, so long as the sectors are considered critical to protect the health and well-being of residents.

The Interim Final Rule emphasizes the need for recipients to prioritize premium pay for lower income workers. Premium pay that would increase a worker's total pay above 150% of the greater of the state or county average annual wage requires specific justification for how it responds to the needs of these workers.

5.2. What criteria should recipients use in identifying third-party employers to receive grants for the purpose of providing premium pay to essential workers?

Any third-party employers of essential workers are eligible. Third-party contractors who employ essential workers in eligible sectors are also eligible for grants to provide premium pay. Selection of third-party employers and contractors who receive grants is at the discretion of recipients.

To ensure any grants respond to the needs of essential workers and are made in a fair and transparent manner, the rule imposes some additional reporting requirements for grants to third-party employers, including the public disclosure of grants provided.

5.3. May recipients provide premium pay retroactively for work already performed?

Yes. Treasury encourages recipients to consider providing premium pay retroactively for work performed during the pandemic, recognizing that many essential workers have not yet received additional compensation for their service during the pandemic.

6. Eligible Uses – Water, Sewer, and Broadband Infrastructure

6.1. What types of water and sewer projects are eligible uses of funds?

The Interim Final Rule generally aligns eligible uses of the Funds with the wide range of types or categories of projects that would be eligible to receive financial assistance

through the Environmental Protection Agency's Clean Water State Revolving Fund (CWSRF) or Drinking Water State Revolving Fund (DWSRF).

Under the DWSRF, categories of eligible projects include: treatment, transmission and distribution (including lead service line replacement), source rehabilitation and decontamination, storage, consolidation, and new systems development.

Under the CWSRF, categories of eligible projects include: construction of publicly-owned treatment works, nonpoint source pollution management, national estuary program projects, decentralized wastewater treatment systems, stormwater systems, water conservation, efficiency, and reuse measures, watershed pilot projects, energy efficiency measures for publicly-owned treatment works, water reuse projects, security measures at publicly-owned treatment works, and technical assistance to ensure compliance with the Clean Water Act.

As mentioned in the Interim Final Rule, eligible projects under the DWSRF and CWSRF support efforts to address climate change, as well as to meet cybersecurity needs to protect water and sewer infrastructure. Given the lifelong impacts of lead exposure for children, and the widespread nature of lead service lines, Treasury also encourages recipients to consider projects to replace lead service lines.

6.2. May construction on eligible water, sewer, or broadband infrastructure projects continue past December 31, 2024, assuming funds have been obligated prior to that date?

Yes. Treasury is interpreting the requirement that costs be incurred by December 31, 2024 to only require that recipients have obligated the funds by such date. The period of performance will run until December 31, 2026, which will provide recipients a reasonable amount of time to complete projects funded with Fiscal Recovery Funds.

6.3. May recipients use funds as a non-federal match for the Clean Water State Revolving Fund (CWSRF) or Drinking Water State Revolving Fund (DWSRF)?

Recipients may not use funds as a state match for the CWSRF and DWSRF due to prohibitions in utilizing federal funds as a state match in the authorizing statutes and regulations of the CWSRF and DWSRF.

6.4. Does the National Environmental Policy Act (NEPA) apply to eligible infrastructure projects?

NEPA does not apply to Treasury's administration of the Funds. Projects supported with payments from the Funds may still be subject to NEPA review if they are also funded by other federal financial assistance programs.

6.5. What types of broadband projects are eligible?

The Interim Final Rule requires eligible projects to reliably deliver minimum speeds of 100 Mbps download and 100 Mbps upload. In cases where it is impracticable due to geography, topography, or financial cost to meet those standards, projects must reliably deliver at least 100 Mbps download speed, at least 20 Mbps upload speed, and be scalable to a minimum of 100 Mbps download speed and 100 Mbps upload speed.

Projects must also be designed to serve unserved or underserved households and businesses, defined as those that are not currently served by a wireline connection that reliably delivers at least 25 Mbps download speed and 3 Mbps of upload speed.

6.6. For broadband investments, may recipients use funds for related programs such as cybersecurity or digital literacy training?

Yes. Recipients may use funds to provide assistance to households facing negative economic impacts due to Covid-19, including digital literacy training and other programs that promote access to the Internet. Recipients may also use funds for modernization of cybersecurity, including hardware, software, and protection of critical infrastructure, as part of provision of government services up to the amount of revenue lost due to the public health emergency.

6.7. How do I know if a water, sewer, or broadband project is an eligible use of funds? Do I need pre-approval? [6/8]

Recipients do not need approval from Treasury to determine whether an investment in a water, sewer, or broadband project is eligible under CSFRF/CLFRF. Each recipient should review the Interim Final Rule (IFR), along with the preamble to the Interim Final Rule, in order to make its own assessment of whether its intended project meets the eligibility criteria in the IFR. A recipient that makes its own determination that a project meets the eligibility criteria as outlined in the IFR may pursue the project as a CSFRF/CLFRF project without pre-approval from Treasury. Local government recipients similarly do not need state approval to determine that a project is eligible under CSFRF/CLFRF. However, recipients should be cognizant of other federal or state laws or regulations that may apply to construction projects independent of CSFRF/CLFRF funding conditions and that may require pre-approval.

For water and sewer projects, the IFR refers to the EPA Drinking Water and Clean Water State Revolving Funds (SRFs) for the categories of projects and activities that are eligible for funding. Recipients should look at the relevant federal statutes, regulations, and guidance issued by the EPA to determine whether a water or sewer project is eligible. Of note, the IFR does not incorporate any other requirements contained in the federal statutes governing the SRFs or any conditions or requirements that individual states may place on their use of SRFs.

6.8. For broadband infrastructure investments, what does the requirement that infrastructure "be designed to" provide service to unserved or underserved households and businesses mean? [6/17]

Designing infrastructure investments to provide service to unserved or underserved households or businesses means prioritizing deployment of infrastructure that will bring service to households or businesses that are not currently serviced by a wireline connection that reliably delivers at least 25 Mbps download speed and 3 Mbps of upload speed. To meet this requirement, states and localities should use funds to deploy broadband infrastructure projects whose objective is to provide service to unserved or underserved households or businesses. These unserved or underserved households or businesses do not need to be the only ones in the service area funded by the project.

6.9. For broadband infrastructure to provide service to "unserved or underserved households or businesses," must every house or business in the service area be unserved or underserved? [6/17]

No. It suffices that an objective of the project is to provide service to unserved or underserved households or businesses. Doing so may involve a holistic approach that provides service to a wider area in order, for example, to make the ongoing service of unserved or underserved households or businesses within the service area economical. Unserved or underserved households or businesses need not be the *only* households or businesses in the service area receiving funds.

6.10. May recipients use payments from the Funds for "middle mile" broadband projects? [6/17]

Yes. Under the Interim Final Rule, recipients may use payments from the Funds for "middle-mile projects," but Treasury encourages recipients to focus on projects that will achieve last-mile connections—whether by focusing on funding last-mile projects or by ensuring that funded middle-mile projects have potential or partnered last-mile networks that could or would leverage the middle-mile network.

6.11. For broadband infrastructure investments, what does the requirement to "reliably" meet or exceed a broadband speed threshold mean? [6/17]

In the Interim Final Rule, the term "reliably" is used in two places: to identify areas that are eligible to be the subject of broadband infrastructure investments and to identify expectations for acceptable service levels for broadband investments funded by the Coronavirus State and Local Fiscal Recovery Funds. In particular:

- The IFR defines "unserved or underserved households or businesses" to mean one or more households or businesses that are not currently served by a wireline connection that reliably delivers at least 25 Mbps download speeds and 3 Mbps of upload speeds.

- The IFR provides that a recipient may use Coronavirus State and Local Fiscal Recovery Funds to make investments in broadband infrastructure that are designed to provide service to unserved or underserved households or businesses and that are designed to, upon completion: (i) reliably meet or exceed

symmetrical 100 Mbps download speed and upload speeds; or (ii) in limited cases, reliably meet or exceed 100 Mbps download speed and between 20 Mbps and 100 Mbps upload speed and be scalable to a minimum of 100 Mbps download and upload speeds.

The use of "reliably" in the IFR provides recipients with significant discretion to assess whether the households and businesses in the area to be served by a project have access to wireline broadband service that can actually and consistently meet the specified thresholds of at least 25Mbps/3Mbps—i.e., to consider the actual experience of current wireline broadband customers that subscribe to services at or above the 25 Mbps/3 Mbps threshold. Whether there is a provider serving the area that advertises or otherwise claims to offer speeds that meet the 25 Mbps download and 3 Mbps upload speed thresholds is not dispositive.

When making these assessments, recipients may choose to consider any available data, including but not limited to documentation of existing service performance, federal and/or state-collected broadband data, user speed test results, interviews with residents and business owners, and any other information they deem relevant. In evaluating such data, recipients may take into account a variety of factors, including whether users actually receive service at or above the speed thresholds at all hours of the day, whether factors other than speed such as latency or jitter, or deterioration of the existing connections make the user experience unreliable, and whether the existing service is being delivered by legacy technologies, such as copper telephone lines (typically using Digital Subscriber Line technology) or early versions of cable system technology (DOCSIS 2.0 or earlier).

The IFR also provides recipients with significant discretion as to how they will assess whether the project itself has been designed to provide households and businesses with broadband services that meet, or even exceed, the speed thresholds provided in the rule.

6.12. May recipients use Funds for pre-project development for eligible water, sewer, and broadband projects? [6/23]

Yes. To determine whether Funds can be used on pre-project development for an eligible water or sewer project, recipients should consult whether the pre-project development use or cost is eligible under the Drinking Water and Clean Water State Revolving Funds (CWSRF and DWSRF, respectively). Generally, the CWSRF and DWSRF often allow for pre-project development costs that are tied to an eligible project, as well as those that are reasonably expected to lead to a project. For example, the DWSRF allows for planning and evaluations uses, as well as numerous pre-project development costs, including costs associated with obtaining project authorization, planning and design, and project start-up like training and warranty for equipment. Likewise, the CWSRF allows for broad pre-project development, including planning and assessment activities, such as cost and effectiveness analyses, water/energy audits and conservation plans, and capital improvement plans.

Similarly, pre-project development uses and costs for broadband projects should be tied to an eligible broadband project or reasonably expected to lead to such a project. For example, pre-project costs associated with planning and engineering for an eligible broadband infrastructure build-out is considered an eligible use of funds, as well as technical assistance and evaluations that would reasonably be expected to lead to commencement of an eligible project (e.g., broadband mapping for the purposes of finding an eligible area for investment).

All funds must be obligated within the statutory period between March 3, 2021 and December 31, 2024, and expended to cover such obligations by December 31, 2026.

7. Non-Entitlement Units (NEUs)

Answers to frequently asked questions on distribution of funds to NEUs can be found in this FAQ supplement, which is regularly updated.

8. Ineligible Uses

8.1. What is meant by a pension "deposit"? Can governments use funds for routine pension contributions for employees whose payroll and covered benefits are eligible expenses?

Treasury interprets "deposit" in this context to refer to an extraordinary payment into a pension fund for the purpose of reducing an accrued, unfunded liability. More specifically, the interim final rule does not permit this assistance to be used to make a payment into a pension fund if both: (1) the payment reduces a liability incurred prior to the start of the COVID-19 public health emergency, and (2) the payment occurs outside the recipient's regular timing for making such payments.

Under this interpretation, a "deposit" is distinct from a "payroll contribution," which occurs when employers make payments into pension funds on regular intervals, with contribution amounts based on a pre-determined percentage of employees' wages and salaries. In general, if an employee's wages and salaries are an eligible use of Fiscal Recovery Funds, recipients may treat the employee's covered benefits as an eligible use of Fiscal Recovery Funds.

8.2. May recipients use Fiscal Recovery Funds to fund Other Post-Employment Benefits (OPEB)? [6/8]

OPEB refers to benefits other than pensions (see, e.g., Governmental Accounting Standards Board, "Other Post-Employment Benefits"). Treasury has determined that Sections 602(c)(2)(B) and 603(c)(2), which refer only to pensions, do not prohibit CSFRF/CLFRF recipients from funding OPEB. Recipients of either the CSFRF/CLFRF may use funds for eligible uses, and a recipient seeking to use CSFRF/CLFRF funds for

OPEB contributions would need to justify those contributions under one of the four eligible use categories.

9. Reporting

On June 17, 2021, Treasury released Guidance on Recipient Compliance and Reporting Responsibilities for the Coronavirus State and Local Fiscal Recovery Funds. Recipients should consult this guidance for additional detail and clarification on recipients' compliance and reporting responsibilities. A users' guide will be provided with additional information on how and where to submit required reports.

9.1. What records must be kept by governments receiving funds?

Financial records and supporting documents related to the award must be retained for a period of five years after all funds have been expended or returned to Treasury, whichever is later. This includes those which demonstrate the award funds were used for eligible purposes in accordance with the ARPA, Treasury's regulations implementing those sections, and Treasury's guidance on eligible uses of funds.

9.2. What reporting will be required, and when will the first report be due?

Recipients will be required to submit an interim report, quarterly project and expenditure reports, and annual Recovery Plan Performance Reports as specified below, regarding their utilization of Coronavirus State and Local Fiscal Recovery Funds.

Interim reports: States (defined to include the District of Columbia), territories, metropolitan cities, counties, and Tribal governments will be required to submit one interim report. The interim report will include a recipient's expenditures by category at the summary level and for states, information related to distributions to non-entitlement units of local government must also be included in the interim report. The interim report will cover activity from the date of award to July 31, 2021 and must be submitted to Treasury by August 31, 2021. Non-entitlement units of local government are not required to submit an interim report.

Quarterly Project and Expenditure reports: State (defined to include the District of Columbia), territorial, metropolitan city, county, and Tribal governments will be required to submit quarterly project and expenditure reports. This report will include financial data, information on contracts and subawards over $50,000, types of projects funded, and other information regarding a recipient's utilization of award funds. Reports will be required quarterly with the exception of non-entitlement units, which will report annually. An interim report is due on August 31, 2021. The reports will include the same general data as those submitted by recipients of the Coronavirus Relief Fund, with some modifications to expenditure categories and the addition of data elements related to specific eligible uses. The initial quarterly Project and Expenditure report will cover two calendar quarters from the date of award to September 30, 2021 and must be submitted to

Treasury by October 31, 2021. The subsequent quarterly reports will cover one calendar quarter and must be submitted to Treasury within 30 days after the end of each calendar quarter.

Non-entitlement units of local government will be required to submit the project and expenditure report annually. The initial annual Project and Expenditure report for non-entitlement units of local government will cover activity from the date of award to September 30, 2021 and must be submitted to Treasury by October 31, 2021. The subsequent annual reports must be submitted to Treasury by October 31 each year.

Recovery Plan Performance Reports: States (defined to include the District of Columbia), territories, metropolitan cities, and counties with a population that exceeds 250,000 residents will also be required to submit an annual Recovery Plan Performance Report to Treasury. This report will include descriptions of the projects funded and information on the performance indicators and objectives of each award, helping local residents understand how their governments are using the substantial resources provided by Coronavirus State and Local Fiscal Recovery Funds program. The initial Recovery Plan Performance Report will cover activity from date of award to July 31, 2021 and must be submitted to Treasury by August 31, 2021. Thereafter, the Recovery Plan Performance Reports will cover a 12-month period and recipients will be required to submit the report to Treasury within 30 days after the end of the 12-month period. The second Recovery Plan Performance Report will cover the period from July 1, 2021 to June 30, 2022 and must be submitted to Treasury by July 31, 2022. Each annual Recovery Plan Performance Report must be posted on the public-facing website of the recipient. Local governments with fewer than 250,000 residents, Tribal governments, and non-entitlement units of local government are not required to develop a Recovery Plan Performance Report.

Please see the Guidance on Recipient Compliance and Reporting Responsibilities for more information.

9.3. What provisions of the Uniform Guidance for grants apply to these funds? Will the Single Audit requirements apply?

Most of the provisions of the Uniform Guidance (2 CFR Part 200) apply to this program, including the Cost Principles and Single Audit Act requirements. Recipients should refer to the Assistance Listing for detail on the specific provisions of the Uniform Guidance that do not apply to this program. The Assistance Listing will be available on beta.SAM.gov.

9.4. Once a recipient has identified a reduction in revenue, how will Treasury track use of funds for the provision of government services? [6/8]

The ARPA establishes four categories of eligible uses and further restrictions on the use of funds to ensure that Fiscal Recovery Funds are used within the four eligible use categories. The Interim Final Rule implements these restrictions, including the scope of

the eligible use categories and further restrictions on tax cuts and deposits into pensions. Reporting requirements will align with this structure.

Consistent with the broad latitude provided to recipients to use funds for government services to the extent of the reduction in revenue, recipients will be required to submit a description of services provided. As discussed in IFR, these services can include a broad range of services but may not be used directly for pension deposits, contributions to reserve funds, or debt service. Recipients may use sources of funding other than Fiscal Recovery Funds to make deposits to pension funds, contribute to reserve funds, and pay debt service, including during the period of performance for the Fiscal Recovery Fund award.

For recipients using Fiscal Recovery Funds to provide government services to the extent of reduction in revenue, the description of government services reported to Treasury may be narrative or in another form, and recipients are encouraged to report based on their existing budget processes and to minimize administrative burden. For example, a recipient with $100 in revenue replacement funds available could indicate that $50 were used for personnel costs and $50 were used for pay-go building of sidewalk infrastructure.

In addition to describing the government services provided to the extent of reduction in revenue, all recipients will also be required to indicate that Fiscal Recovery Funds are not used directly to make a deposit in a pension fund. Further, recipients subject to the tax offset provision will be required to provide information necessary to implement the Interim Final Rule, as described in the Interim Final Rule. Treasury does not anticipate requiring other types of reporting or recordkeeping on spending in pensions, debt service, or contributions to reserve funds.

These requirements are further detailed in the guidance on reporting requirements for the Fiscal Recovery Funds available here.

9.5. What is the Assistance Listing and Catalog of Federal Domestic Assistance (CFDA) number for the program? [6/8]

The Assistance Listing for the Coronavirus State and Local Fiscal Recovery Funds (CSLFRF) was published May 28, 2021 on SAM.gov. This includes the final CFDA Number for the program, 21.027.

The assistance listing includes helpful information including program purpose, statutory authority, eligibility requirements, and compliance requirements for recipients. The CFDA number is the unique 5-digit code for each type of federal assistance, and can be used to search for program information, including funding opportunities, spending on usaspending.gov, or audit results through the Federal Audit Clearinghouse.

To expedite payments and meet statutory timelines, Treasury issued initial payments under an existing CFDA number. If you have already received funds or captured the

initial CFDA number in your records, please update your systems and reporting to reflect the final CFDA number 21.027. **Recipients must use the final CFDA number for all financial accounting, audits, subawards, and associated program reporting requirements.**

To ensure public trust, Treasury expects all recipients to serve as strong stewards of these funds. This includes ensuring funds are used for intended purposes and recipients have in place effective financial management, internal controls, and reporting for transparency and accountability.

Please see Treasury's Interim Final Rule and the Guidance on Recipient Compliance and Reporting Responsibilities for more information.

10. Miscellaneous

10.1. May governments retain assets purchased with Fiscal Recovery Funds? If so, what rules apply to the proceeds of disposition or sale of such assets?

Yes, if the purchase of the asset was consistent with the limitations on the eligible use of funds. If such assets are disposed of prior to December 31, 2024, the proceeds would be subject to the restrictions on the eligible use of payments.

10.2. Can recipients use funds for administrative purposes?

Recipients may use funds to cover the portion of payroll and benefits of employees corresponding to time spent on administrative work necessary due to the COVID–19 public health emergency and its negative economic impacts. This includes, but is not limited to, costs related to disbursing payments of Fiscal Recovery Funds and managing new grant programs established using Fiscal Recovery Funds.

10.3. Are recipients required to remit interest earned on CSFRF/CLFRF payments made by Treasury? [5/27]

No. CSFRF/CLFRF payments made by Treasury to states, territories, and the District of Columbia are not subject to the requirement of the Cash Management Improvement Act and Treasury's implementing regulations at 31 CFR part 205 to remit interest to Treasury. CSFRF/CLFRF payments made by Treasury to local governments and Tribes are not subject to the requirement of 2 CFR 200.305(b)(8)–(9) to maintain balances in an interest-bearing account and remit payments to Treasury.

10.4. Is there a deadline to apply for funds? [5/27]

The Interim Final Rule requires that costs be incurred by December 31, 2024. Direct recipients are encouraged to apply as soon as possible. For direct recipients other than Tribal governments, there is not a specific application deadline.

Tribal governments do have deadlines to complete the application process and should visit www.treasury.gov/SLFRPTribal for guidance on applicable deadlines.

Non-entitlement units of local government should contact their state government for information on applicable deadlines.

10.5. May recipients use funds to cover the costs of consultants to assist with managing and administering the funds? [6/8]

Yes. Recipients may use funds for administering the CSFRF/CLFRF program, including costs of consultants to support effective management and oversight, including consultation for ensuring compliance with legal, regulatory, and other requirements.

11. Operations

11.1. How do I know if my entity is eligible?

The Coronavirus State and Local Fiscal Recovery Funds American Rescue Plan Act of 2021 set forth the jurisdictions eligible to receive funds under the program, which are:

- States and the District of Columbia
- Territories
- Tribal governments
- Counties
- Metropolitan cities (typically, but not always, those with populations over 50,000)
- Non-entitlement units of local government, or smaller local governments (typically, but not always, those with populations under 50,000)

11.2. How does an eligible entity request payment?

Eligible entities (other than non-entitlement units) must submit their information to the Treasury Submission Portal. Please visit the **Coronavirus State and Local Fiscal Recovery Fund website** for more information on the submission process.

11.3. I cannot log into the Treasury Submission Portal or am having trouble navigating it. Who can help me?

If you have questions about the Treasury Submission Portal or for technical support, please email covidreliefitsupport@treasury.gov.

11.4. What do I need to do to receive my payment?

All eligible payees are required to have a DUNS Number previously issued by Dun & Bradstreet (https://www.dnb.com/).

All eligible payees are also required to have an active registration with the System for Award Management (SAM) (https://www.sam.gov).

And eligible payees must have a bank account enabled for Automated Clearing House (ACH) direct deposit. Payees with a Wire account are encouraged to provide that information as well.

More information on these and all program pre-submission requirements can be found on the **Coronavirus State and Local Fiscal Recovery Fund website.**

11.5. Why is Treasury employing id.me for the Treasury Submission Portal?

ID.me is a trusted technology partner to multiple government agencies and healthcare providers. It provides secure digital identity verification to those government agencies and healthcare providers to make sure you're you – and not someone pretending to be you – when you request access to online services. All personally identifiable information provided to ID.me is encrypted and disclosed only with the express consent of the user. Please refer to ID.me Contact Support for assistance with your ID.me account. Their support website is https://help.id.me.

11.6. Why is an entity not on the list of eligible entities in Treasury Submission Portal?

The ARPA statute lays out which governments are eligible for payments. The list of entities within the Treasury Submission Portal includes entities eligible to receive a direct payment of funds from Treasury, which include states (defined to include the District of Columbia), territories, Tribal governments, counties, and metropolitan cities.

Eligible non-entitlement units of local government will receive a distribution of funds from their respective state government and should not submit information to the Treasury Submission Portal.

If you believe an entity has been mistakenly left off the eligible entity list, please email SLFRP@treasury.gov.

11.7. What is an Authorized Representative?

An Authorized Representative is an individual with legal authority to bind the government entity (e.g., the Chief Executive Officer of the government entity). An Authorized Representative must sign the Acceptance of Award terms for it to be valid.

11.8. How does a Tribal government determine their allocation?

Tribal governments will receive information about their allocation when the submission to the Treasury Submission Portal is confirmed to be complete and accurate.

11.9. How do I know the status of my request for funds (submission)?

Entities can check the status of their submission at any time by logging into Treasury Submission Portal.

11.10. My Treasury Submission Portal submission requires additional information/correction. What is the process for that?

If your Authorized Representative has not yet signed the award terms, you can edit your submission with in the into Treasury Submission Portal. If your Authorized Representative has signed the award terms, please email SLFRP@treasury.gov to request assistance with updating your information.

11.11. My request for funds was denied. How do I find out why it was denied or appeal the decision?

Please check to ensure that no one else from your entity has applied, causing a duplicate submission. Please also review the list of all eligible entities on the **Coronavirus State and Local Fiscal Recovery Fund website.**

If you still have questions regarding your submission, please email SLFRP@treasury.gov.

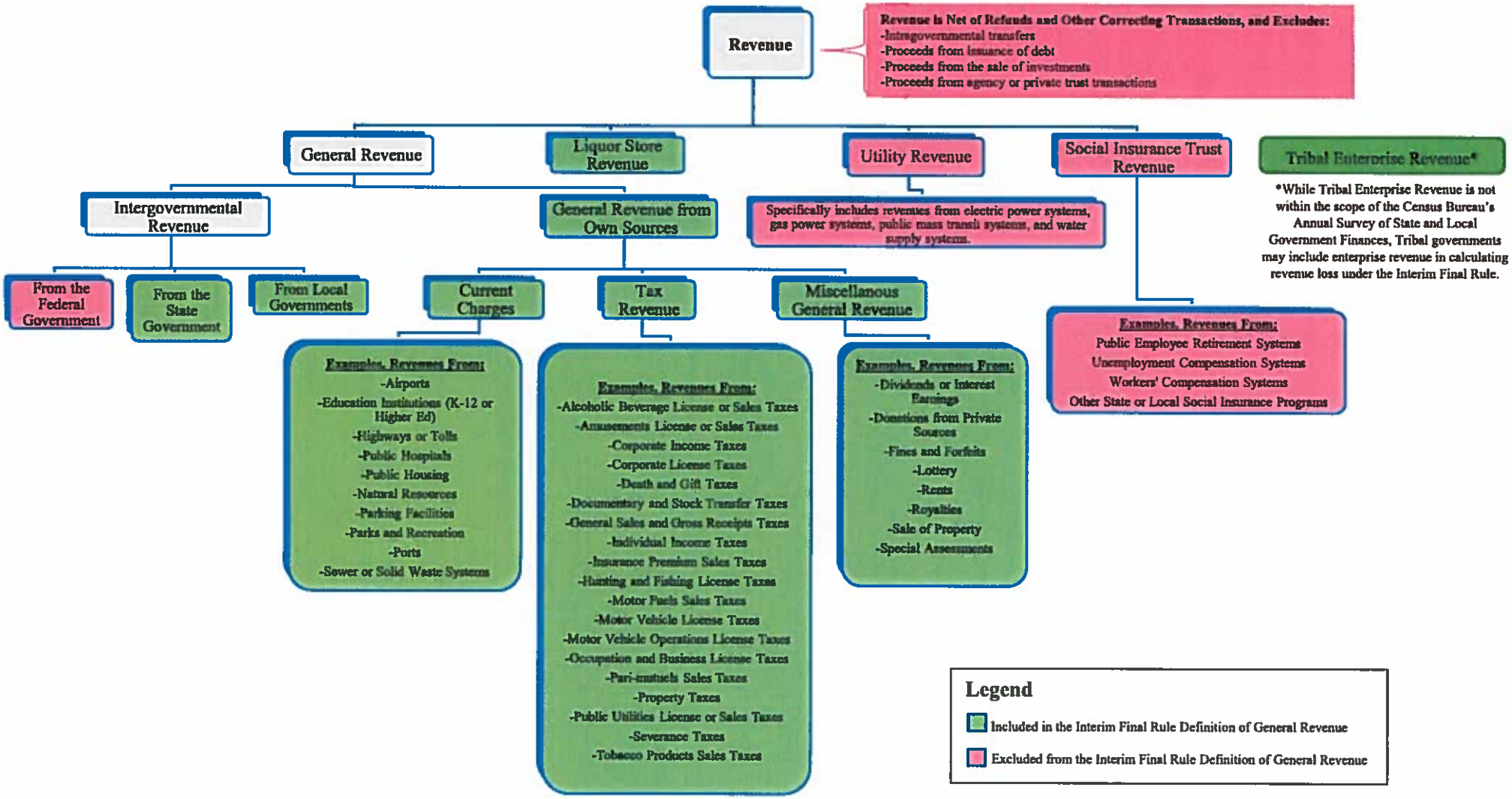
11.12. When will entities get their money?

Before Treasury is able to execute a payment, a representative of an eligible government must submit the government's information for verification through the Treasury Submission Portal. The verification process takes approximately four business days. If any errors are identified, the designated point of contact for the government will be contacted via email to correct the information before the payment can proceed. Once verification is complete, the designated point of contact of the eligible government will receive an email notifying them that their submission has been verified. Payments are generally scheduled for the next business day after this verification email, though funds may not be available immediately due to processing time of their financial institution.

11.13. How does a local government entity provide Treasury with a notice of transfer of funds to its State?

For more information on how to provide Treasury with notice of transfer to a state, please email SLRedirectFunds@treasury.gov.

Appendix: Interim Final Rule Definition of General Revenue Within the Census Bureau Classification Structure of Revenue



Source: U.S. Bureau of the Census Government Finance and Employment Classification Manual, 2006; Annual Survey of State and Local Government Finances

Locust Ln Retention Basin Pictures

Mount Joy Borough
East Donegal Township
315
311
307
LOCUST LN
PINKERTON

10-a

MOUNT JOY BOROUGH

Lancaster County, Pennsylvania

APPLICATION FOR CONSIDERATION OF A SUBDIVISION AND/OR LAND DEVELOPMENT PLAN

The undersigned hereby applies for approval under Chapter 240, Subdivision and Land Development, of the Code of the Borough of Mount Joy for the Plan submitted herewith and described below:

For Mount Joy Borough Use Only

Mount Joy Borough File No: 21003	Date of Receipt/Filing: 4/1/21

Plan & Project Information

Plan Name: Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company	
Plan No: 1378-20	Plan Date: March 22, 2021
Location: 240 W Main Street	
Property Owner: Mount Joy Senior Housing LP	
Owner Address: 2121 Old Gatesburg Road Suite 200 State College, PA 16803	
Telephone Number: 814-272-8945	
Email: clovrack@gatesburgroaddevelopment.com	
Deed Reference: 6574192	Tax Parcel No: 450-34256-0-0000
Applicant (if not landowner): same as owner	
Applicant Address:	
Telephone Number:	
Email:	
Firm Which Prepared Plan: DC Gohn Associates	
Firm Address: 32 Mount Joy Street Mount Joy, PA 17552	
Telephone Number: 717-653-5308	
Person Responsible For Plan: Brian R. Cooley	
Email: bcooley@dcgohn.com	
Plan Type: ☐ Sketch Plan	
☐ Preliminary Plan ☐ Subdivision ☐ Land Development ☐ Lot-Line Change Plan	
☒ Final & Preliminary/Final Plan ☐ Lot-Line Change Plan (expedited)	
☐ Improvement Construction Plan	
Description: Convert existing building into 36 senior housing apartments, construct retail on ground floor, re-configure existing parking lot	
Total Acreage: 1.279	
Zoning District: Commercial Business District	
Is/was a zoning variance, special exception or conditional use approval necessary? ☐ yes ☒ no	
If yes, please attach Zoning Hearing Board Decision.	

Proposed Lots and Units					
	# of Lots	# of Units		# of Lots	# of Units
Total #	1	36	Mixed Use		
Commercial			Single Family Detached		
Industrial			Multifamily		
Institutional			Other Senior housing	1	36
Total Square Feet of Ground Floor Area (building footprint):			11,428		
Total Square Feet of Existing Structures (all floors):			57,888		
Total Square Feet of Proposed Structures (all floors):			57,140		
Total Square Feet (or Acres) of Proposed Parkland/Other Public Use:			0		
Linear feet of new street:			0		
Identify all street(s) not proposed for dedication:			All access drives are private		

NOTES:

1. **All units of occupancy shall be provided with a complete water supply system which shall be connected to the Borough's water supply system in accordance with the requirements of Council, the Authority and DEP.**
2. **All units of occupancy shall be provided with a complete sanitary sewer system, which shall be connected to the Borough's sanitary sewer system in accordance with the requirements of Council, the Authority and DEP.**
3. **The final plan application shall include a statement from the Authority indicating the approval of plans for design, installation, and possible financial guarantees.**
4. **Applicants shall comply with all plan processing procedures of the County Planning Commission. It is the responsibility of the applicant to determine the requirements of the County Planning Commission, including, but not limited to, the number of copies which must be submitted and the filing fee.**
5. **The final plan or preliminary/final plan shall be recorded in the office of the Recorder of Deeds in and for Lancaster County.**

GATESBURG ROAD
DEVELOPMENT
2121 Old Gatesburg Rd.
State College, PA 16803
fax 814.272.8816
office 814.272.8950

May 12, 2021

To Whom It May Concern,

Mount Joy Senior Apartments has several sources of financing that are both conventional and public sourced. The financing includes Federal Tax Credits sold to a corporate investor, Lancaster County Redevelopment Authority HOME funds, and Pennsylvania Housing Finance Agency debt. As part of this financing, we are obligated to restrict our units to seniors over the age of 62 years of age, and must be persons who have incomes of less than 60% area median income. Violation of this requirement could jeopardize all of this financing. The developer has developed 11 senior properties with similar financing.

PHFA and Lancaster County will require a Rent Regulatory Agreement executed and recorded at financial closing. The Rent Regulatory Agreement outlines the Age restriction for the financing. A copy of that agreement is attached from a similar project. The Age restriction is noted on Page 3 under Tenant Selection.

Should you have any questions or need additional information, please do not hesitate to contact me at 814-272-8907.

M-950S
(03-04)
PENNDOT

DRIVEWAY SIGHT DISTANCE MEASUREMENTS

(FOR LOCAL ROADS, USE PENNDOT PUB 70)

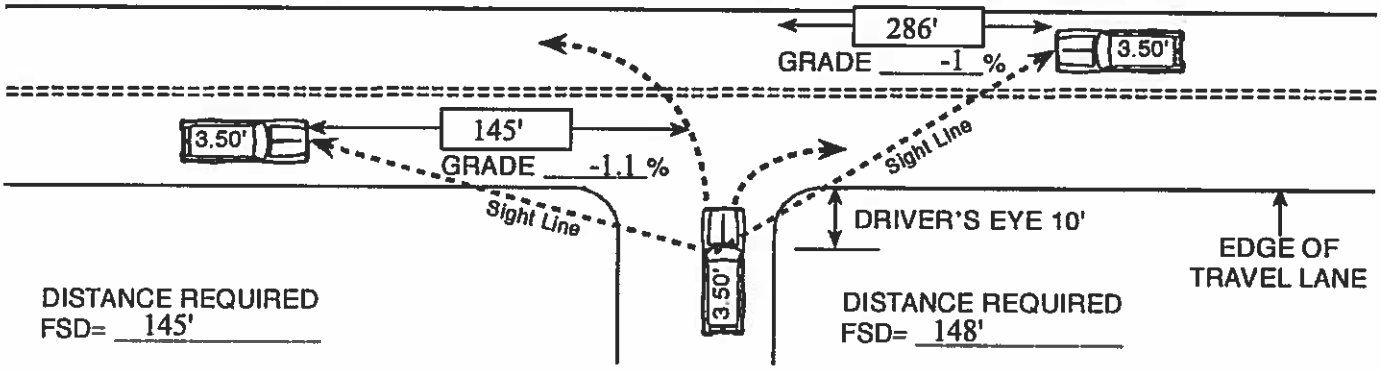
APPLICANT Mount Joy Senior Housing APPLICATION NO. _____

S.R. 0230 SEG. 0220 OFFSET 654' LEGAL SPEED LIMIT 25

MEASURED BY _____ DATE May 17, 2021

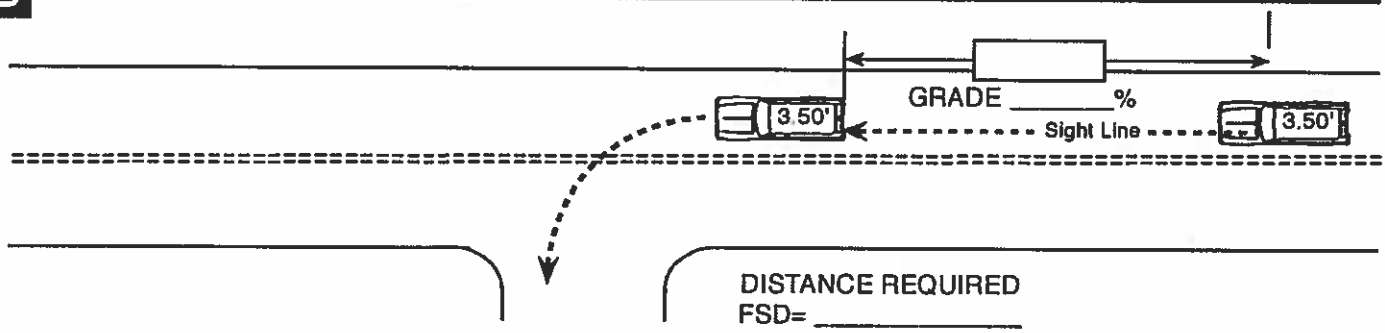
FOR DEPARTMENT USE ONLY: Safe-Running Speed _____ 85th Percentile Speed _____

A



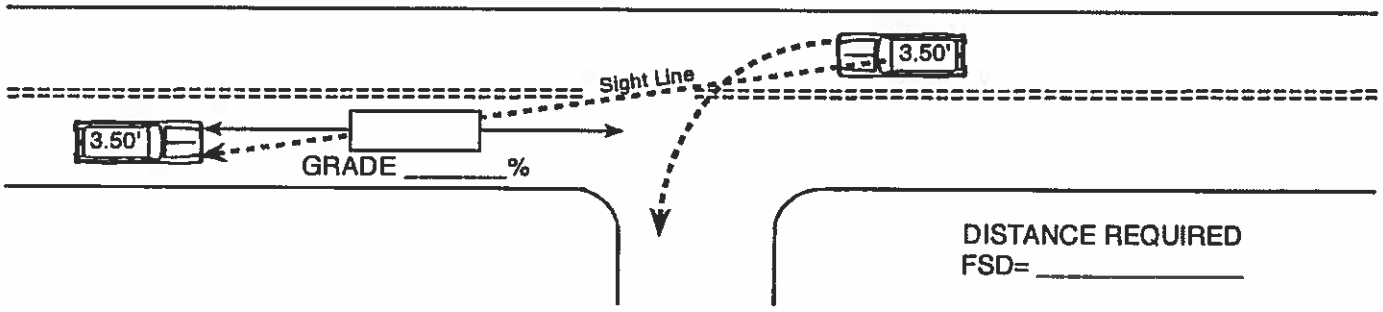
THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.

B



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.

C



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

(11)

When Recorded Return To: ____________
First American Title Insurance Company
National Commercial Services
310 Grant Street, Suite 1601
Pittsburgh, PA 15219
File No: NCS 971899

[illegible] 2020 [illegible] 12 pgs

RENT REGULATORY AGREEMENT

This Agreement is made and entered into this 23rd day of December, 2020, to be effective as of December 23, 2020,

by and between:

RIVERVIEW SENIOR HOUSING LP, a Pennsylvania limited partnership, with an address of 2121 Gatesburg Road, Suite 200, State College, PA 16803 ("the Borrower"),

AND

COUNTY OF ALLEGHENY, a home rule county and political subdivision of the Commonwealth of Pennsylvania, acting through its Department of Economic Development ("DOED"), with its address at One Chatham Center 112 Washington Place, Suite 900, Pittsburgh, Pennsylvania 15219 (the "County" or "Allegheny County").

WITNESSETH:

WHEREAS, the County's DOED operates the "Allegheny Housing Development Fund Program" (hereinafter the "Program") under which DOED provides monies made available to the County by the United States Department of Housing and Urban Development ("HUD") pursuant to Title II of the National Affordable Housing Act of 1990 under the HOME Investment Partnerships Program (hereinafter "the HOME Program") and also under the Allegheny Housing Trust Fund Program ("AHTF") as loans to assist in the development of new or substantially rehabilitated housing at affordable rental rates for low/moderate-income households; and

WHEREAS, the Borrower has proposed the acquisition, development and construction of thirty (30) units of affordable senior rental housing, of which 30 units are expected to be low income units (the "Project"), to be located at 1330 Eleventh Avenue in the Harrison Township, Allegheny County, Pennsylvania, 15065 being more particularly described on Exhibit "A" attached hereto (the "Property"); and

WHEREAS, pursuant to the Program, the County has agreed to provide a loan of HOME/AHTF Program funds in the amount of [redacted] and 00/100 Dollars ([redacted]) to assist Borrower in the development and construction activities of the Project (the "Loan"); and

WHEREAS, the proceeds of the Loan (the "Loan Proceeds") will be allocated to four (4) floating Assisted Units (the "Assisted Units") in the Project, subject to the HOME rent and income restrictions (as detailed below); and

WHEREAS, the Loan is evidenced by a Mortgage Note (the "Note"), secured by an Open-End Mortgage and Security Agreement (the "Mortgage") and this Rent Regulatory Agreement (the "Regulatory Agreement" or the "Rent Regulatory Agreement"), and the Construction Loan and Development Agreement between the parties, all of even date herewith, and other related security documents (collectively the "Loan Documents"); and

WHEREAS, the County is making the Loan pursuant to the HOME Investment Partnerships Program, 42 U.S.C. 12701 et seq., Titles I and II and the regulations promulgated by the Secretary of the United States Department of Housing and Urban Development pursuant thereto at 24 CFR Part 92 (the "HOME Program Regulations"); and

WHEREAS, as a condition for the making of the Loan, the County and the Borrower have entered into an agreement for the implementation of the FY 2017 HOME Investment Partnerships Program/Affordable Housing Trust Fund Program (hereinafter "the HOME Agreement"); and

WHEREAS, the County is setting the allowable rent and tenant income limits for two periods, the first of which shall be the HOME affordability period, which will have a length of twenty-two years from the date of this document, and the second, known as the County affordability period which will begin at the end of the HOME affordability period until the expiration date of this agreement, thirty (30) years from the date of this document; and

WHEREAS, the Borrower, in consideration of the Loan and the other matters set forth herein and in the other Loan Documents, has agreed to operate the Project and the Assisted Units pursuant to certain prescribed conditions as set forth in this Regulatory Agreement, the Construction Loan and Development Agreement and the HOME Agreement; and

NOW, THEREFORE, the County and the Borrower, in consideration of the mutual promises and covenants contained herein and agreeing to be legally bound thereby, the parties hereto agree as follows:

1. Rent

A. Rent for the HOME affordability period (years 0-22). The rent (the "Rent") for the Assisted Units shall not exceed the fair market rent for existing housing for comparable units in the area as established by HUD under 24 CFR §888.111 or thirty percent (30%) of the adjusted gross income of the tenant whose annual income equals sixty-five percent (65%) of the median income for the area, all as more specifically set forth in the HOME Program Regulations at 24 CFR §92.252. Because the Project has fewer than five (5) Assisted Units, none of the Assisted Units are required to be leased at Low HOME Rent levels. (The Rent for Low HOME Rent, defined as thirty percent (30%) of the tenant's monthly-adjusted income, or thirty percent (30%) of the annual income of a family whose income equals fifty percent (50%) of the median income for the area.) All assisted units are rent limited only to the High HOME rent limits. The Rent shall include a pro rata portion of all costs to Borrower of operating the Property, including all electric, gas, water and sewer charges for each unit if paid by Borrower, but excluding the Assisted Units' telephone and any other optional services such as cable television. The initial rent limits are included in Exhibit "B" attached hereto. Exhibit "B" will also contain the number of each size unit required to be counted as the Assisted Units. Please note that if the HOME Rent limits are updated prior to the completion of construction, the updated HOME Rent limits may be applied to the HOME-Assisted units, if requested of the County in writing and once an approval letter from the County is received.

B. Rent for the County affordability period (years 23-30). The rent for the

Assisted Units may not exceed the rent limits in effect for the non-assisted affordable units, as set by the Pennsylvania Housing Finance Agency ("PHFA") and updated by PHFA from time to time.

C. (i) The maximum rents set forth in paragraphs A and B above may not be increased prior to January 1, 2023. Thereafter, the maximum rents may be increased by Borrower provided that such request is not disapproved by the County by notice to Borrower given within sixty (60) days after Borrower submits to the County a notice that it intends to increase the maximum rents (the "Rent Increase Notice"). Rent Increase Notices shall include the Project's current audited financial statement and a proposed annual operating budget and any other documentation relied on for the rent increase.

(ii) The Borrower may not increase rents more than two times in any calendar year. Rent increases shall be effective for leases entered into, renewed, or extended beginning sixty (60) days after submission and the County's approval of a Rent Increase Notice.

(iii) In making its determination as to whether a requested increase will be disapproved in full or in part, the County shall consider all relevant factors including the operating results set forth in the Borrower's financial statements, Borrower's need to operate on a break-even basis, general increases in operating costs as evidenced by the United States Department of Labor, Bureau of Labor Statistics Consumer Price Index, and other relevant data, extraordinary increases in operating costs which are beyond the control of the Borrower, and the maintenance and capital needs of the Property, the reasonableness of the compensation, and other amounts paid for management and other expenses.

(iv) In general, the County shall not disapprove rent increases caused by increases in the following operating expenses except to the extent offset by any reduction in other operating expenses or by such amounts, if any, that the County reasonably deems certain expenses to be excessive:

(a) Utility rates and real estate taxes; or

(b) Insurance, refuse removal, and HVAC maintenance (the "Service Contracts") if the increases in the Service Contract expenses have resulted in actual operating expenses exceeding budgeted annual operating expenses by more than one-half of one percent (0.5%).

(v) Notwithstanding any other provision of this Regulatory Agreement, in no event shall the maximum rents in force during the HOME Affordability period exceed the maximum rent allowable under the HOME Program Regulations and any other applicable federal regulations.

2. Tenant Selection.

A. Tenant Selection during the HOME Affordability Period (years 0-22). Tenant selection shall be made by Borrower. All tenants shall be aged 62 years or older. The household incomes of the Assisted Units can be no greater than 60% or less of median income for Allegheny County as published by HUD. Per the HOME rules, this applies at the initial occupancy for each tenant, but afterwards each tenant's income may increase up to 80% of median income.

B. Tenant Selection during the County Affordability Period (years 23-30). Tenant selection shall be made by Borrower. All tenants shall be aged 62 years or older. Household incomes of tenants for the Assisted Units may be limited under the same standards and limits, as set by PHFA, for the non-Assisted, non-market rate units.

C. The Borrower shall maintain tenant records with respect to the Assisted Units (including eligibility requirements) in such a way that compliance with the criteria set forth herein can be ascertained by the County. The Borrower shall furnish, not less than annually, tenant income certification to the County and permit access to such records by an agent of County at any reasonable time.

3. **Restrictions.** Except as otherwise expressly permitted in this Regulatory Agreement, the Borrower shall not do any of the following without the prior written approval of County:

A. Require, as a condition of the occupancy or leasing of any unit on the Property, any consideration or deposit other than the prepayment of the first month's rent plus a security deposit in an amount not in excess of one month's rent. All security deposits shall be kept separate and apart from all other funds of the Property in a trust account, the amount of which shall at all times equal or exceed the aggregate of all outstanding obligations under said account.

B. Permit the use of the units for any purpose except residential accommodations.

C. Violate any applicable provisions of the HOME Program Regulations, during the HOME affordability period.

4. **Reserve for Replacements.** The Borrower shall establish and maintain a reserve fund for replacements (the "Reserve for Replacement Fund") in a separate account held by the Borrower or PHFA. Beginning at initial occupancy, or other such date approved by PHFA and the County, the Borrower shall make annual payments to the Reserve for Replacement Fund Account in an amount equal to $375 per unit per year unless a different date or amount is approved in writing by PHFA and the County.

5. **Financial Statements.** On or before June 30 of each year, Borrower will provide the County with an audited annual financial statement for the Project as of December 31st of the immediately previous calendar year prepared by an independent certified public accountant in accordance with generally accepted accounting principles consistently applied.

6. **Discrimination.** The Borrower will comply with the provisions of any applicable federal, state or local law prohibiting discrimination in housing on the grounds of race, color, creed, age, ancestry, sex, religion, disability, familial status, national origin, actual or perceived sexual orientation, gender identity, or marital status.

7. **Remedies.** Upon the violation of any of the above provisions of this Regulatory Agreement by the Borrower, the County shall give written notice thereof to the Borrower, the Borrower's limited partner ("Limited Partner"), Citizens Bank, N.A. ("Bank") and PHFA. If such violation is not corrected by the Borrower, the Limited Partner, the Bank or PHFA to the

satisfaction of the County within sixty (60) days after the giving of such notice or within such further time as the County determines is necessary to correct the violation, without further notice, the County may declare a default under this Regulatory Agreement. Upon such declaration of default, the County may pursue any and all of its legal and equitable rights and remedies including but not limited to the pursuit of any remedy provided for in the Loan Documents and the application to any court, state or federal, for specific performance of this Regulatory Agreement, for an injunction against any violation of the Regulatory Agreement, for the appointment of a receiver to take over and operate the Property in accordance with terms of the Regulatory Agreement, or for such other type of relief as may be appropriate. It is agreed that the injury to the County arising from a default under any of the terms of this Regulatory Agreement would be irreparable and the amount of damages would be difficult to ascertain. Notwithstanding anything to the contrary contained herein or in the other Loan Documents, the County hereby agrees that any cure of any default made or tendered by the Borrower's limited partners shall be deemed to be a cure by the Borrower and shall be accepted or rejected on the same basis as if made or tendered by the Borrower.

8. **Duration of Covenants.**

A. Except as set forth in Subparagraph B below, this Regulatory Agreement shall constitute a covenant running with the land starting from the date of the execution of this Regulatory Agreement and ending thirty (30) years thereafter.

B. In addition, in the event of any sale, lease (other than unit leases) or other transfer of the Property or any part thereof by the Borrower, its heirs, successors, successors in title or assigns, at any time or times during or after the term of this Regulatory Agreement, the Property shall be subject to and the transferor shall cause a covenant running with the land to be inserted in the deed or lease for such transfer, prohibiting discrimination upon the basis of race, color, creed, religion, sex, age, ancestry, disability, actual or perceived sexual orientation, gender identity, or marital status, familial status or national origin in the sale, lease or rental, or in the use or occupancy of the Property, and providing that the County and the United States Government are beneficiaries of and entitled to enforce such covenant. County, in undertaking its obligation in carrying out the Program through the Loan provided, agrees to take such measures as are necessary to enforce such covenant and will not itself so discriminate.

9. **Partial Invalidity.** The invalidity of any clause, part or provision of this Regulatory Agreement shall not affect the validity of the remaining portions thereof.

10. **Successors.** The covenants, conditions and promises contained in this Regulatory Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

11. **Non-Recourse.** Notwithstanding anything to the contrary in this Regulatory Agreement, no personal liability for repayment of the Loan shall be asserted or be enforceable against the Borrower or any partner of the Borrower under this Regulatory Agreement. Any execution pursuant to any judgment obtained on account of the Borrower's monetary obligations hereunder shall be limited to the real and personal property subject to the Mortgage and any other security given County to secure repayment of the Loan.

12. **Notices.** Any notice hereunder shall be deemed given on the next business day after being mailed by registered or certified United States mail, or sent via overnight delivery, return receipt requested, addressed to parties at their respective addresses as herein above specified or at such other address as may be specified from time to time by notice in the manner herein set forth, or upon hand delivery to the parties. All notices under this Regulatory Agreement shall be copied to:

Limited Partner:	CREA Riverview Natrona Heights, LLC 30 South Meridian Street, Suite 400 Indianapolis, IN 46204 Attn: Asset Management
	With copies to:
	Jones Day 100 High Street Boston, MA 02110 Attention: John D. Kelley, Esquire
Bank:	Citizens Bank, National Association 1215 Superior Avenue – OHS-760 Cleveland, OH 44114 Attention: Timothy B. Smith
	With copies to:
	Thompson Hine LLP 3900 Key Center 127 Public Square Cleveland, OH 44114 Attention: David M. Lewis, Esquire
PHFA:	Pennsylvania Housing Finance Agency 211 North Front Street Harrisburg, PA 17101 Attention: Legal Division

13. **Subordination.** The Lender has agreed to subordinate its rights and interests under this Agreement to the obligations of the Borrower to the Bank during the development and construction of the Project so long as the indebtedness of the Bank remains outstanding and to the PHFA during the development and operation of the Project so long as the indebtedness of PHFA remains outstanding.

14. **Counterparts.** This Agreement may be executed in counterparts which shall all be originals.

[REMINDER OF PAGE INTENTIONALLY BLANK]

WITNESS the hand and seal of the Borrower the day and year first above written.

BORROWER:

ATTEST:

RIVERVIEW SENIOR HOUSING LP, A PENNSYLVANIA LIMITED PARTNERSHIP

By: 11th Avenue Housing LLC, a Pennsylvania limited liability company, its sole general partner

By: Poole Anderson Properties, LLC, a Pennsylvania limited liability company, its sole member

By: _____
Name: Andrew S Hanas
Title: Exec. Vice Pres.

WITNESS:

COUNTY OF ALLEGHENY, THROUGH AND BY ITS DEPARTMENT OF ECONOMIC DEVELOPMENT

By: _____
Lance Chimka
Director

For John J. Exler Jr.
Sr. Deputy Director

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ~~ALLEGHENY~~ CENTRE)

On this, the 23 day of DECEMBER, 2020, before me, the undersigned officer, personally appeared ANDREW S WAIMES who acknowledged himself to be the EXEC VP. of Poole Anderson Properties, LLC, a Pennsylvania limited liability company, the sole member of 11th Avenue Housing LLC, a Pennsylvania limited liability company, the sole general partner of Riverview Senior Housing LP, a Pennsylvania limited partnership (Borrower), and that he, as such officer, being authorized to do so, executed the foregoing agreement on behalf of the partnership for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires:
08/06/2023

Commonwealth of Pennsylvania - Notary Seal
Roger E High, Notary Public
Centre County
My commission expires August 6, 2023
Commission number 1355468

#11118191 v2

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this, the 30th day of December, 2020, before me, John J. Exler, Jr. Senior Deputy the undersigned officer, personally appeared ~~Lance Chlinka~~ who acknowledged himself to be the Director of the Allegheny County Department of Economic Development, a department of the County of Allegheny, a home rule county and political subdivision of the Commonwealth of Pennsylvania, and that he as such officer, being authorized to do so, executed the foregoing agreement on behalf of the Department for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Mary E Fol
Notary Public

My Commission Expires:

Commonwealth of Pennsylvania - Notary Seal
Mary E. Farach, Notary Public
Allegheny County
My commission expires June 25, 2023
Commission number 1049417
Member, Pennsylvania Association of Notaries

Exhibit "A"

ALL that certain lot or piece of ground situate in Harrison Township, Allegheny County and State of Pennsylvania, bounded and described as follows, to-wit:

BEGINNING at the Northeast corner of Delaware Avenue and Fifth Street, as shown on said plan, said point being three hundred ten (310) feet North from the North line of Fourth Street, and extending thence along the East line of Delaware Avenue, in a Northwardly direction, two hundred sixty (260) feet to the South line of Sixth Street; thence along the South line of Sixth Street in an Eastwardly direction, three hundred ninety-five and fifty-five hundredths (395.55) feet to the West line of a Street or Avenue fifty (50) feet wide, thence along the West line of said Fifty (50) foot Street or Avenue, in a Southwardly direction, on a line curving to the right. (the radius of said curve being thee hundred fifty (350) feet), a distance of ninety-nine and twenty-eight hundredths (99.28) feet to a point; thence continuing along the West line of said Street or Avenue, in a Southwardly direction, one hundred sixty-eight and thirty-nine hundredths (168.39) feet to the North line of Fifth Street; and thence along the North line of Fifth Street in a Westwardly direction, three hundred thirty-six and seven hundredths (336.07) feet to the East line of Delaware Avenue at the place of beginning.

The above-described property is also the same as the property described on the ALTA/NSPS Land Title Survey prepared by Fahringer, McCarty, Grey, Inc., dated November 25, 2019, designated Job No. 5075-01 as follows:

ALL that certain Parcel of land situate in the Township of Harrison, County of Allegheny and Commonwealth of Pennsylvania, being a Parcel of land as shown in the Riverview Plan of Lots of the Brackenridge-McKelvey Land Company Subdivision Plan in Plan Book Volume 31, page 72 in the Office of the Department of Real Estate of Allegheny County, Commonwealth of Pennsylvania and being more particularly described as follows:

Beginning at the point where the northerly right of way line of 10th Avenue (having a 50.00 foot width) and the easterly right of way line of Delaware Avenue (having a 50.00 foot width) intersect; thence from said point of beginning and along the easterly right of way line of the aforementioned Delaware Avenue (having a 50.00 foot width), North 16°00'34" West for a distance of 260.00 feet to a point on the southerly right of way line of 11th Avenue (having a 50.00 foot width); thence along said southerly right of way line of 11th Avenue (having a 50.00 foot width), North 73°59'26" East for a distance of 395.51 feet to a point on the westerly right of way line of California Avenue (having a 50.00 foot width); thence along said westerly right of way line of the aforementioned California Avenue (having a 50.00 foot width), by a curve to the right having a radius of 350.00 feet for an arc distance of 99.28 feet and having a central angle of 16°15'07", subtended by chord bearing of South 08°15'07" East for a chord distance of 98.94 feet; thence along same, South 00°07'34" East for a distance of 168.39 feet to a point on the aforementioned northerly right of way line of 10th Avenue (having a 50.00 foot width); thence along said northerly right of way line of 10th Avenue (having a 50.00 foot width), South 73°59'26" West for a distance of 336.07 feet, to the point of beginning.

CONTAINING 96,515 square feet or 2.216 Acres.

BEING Parcel No. 1368-E-5

EXHIBIT "B"

Rent Limits and Assisted Unit Types—HOME Affordability Period only

Assisted-Unit Types	Required Number Each Type	Maximum Rent Limit*	(Gross) Rent Limit
1-Bedroom	4	Low HOME Rent	$727

*HOME 2020 Limits

Please note that if the HOME Rent limits are updated prior to the completion of construction, the updated HOME Rent limits may be applied to the HOME-Assisted units, if requested of the County in writing and once an approval letter from the County is received.

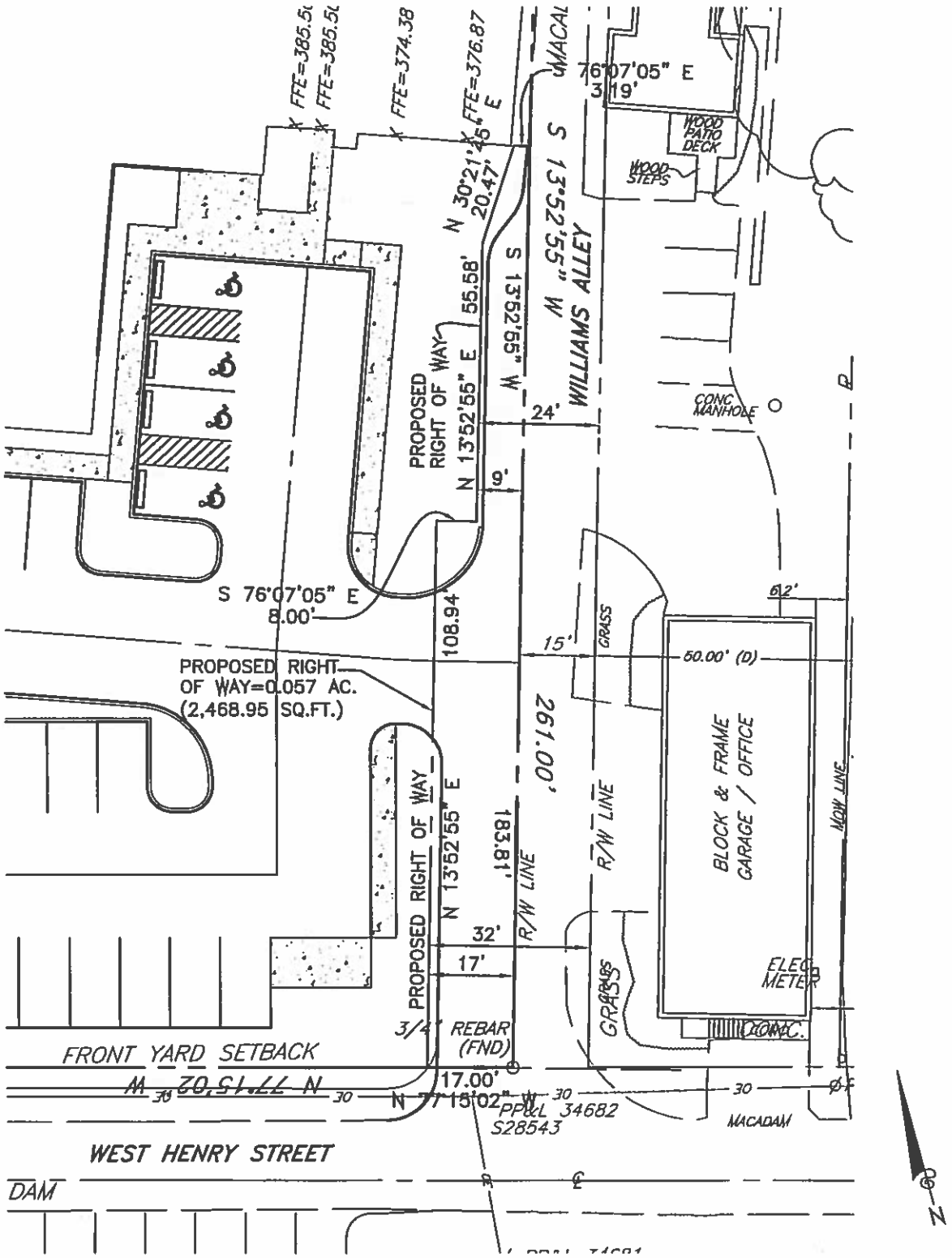
Following the expiration of the HOME affordability period, rents may be set to the PHFA LIHTC rent limits in place at that time.

LEGAL DESCRIPTION
of
Right-of-Way Dedication
on
Williams Alley
in
Mount Joy Borough
Lancaster County, Pennsylvania

ALL THAT CERTAIN tract of land lying south of West Main Street and north of West Henry Street, on the west side of Williams Alley, in Mount Joy Borough, Lancaster County, Commonwealth of Pennsylvania, as shown on a Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company, as prepared by D.C. Gohn Associates, Inc., Drawing No.: CG-3049, dated March 22, 2021, last revised on 5/17/21, Project No. 1378-20, as filed in the Lancaster County Recorder of Deeds Office as Document #_____ on _____, 2021, said tract also shown on attached Proposed Right-of-Way Exhibit as prepared by the same firm, said tract being more particularly described as follows:

From a **POINT OF BEGINNING** at the northwest corner of the intersection of West Henry Street and Willams Alley, said point being the southeast corner of land, now or formerly, of Mount Joy Senior Housing LP as described in Deed Instrument #6574192 and being marked by a 3/4 inch rebar; thence run along the northerly right-of-way line of West Henry Street, North 77 degrees 15 minutes 02 seconds West, a distance of 17.00 feet to a point; thence departing said right-of-way line, run over and through said land, now or formerly, of Mount Joy Senior Housing LP the following five (5) courses: (1) North 13 degrees 52 minutes 55 seconds East, a distance of 108.94 feet to a point; (2) South 76 degrees 07 minutes 05 seconds East, a distance of 8.00 feet to a point; (3) North 13 degrees 52 minutes 55 seconds East, a distance of 55.58 feet to a point; (4) North 30 degrees 21 minutes 45 seconds East, a distance of 20.47 feet to a point; (5) South 76 degrees 07 minutes 05 seconds East, a distance of 3.19 feet to a point on the west right-of-way line of Williams Alley; thence run along said right-of-way line. South 13 degrees 52 minutes 55 seconds West, a distance of 183.81 feet to the **POINT OF BEGINNING**.

ABOVE DESCRIBED LAND CONTAINING 0.057 acres (2,468.95 square feet).



FILENAME: P:\1378\1378-20\Cadd\Final Plan.dwg

PROPOSED RIGHT OF WAY EXHIBIT

FOR

MOUNT JOY SENIOR HOUSING LP
240 W MAIN STREET

MOUNT JOY BOROUGH — LANCASTER COUNTY, PENNSYLVANIA

SHEET 1 OF 1

D.C. GOHN ASSOCIATES, INC.
SURVEYORS & ENGINEERS – MOUNT JOY, PA.

DWN. BY: BRC	SCALE: 1"=30'	DATE: 5/6/2021
CKD. BY:	PROJ. NO.: 1378-20	REVISED:

SOUTH CENTRAL TRANSIT AUTHORITY

SCTA

45 Erick Road, Lancaster, PA 17601-3111 ■ Phone: 717-397-5613

March 11, 2021

Brian R. Cooley, ASLA
D. C. Gohn Associates, Inc.
32 Mount Joy Street
POB 128
Mount Joy, PA 17552-0128

RE: **Gatesburg Road Development, Gerberich Payne Shoe Company**

Dear Mr. Cooley:

The South Central Transit Authority (SCTA) reviewed the revised "Proposed Layout, Easement, and Landscape Plan" for the redevelopment of the Gerberich Payne Shoe Company. The revised plan was prepared following a February 7, 2021 virtual meeting with Mr. Haines and you to discuss including a bus stop as part of the project.

SCTA currently has a designated bus stop with sign located on West Main Street at Williams Alley. The revised plan reviewed by SCTA provide for an enhanced bus stop at its current location. The plans include the construction of a 5 FT x 8 FT concrete boarding & alighting pad at the bus stop in accordance with ADA requirements. A separate 6 FT x 10 FT concrete pad is being planned for the installation of a bus shelter. The planned installation of a bus shelter supplied by SCTA is expected to help attract and retain bus riders from the residents. An ADA accessible route to the bus stop and shelter will be available via the sidewalk for residents. An accessible path will also be provided across Williams Alley.

Based on its review of the revised plan received on February 22, 2021, SCTA concluded the proposed stop with a shelter meets our requirements. SCTA looks forward to the completion of the proposed redevelopment of the Gerberich Payment Shoe Company and the construction of the enhanced bus stop improvements.

Sincerely

David W. Kilmer
Executive Director

cc: Jeffrey Glisson

RETTEW

We answer to you.

3020 Columbia Avenue, Lancaster, PA 17603
Phone: (800) 738-8395
E-mail: rettew@rettew.com • Web site: rettew.com

MEMORANDUM

TO:	Brian R. Cooley, ASLA – D.C. Gohn Associates, Inc.		
FROM:	John M. Schick		
DATE:	March 12, 2021		
PROJECT NAME:	Gerberich Payne Shoe Company Site	**PROJECT NO.:**	041432008
SUBJECT:	Comment / Response Letter		

As requested, we have reviewed and addressed the November 25, 2020 Traffic Comments provided by Arro Consulting, Inc. We offer the following responses to each comment:

Comment 7 - The trips generated based on the ITE Land Use Code 820 shown in Table 1 appear to have used the average rate rather than the fitted curve equation. The equation shall be used when available.

Response - The use of the equations for ITE LUC 820 (Shopping Center) are not reasonable or feasible for the proposed small amount of retail space. The use of the trip equations for 3,000 SF of retail would generate approximately 554 trips per day, with 153 occurring in the AM Peak and 40 in the PM Peak. The equation for the AM peak trips is $T = 0.50(X) + 151.78$, so even 1,000 SF of retail would generate 153 trips. Therefore, we believe the use of the average rates are more realistic for a small 3,000 SF retail use located in Mount Joy Borough.

Comment 8 - The bottle neck at the adjacent Alley and West Henry Street needs to be taken into consideration and dimensioned to determine if it is feasible to maintain a two-way alley from the proposed one-way section to West Henry Street. Further discussion needs to be held with the Borough. (reference page 2 of 5 of the TIA memo).

Response – It is our understanding that the adjacent Alley will be converted to a one-way north flow. The entrance to the Alley and West Henry Street was revised to relocate the utility pole and widen that area on the plans. There were dimensions and signage also added to the plans.

Comment 9 - There appears to be a typo in the AM base analysis on the intersection of Main Street, Lumber Street and Fairview Street. The right turn volume from Fairview Street should be 17 according to the traffic counts.

Response – The analyses were revised to change the right turn volume from 15 to 17. The updated TIA has been revised accordingly.

Comment 10 - It appears the AM base analysis for the intersection of Henry Street and the Alley was conducted using the 6:00 to 7:00 AM counts even though the study indicated a peak hour of 8:00AM to 9:00AM.

Response – The report was revised to remove the peak hour references. The peak hours at all of the intersections varied. The analyses utilized the peak hour of each intersection in order to analyse "worse-case" scenario.

Comment 11 - It appears the PM existing analysis for the intersection of West Henry Street and the Alley was conducted using the 4-5PM counts even though the study indicates a peak hour of 5-6PM.

Response – See response to Comment #10. The 4:00 – 5:00 was the highest hour for this intersection, therefore this hour was used. There are 12 total vehicles using this intersection during the 4:00 – 5:00 p.m. peak hour. The 5:00 – 6:00 p.m. hour total is 7 vehicles.

Comment 12 - The existing PM analysis shows 4 vehicles turning right from eastbound Main Street. However, the counts show no vehicles making a right turn and 4 vehicles making a left turn.

Response - The 4 eastbound left turns are into the VFW driveway which is not included in this intersection analysis since it is located to the west of the Alley. The right turning volumes were review and revised. The updated TIA has been revised accordingly.

Comment 13 - The Turn Lane Warrant analysis for Main Street, Lumber Street and Fairview Street for the 2022 PM Peak Hour shows the advancing left turn lane volume as 17. According to the intersection analysis, it should be 18.

Response – The turn lane warrant analyses were updated based on the change of the commercial uses. The updated TIA contains the revised analyses and results.

The revised TIA contains all updated traffic counts, analyses, and findings. If you have any questions or comments, please feel free to call me. Thanks!

dc gohn Associates, Inc.
Surveyors - Engineers - Landscape Architects

May 6, 2021
VIA EMAIL

Stacie Gibbs, BCO
Planning, Zoning & Code Administrator
Mount Joy Borough
21 E. Main Street
Mount Joy, PA 17552

SUBJECT: Gerberich-Payne Shoe Company Re-Development
Preliminary/Final Land Development Plan Modification Requests
DCG Project Number **1378-20**

Ms. Stacie Gibbs:

On behalf of our client, Gatesburg Road Development, we are submitting the requested modifications for the Preliminary/Final Land Development Plan for the Gerberich-Payne Shoe Company Re-Development.

Subdivision and Land Development Ordinance

1. **Section 240-43.H.1 – Improvement of Existing Streets**
   We request relief from the requirement that in cases where a subdivision or land development abuts an existing Borough and/or state street, the street shall be improved to the ultimate width in accordance with Subsection H(1) or as indicated on the Official Map, whichever is greater, and additional right of way shall be provided, concrete curbing, and sidewalk, and any other street improvements that are required by this Chapter, shall be constructed.

   The Official Map indicates that the Alley and the portion of West Henry Street along the property frontage as proposed local streets. There are no additional requirements for any adjacent streets noted on the Official Map.

   The Alley requires a 16 feet cartway and a 20 feet right of way. If improved to local street standards, it requires a 24 feet cartway and a 50 feet right of way. Currently, the Alley consists of a 15' right of way and a cartway width of 12 feet. The proposal is to maintain the existing Alley right of way of 15 feet and the cartway width of 12 feet and not upgrade the Alley to a local street standard. The Alley is proposed to be widened along the property frontage to accommodate the re-configured access to the site and provide for better maneuverability into the site. The existing building and sidewalk on the subject property and the existing building on the adjacent property are directly adjacent to the Alley which would prohibit expanding the cartway or right of way in this area.

West Henry Street requires a 24 feet cartway with curbing and no parking and a 50 feet right of way. Currently, West Henry Street consists of a 49.5 feet right of way and a cartway width of 18.1 feet. The existing street is adequate for access to the site.

West Main Street is classified as arterial which requires 36 feet cartway with curb and no parking and a 60 feet right of way. Currently, West Main Street consists of a 39 feet cartway with curb and a 60 feet right of way. The street meets current standards.

2. **Section 240-43.I.(4) – Street Radius**
We request relief from the requirement that the street intersection with a local street shall be a minimum radius of 20 feet. The request is to provide a radius of 15 feet and 8 feet for the parking lot access drive to Williams Alley. The smaller radius are a result of the layout of the parking lot and access drives which accommodate the required number of parking spaces and provides access to the building. The smaller radius permit resident vehicles and emergency vehicles from entering and exiting the parking lot to the alley.

3. **Section 240-46.C.(1) – Curbing**
We request relief from the requirement that curbing shall be provided along the edge of any landscaped portions of a parking facility. The request is to provide curbing in the area of the handicap parking area, the center landscape island, and the northern portion of the parking lot adjacent to the building. The remaining parking areas do not propose curbing. The parking lot is designed to sheet flow stormwater from Henry Street to the storm sewer system along the curbed areas for collection to the stormwater BMP. There is a landscape and grass buffer between the areas adjacent to the parking lot which do not contain curbing along Henry Street and the western property line.

4. **Section 240-57.D.(1) – Dedication of Recreation**
We request relief from the requirement to dedicate recreation land. There is limited areas of the site to dedicate areas for recreation. As an alternate, the project proposes to pay a fee in lieu of dedication of recreation as indicated in Section 240-57.G.

5. **Section 240-57.G – Fee In Lieu of Dedication**
We request relief from the requirement to provide a fee in lieu of dedication of recreation. As an alternate, the applicant is proposing a fee in lieu of $2,000 per unit. Based on the 36 residential units, the proposed fee in lieu of is $72,000.

6. **Section 240-62.B – Traffic Study**
We request relief from the requirement for applications for all residential developments containing 20 or more dwelling units and all nonresidential developments with buildings containing 1,000 square feet of usable space shall provide a traffic study and report. The alternate is a traffic assessment. The traffic assessment has been revised based on comments received from the public meetings regarding the review of the sketch plan and previous traffic assessment. In particular, the New Haven Street and Henry Street and West Main Street, Manheim Street, and New Haven Street intersections have been analyzed in addition to the previous intersections. The revisions are incorporated into the revised assessment.

The assessment is based on the 36 senior apartment units, 3,000 square feet of general retail, and 3,000 square feet of medical office. The traffic assessment indicates that there are approximately 21 AM peak trips and 34 PM peak trips for the senior housing, retail, and medical office. The results of the capacity analyses indicate that the studied intersections currently operate at an overall acceptable level of service and will continue to operate at an overall acceptable level of service for the project. The results of the queue analyses indicated that the proposed redevelopment will not have any significant impact on the studied intersections. The results of the auxiliary turn lane warrant analysis indicates that turn lanes are not warranted for traffic along Main Street turning right or left onto Lumber Street. The crash data for the area indicated 9 reportable crashes at the five intersections over the past 5 years. Based on the traffic assessment, the redevelopment will not create any adverse traffic conditions to the surrounding street network and no roadway improvements are warranted.

Stormwater Management Ordinance

1. **Section 226-32.A.(2)(c) – Loading Ratios**
   We request relief of the requirement that the maximum loading ratios in Karst areas shall be 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area.

   The loading ratio for the proposed rain garden is 18.9:1 for the total area to infiltration area and 12.0:1 for the impervious area to the infiltration area. The rain garden is designed to infiltrate stormwater from a portion of West Henry Street, parking lot, sidewalks, and grass areas. A soil amended area is installed at the bottom of the rain garden which will promote infiltration and aid in water quality. A spillway is used as an overflow during larger storm events. The dewatering time is 24 hours for the volume storage area. The rain garden is routed for the 100 year storm to ensure that stormwater drains to the infiltration basin without impacting the adjacent areas of development.

   Currently, there are no stormwater detention facilities on-site. Based on the re-configured parking lot, the existing building, and the surrounding street network, there is limited areas for stormwater infiltration and detention. The proposed rain garden is designed to infiltrate the net increase in the 2 year volume associated with Area A and designed to detain stormwater for the 2, 10, 25, 50, and 100 year rate. The addition of the rain garden will provide a stormwater facility which provides infiltration, treats water quality, and detains rate for an existing site which did not contain any such facility.

2. **Section 226-37.A.(6)(b) — Emergency Spillway Conveyance**
   We request relief of the requirement that the use of the emergency spillway to convey flows greater than the 50 year storm is permitted. The request is to use the emergency spillway to convey flows from the 2, 10, and 25 year storm events. This is in addition to the emergency spillway conveying the 50 and 100 year storms which is permitted. The spillway is designed with the required erosion control liner for the 100 year storm inflow hydrograph to the rain garden to prevent erosion. The stormwater overflow will drain to

the existing inlet located in West Main Street similar to the pre development stormwater flow condition.

Call me directly if you have any questions or concerns. Thank you.

Sincerely,

D. C. GOHN ASSOCIATES, INC.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

cc: Mount Joy Senior Housing LP
Steve Funk, LeFevre Funk Architects Inc.
ARRO
File

Call me directly if you have any questions or concerns. Thank you.

Sincerely,

D. C. GOHN ASSOCIATES, INC.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

cc: Gatesburg Road Development
Steve Funk, LeFevre Funk Architects Inc.
Josele Cleary, Borough Solicitor
Lancaster County Planning Commission
ARRO
File

May 3, 2021

Corporate Headquarters
108 West Airport Road
Lititz, PA 17543
T 717.569.7021
www.arroconsulting.com

Stacie Gibbs, BCO
Planning, Zoning, & Code Administrator
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: Gatesburg Road Development
Gerberich Payne Shoe Company Land Development
ARRO #10863.39

Dear Stacie:

ARRO Consulting, Inc. ("ARRO") reviewed the following information in accordance with the Mount Joy Borough Subdivision and Land Development, Zoning, and Stormwater Management Ordinances:

1. Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc. with Drawing # CG-3049 dated March 22, 2021.

2. Traffic Assessment prepared by Rettew with Project No. 041432008 dated November 10, 2020 and revised on March 11, 2021.

3. Preliminary/Final Land Development Plan Modification Request Letter submitted by D.C. Gohn Associates, Inc. with Project No. 1378-20 dated March 22, 2021.

4. Stormwater Infiltration Summary Report for the Gerberich Payne Shoe Company prepared by Kleinfelder, Inc. with Project No. 20213553.001A dated February 19, 2021.

5. Post-Construction Stormwater Management Report for Preliminary/Final Land Development Plan: Gerberich Payne Shoe Company – 240 West Main Street prepared by D.C. Gohn Associates, Inc. with DCG Project No. 1378-20 dated March 22, 2021.

6. Lighting Plan for Gatesburg Road Development Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc. with Drawing # CG-3049 dated March 16, 2021 and the luminaire details.

7. Drainage Area Maps for Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc. dated March 16, 2021.

We offer the following comments:

Subdivision and Land Development

1. The applicant shall post financial security to the Borough. [§240-31.A]

2. As-built plans shall be provided after construction is complete and the cost for preparation of the plans shall be included in the financial security [§240-37]. A note shall be added to the plans requiring the submission of as-built plans.

3. Any change to a street or access intersection with a state road, such as changing Williams Alley from two-way to one-way, shall require a Highway Occupancy Permit Application submission to PennDOT and the following note shall be shown on the plan: "A highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law', before access to a state highway is permitted. Access to the state highway shall be as authorized by a highway occupancy permit and the Borough Council's approval of this plan in no way implies that such a permit can be acquired." [§240-61.D.12.c]

4. The plans shall be signed and sealed by a registered engineer, surveyor, or landscape architect. [§240-61.A.5]

5. The right-of-way for Williams Alley is 15' wide and the cartway at the intersection of West Henry Street is wider. The applicant shall clarify if additional right-of-way will be dedicated to the Borough. [§240-43.H]

6. Proposed pavement markings and signage shall be shown on the plan. Based on the response from previous Comment 8, Williams Alley is to be one 'way northbound 190' north of West Henry Street. The applicant shall provide appropriate signage to indicate this change. Changing from existing two-way traffic to one-way traffic requires a PennDOT Highway Occupancy Permit. The PennDOT Highway Occupancy Permit plan shall be submitted to the Borough for review prior to submission to PennDOT. [§240-61.D.2]

7. Clear sight triangles shall be shown on the plan for the intersections of Williams Alley with Main Street and West Henry Street. [§240-61.D.11]

Stormwater Management

8. The measurement of impervious area shall include the proposed future parking area. This area shall be included in the volume calculations. [§226-31.H.1]

9. The rain garden detail on Sheet 9 shows the spillway at an elevation of 376.30' and shall be corrected. [§226-43.J.5]

10. Financial security shall be provided in the amount indicated in an approved construction cost estimate. [§226-60]

11. An Operation and Maintenance Agreement shall be prepared, signed, and provided to the Borough. [§226-62]

Zoning

12. The electrical lines to the proposed lighting fixtures shall be provided to show there are no conflicts with other proposed features. [§270-76]

Traffic

13. Williams Alley is proposed to be one way northbound from 190' north of West Henry Street. The analysis shall reflect this change.

14. The study shall indicate that the peak hour for each intersection varies and that the analysis utilized the highest peak hour at each intersection in order to analyze the "worst-case" scenario.

15. The plan indicate that the proposed use is to be senior housing and retail or restaurant space. The analysis shall provide the trip generation calculations and analysis for the "worst-case" scenario.

General

16. The sidewalk detail on Sheet 7 of 12 shall be revised to state 4' minimum – varies, see plan.

17. A note shall be provided on the plan indicating that the curb shall be painted yellow or "No Parking" signs shall be installed along Main Street between Williams Alley and the proposed parking spaces to the west.

18. Notes on the plan state that West Henry Street may be widened and parking constructed in the future. If the developer/owner decides to proceed with construction, approval by Borough Council must be obtained and maintenance and other applicable agreements must be executed with the Borough prior to beginning construction.

19. A "Tenant Parking Only" sign shall be shown on the plans at the entrance to the parking lot.

Waivers – Subdivision and Land Development

20. The applicant is requesting to waive the requirement to improve streets in which a subdivision or land development abuts an existing Borough and/or state street (§240-43.H.1). Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

21. The applicant is requesting to waive the requirement for street intersections with a local street to be a minimum radius of 20' [§240-43.I.4]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

22. The applicant is requesting to waive the requirement that curbing shall be provided along the edge of any landscaped portion of a parking facility [§240-46.C.1]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

23. The applicant is requesting to waive the requirement to dedicate recreation land to the Borough because there is limited area on the site for this purpose. As an alternative, the applicant is proposing to pay a fee in lieu of dedication of recreation land. Based on the justification provided, **ARRO recommends granting this waiver request.**

24. The applicant is requesting to waive the requirement to provide a fee in lieu of dedication of recreation [§240-57.G]. The applicant proposes paying a fee of $2,000.00 per unit for a total fee of $72,000.00. However, because land is not being provided on the subject property, the fair market value cannot be determined. Therefore, Borough Council must decide if $72,000.00 is an acceptable fee in lieu of land dedication.

25. The applicant is requesting to waive the requirement that applications for all residential developments with 20 or more dwelling units and buildings containing 1,000 square feet of usable space provide a traffic study and report [§240-62.B]. Because a traffic assessment was prepared which provides adequate information to evaluate the traffic impacts on the adjacent roadway system, **ARRO recommends granting this waiver request.**

26. The applicant is requesting to waive the requirement that the applicant shall make an estimated contribution of the sum necessary to defray the costs of improvements recommended by the Traffic Impact Study [§240-62.B.5]. After discussion with Borough staff and the applicant's engineer, this waiver is not required because the traffic study is not recommending improvements.

Waivers – Stormwater Management

27. The applicant is requesting to waive the requirement for the loading ratios in Karst areas to be a maximum of 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area. The site is very limited in space which limits the size of the infiltration area [§226-32.A.2.c]. Based on the justification provided, **ARRO recommends granting this waiver request.**

28. The applicant is requesting to waive the requirement that the use of the emergency spillway to convey flows greater than the 50-year storm is permitted [§226-37.A.6.b]. The spillway is designed as the primary outlet for the rain garden and will convey flows from the 2-year through 100-year events without erosion. Based on the justification provided, **ARRO recommends granting this waiver request.**

Please call me at 717-560-6065 if you have questions.

Sincerely,

Darrell L. Becker, P.E.
Vice President

DLB:ely

c: Jill Frey, Interim Manager – Borough of Mount Joy
Brian R. Cooley – D.C. Gohn Associates, Inc.
Josele Cleary, Esq. – Morgan, Hallgren, Crosswell, & Kane, PC

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April 9, 2021

VIA E-MAIL

Stacie M. Gibbs, Zoning Officer
Mount Joy Borough
21 East Main Street
Mount Joy, PA 17552

Re: Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company
Our File No. 16724-3

Dear Stacie:

We have received the Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company (the "Plan") and supporting information from D.C. Gohn Associates, Inc. ("D.C. Gohn"). The Plan relates to an existing lot located on the south side of West Main Street (SR 0230) which also has frontage on West Henry Street and Williams Alley identified as 240 West Main Street (the "Property"). The Plan proposes the conversion of the vacant building on the Property into 36 apartment dwellings together will the installation of 40 off-street parking spaces and storm water management facilities. This letter will set forth comments on the Plan. We did previously review a sketch plan for the Property and provided comments by a letter dated November 17, 2020.

The Property is currently owned by Mount Joy Senior Housing LP ("Landowner") by virtue of a deed recorded at Document No. 6574192. There is a mortgage against the Property held by S & A Homes, Inc. recorded at Document No. 6574193. The Plan proposes the installation of storm water management facilities, so there must be a Storm Water Management Agreement executed by Landowner. The mortgage holder will have to execute the necessary Joinder by Mortgagee. D.C. Gohn should prepare an exhibit for the Storm Water Management Agreement containing the operation and maintenance procedure table from Sheet 9 of the Plan.

Sheet 3 of the Plan shows "future road widening of West Henry Street" and "future parking areas of West Henry Street." Plan Note 2 indicates that no improvements are intended for dedication to the Borough. I therefore assume that Gatesburg Road Development ("Developer") is not intending to perform the road widening or install the off-street parking. The letter dated March 22, 2021, requests waivers from Section 240-43.H(1) of the Subdivision and Land Development Ordinance ("SALDO"), so I assume these designated "future" improvements are to be installed by others. The Plan should make that clear.

The letter dated March 22, 2021, requests waivers from the requirement to dedicate open space and recreation land or pay a fee in lieu of dedication required by Section 240-57 of the

SALDO. My letter to you reviewing the sketch plan addressed the policy issues raised by the request that an indoor community room and indoor fitness room should be considered to be the park and recreation facilities. Whether the proposal to pay a fee in lieu of dedication of $72,000, $2,000 per unit, is acceptable is a policy issue for Council.

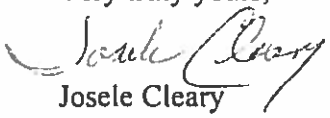
The traffic assessment prepared by Rettew Associates, Inc., recommends that Williams Alley be restricted to one-way traffic north from 190 feet north of Henry Street to West Main Street. The Borough must enact an ordinance if it will make Williams Alley a one-way street for any or all of the portion abutting the Property. The Developer should reimburse the Borough for all costs associated with the preparation and advertising of such an ordinance.

The Plan does not propose to make improvements to the street frontages or dedication additional right-of-way. The Borough should consider whether it desires to waive or defer any or all of the requirements. If Council will defer rather than waive any of the requirements, there should be a recorded Deferred Improvements Agreement between Landowner and the Borough.

The off-street parking is sufficient only if the apartments are age restricted. The Developer should identify how it intends to establish the age restriction. A statement in the zoning site data table that the parking requirements are based on housing permanently restricted to persons 62 years and older and/or physically handicapped is not sufficient.

If you have any questions concerning these comments, please contact me.

Very truly yours,



Josele Cleary

JC:sle
MUNI\167241-3\210407\71

cc: Darrell L. Becker, P.E. (via e-mail)
Brian R. Cooley, Landscape Architect (via e-mail)

D-Series Size 0
LED Area Luminaire

Catalog Number

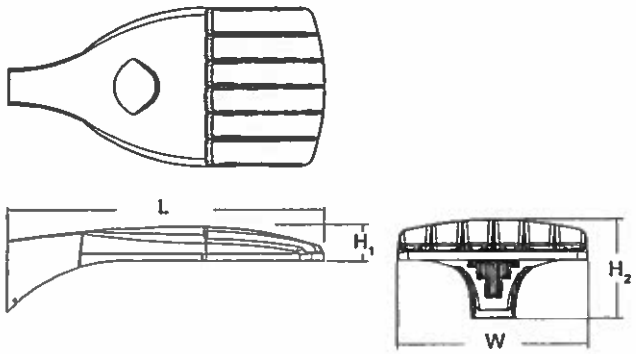
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements

Specifications

EPA:	0.95 ft² (.09 m²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height$_1$:	3" (7.62 cm)
Height$_2$:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	**Forward optics** P1 P5 P2 P6 P3 P7[8] P4[8] **Rotated optics** P10[2] P12[2] P11[2] P13[1,2]	30K 3000K 40K 4000K 50K 5000K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short[1] T5S Type V short[1] T5M Type V medium[1] T5W Type V wide[1] BLC Backlight control[4] LCCO Left corner cutoff[4] RCCO Right corner cutoff[4]	MVOLT (120V-277V)[5,6] XVOLT (277V-480V)[7,8,9] 120[6] 208[6] 240[6] 277[6] 347[6] 480[6]	**Shipped included** SPA Square pole mounting RPA Round pole mounting[10] WBA Wall bracket[1] SPUMBA Square pole universal mounting adaptor[11] RPUMBA Round pole universal mounting adaptor[11] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

Control options		Other options	Finish
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[13,14] PIRHN Network, high/low motion/ambient sensor[15] PER NEMA twist-lock receptacle only (control ordered separate)[16] PER5 Five-pin receptacle only (control ordered separate)[16,17] PER7 Seven-pin receptacle only (leads exit fixture) (control ordered separate)[16,17] DMG 0-10V dimming extend out back of housing for external control (control ordered separate)[18]	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[19,20] PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[19,20] PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[19,20] PIRH1FC3V High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[19,20] FAO Field adjustable output[21]	**Shipped installed** HS House-side shield[22] SF Single fuse (120, 277, 347V)[6] DF Double fuse (208, 240, 480V)[6] L90 Left rotated optics[2] R90 Right rotated optics[2] DDL Diffused drop lens[22] HA 50°C ambient operations[1] **Shipped separately** BS Bird spikes[23] EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Ordering Information

Accessories

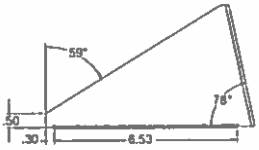
Ordered and shipped separately.

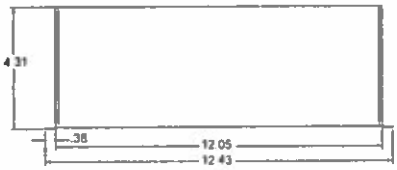
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [24]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [24]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [24]
DSHORT SBK U	Shorting cap [24]
DSX0HS 20C U	House-side shield for P1, P2, P3 and P4 [22]
DSX0HS 30C U	House-side shield for P10, P11, P12 and P13 [22]
DSX0HS 40C U	House-side shield for P5, P6 and P7 [22]
DSX0DDL U	Diffused drop lens (polycarbonate) [22]
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) [22]
KMAB DDBXD U	Mast arm mounting bracket adaptor (specify finish) [22]
DSX0EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online. Link to nLight Air 2

NOTES
1. HA not available with P4, P7, and P13.
2. P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
3. Any Type 5 distribution with photocell, is not available with WBA.
4. Not available with HS or DDL.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
7. XVOLT only suitable for use with P4, P7 and P13.
8. XVOLT operates with any voltage between 277V and 480V.
9. XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
10. Suitable for mounting to round poles between 3.5" and 12" diameter.
11. Universal mounting brackets intended for retrofit on existing pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8.
12. Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13. Must be ordered with PIRHN.
14. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
15. Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link
16. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
17. If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
18. DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
19. Reference Controls Options table on page 4.
20. Reference Motion Sensor Default Table on page 4 to see functionality.
21. Not available with other dimming controls options.
22. Not available with BLC, LCCO and RCCO distribution.
23. Must be ordered with fixture for factory pre-drilling.
24. Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
25. For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8

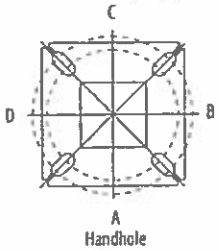
EGS – External Glare Shield

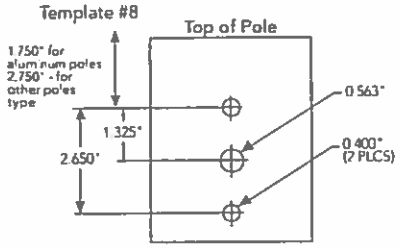




Drilling

HANDHOLE ORIENTATION
(from top of pole)





Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
		Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"		3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"		4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 LED	0.950	1.900	1.830	2.850	2.850	3.544

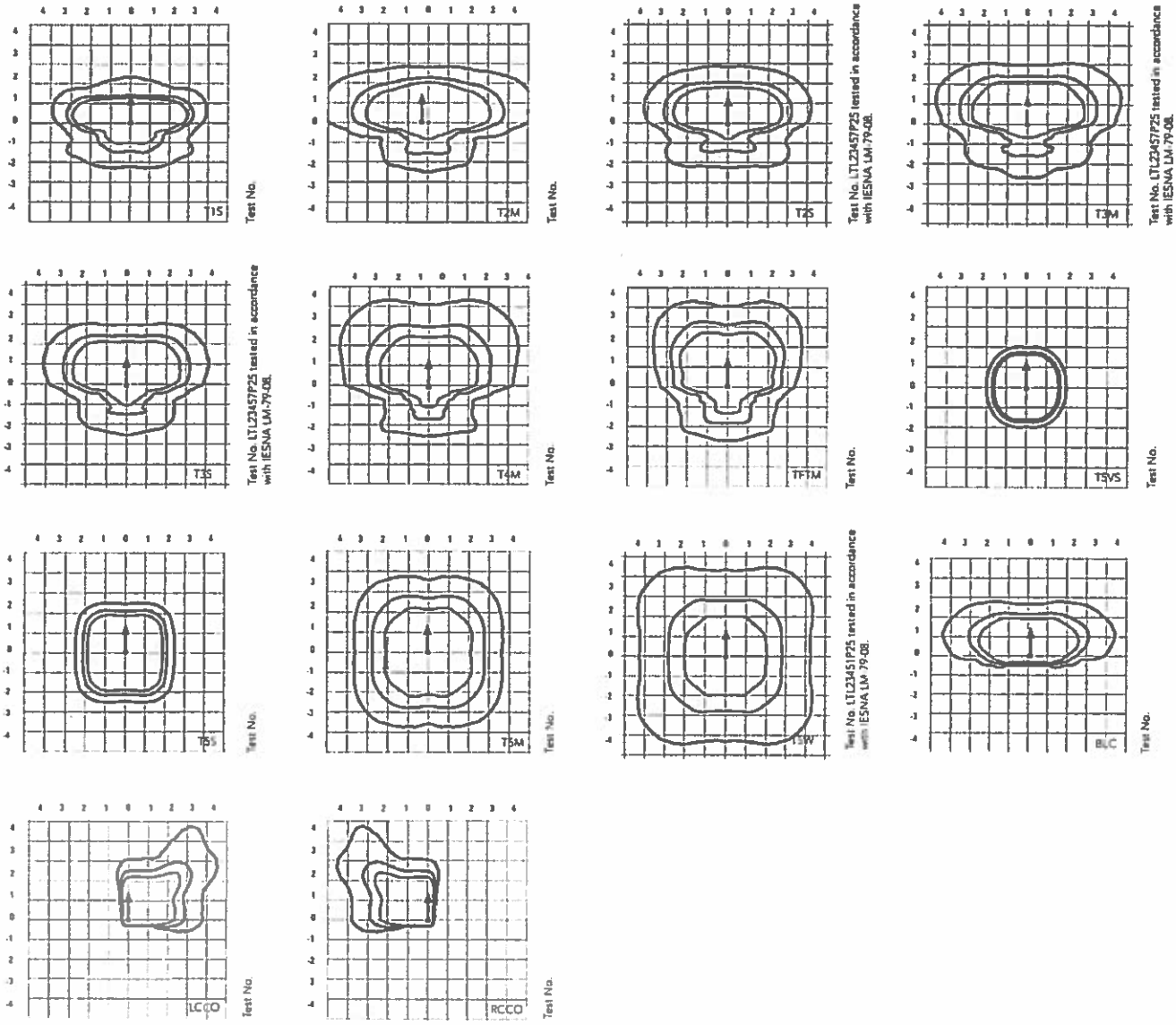
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 0 homepage.

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').

LEGEND

0.1 fc
0.5 fc
1.0 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	77°C	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
25,000	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	20	530	38	0.32	0.18	0.15	0.15	0.10	0.08
	P2	20	700	49	0.41	0.23	0.20	0.19	0.14	0.11
	P3	20	1050	71	0.60	0.37	0.32	0.27	0.21	0.15
	P4	20	1400	92	0.77	0.45	0.39	0.35	0.28	0.20
	P5	40	700	89	0.74	0.43	0.38	0.34	0.26	0.20
	P6	40	1050	134	1.13	0.65	0.55	0.48	0.39	0.29
	P7	40	1300	166	1.38	0.80	0.69	0.60	0.50	0.37
Rotated Optics (Requires L90 or R90)	P10	30	530	53	0.45	0.26	0.23	0.21	0.16	0.12
	P11	30	700	72	0.60	0.35	0.30	0.27	0.20	0.16
	P12	30	1050	104	0.88	0.50	0.44	0.39	0.31	0.23
	P13	30	1300	128	1.08	0.62	0.54	0.48	0.37	0.27

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CLAIRity Pro app.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	20	530	38W	T1S	4,369	1	0	1	115	4,706	1	0	1	124	4,766	1	0	1	125
				T2S	4,364	1	0	1	115	4,701	1	0	1	124	4,761	1	0	1	125
				T2M	4,387	1	0	1	115	4,726	1	0	1	124	4,785	1	0	1	126
				T3S	4,248	1	0	1	112	4,577	1	0	1	120	4,634	1	0	1	122
				T3M	4,376	1	0	1	115	4,714	1	0	1	124	4,774	1	0	1	126
				T4M	4,281	1	0	1	113	4,612	1	0	2	121	4,670	1	0	2	123
				TFTM	4,373	1	0	1	115	4,711	1	0	2	124	4,771	1	0	2	126
				T5VS	4,548	2	0	0	120	4,900	2	0	0	129	4,962	2	0	0	131
				T5S	4,552	2	0	0	120	4,904	2	0	0	129	4,966	2	0	0	131
				T5M	4,541	3	0	1	120	4,891	3	0	1	129	4,953	3	0	1	130
				T5W	4,576	3	0	2	120	4,929	3	0	2	130	4,992	3	0	2	131
				BLC	3,586	1	0	1	94	3,863	1	0	1	102	3,912	1	0	1	103
				LCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
				RCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
P2	20	700	49W	T1S	5,570	1	0	1	114	6,001	1	0	1	122	6,077	2	0	2	124
				T2S	5,564	1	0	2	114	5,994	1	0	2	122	6,070	2	0	2	124
				T2M	5,593	1	0	1	114	6,025	1	0	1	123	6,102	1	0	1	125
				T3S	5,417	1	0	2	111	5,835	1	0	2	119	5,909	2	0	2	121
				T3M	5,580	1	0	2	114	6,011	1	0	2	123	6,087	1	0	2	124
				T4M	5,458	1	0	2	111	5,880	1	0	2	120	5,955	1	0	2	122
				TFTM	5,576	1	0	2	114	6,007	1	0	2	123	6,083	1	0	2	124
				T5VS	5,799	2	0	0	118	6,247	2	0	0	127	6,327	2	0	0	129
				T5S	5,804	2	0	0	118	6,252	2	0	0	128	6,332	2	0	1	129
				T5M	5,789	3	0	1	118	6,237	3	0	1	127	6,316	3	0	1	129
				T5W	5,834	3	0	2	119	6,285	3	0	2	128	6,364	3	0	2	130
				BLC	4,572	1	0	1	93	4,925	1	0	1	101	4,987	1	0	1	102
				LCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
				RCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
P3	20	1050	71W	T1S	7,833	2	0	2	110	8,438	2	0	2	119	8,545	2	0	2	120
				T2S	7,825	2	0	2	110	8,429	2	0	2	119	8,536	2	0	2	120
				T2M	7,865	2	0	2	111	8,473	2	0	2	119	8,580	2	0	2	121
				T3S	7,617	2	0	2	107	8,205	2	0	2	116	8,309	2	0	2	117
				T3M	7,846	2	0	2	111	8,452	2	0	2	119	8,559	2	0	2	121
				T4M	7,675	2	0	2	108	8,269	2	0	2	116	8,373	2	0	2	118
				TFTM	7,841	2	0	2	110	8,447	2	0	2	119	8,554	2	0	2	120
				T5VS	8,155	3	0	0	115	8,785	3	0	0	124	8,896	3	0	0	125
				T5S	8,162	3	0	1	115	8,792	3	0	1	124	8,904	3	0	1	125
				T5M	8,141	3	0	2	115	8,770	3	0	2	124	8,881	3	0	2	125
				T5W	8,204	3	0	2	116	8,838	4	0	2	124	8,950	4	0	2	126
				BLC	6,429	1	0	2	91	6,926	1	0	2	98	7,013	1	0	2	99
				LCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
				RCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
P4	20	1400	92W	T1S	9,791	2	0	2	106	10,547	2	0	2	115	10,681	2	0	2	116
				T2S	9,780	2	0	2	106	10,536	2	0	2	115	10,669	2	0	2	116
				T2M	9,831	2	0	2	107	10,590	2	0	2	115	10,724	2	0	2	117
				T3S	9,521	2	0	2	103	10,256	2	0	2	111	10,386	2	0	2	113
				T3M	9,807	2	0	2	107	10,565	2	0	2	115	10,698	2	0	2	116
				T4M	9,594	2	0	2	104	10,335	2	0	3	112	10,466	2	0	3	114
				TFTM	9,801	2	0	2	107	10,558	2	0	2	115	10,692	2	0	2	116
				T5VS	10,193	3	0	1	111	10,981	3	0	1	119	11,120	3	0	1	121
				T5S	10,201	3	0	1	111	10,990	3	0	1	119	11,129	3	0	1	121
				T5M	10,176	4	0	2	111	10,962	4	0	2	119	11,101	4	0	2	121
				T5W	10,254	4	0	3	111	11,047	4	0	3	120	11,186	4	0	3	122
				BLC	8,036	1	0	2	87	8,656	1	0	2	94	8,766	1	0	2	95
				LCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71
				RCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P5	40	700	89W	T1S	10,831	2	0	2	122	11,668	2	0	2	131	11,816	2	0	2	133
				T2S	10,820	2	0	2	122	11,656	2	0	2	131	11,803	2	0	2	133
				T2M	10,876	2	0	2	122	11,716	2	0	2	132	11,864	2	0	2	133
				T3S	10,532	2	0	2	118	11,346	2	0	2	127	11,490	2	0	2	129
				T3M	10,849	2	0	2	122	11,687	2	0	2	131	11,835	2	0	2	133
				T4M	10,613	2	0	3	119	11,434	2	0	3	128	11,578	2	0	3	130
				TFTM	10,842	2	0	2	122	11,680	2	0	2	131	11,828	2	0	2	133
				T5VS	11,276	3	0	1	127	12,148	3	0	1	136	12,302	3	0	1	138
				T5S	11,286	3	0	1	127	12,158	3	0	1	137	12,312	3	0	1	138
				T5M	11,257	4	0	2	126	12,127	4	0	2	136	12,280	4	0	2	138
				T5W	11,344	4	0	3	127	12,221	4	0	3	137	12,375	4	0	3	139
				BLC	8,890	1	0	2	100	9,576	1	0	2	108	9,698	1	0	2	109
				LCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81
				RCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81
P6	40	1050	134W	T1S	14,805	3	0	3	110	15,949	3	0	3	119	16,151	3	0	3	121
				T2S	14,789	3	0	3	110	15,932	3	0	3	119	16,134	3	0	3	120
				T2M	14,865	3	0	3	111	16,014	3	0	3	120	16,217	3	0	3	121
				T3S	14,396	3	0	3	107	15,509	3	0	3	116	15,705	3	0	3	117
				T3M	14,829	2	0	3	111	15,975	3	0	3	119	16,177	3	0	3	121
				T4M	14,507	2	0	3	108	15,628	3	0	3	117	15,826	3	0	3	118
				TFTM	14,820	2	0	3	111	15,965	3	0	3	119	16,167	3	0	3	121
				T5VS	15,413	4	0	1	115	16,604	4	0	1	124	16,815	4	0	1	125
				T5S	15,426	3	0	1	115	16,618	4	0	1	124	16,828	4	0	1	126
				T5M	15,387	4	0	2	115	16,576	4	0	2	124	16,786	4	0	2	125
				T5W	15,506	4	0	3	116	16,704	4	0	3	125	16,915	4	0	3	126
				BLC	12,151	1	0	2	91	13,090	1	0	2	98	13,255	1	0	2	99
				LCCO	9,041	1	0	3	67	9,740	1	0	3	73	9,863	1	0	3	74
				RCCO	9,041	1	0	3	67	9,740	1	0	3	73	9,863	1	0	3	74
P7	40	1300	166W	T1S	17,023	3	0	3	103	18,338	3	0	3	110	18,570	3	0	3	112
				T2S	17,005	3	0	3	102	18,319	3	0	3	110	18,551	3	0	3	112
				T2M	17,092	3	0	3	103	18,413	3	0	3	111	18,646	3	0	3	112
				T3S	16,553	3	0	3	100	17,832	3	0	3	107	18,058	3	0	3	109
				T3M	17,051	3	0	3	103	18,369	3	0	3	111	18,601	3	0	3	112
				T4M	16,681	3	0	3	100	17,969	3	0	3	108	18,197	3	0	3	110
				TFTM	17,040	3	0	3	103	18,357	3	0	4	111	18,590	3	0	4	112
				T5VS	17,723	4	0	1	107	19,092	4	0	1	115	19,334	4	0	1	116
				T5S	17,737	4	0	2	107	19,108	4	0	2	115	19,349	4	0	2	117
				T5M	17,692	4	0	2	107	19,059	4	0	2	115	19,301	4	0	2	116
				T5W	17,829	5	0	3	107	19,207	5	0	3	116	19,450	5	0	3	117
				BLC	13,971	2	0	2	84	15,051	2	0	2	91	15,241	2	0	2	92
				LCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68
				RCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Rotated Optics

Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	30	530	53W	T1S	6,727	2	0	2	127	7,247	3	0	3	137	7,339	3	0	3	138
				T2S	6,689	3	0	3	126	7,205	3	0	3	136	7,297	3	0	3	138
				T2M	6,809	3	0	3	128	7,336	3	0	3	138	7,428	3	0	3	140
				T3S	6,585	3	0	3	124	7,094	3	0	3	134	7,183	3	0	3	136
				T3M	6,805	3	0	3	128	7,331	3	0	3	138	7,424	3	0	3	140
				T4M	6,677	3	0	3	126	7,193	3	0	3	136	7,284	3	0	3	137
				TFTM	6,850	3	0	3	129	7,379	3	0	3	139	7,472	3	0	3	141
				TSVS	6,898	3	0	0	130	7,431	3	0	0	140	7,525	3	0	0	142
				TSS	6,840	2	0	1	129	7,368	2	0	1	139	7,461	2	0	1	141
				TSM	6,838	3	0	1	129	7,366	3	0	2	139	7,460	3	0	2	141
				TSW	6,777	3	0	2	128	7,300	3	0	2	138	7,393	3	0	2	139
				BLC	5,626	2	0	2	106	6,060	2	0	2	114	6,137	2	0	2	116
				LCCO	4,018	1	0	2	76	4,328	1	0	2	82	4,383	1	0	2	83
				RCCO	4,013	3	0	3	76	4,323	3	0	3	82	4,377	3	0	3	83
P11	30	700	72W	T1S	8,594	3	0	3	119	9,258	3	0	3	129	9,376	3	0	3	130
				T2S	8,545	3	0	3	119	9,205	3	0	3	128	9,322	3	0	3	129
				T2M	8,699	3	0	3	121	9,371	3	0	3	130	9,490	3	0	3	132
				T3S	8,412	3	0	3	117	9,062	3	0	3	126	9,177	3	0	3	127
				T3M	8,694	3	0	3	121	9,366	3	0	3	130	9,484	3	0	3	132
				T4M	8,530	3	0	3	118	9,189	3	0	3	128	9,305	3	0	3	129
				TFTM	8,750	3	0	3	122	9,427	3	0	3	131	9,546	3	0	3	133
				TSVS	8,812	3	0	0	122	9,493	3	0	0	132	9,613	3	0	0	134
				TSS	8,738	3	0	1	121	9,413	3	0	1	131	9,532	3	0	1	132
				TSM	8,736	3	0	2	121	9,411	3	0	2	131	9,530	3	0	2	132
				TSW	8,657	4	0	2	120	9,326	4	0	2	130	9,444	4	0	2	131
				BLC	7,187	3	0	3	100	7,742	3	0	3	108	7,840	3	0	3	109
				LCCO	5,133	1	0	2	71	5,529	1	0	2	77	5,599	1	0	2	78
				RCCO	5,126	3	0	3	71	5,522	3	0	3	77	5,592	3	0	3	78
P12	30	1050	104W	T1S	12,149	3	0	3	117	13,088	3	0	3	126	13,253	3	0	3	127
				T2S	12,079	4	0	4	116	13,012	4	0	4	125	13,177	4	0	4	127
				T2M	12,297	3	0	3	118	13,247	3	0	3	127	13,415	3	0	3	129
				T3S	11,891	4	0	4	114	12,810	4	0	4	123	12,972	4	0	4	125
				T3M	12,290	3	0	3	118	13,239	4	0	4	127	13,407	4	0	4	129
				T4M	12,058	4	0	4	116	12,990	4	0	4	125	13,154	4	0	4	126
				TFTM	12,369	4	0	4	119	13,325	4	0	4	128	13,494	4	0	4	130
				TSVS	12,456	3	0	1	120	13,419	3	0	1	129	13,589	4	0	1	131
				TSS	12,351	3	0	1	119	13,306	3	0	1	128	13,474	3	0	1	130
				TSM	12,349	4	0	2	119	13,303	4	0	2	128	13,471	4	0	2	130
				TSW	12,238	4	0	3	118	13,183	4	0	3	127	13,350	4	0	3	128
				BLC	10,159	3	0	3	98	10,944	3	0	3	105	11,083	3	0	3	107
				LCCO	7,256	1	0	3	70	7,816	1	0	3	75	7,915	1	0	3	76
				RCCO	7,246	3	0	3	70	7,806	4	0	4	75	7,905	4	0	4	76
P13	30	1300	128W	T1S	14,438	3	0	3	113	15,554	3	0	3	122	15,751	3	0	3	123
				T2S	14,355	4	0	4	112	15,465	4	0	4	121	15,660	4	0	4	122
				T2M	14,614	3	0	3	114	15,744	4	0	4	123	15,943	4	0	4	125
				T3S	14,132	4	0	4	110	15,224	4	0	4	119	15,417	4	0	4	120
				T3M	14,606	4	0	4	114	15,735	4	0	4	123	15,934	4	0	4	124
				T4M	14,330	4	0	4	112	15,438	4	0	4	121	15,633	4	0	4	122
				TFTM	14,701	4	0	4	115	15,836	4	0	4	124	16,037	4	0	4	125
				TSVS	14,804	4	0	1	116	15,948	4	0	1	125	16,150	4	0	1	126
				TSS	14,679	3	0	1	115	15,814	3	0	1	124	16,014	3	0	1	125
				TSM	14,676	4	0	2	115	15,810	4	0	2	124	16,010	4	0	2	125
				TSW	14,544	4	0	3	114	15,668	4	0	3	122	15,866	4	0	3	124
				BLC	7919	3	0	3	62	8531	3	0	3	67	8639	3	0	3	67
				LCCO	5145	1	0	2	40	5543	1	0	2	43	5613	1	0	2	44
				RCCO	5139	3	0	3	40	5536	3	0	3	43	5606	3	0	3	44

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft^2) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS
The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C to 50°C ambient with HA option. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

GARDCO

by signify

Wall Mount

LED wall sconce

121

Gardco LED wall sconce 121 offers distinction through its styling, powerful optical design, array of distributions, and impressive selection of control possibilities. Designed to add an element of style to your application by pairing straight lines with rounded edges, the form of the 121 is timeless, yet contemporary, and will complement a wide assortment of architectural styles and designs, while delivering high light levels and functional distributions. 121 sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 12,400 lumens. Energy saving control options help to increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path-of-egress and is integral to the luminaire.

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Ordering guide

example: 121-32L-700-NW-G4-3-120-BL-IMRI2-BZ

Prefix	Number of LEDs	Drive Current	LED Color-Generation	Distribution	Emergency	Voltage
121						
121 LED wall sconce	16L 16 LEDs (1 module)	200 200mA 400 400mA 530 530mA 700 700mA 1000 1000mA 1200 1200mA	CW-G4 Cool White 5000K, 70 CRI Generation 4 NW-G4 Neutral White 4000K, 70 CRI Generation 4 WW-G4 Warm White 3000K, 70 CRI Generation 4 WY-G4 Warm Yellow 2700K, 80 CRI Generation 4 [2] BW-G4 Balanced White 3500K 80CRI Generation 4 [2] AM-G4 Direct Amber (590nm) Generation 4 [2]	2 Type 2 3 Type 3 4 Type 4	EBPC Emergency Battery Pack Cold Weather [1,3,11] Leave blank to omit an emergency option	UNV 120-277V HVU 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
	32L 32 LEDs (2 modules)	530 530mA 700 700mA 1000 1000mA				

Options

Dimming controls	Motion sensing lens	Photo sensing	Electrical	Finish
DD 0-10V External dimming (controls by others) [4] DCC Dual Circuit Control [4,5,8,9] FAWS Field Adjustable Wattage [4,5] SW Interface Module for SiteWise [4,6,11] LLC Integral wireless module [4,6,7,13] BL Bi-level functionary with motion sensor [4,7,12] **DynaDimmer: Automatic Profile Dimming [4,7]** CS50 Security 50% Dimming, 7 hours CM50 Median 50% Dimming, 8 hours CS30 Security 30% Dimming, 7 hours CM30 Median 30% Dimming, 8 hours	IMRI2 Integral with #2 lens [10] IMRI3 Integral with #3 lens [10]	PCB Photocontrol Button [12]	**Fusing** F1 Single (120, 277, 347VAC) [9] F2 Double (208, 240, 480VAC) [9] F3 Canadian Double Pull (208, 240, 480VAC) [9] **Surge Protection (10kA standard)** SP2 Increased 20kA	**Textured** BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray **Customer specified** RAL Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)

[1] Only 16L up to 700mA can be used with battery backup (EBPC) configuration.

[2] Extended lead times apply. Contact factory for details.

[3] Available in 120V or 277V only.

[4] Not available with other dimming control options.

[5] Not available with motion sensor.

[6] Not available with photocontrol.

[7] Not available in 347 or 480V.

[8] Must specify input voltage.

[9] Available with two modules (32L) at 530mA.

[10] Not available with DD, DCC, and FAWS dimming control options.

[11] Available in 120V, 277V, or 347V.

[12] Must specify a motion sensor lens.

[13] Not available with DCC, FAWS, SW, and LLC.

121 LED wall sconce

Luminaire Accessories (order separately)

Mounting Accessories

Wall Mount

WS Wall Mounted Box for Surface Conduit

System accessories

Wireless system remote mount module

LLCR2-(F) #2 lens - specify finish in place of (F)
LLCR3-(F) #3 lens - specify finish in place of (F)

Central Remote Motion Response (used connected to SiteWise main panel)

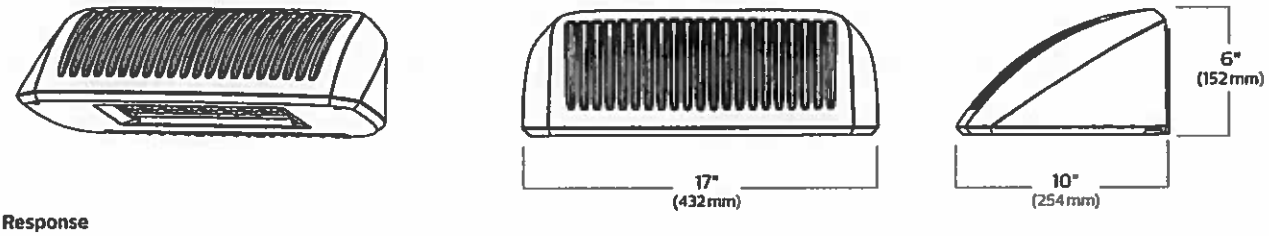
MS2-A-FVR-3
MS2-A-FVR-7

Wireless system remote controller accessory

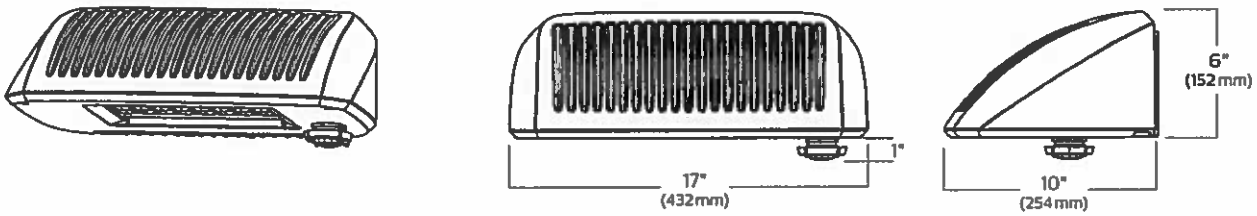
Wireless system offers a remote radio/sensor module that allows to connected to a Limelight system (sold by other). Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/ sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers. See page 4 for Wireless system details.

Dimensions

Standard Luminaire



Motion Response

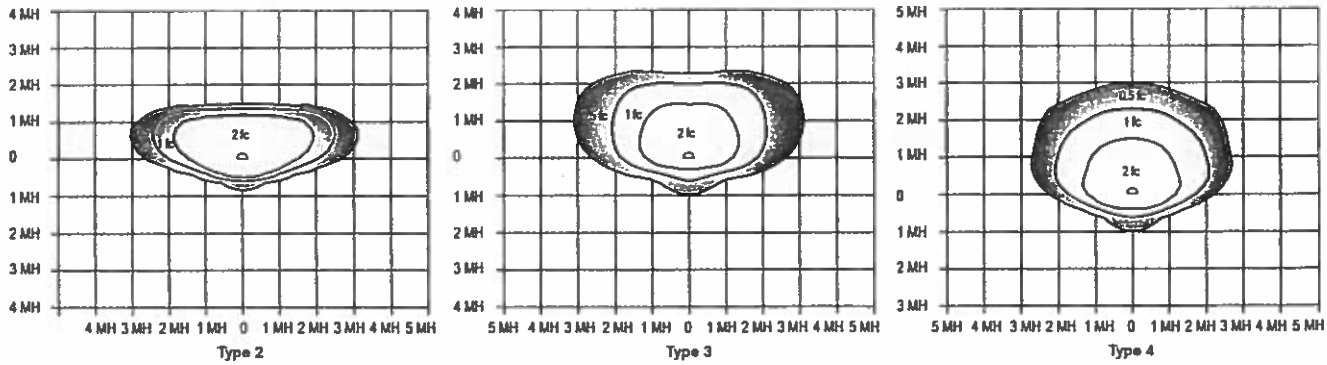


Luminaire Weights

LED wall sconce 121	Weight
Luminaire	15.0 lbs
Luminaire - EBPC (EM battery pack)	18.5 lbs
Luminaire - Integrated system controls	17.0 lbs

Optical Distributions

Based on configuration 121-32L-530-NW-G4 (52W) mounted at 15ft.



121 LED wall sconce

3000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2			Type 3			Type 4		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
[illegible]													
121-16L-400-WW-G4-x	16	400	3000	22	2576	116	B1-U0-G0	2382	107	B1-U0-G0	2389	108	B1-U0-G0
[illegible]													
121-16L-700-WW-G4-x	16	700	3000	38	4091	107	B1-U0-G1	3785	99	B1-U0-G1	3795	99	B1-U0-G1
[illegible]													
121-16L-1200-WW-G4-x	16	1200	3000	66	5935	90	B2-U0-G1	5490	84	B1-U0-G2	5505	84	B1-U0-G2
[illegible]													
121-32L-700-WW-G4-x	32	700	3000	70	8336	119	B2-U0-G1	7711	110	B1-U0-G2	7732	110	B1-U0-G2
[illegible]													

4000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2			Type 3			Type 4		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
[illegible]													
121-16L-400-NW-G4-x	16	400	4000	22	2862	129	B1-U0-G0	2647	119	B1-U0-G0	2654	120	B1-U0-G0
[illegible]													
121-16L-700-NW-G4-x	16	700	4000	38	4546	118	B1-U0-G1	4206	110	B1-U0-G1	4217	110	B1-U0-G1
[illegible]													
121-16L-1200-NW-G4-x	16	1200	4000	66	6594	101	B2-U0-G1	6100	93	B1-U0-G2	6117	93	B1-U0-G2
[illegible]													
121-32L-700-NW-G4-x	32	700	4000	70	9262	132	B2-U0-G1	8568	122	B1-U0-G2	8591	122	B2-U0-G2
[illegible]													

5000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2			Type 3			Type 4		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
[illegible]													
121-16L-400-CW-G4-x	16	400	5000	22	2862	129	B1-U0-G0	2647	119	B1-U0-G0	2654	120	B1-U0-G0
[illegible]													
121-16L-700-CW-G4-x	16	700	5000	38	4546	118	B1-U0-G1	4206	110	B1-U0-G1	4217	110	B1-U0-G1
[illegible]													
121-16L-1200-CW-G4-x	16	1200	5000	66	6594	101	B2-U0-G1	6100	93	B1-U0-G2	6117	93	B1-U0-G2
[illegible]													
121-32L-700-CW-G4-x	32	700	5000	70	9262	132	B2-U0-G1	8568	122	B1-U0-G2	8591	122	B2-U0-G2
[illegible]													

LED Wattage and Lumen Values (Emergency Mode)

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Avg. System Watts		Lumen Outputs by Optic Type					
						Type 2		Type 3		Type 4	
				Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
[illegible]											
121-16L-400-NW-G4-x-EBPC	16	400	5000	22	14	2862	1654	2647	1510	2654	1543
[illegible]											
121-16L-700-NW-G4-x-EBPC	16	700	5000	38	14	4546	1654	4206	1510	4217	1543

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

For emergency EBPC option, published values are based on initial lumens.

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

Ambient Temperature °C	Drive current	Calculated L_{70} Hours	L_{70} per TM-21	Lumen Maintenance % at 60,000 hrs
40°C	up to 1200 mA	>100,000 hours	>42,000 hours	>99%

121 LED wall sconce

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion. 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Light Engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 1 and 2 modules or 16 and 32 LEDs. Module is RoHS compliant. Standard color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K, 3500K, and Amber (590nm) with extended lead times. Contact factory for details.

LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy Saving Benefits

System efficacy up to 140 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Optical System

Type 2, 3, and 4 distributions available. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Control Options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of 2 modules each at 530mA (32L models), controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

SiteWise (SW): SiteWise system includes a controller fully integrated in he luminaire that enables the luminaires to communicate with a dimming ignal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Automatic Profile Dimming (CS/CM): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

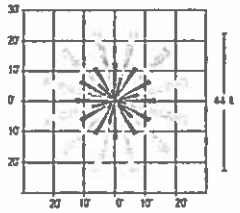
- CS50/CS30: Security for 7 hours night duration (Ex., 11 PM - 6 AM)
- CM50/CM30: Median for 8 hours night duration (Ex., 10 PM - 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

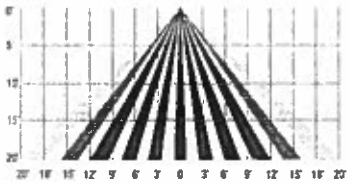
Emergency Battery Backup Cold Pack (EBPC): Emergency battery pack is cold weather rated down to -20oC (-4oF) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Emergency battery pack is used with 16L configuration up to 700mA, operating in emergency mode to meet various redundancy requirements. Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost. Available in 120 or 277V only.

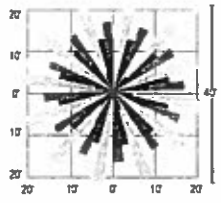
Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #2 lens (LLC-IMRI2) for 8' to 15' mounting height" or #3 lens (LLC-IMRI3) for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC-IMRI2 Luminaire or remote mount controller with #2 lens



LLC-IMRI3 Luminaire or remote mount controller with #3 lens





Motion Response Options

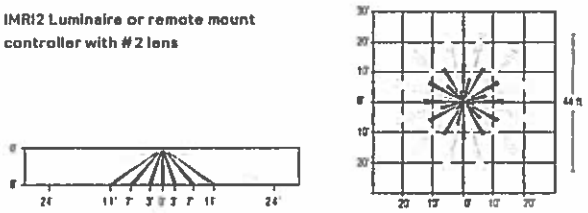
121 LED wall sconce

Specifications

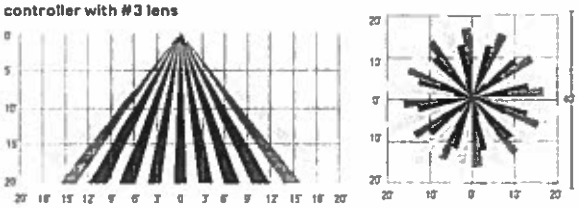
Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls (SW-IMRI3): When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be reprogrammed via the controller. Infrared Motion Response Lenses (IMRI2/IMRI3): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #2 (IMRI2) is designed for lower mounting heights up to 8' with larger coverage areas up to 44' diameter coverage area. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

IMRI2 Luminaire or remote mount controller with #2 lens



IMRI3 Luminaire or remote mount controller with #3 lens



Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Each luminaire is provided as standard with surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

Finish

Five standard colors offered in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom color matching available.

Listings

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when inverted upward facing when mounted in covered ceiling application. Emergency Battery Pack option is tested and listed to UL924 and CSA C22.2 No. 141-10 DesignLights Consortium qualified on models as listed on DLC QPL. CCTs 3000K and warmer are Dark Sky Approved. Luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F)[4].

Warranty

121 LED sconce luminaires feature a 5-year limited warranty.
See signify.com/warranties for complete details and exclusions

Electrical

Signify North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Telephone 855-486-2216

Signify Canada Ltd.
281 Hillmount Road
Markham, ON, Canada L6C 2S3
Telephone 800-668-6008

KLEINFELDER
Bright People. Right Solutions.

February 19, 2021

Mr. Brian R. Cooley, ASLA
D.C. Gohn Associates, Inc.
32 Mount Joy Street
P.O. Box 128
Mount Joy, PA 17552

RE: Stormwater Infiltration Summary Report
Gerberich Payne Shoe Company
Mount Joy Borough, Lancaster County, Pennsylvania
Kleinfelder Project No.: 20213553.001A

Dear Mr. Cooley:

In accordance with your request, Kleinfelder, Inc. (Kleinfelder) has completed a Stormwater Infiltration Summary Report for the above referenced project site to evaluate the suitability of the subsurface soils for the infiltration of stormwater. This correspondence serves to transmit the results of our evaluation.

SITE & PROJECT DESCRIPTION

The project site currently consists of a developed parcel located at 240 West Main Street in Mount Joy Borough, Lancaster County, Pennsylvania. The site is bordered to the north by West Main Street, to the east and west by commercial properties and to the south by West Henry Street. Topography across the project slopes gently downgradient towards the north. The approximate location of the site in relation to the surrounding area is presented on the *Topographic Map* (Figure 1) within the Appendix.

Based on information provided by the Client, the project will consist of renovating the existing building and parcel. Development of the project will also include constructing new parking areas and stormwater management facilities. Based on existing and proposed grades, maximum cuts of approximately 7 feet will be required to reach the invert elevations of the proposed stormwater management facilities.

SCOPE OF WORK

The objective of our work was to determine the permeability of the invert soils and to identify any limiting zones (i.e. bedrock, groundwater and/or seasonal high-water table) within the proposed stormwater management facilities. Our scope of work included a subsurface exploration, laboratory testing program and preparation of this report. This report presents a summary of the work completed, conditions encountered and results of our engineering analysis of the subsurface conditions.

SITE GEOLOGY

According to the Pennsylvania State Geologic Survey, Atlas of Preliminary Geologic Quadrangles, 1981, the project site is underlain by the Ordovician Epler Formation (geologic symbol Oe). A depiction of the project site within its geologic setting is presented on the *Geologic & Karst Features Map* (Figure 2) within the Appendix.

The Pennsylvania Geologic Survey publication, *Engineering Characteristics of the Rocks of Pennsylvania*, Second Edition, 1982, describes the Epler Formation as consisting of very finely crystalline, medium gray limestone with interbedded gray dolomite. Some coarsely crystalline limestone lenses and veins are present. The bedding of this formation well developed, thin to flaggy. Fractures are moderately abundant and have a seamy pattern, ranging from well to poorly developed. The rock in this formation is moderately resistant to weathering, and decomposition results in flat rectangular fragments. The overlying soil mantle varies in thickness, and in some cases may be greater than 80 feet thick. The soil-to-bedrock interface is typically characterized by pinnacles.

The underlying bedrock formation is comprised of carbonate lithology which is prone to dissolution and the development of sinkholes and other karst geologic features.

SUBSURFACE EXPLORATION

To characterize subsurface conditions across the stormwater management facilities, 4 test pits were excavated utilizing a John Deere 35-D mini-excavator on February 5, 2021. Supervision and monitoring of the subsurface exploration were provided by a representative of Kleinfelder who field located the test locations utilizing a hand-held GPS unit based on the *Final Grading/PCSM* plan, prepared by D.C. Gohn Associates. The approximate test pit locations, referenced as IT-1 through IT-4, are shown on the *Exploration Plan* (Figure 3) found within the Appendix. Data pertaining to the subsurface exploration was documented in the field and is presented in detail on the *Test Pit Logs* within the Appendix, which contain visual descriptions of the subsurface materials encountered and infiltration test data.

LABORATORY ANALYSIS

Soil samples retrieved from the site were visually reviewed and classified by Kleinfelder. A representative sample was subjected to laboratory analysis to verify visual classification in accordance with the following schedule:

- Natural Moisture Content (ASTM D2216)
- Sieve Analysis (ASTM D422)
- Atterberg Limits Determination (ASTM D4318)

A Unified Soil Classification System (USCS) Group Symbol and ASTM Group Name has been assigned to the soil analyzed. The results of the testing conducted are presented within the Appendix and table below.

LABORATORY RESULTS											
Location	Depth (ft)	Soil Type	% Gravel	% Sand	% Fines	LL	PL	PI	Natural Moisture Content	USCS Group Symbol	ASTM Group Name
IT-4	7	Stratum I	18.3	17.3	64.4	36	13	23	17.0%	CL	Gravelly Lean CLAY with Sand
LL-Liquid Limit; PL-Plastic Limit; PI-Plasticity Index											

SUBSURFACE CONDITIONS

Soil

Surficial Materials

Test pits IT-1, IT-2 and IT-4 were covered by approximately 4 to 6 inches of topsoil, while test pit IT-3 was covered by approximately 2 inches of gravel. However, it should be noted, the possibility always exists for surficial material thicknesses to vary in unexplored areas of the project site.

Fill – Brown CLAY with varying amounts of Sand Gravel, brick, cobble- to boulder-sized rock fragments and brick and plastic fragments

Existing Fill was encountered within test pits IT-1, IT-2, and IT-4, extending to depths ranging from approximately 2 to 4 feet below existing site grades. Upon review, the Fill was found to be poorly graded, plastic and comprised predominantly of CLAY with secondary amounts of Sand, Gravel, cobble to boulder-sized rock fragments as well as brick and plastic fragments.

Upon review, the existing Fill was found to be free of deleterious materials such as ash, cinder, slag and topsoil and/or organic debris. These samples were taken from discrete locations and the possibility does exist for unsuitable materials to be present in unexplored portions of the site.

Stratum I – Brown CLAY with varying amounts of Sand and Gravel

Stratum I was encountered within test pits IT-1, IT-3 and IT-4, extending to their termination depths of approximately 6 and 10 feet below existing site grades. Laboratory testing conducted on a representative sample of Stratum I shows this soil to be poorly graded and plastic, with a natural moisture content of 17.0%. Stratum I is described under the USCS as Gravelly Lean CLAY with Sand (CL).

Bucket Refusal/Bedrock

Bucket refusal was encountered within test pit IT-2 at a depth of approximately 4 feet below existing site grades, which was attributed to the boulder-sized material present within the existing Fill and unable to be removed with the given excavation equipment. Furthermore, the bedrock surface was not encountered within test pits IT-1, IT-3 and IT-4. Within these test pits, the bedrock surface would have been defined as the depth at which refusal of the excavation equipment was encountered on the competent bedrock surface underlying the naturally occurring soils.

Published geologic data indicates the bedrock beneath the property is comprised of carbonate rock which is characterized as having an erratic bedrock surface profile over short lateral distances. Therefore, the possibility exists for the bedrock surface to be encountered at depths which vary from those stated above during construction.

Groundwater/Soil Mottling

Neither groundwater nor soil mottling (indicator of seasonal high-water table and/or poorly draining soils) were noted during the subsurface exploration. These observations were made at the time of the field operation and the groundwater table elevation will vary with daily, seasonal, climatological, and anthropogenic variations.

CONSIDERATION OF KARST GEOLOGY

The project site is underlain by carbonate lithology which is subject to dissolution and the development of sinkholes and other karst-geologic features. The *Sinkhole Map of Pennsylvania*, prepared by William Kochonov of the Pennsylvania Geologic Survey, does not show any mapped karst features within the project site; however, several surface depressions are mapped within 1,500 feet of the project site are shown on adjacent lands to the north, south and west.

The following recommendations are provided in an effort to minimize the potential for development of sinkholes at the site.

- Surface water is not recommended to collect or pool in low lying areas of the site for extended periods of time and should be directed to appropriate storm water channels. Expeditious backfilling or grading of low-lying areas will also help minimize the potential development of sinkholes.
- The extent of excavations should be kept to a minimum and the influx of surface water into excavations should be minimized. The potential for sinkhole development generally increases as the bedrock surface is encountered. Therefore, the prolonged exposure of the bedrock surface should also be minimized.
- Storm sewer conveyance lines should be constructed as "water-tight" joints.
- Positive drainage away from structures should always be maintained. Roof drains should also be directed away from structures and into designated stormwater channels.
- Unpaved areas, swales or surface basins should be minimized adjacent to building/foundation areas. Designing/installing subsurface stormwater infiltration facilities in proposed parking areas is considered a risk in areas underlain by carbonate geology.

The above recommendations constitute best management practices for construction and development in karst settings. Contingencies should be made in the construction schedule and budget for the repair of sinkholes and unstable soil conditions encountered during development of the site.

Sinkholes may occur during construction, and specifically during and shortly following mass grading of the project site. All sinkholes and unstable soil conditions should be reviewed by the geotechnical engineer of record. Following review of the specific characteristics and locations of a given sinkhole feature, a detailed repair procedure should be developed and implemented.

Structural Areas *(areas adjacent to structures/beneath pavement)*

- Any and all loose and/or excessively moist soils within the sinkhole should be excavated and continue until stable soils, a "throat" is identified, or until the extent of the excavation equipment is reached.
- Upon removal of the unstable soils, the excavation should be backfilled using high mobility, low strength flowable fill (500 psi) to final subgrade elevation; however, utilities should not be encased with flowable fill.
- Dependent on specific conditions, specialty mitigations may be warranted, such as ground modification (i.e., karst grouting).

Non-Structural Areas *(non-pavement/landscaped areas)*

- Any and all loose and/or excessively moist soils should be excavated from the sinkhole. Excavation should continue until stable soils, a "throat" is identified, or until the extent of the excavation equipment is reached.
- The excavation should be backfilled with aggregate of decreasing size, commonly referred to as an Inverted Filter.

The repairs outlined above are general guidelines and each sinkhole occurrence should be thoroughly reviewed by the Geotechnical Engineer of Record for an appropriate mitigation plan.

The site is underlain by carbonate lithology which has the potential for sinkhole development. The influx of water into concentrated areas increases this risk. The site owner must recognize the risks associated with the development of sinkholes in areas underlain by carbonate geologic formations. Contingencies should be made in the construction schedule and budget for the repair of sinkholes and unstable soil conditions encountered during development of the site.

INFILTRATION ANALYSIS

To evaluate the feasibility of stormwater infiltration, infiltration testing was completed within each test pit utilizing the "double-ring" infiltrometer method in accordance with the Pennsylvania Stormwater Best Management Practices Manual. Each test pit extended to a minimum depth of approximately 2 feet below the actual test elevation to review the presence of limiting zones. Information regarding the results of the infiltration testing is provided within the table below.

INFILTRATION TEST RESULTS					
Test Location	Surface Elevation (ft)	Proposed Test Elevation (ft)	Actual Test Elevation(s) (ft)	Limiting Zone Elevation (ft)	Infiltration Rate* (in/hr)
IT-1	378	375	375	Not Encountered at 372	1.8
IT-2	377	375	375	Bucket Refusal at 373	1.2
IT-3	381	378	378	Not Encountered at 375	0.2
IT-4	385	378	378	Not Encountered at 375	3.0
*Rates are field rates and are unfactored.					

Based on the results of our field exploration and engineering analysis of the data obtained, we offer the following comments regarding the infiltration of stormwater at the project site:

- Infiltration testing was conducted within the existing Fill layer and naturally occurring soils of Stratum I.
- Neither groundwater nor soil mottling (indication of seasonal high-water table and/or poorly draining soils) were encountered within the test pits excavated.
- Bucket refusal was encountered within test pit IT-2 at a depth of approximately 4 feet below existing site grades, which was attributed to the boulder-sized material present within the existing Fill and unable to be removed with the given excavation equipment. Furthermore, the bedrock surface was not encountered within test pits IT-1, IT-3 and IT-4.
- The unfactored field infiltration rates were found to range from 0.2 to 3.0 inches per hour. The PADEP recommended rate for infiltration of stormwater is 0.1 to 10 inches per hour.

The project site is underlain by carbonate lithology and is subject to the development of sinkholes and other karst geologic features and the concentrated influx of water into these areas will increase this risk. The Owner should recognize the risks associated with development of project sites underlain by carbonate bedrock.

LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Further, Kleinfelder assumes no liability for interpolation of data between the specific testing locations discussed herein. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than 2 years from the date of the report.

The varied nature of carbonate geology precludes absolute certainty in assessing sinkhole formation. Therefore, the Owner should be aware that conditions could be encountered during construction that would require modifications to the proposed stormwater design/plan. Kleinfelder makes no warranty or guarantee with regard to the development of sinkholes on the project site. The site Owner must recognize the risks associated with areas underlain by karst geologic formations.

Our scope of services for this exploration and report did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.

CLOSING

We thank you for the opportunity to work on this project with you. Should you have any questions or require any additional information, please do not hesitate to contact us.

Sincerely,
KLEINFELDER, INC.

Charles P. Weems
Senior Technician

Michael D. Owen
Project Manager

KLEINFELDER
Bright People. Right Solutions.

APPENDIX

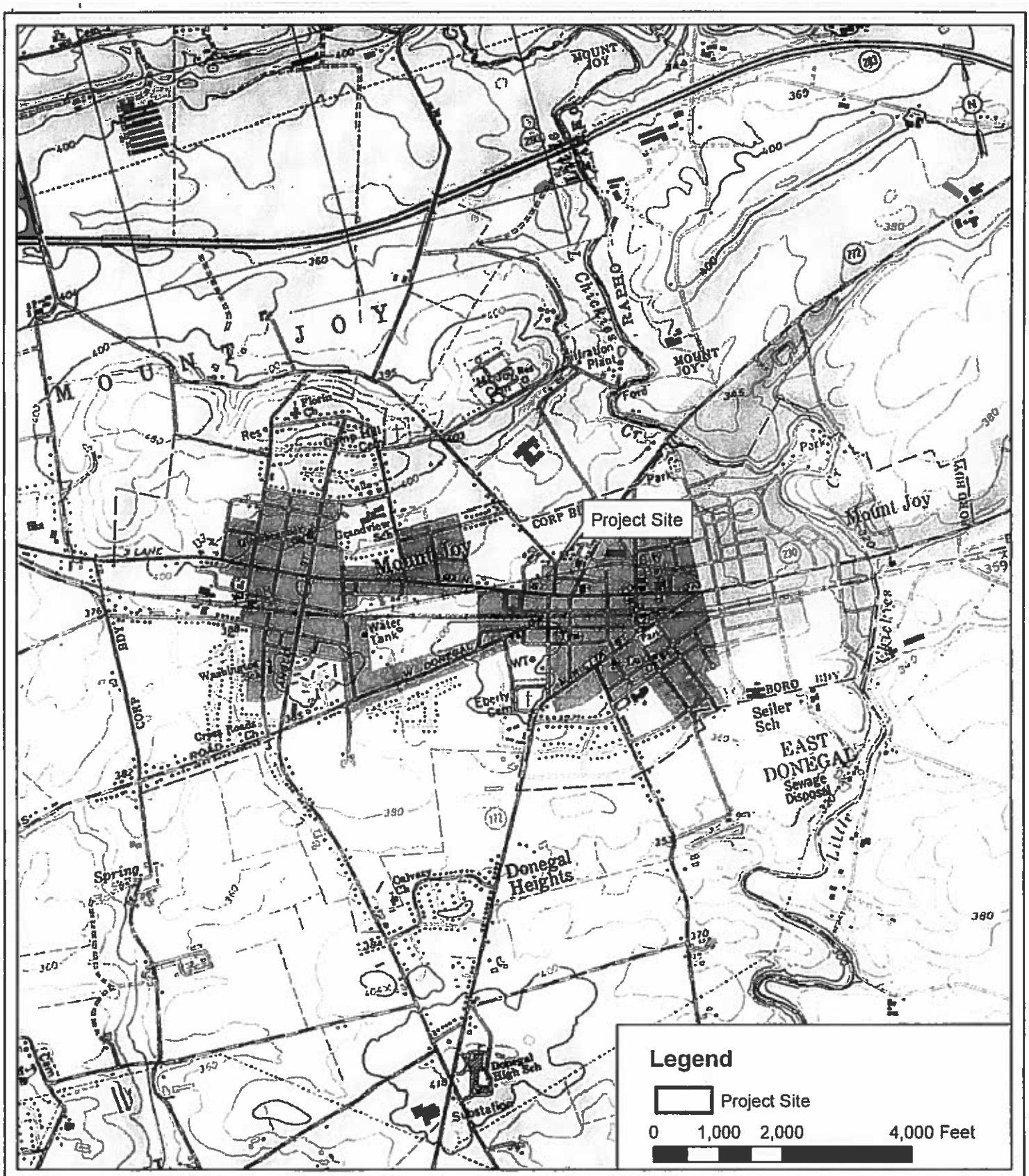
FIGURE 1 – TOPOGRAPHIC MAP

FIGURE 2 – GEOLOGIC AND KARST FEATURES MAP

FIGURE 3 – EXPLORATION PLAN

LAB TESTING RESULTS

TEST PIT LOGS



SCALE:	DRAWING NUMBER:
AS SHOWN	FIGURE 1
DRAWN BY:	CHECKED BY:
D. TORRES	M. OWEN
APPROVED BY:	DATE:
D. CLOUSER	02/09/2021

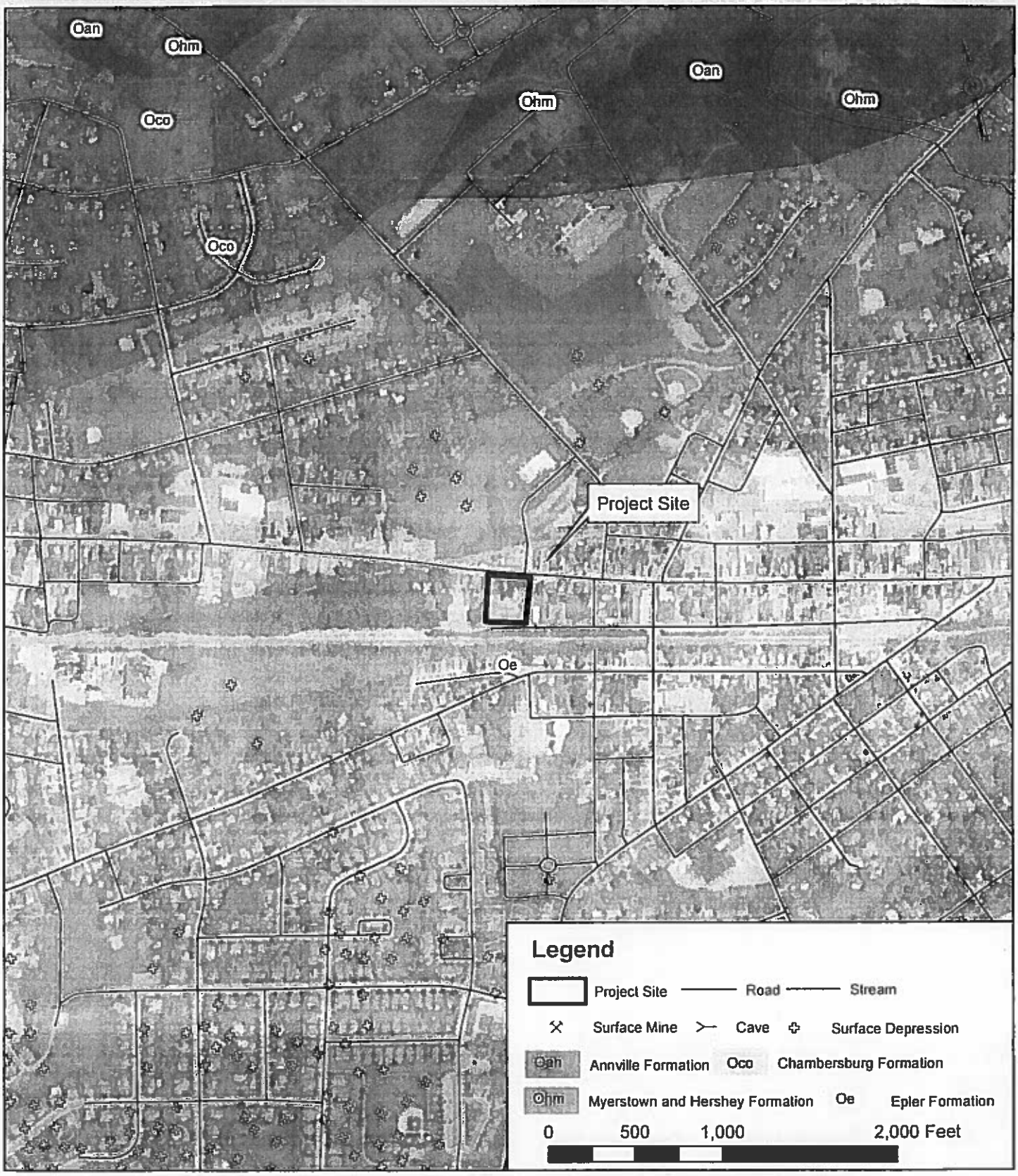
TOPOGRAPHIC MAP

PREPARED FOR

GERBERICH PAYNE SHOE COMPANY

WEST DONEGAL TOWNSHIP LANCASTER COUNTY PENNSYLVANIA

KLEINFELDER
Bright People. Right Solutions.
435 INDEPENDENCE AVE., SUITE C
MECHANICSBURG, PA 17055
PH (717) 458-0800
FAX (717)458-0801



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

SCALE:	DRAWING NUMBER:
AS SHOWN	FIGURE 2
DRAWN BY:	CHECKED BY:
D. TORRES	M. OWEN
APPROVED BY:	DATE:
D. CLOUSER	02/09/2021

GEOLOGIC AND KARST FEATURES MAP

PREPARED FOR

GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH LANCASTER COUNTY PENNSYLVANIA

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435 INDEPENDENCE AVE., SUITE C
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PH (717) 458-0800
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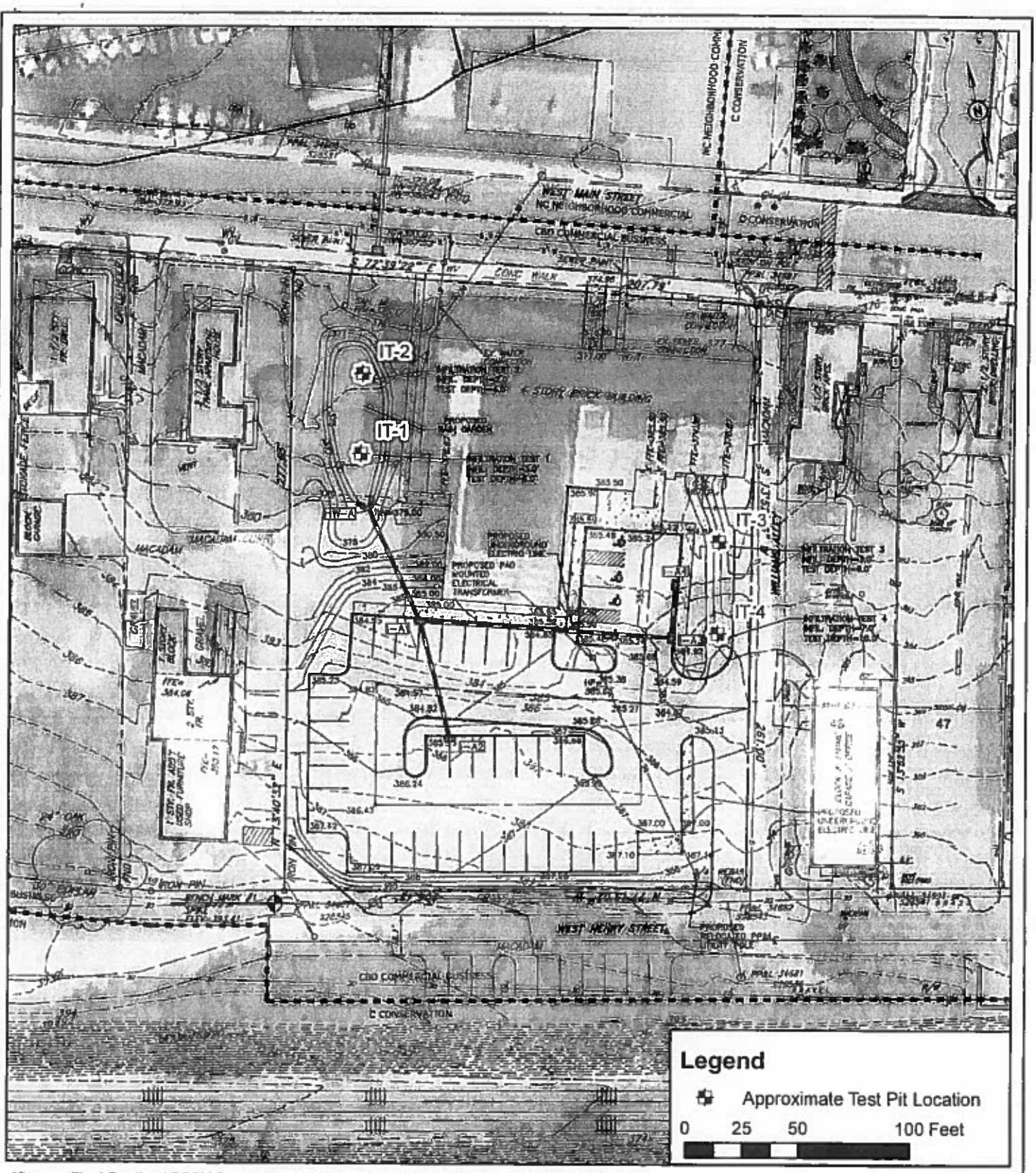

*Source: Final Grading / PCSM Plan, provided by D.C. Gohn Associates, Inc., dated March 5, 2021

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

SCALE:	DRAWING NUMBER:
AS SHOWN	FIGURE 3
DRAWN BY:	CHECKED BY:
D. TORRES	M. OWEN
APPROVED BY:	DATE:
D. CLOUSER	02/12/2021

EXPLORATION PLAN

PREPARED FOR

GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH LANCASTER COUNTY PENNSYLVANIA

KLEINFELDER
Bright People. Right Solutions.
435 INDEPENDENCE AVE., SUITE C
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FAX (717)458-0801

KLEINFELDER
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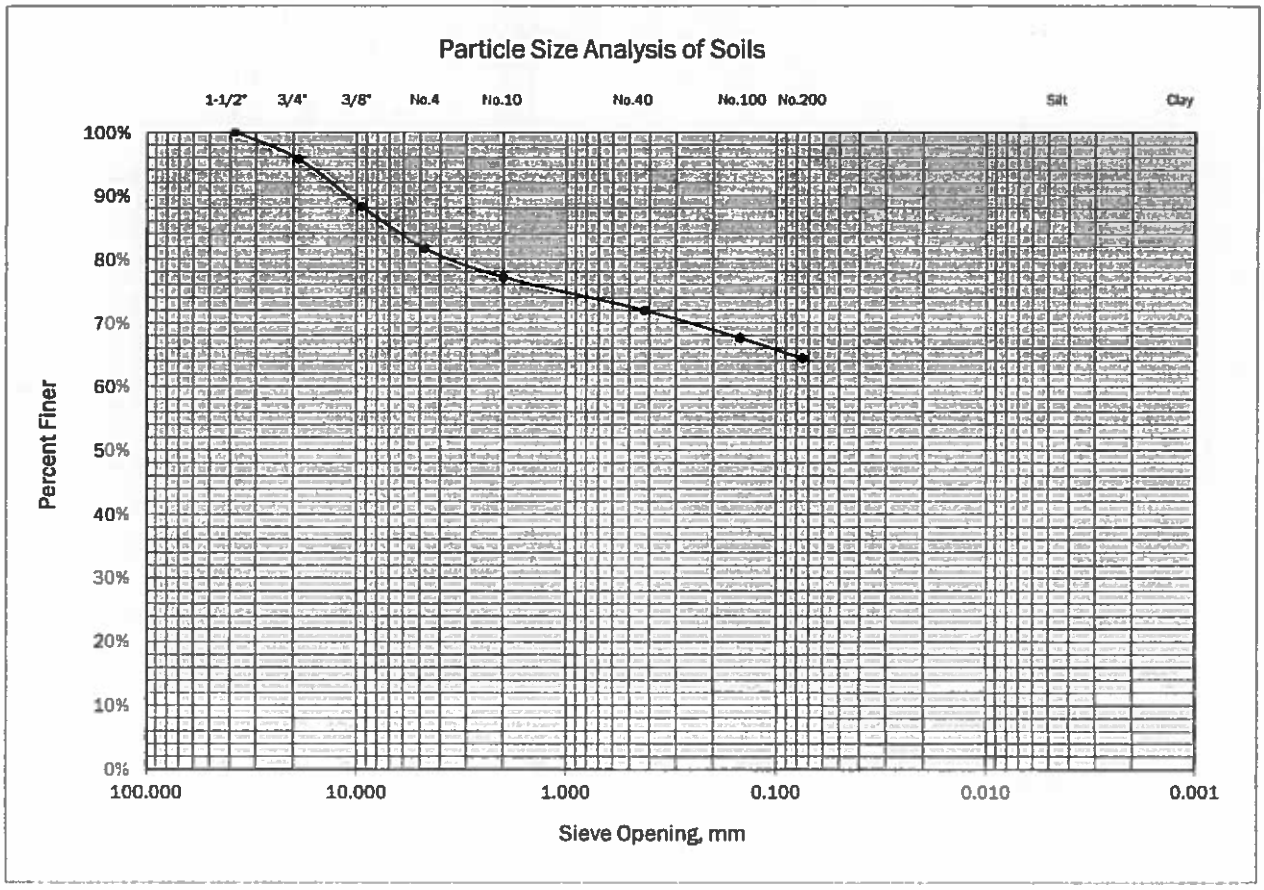
Soil Classification Report

Per ASTM Designations D 2487 and D 2488



As-Received Moisture 17.0%								
USCS Classification: Gravelly Lean CLAY with Sand (CL)								
Gravel: 18.3%	Coarse: 4.3%			Fine: 14.0%				
Sand: 17.3%	Coarse: 4.5%	Medium: 5.2%		Fine: 7.6%				
Fines: 64.4%	Silt:		Clay:					
Gravel Description: Angular to Sub-angular								
Sand Description: Angular to Sub-angular								
Consistency: N/A		Dry Strength:		High				
Dilatancy: None		Toughness:		High				
Structure: Homogeneous		Cementation:		N/A				
Test Pit: IT-4								
Sample: S-1	Depth: 7'							
Project: Gerberich Payne Shoe Company								
Client: DC. Gohn & Associates								
Kleinfelder Project Number: 20213553.001A								

Particle Size Distribution

	US Standard Sieve Size	Opening (mm)	%Finer
GRAVEL Coarse	1-1/2"	38.0	100.0%
GRAVEL	3/4"	19.0	95.7%
GRAVEL Fine	3/8"	9.50	88.2%
GRAVEL Fine	No. 4	4.75	81.7%
SAND Coarse	No. 10	2.00	77.2%
SAND Medium	No. 40	0.425	72.0%
SAND	No. 100	0.150	67.6%
SAND Fine	No. 200	0.075	64.4%
Hydrometer Analysis	Silt Size	0.005	
Hydrometer Analysis	Clay Size	0.001	

D_{60}:	D_{30}:	D_{10}:	Cu:	Cc:

Atterberg Limits	LL: 36	PL: 13	PI: 23
Description:	Orange Gravelly CLAY with Sand (CL)		
Remarks:	Stratum I		
Report Date:	February 15, 2021		

PLOTTED: 02/19/2021 02:33 PM BY: CWeems

Date Begin - End:	2/05/2021	**Excavation Company:**	John W. Gleim, Jr., Inc.
Logged By:	D. Torres	**Excavation Crew:**	L. Dietrich
Hor.-Vert. Datum:	Not Available	**Excavation Equip.:**	John Deere 35-D
Plunge:	N/A degrees	**Excav. Dimensions:**	ft
Weather:	Not Available		

TEST PIT LOG IT-1

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION Latitude: 40.11102° Longitude: -76.51011° Approximate Ground Surface Elevation (ft.): 378.00 Surface Condition: Grass Lithologic Description	Sample Type	LABORATORY RESULTS USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			6" dark brown organic soil									
			Fill Sandy CLAY with Gravel: brown, moist, with red brick fragments, plastic fragments, and Cobble- to Boulder-sized rock fragments									
375			**Stratum I** Gravelly CLAY with Sand: brown, moist									Infiltration test conducted at 3'.
	5											
370												
	10											
365												
	15											
360												

The test pit was terminated at approximately 6 ft. below ground surface.
The test pit was backfilled with excavated material on February 05, 2021.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20213553.001A
DRAWN BY:	DT
CHECKED BY:	MO
DATE:	2/5/2021

TEST PIT LOG IT-1

Gerberich Payne Shoe Company
Mount Joy Borough
Lancaster County, Pennsylvania

gINT FILE: Klf_gint_master_2021
gINT TEMPLATE: E:\KLF_STANDARD_GINT_LIBRARY_2021.GLB
PROJECT NUMBER: 20213553.001A
OFFICE FILTER: MECHANICSBURG

Date Begin - End:	2/05/2021	Excavation Company:	John W. Gleim, Jr., Inc.
Logged By:	D. Torres	Excavation Crew:	L. Dietrich
Hor.-Vert. Datum:	Not Available	Excavation Equip.:	John Deere 35-D
Plunge:	N/A degrees	Excav. Dimensions:	ft
Weather:	Not Available		

TEST PIT LOG IT-2

Latitude: 40.11111°
Longitude: -76.51008°
Approximate Ground Surface Elevation (ft.): 377.00
Surface Condition: Grass

Approximate Elevation (feet)	Depth (feet)	Graphical Log	Lithologic Description	Sample Type	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
375	0		4" dark brown organic soil									Infiltration test conducted at 2'
			Fill Sandy CLAY with Gravel: brown, moist, with red brick fragments, plastic fragments, and Cobble- to Boulder-sized rock fragments									
370	5											
365	10											
360	15											

The test pit was terminated because of backhoe refusal ( ) at approximately 4 ft. below ground surface on a boulder. The test pit was backfilled with excavated material on February 05, 2021.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20213553.001A
DRAWN BY:	DT
CHECKED BY:	MO
DATE:	2/5/2021

TEST PIT LOG IT-2

Gerberich Payne Shoe Company
Mount Joy Borough
Lancaster County, Pennsylvania

PLOTTED 02/19/2021 02:33 PM BY CWeems

Date Begin - End:	2/05/2021	Excavation Company:	John W. Gleim, Jr., Inc.
Logged By:	D. Torres	Excavation Crew:	L. Dietrich
Hor.-Vert. Datum:	Not Available	Excavation Equip.:	John Deere 35-D
Plunge:	N/A degrees	Excav. Dimensions:	ft
Weather:	Not Available		

TEST PIT LOG IT-3

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION Latitude: 40.11081° Longitude: -76.50959° Approximate Ground Surface Elevation (ft.): 381.00 Surface Condition: Gravel Lithologic Description	Sample Type	LABORATORY RESULTS USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
380	0		GRAVEL: 2" Stone Driveway									
			Stratum I Gravelly CLAY with Sand: brown, moist									Infiltration test conducted at 3'.
375	5											
370	10											
365	15											

The test pit was terminated at approximately 6 ft. below ground surface.
The test pit was backfilled with excavated material on February 05, 2021.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20213553.001A
DRAWN BY:	DT
CHECKED BY:	MO
DATE:	2/5/2021

TEST PIT LOG IT-3

Gerberich Payne Shoe Company
Mount Joy Borough
Lancaster County, Pennsylvania

gINT FILE: Kfl_gint_master_2021
gINT TEMPLATE: E:\KLF_STANDARD_GINT_LIBRARY_2021.GLB (...KLF_BORING/TEST PIT SOIL LOG)
PROJECT NUMBER: 20213553.001A
OFFICE: FILTER MECHANICSBURG

Date Begin - End:	2/05/2021	Excavation Company:	John W. Gleim, Jr., Inc.
Logged By:	D. Torres	Excavation Crew:	L. Dietrich
Hor.-Vert. Datum:	Not Available	Excavation Equip.:	John Deere 35-D
Plunge:	N/A degrees	Excav. Dimensions:	ft
Weather:	Not Available		

TEST PIT LOG IT-4

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION Latitude: 40.11071° Longitude: -78.50962° Approximate Ground Surface Elevation (ft.): 385.00 Surface Condition: Grass Lithologic Description	Sample Type	LABORATORY RESULTS USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			6" Dark brown organic soil									
			Fill Sandy CLAY with Gravel, brown, moist, with red-brick fragment, plastic fragments, and Cobble- to Boulder-sized rock fragments									
380	5		Stratum I Gravelly CLAY with Sand: brown, moist									Infiltration test conducted at 7'.
375	10											
370	15											

The test pit was terminated at approximately 10 ft. below ground surface.
The test pit was backfilled with excavated material on February 05, 2021.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20213553.001A
DRAWN BY:	DT
CHECKED BY:	MO
DATE:	2/5/2021

TEST PIT LOG IT-4

Gerberich Payne Shoe Company
Mount Joy Borough
Lancaster County, Pennsylvania

LANCASTER COUNTY
CONSERVATION DISTRICT

Conserving Natural Resources for Our Future

April 26, 2021

Mount Joy Senior Housing LP
2121 Old Gatesburg Road, Suite 200
State College, PA 16803

RE: Project Name: Gerberich Payne Shoe Company
LCCD Plan ID: ESP03359
Mount Joy Borough, Lancaster County

Dear Applicant:

I have reviewed the Erosion & Sediment Pollution Control Plan dated March 22, 2021 for the above referenced project. The following comments need to be addressed.

1. Include the following within the limits of disturbance:
    a. The existing utility pole to be removed (southeast side of site, shown on the Existing Conditions Plan). §102.4(b)(5)(iii)
    b. The plantings on the northeast side of the site adjacent to the rain garden. §102.4(b)(5)(iii)
2. Verify the following pertaining to the limits of disturbance:
    a. A bolded line type is shown immediately downslope of compost sock #4 adjacent to Williams Alley. Clarify what this feature is. If the construction of this feature will involve earth disturbance, include it within the limits of disturbance (LOD). §102.4(b)(5)(iii)
    b. Clarify whether any earth disturbance will occur within the footprint of the existing building. If so, include the anticipated disturbed areas within the LOD. §102.4(b)(5)(iii)
    c. Sheet 3 of the plan drawings indicates a future road widening of West Henry Street. It is noted that the majority of West Henry Street is not included within the LOD. Verify whether all areas proposed for widening of Henry Street are included within the LOD. Additionally, verify whether there will be any earth disturbance on West Henry Street apart from the areas shown within the LOD. §102.4(b)(5)(iii)
    d. Verify the topsoil stockpile will be able to be located within the limits of disturbance as shown on the E&S plans without conflict to the proposed parking area. Additionally, as the soil stockpile is located in a separate area of the site from the proposed rain garden, verify the soil stockpile location as presented is suitable for construction of the rain garden, which is identified in the construction sequence to be installed after other earthmoving activities on site. §102.4(b)(5)(iii)
3. Construction sequence:
    a. Clarify in the construction sequence how the limits of disturbance will be marked prior to earth disturbance activities occurring. Ensure the method of marking is appropriate for the impervious areas throughout the limits of disturbance. §102.4(b)(5)(vii)
    b. Within the construction sequence, provide instructions for the repair/replacement of compost sock #1 when the sewer/water laterals are installed. §102.4(b)(5)(vii)

4. Provide supporting calculations which verify the Qmax of 3.3 cfs identified on Figure 9.4. §102.4(b)(5)(viii)
5. Provide Type C inlet protection for the inlets on West Main Street north of the proposed rain garden or justify how the inlets will be protected from sedimentation while construction of the rain garden and sewer/water laterals are underway. If inlet protection is used, add Standard Construction Detail #4-15 from the PA Erosion Control Program Manual and notes or other appropriate Type C inlet protection detail to the E&S plan drawings. §102.4(b)(5)(ix)
6. Provide a perimeter control BMP below the soil stockpile and add associated standard construction details. §102.4(b)(5)(ix)

These comments need to be addressed and incorporated into the Plan before a determination of the Plan's adequacy to comply with the rules and regulations adopted under the PA Clean Streams Law relating to erosion and sedimentation control can be made. **Please reference the date of revision on any future resubmissions.** Contact me at (717) 299-5361 if you have any questions pertaining to the review.

Yours for a better environment,

Eric Hout
Resource Conservationist

C: DC Gohn Associates – Brian Cooley
Mount Joy Borough

EH/slk

RETTEW
We answer to you.
3020 Columbia Avenue, Lancaster, PA 17603
Phone: (800) 738-8395
E-mail: rettew@rettew.com • Web site: rettew.com

MEMORANDUM

TO:	Brian R. Cooley, ASLA – D.C. Gohn Associates, Inc.		
FROM:	John M. Schick		
DATE:	November 10, 2020 ***Revised: March 11, 2021***		
PROJECT NAME:	Gerberich Payne Shoe Company Site	**PROJECT NO.:**	041432008
SUBJECT:	Traffic Assessment		

As per your request, we have completed our traffic assessment on the proposed redevelopment of the Gerberich Payne Shoe Company building to be converted into 36 senior housing dwelling units with a possible 3,000 SF medical office and a possible 3,000 SF of general retail use. The existing building is located at the southwest corner of the intersection of West Main Street (SR 0230) and a public unnamed alley in Mount Joy Borough, Lancaster County, PA. The following summary of our data collection effort, traffic analyses, and findings for your review and comment:

EXISTING TRAFFIC CONDITIONS

Manual turning movement counts were conducted at the following intersections on the dates indicated during the weekday morning peak period (6:00 to 9:00 a.m.) and during the afternoon peak period (3:00 to 6:00 p.m.):

- West Main Street and Alley (Wednesday, November 4, 2020)
- West Main Street, Fairview Street, and Lumber Street (Wednesday, November 4, 2020)
- Alley and Henry Street (Wednesday, November 4, 2020)
- West Main Street, Manheim Street, and New Haven Street (Wednesday, February 24, 2021)
- New Haven Street and Henry Street (Wednesday, February 24, 2021)

Copies of the traffic count summary sheets for each intersection are attached to this memorandum.

CRASH ANALYSIS

Reportable crash data was obtained from the PennDOT PCIT (Pennsylvania Crash Information Tool) website and reviewed for the five (5) intersections listed above. The results of our investigation indicated that there were nine (9) reportable crashes during the most recent five-year time period beginning January 1, 2015 and ending December 31, 2019. A review of the crash data shows no discernible crash patterns at any of the studied intersections. A copy of the crash data results is attached to this memorandum.

TRIP GENERATION

Estimated trip generation for the proposed redevelopment was computed using the procedures derived from the manual *Trip Generation, 10th Edition + Supplement, 2020*, an Institute of Transportation Engineers (ITE) Informational Report. The trip generation program for the proposed redevelopment for the weekday daily and weekday AM and PM peak hours are summarized on the following page in **Table 1.**

Table 1 - Trip Generation Program							
Land Use	ADT	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
36-Senior Adult Housing (Attached) (ITE Land Use Code 252)	120	2	5	7	6	5	11
3,000 SF Medical Office (ITE Land Use Code 720)	28	8	2	10	3	9	12
3,000 SF General Retail (ITE Land Use Code 820)	114	2	2	4	5	6	11
Total	262	12	9	21	14	20	34

A copy of the ITE trip generation worksheet is attached to this memorandum.

The trips from the development, shown in **Table 1**, were distributed onto the roadway network based the following: (1) an analysis of existing traffic patterns and volumes adjacent to the site; (2) the available routes; and (3) the proposed site access location.

Based on the width of the adjacent alley and the availability of access from Lumber Street to Henry Street, we recommend that the adjacent Alley be restricted to one way northbound from 190' north of Henry Street north to West Main Street. Site generated traffic can access the parking in the rear of the building via Lumber Street and/or Henry Street from New Haven Street.

The directional distribution percentages of the new site generated traffic are displayed in **Table 2** below.

Table 2 – Trip Distribution Percentages		
Direction (To/From)	Assignment (To/From)	Distribution Percentage (To/From)
East	via West Main Street	20%
West	via West Main Street	40%
North	via Manheim Street	25%
South	via New Haven Street to Henry Street	15%
Total		**100%**

FUTURE TRAFFIC CONDITIONS

In order to evaluate future traffic conditions, it was necessary to determine an appropriate growth rate for "background" traffic. PennDOT's *Growth Factors for August 2020 to July 2021* provides growth factors based on the

functional classification of a subject roadway. The roadways within the study area are classified as Urban Non-Interstate Roadways. Roadways in Lancaster County with this classification have exhibited an average growth rate of 1.04% per year by PennDOT. The current traffic data was projected to the 2022 design year (expected completion and opening year) using a growth factor of 1.04% compounded annually in accordance with the following formula:

$$F = P(1 + i)^n$$

where: F - future traffic volumes
i - growth factor
P - present traffic volumes
n - number of years in projection

EXISTING AND FUTURE TRAFFIC CONDITIONS

Capacity analyses were performed at the intersections listed above for the for the following peak period scenarios:

- Existing 2020 AM and PM Peak Hour Conditions
- 2022 "Build" AM and PM Peak Hour Conditions

The capacity analyses were conducted in accordance with the methodology presented in the *Highway Capacity Manual, 6th Edition* utilizing the PTV VISTRO™ Software, Version 2021 (SP 0-3). It should be noted that existing left and right turning traffic along West Main Street at the Alley were redistributed to Lumber Street for the 2022 "Build" conditions.

Table 3 provides a summary of the level of service analysis results for the scenarios described above.

Table 3 – Level of Service Summary

Intersection	Movement	Existing Conditions		"Build" 2022 Conditions	
		AM Peak	PM Peak	AM Peak	PM Peak
West Main Street, Fairview Street, and Lumber Street	SB Fairview Street	B (12.05)	C (17.19)	B (12.27)	C (17.50)
	WB West Main Street	A (0.03)	A (0.09)	A (0.10)	A (0.09)
	EB West Main Street	A (0.37)	A (0.51)	A (0.35)	A (0.52)
	ILOS	**A (0.66)**	**A (1.05)**	**A (0.68)**	**A (1.07)**
West Main Street and Alley	NB Alley	A (9.84)	C (14.26)	B (10.64)	A (14.46)
	WB Left	A (0.03)	A (0.03)	n/a	n/a
	ILOS	**A (0.06)**	**A (0.32)**	**A (0.20)**	**A (0.30)**
Alley and Henry Street	SB Henry Street	A (8.34)	A (8.66)	A (8.50)	A (8.66)
	EB Left	A (0.00)	A (0.00)	A (0.00)	A (0.00)
	ILOS	**A (1.19)**	**A (2.21)**	**A (0.94)**	**A (2.21)**

ILOS = Intersection Overall Level of Service

Table 3 – Level of Service Summary (continued)					
Intersection	Movement	Existing Conditions		"Build" 2022 Conditions	
		AM Peak	PM Peak	AM Peak	PM Peak
West Main Street, Manheim Street, and New Haven Street	SB Manheim Street	E (65.58)	D (42.67)	E (69.43)	D (42.90)
	NB New Haven Street	E (69.85)	D (40.18)	E (70.30)	D (40.03)
	EB West Main Street	C (25.41)	A (7.76)	C (25.75)	A (7.85)
	WB West Main Street	C (23.65)	A (7.89)	C (23.80)	A (7.97)
	ILOS	**D (48.18)**	**C (21.82)**	**D (48.53)**	**C (21.88)**
New Haven Street and Henry Street	EB Henry Street	B (10.30)	B (12.77)	B (10.25)	B (12.93)
	WB Henry Street	B (11.62)	B (13.49)	B (11.73)	B (13.67)
	NB New Haven Street	A (0.02)	A (0.29)	A (0.04)	A (0.28)
	SB New Haven Street	A (0.04)	A (0.53)	A (0.04)	A (0.52)
	ILOS	**A (0.30)**	**A (0.53)**	**A (0.32)**	**A (1.59)**

ILOS = Intersection Overall Level of Service

As can be seen, all of the intersections studied currently operate at overall acceptable levels of service and will continue to operate at the same overall acceptable levels under 2022 "build' conditions. Copies of the capacity analysis worksheets are attached to this memorandum.

QUEUE ANALYSIS

95th percentile queue analyses were also conducted at the studied intersection for the 2022 "build" conditions using the *Highway Capacity Manual, 6th Edition* methodology. The queue length values were calculated and taken directly from the VISTRO™ analyses. The queue analysis results are summarized in **Table 4**. As can be seen, future 2022 "build" traffic volumes add, at the most, less than one car length to the 2020 "existing" condition queues.

Table 4 – 95TH Percentile Queue Summary					
Intersection	Movement	Existing Conditions		"Build" 2022 Conditions	
		AM Peak	PM Peak	AM Peak	PM Peak
West Main Street, Fairview Street, and Lumber Street	SB Fairview Street App	< 25'	< 25'	< 25'	< 25'
West Main Street and Alley	NB Alley App.	< 25'	< 25'	< 25'	< 25'

Table 4 – 95TH Percentile Queue Summary (continued)

Intersection	Movement	Existing Conditions		"Build" 2022 Conditions	
		AM Peak	PM Peak	AM Peak	PM Peak
Alley and Henry Street	SB Henry Street App.	< 25'	< 25'	< 25'	< 25'
West Main Street, Manheim Street, and New Haven Street	SB Manheim Street	345'	322'	356'	328'
	NB New Haven Street L	45'	46'	46'	46'
	NB New Haven Street TR	457'	242'	466'	246'
	EB West Main Street L	89'	36'	97'	37'
	EB West Main Street TR	184'	104'	189'	107'
	WB West Main Street L	< 25'	< 25'	< 25'	< 25'
	WB West Main Street TL	179'	132'	185'	135'
New Haven Street and Henry Street	EB Henry Street	< 25'	< 25'	< 25'	< 25'
	WB Henry Street	< 25'	< 25'	< 25'	< 25'

AUXILIARY TURN LANE ANALYSIS

In addition to capacity and queue analyses, auxiliary turn lane warrant criteria was reviewed for the left and right turning movements onto Lumber Street from West Main Street using the 2022 "build" traffic condition peak hour traffic volumes and the methodologies contained in Chapter 11 of PennDOT's *Publication 46*. The results of the auxiliary (left and right) turn lane warrant analyses indicated that no auxiliary turn lanes are warranted. Copies of the auxiliary turn lane warrant analyses are attached to this memorandum.

CONCLUSIONS

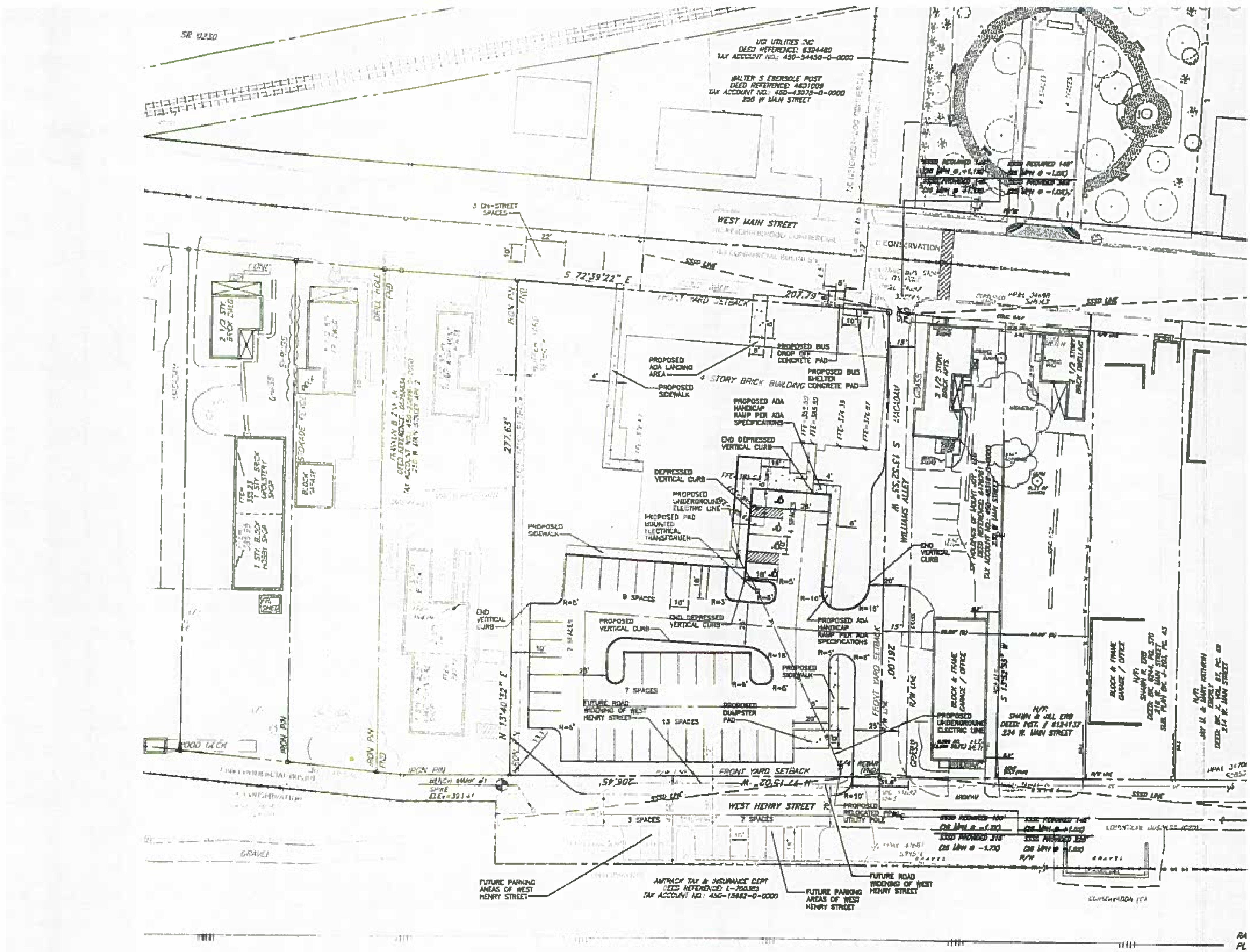
The overall findings and conclusions of our analyses are as follows:

1. There were nine (9) reportable crashes at the five (5) studied intersections over the past five-year period. There is no discernible crash pattern at the studied intersections.
2. The proposed 36 senior living dwelling units, 3,000 SF of medical office use, and 3,000 SF of general retail use will generate approximately 262 trips per day (131 entering and 131 exiting). Of that total, approximately 21 trips will occur during the AM peak hour and approximately 34 trips will occur during the PM peak hour.

3. The proposed project was assumed to be completed and operational in 2022.
4. Based on the narrowness of the adjacent Alley and the availability of access from Lumber Street to Henry Street to the site's parking lot, we recommend that the adjacent Alley be restricted to one way north from 190' north of Henry Street north to West Main Street.
5. The results of the capacity analyses indicated that the studied intersections currently operate at an overall acceptable level of service and will continue to operate at an overall acceptable level of service under 2022 "build" conditions.
6. The results of the queue analyses indicated that the proposed redevelopment will not have any significant impact on the studied intersections.
7. The results of the auxiliary turn lane warrant analysis indicated that turn lanes are not warranted for traffic along Main Street turning right or left onto Lumber Street.

Based on the results of our analysis, it is our opinion that the redevelopment of the Gerberich Payne Shoe Company building, will not create any adverse traffic conditions to the surrounding roadway network and no roadway improvements are warranted.

If you have any questions or wish to discuss any of the information contained within this memorandum, please feel free to call me. Thanks!



SR 0230
UGI UTILITIES INC
DEED REFERENCE: 6394480
TAX ACCOUNT NO.: 450-54458-0-0000
WALTER S EBERSOLE POST
DEED REFERENCE: 4601009
TAX ACCOUNT NO.: 450-43075-0-0000
256 W MAIN STREET
WEST MAIN STREET
CONSERVATION
3 ON-STREET SPACES
22'
10'
S 72°39'22" E
207.79'
FRONT YARD SETBACK
PROPOSED BUS DROP OFF CONCRETE PAD
PROPOSED BUS SHELTER CONCRETE PAD
PROPOSED ADA LANDING AREA
4 STORY BRICK BUILDING
PROPOSED SIDEWALK
PROPOSED ADA HANDICAP RAMP PER ADA SPECIFICATIONS
END DEPRESSED VERTICAL CURB
DEPRESSED VERTICAL CURB
PROPOSED UNDERGROUND ELECTRIC LINE
PROPOSED PAD MOUNTED ELECTRICAL TRANSFORMER
PROPOSED SIDEWALK
9 SPACES
7 SPACES
13 SPACES
PROPOSED VERTICAL CURB
FUTURE ROAD WIDENING OF WEST HENRY STREET
PROPOSED DUMPSTER PAD
277.63'
N 13°40'32" E
206.45'
261.00'
S 13°52'55" W
WILLIAMS ALLEY
2 1/2 STORY BRICK APTS
2 1/2 STORY BRICK DWELLING
BLOCK & FRAME GARAGE / OFFICE
N/F SHAWN & JILL ERB DEED: INST. # 6124137 224 W. MAIN STREET
WEST HENRY STREET
3 SPACES
7 SPACES
FUTURE PARKING AREAS OF WEST HENRY STREET
AMTRACK TAX & INSURANCE DEPT
DEED REFERENCE: L-750.353
TAX ACCOUNT NO.: 450-15682-0-0000
FUTURE ROAD WIDENING OF WEST HENRY STREET
BENCH MARK #1 SPIKE ELEV=393.4'
IRON PIN
DRILL HOLE
GRASS
GRAVEL
BLOCK GARAGE
1 STY. BRICK UPHOLSTERY SHOP
1 STY. BLOCK LEECH SHOP
2 1/2 STY. BRICK DWLG
STOCKADE FENCE

Manual Traffic Count Printouts

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
West Main St & Alley
Wednesday, November 4, 2020
40.111142, -76.509404

File Name : West Main Street & Alley - Weekda
Site Code :
Start Date : 11/4/20
Page No : 1

Groups Printed- Lights - Buses - Trucks

	American Legion Southbound					West Main Street Westbound					Alley Northbound					West Main Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	0	0	0	0	0	0	16	0	0	16	2	0	0	0	2	0	34	0	0	34	52
06:15 AM	0	0	0	0	0	2	17	0	0	19	1	0	0	0	1	0	26	0	0	26	46
06:30 AM	0	0	0	0	0	0	34	0	0	34	0	0	0	0	0	0	42	0	0	42	76
06:45 AM	0	0	1	0	1	1	27	1	0	29	1	0	1	0	2	0	39	0	0	39	71
Total	0	0	1	0	1	3	94	1	0	98	4	0	1	0	5	0	141	0	0	141	245
07:00 AM	1	0	0	0	1	0	29	1	0	30	0	0	1	0	1	0	51	0	0	51	83
07:15 AM	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	61	0	0	61	91
07:30 AM	0	0	0	0	0	0	52	0	0	52	1	0	0	0	1	0	72	0	0	72	125
07:45 AM	1	0	0	0	1	0	37	1	0	38	2	0	0	0	2	0	69	0	0	69	110
Total	2	0	0	0	2	0	148	2	0	150	3	0	1	0	4	0	253	0	0	253	409
08:00 AM	0	0	0	0	0	1	41	0	0	42	0	0	0	0	0	0	80	0	0	80	122
08:15 AM	0	0	0	0	0	0	61	0	0	61	0	0	1	0	1	0	77	2	0	79	141
08:30 AM	0	0	0	0	0	0	79	0	0	79	0	0	1	0	1	0	67	0	0	67	147
08:45 AM	0	0	0	0	0	0	79	0	0	79	0	0	1	0	1	0	77	0	0	77	157
Total	0	0	0	0	0	1	260	0	0	261	0	0	3	0	3	0	301	2	0	303	567
03:00 PM	1	0	2	0	3	0	110	0	0	110	1	0	0	0	1	1	101	0	0	102	216
03:15 PM	1	0	0	0	1	0	115	1	0	116	1	0	1	0	2	0	105	0	0	105	224
03:30 PM	1	0	0	0	1	0	130	1	0	131	0	0	0	0	0	1	87	0	0	88	220
03:45 PM	0	0	0	0	0	0	125	2	0	127	2	0	0	0	2	0	105	0	0	105	234
Total	3	0	2	0	5	0	480	4	0	484	4	0	1	0	5	2	398	0	0	400	894
04:00 PM	0	0	2	0	2	1	126	0	0	127	3	0	1	0	4	1	99	1	0	101	234
04:15 PM	0	1	1	0	2	0	126	0	0	126	2	0	0	0	2	0	110	2	0	112	242
04:30 PM	0	1	2	0	3	0	125	3	0	128	1	0	0	0	1	3	102	0	0	105	237
04:45 PM	0	1	0	0	1	0	120	0	0	120	0	0	0	0	0	1	111	0	0	112	233
Total	0	3	5	0	8	1	497	3	0	501	6	0	1	0	7	5	422	3	0	430	946
05:00 PM	1	0	3	0	4	1	120	1	0	122	1	0	0	0	1	1	125	0	0	126	253
05:15 PM	0	0	1	0	1	0	134	2	0	136	2	0	0	0	2	1	102	0	0	103	242
05:30 PM	0	0	2	0	2	0	146	2	0	148	1	0	0	0	1	1	109	0	0	110	261
05:45 PM	0	0	1	0	1	1	161	3	0	165	1	0	0	0	1	1	102	0	0	103	270
Total	1	0	7	0	8	2	561	8	0	571	5	0	0	0	5	4	438	0	0	442	1026
Grand Total	6	3	15	0	24	7	2040	18	0	2065	22	0	7	0	29	11	1953	5	0	1969	4087
Apprch %	25	12.5	62.5	0		0.3	98.8	0.9	0		75.9	0	24.1	0		0.6	99.2	0.3	0		
Total %	0.1	0.1	0.4	0	0.6	0.2	49.9	0.4	0	50.5	0.5	0	0.2	0	0.7	0.3	47.8	0.1	0	48.2	
Lights	6	3	14	0	23	7	1903	17	0	1927	22	0	7	0	29	11	1836	5	0	1852	3831
% Lights	100	100	93.3	0	95.8	100	93.3	94.4	0	93.3	100	0	100	0	100	100	94	100	0	94.1	93.7
Buses	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	16	0	0	16	30
% Buses	0	0	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0	0	0.8	0	0	0.8	0.7
Trucks	0	0	1	0	1	0	123	1	0	124	0	0	0	0	0	0	101	0	0	101	226
% Trucks	0	0	6.7	0	4.2	0	6	5.6	0	6	0	0	0	0	0	0	5.2	0	0	5.1	5.5

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
West Main St & Alley
Wednesday, November 4, 2020
40.111142, -76.509404

File Name : West Main Street & Alley - Weekda
Site Code :
Start Date : 11/4/20
Page No : 2

	American Legion Southbound					West Main Street Westbound					Alley Northbound					West Main Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 12:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	1	41	0	0	42	0	0	0	0	0	0	80	0	0	80	122
08:15 AM	0	0	0	0	0	0	61	0	0	61	0	0	1	0	1	0	77	2	0	79	141
08:30 AM	0	0	0	0	0	0	79	0	0	79	0	0	1	0	1	0	67	0	0	67	147
08:45 AM	0	0	0	0	0	0	79	0	0	79	0	0	1	0	1	0	77	0	0	77	157
Total Volume	0	0	0	0	0	1	260	0	0	261	0	0	3	0	3	0	301	2	0	303	567
% App. Total	0	0	0	0		0.4	99.6	0	0		0	0	100	0		0	99.3	0.7	0		
PHF	.000	.000	.000	.000	.000	.250	.823	.000	.000	.826	.000	.000	.750	.000	.750	.000	.941	.250	.000	.947	.903
Lights	0	0	0	0	0	1	234	0	0	235	0	0	3	0	3	0	274	2	0	276	514
% Lights	0	0	0	0	0	100	90.0	0	0	90.0	0	0	100	0	100	0	91.0	100	0	91.1	90.7
Buses	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	8
% Buses	0	0	0	0	0	0	1.2	0	0	1.1	0	0	0	0	0	0	1.7	0	0	1.7	1.4
Trucks	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	22	0	0	22	45
% Trucks	0	0	0	0	0	0	8.8	0	0	8.8	0	0	0	0	0	0	7.3	0	0	7.3	7.9
Peak Hour Analysis From 12:15 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	3	0	4	1	120	1	0	122	1	0	0	0	1	1	125	0	0	126	253
05:15 PM	0	0	1	0	1	0	134	2	0	136	2	0	0	0	2	1	102	0	0	103	242
05:30 PM	0	0	2	0	2	0	146	2	0	148	1	0	0	0	1	1	109	0	0	110	261
05:45 PM	0	0	1	0	1	1	161	3	0	165	1	0	0	0	1	1	102	0	0	103	270
Total Volume	1	0	7	0	8	2	561	8	0	571	5	0	0	0	5	4	438	0	0	442	1026
% App. Total	12.5	0	87.5	0		0.4	98.2	1.4	0		100	0	0	0		0.9	99.1	0	0		
PHF	.250	.000	.583	.000	.500	.500	.871	.667	.000	.865	.625	.000	.000	.000	.625	1.00	.876	.000	.000	.877	.950
Lights	1	0	7	0	8	2	534	8	0	544	5	0	0	0	5	4	422	0	0	426	983
% Lights	100	0	100	0	100	100	95.2	100	0	95.3	100	0	0	0	100	100	96.3	0	0	96.4	95.8
Buses	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
% Buses	0	0	0	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0	0.2	0	0	0.2	0.4
Trucks	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	0	15	0	0	15	39
% Trucks	0	0	0	0	0	0	4.3	0	0	4.2	0	0	0	0	0	0	3.4	0	0	3.4	3.8

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
West Main St & Lumber St
Wednesday, November 4, 2020
40.110805, -76.508009

File Name : West Main Street & Lumber Street -Weekda
Site Code :
Start Date : 11/4/20
Page No : 1

Groups Printed- Lights - Buses - Trucks

	Fairview Street Southbound					West Main Street Westbound					Lumber Street Northbound		West Main Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	1	0	1	0	2	0	16	0	0	16	0	0	0	34	0	0	34	52
06:15 AM	1	0	0	0	1	0	16	0	0	16	0	0	0	27	0	0	27	44
06:30 AM	4	0	0	0	4	0	34	0	0	34	0	0	0	40	0	0	40	78
06:45 AM	1	0	2	0	3	0	26	1	0	27	0	0	0	40	0	0	40	70
Total	7	0	3	0	10	0	92	1	0	93	0	0	0	141	0	0	141	244
07:00 AM	0	1	1	0	2	0	29	1	0	30	0	0	1	51	0	0	52	84
07:15 AM	4	0	6	0	10	0	31	1	0	32	0	0	1	62	0	0	63	105
07:30 AM	2	0	5	0	7	0	53	2	0	55	0	0	1	71	0	0	72	134
07:45 AM	2	0	6	0	8	0	36	0	0	36	0	0	2	70	0	0	72	116
Total	8	1	18	0	27	0	149	4	0	153	0	0	5	254	0	0	259	439
08:00 AM	2	0	6	0	8	1	45	1	0	47	0	0	0	80	0	0	80	135
08:15 AM	2	0	4	0	6	0	62	2	0	64	0	0	7	76	0	0	83	153
08:30 AM	3	0	4	0	7	0	79	2	0	81	0	0	7	70	0	0	77	165
08:45 AM	0	0	3	0	3	0	79	3	0	82	0	0	1	78	0	0	79	164
Total	7	0	17	0	24	1	265	8	0	274	0	0	15	304	0	0	319	617
03:00 PM	2	0	2	0	4	0	111	3	0	114	0	0	1	101	1	0	103	221
03:15 PM	3	0	8	0	11	0	115	1	0	116	0	0	6	104	1	0	111	238
03:30 PM	4	0	5	0	9	0	131	4	0	135	0	0	2	88	1	0	91	235
03:45 PM	1	1	9	0	11	0	124	3	0	127	0	0	6	105	1	0	112	250
Total	10	1	24	0	35	0	481	11	0	492	0	0	15	398	4	0	417	944
04:00 PM	2	0	7	0	9	2	127	3	0	132	0	0	3	100	1	0	104	245
04:15 PM	2	0	6	0	8	1	126	4	0	131	0	0	4	110	2	0	116	255
04:30 PM	0	1	3	0	4	0	125	4	0	129	0	0	7	101	0	0	108	241
04:45 PM	4	1	12	0	17	1	121	6	0	128	0	0	2	112	3	0	117	262
Total	8	2	28	0	38	4	499	17	0	520	0	0	16	423	6	0	445	1003
05:00 PM	1	2	13	0	16	1	122	4	0	127	0	0	7	124	3	0	134	277
05:15 PM	1	1	4	0	6	1	135	3	0	139	0	0	6	99	1	0	106	251
05:30 PM	1	0	12	0	13	1	145	3	0	149	0	0	9	116	4	0	129	291
05:45 PM	3	0	14	0	17	0	162	6	0	168	0	0	6	103	0	0	109	294
Total	6	3	43	0	52	3	564	16	0	583	0	0	28	442	8	0	478	1113
Grand Total	46	7	133	0	186	8	2050	57	0	2115	0	0	79	1962	18	0	2059	4360
Apprch %	24.7	3.8	71.5	0		0.4	96.9	2.7	0		0		3.8	95.3	0.9	0		
Total %	1.1	0.2	3.1	0	4.3	0.2	47	1.3	0	48.5	0	0	1.8	45	0.4	0	47.2	
Lights	43	7	127	0	177	8	1913	54	0	1975	0	0	78	1845	17	0	1940	4092
% Lights	93.5	100	95.5	0	95.2	100	93.3	94.7	0	93.4	0	0	98.7	94	94.4	0	94.2	93.9
Buses	1	0	4	0	5	0	14	3	0	17	0	0	0	16	0	0	16	38
% Buses	2.2	0	3	0	2.7	0	0.7	5.3	0	0.8	0	0	0	0.8	0	0	0.8	0.9
Trucks	2	0	2	0	4	0	123	0	0	123	0	0	1	101	1	0	103	230
% Trucks	4.3	0	1.5	0	2.2	0	6	0	0	5.8	0	0	1.3	5.1	5.6	0	5	5.3

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File Name : West Main Street & Lumber Street -Weekda
Site Code :
Start Date : 11/4/20

	Fairview Street Southbound					West Main Street Westbound					Lumber Street Northbound		West Main Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 12:00 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	2	0	6	0	8	1	45	1	0	47	0	0	0	80	0	0	80	135
08:15 AM	2	0	4	0	6	0	62	2	0	64	0	0	7	76	0	0	83	153
08:30 AM	3	0	4	0	7	0	79	2	0	81	0	0	7	70	0	0	77	165
08:45 AM	0	0	3	0	3	0	79	3	0	82	0	0	1	78	0	0	79	164
Total Volume	7	0	17	0	24	1	265	8	0	274	0	0	15	304	0	0	319	617
% App. Total	29.2	0	70.8	0		0.4	96.7	2.9	0		0		4.7	95.3	0	0		
PHF	.583	.000	.708	.000	.750	.250	.839	.667	.000	.835	.000	.000	.536	.950	.000	.000	.961	.935
Lights	5	0	15	0	20	1	239	6	0	246	0	0	15	277	0	0	292	558
% Lights	71.4	0	88.2	0	83.3	100	90.2	75.0	0	89.8	0	0	100	91.1	0	0	91.5	90.4
Buses	0	0	1	0	1	0	3	2	0	5	0	0	0	5	0	0	5	11
% Buses	0	0	5.9	0	4.2	0	1.1	25.0	0	1.8	0	0	0	1.6	0	0	1.6	1.8
Trucks	2	0	1	0	3	0	23	0	0	23	0	0	0	22	0	0	22	48
% Trucks	28.6	0	5.9	0	12.5	0	8.7	0	0	8.4	0	0	0	7.2	0	0	6.9	7.8
Peak Hour Analysis From 12:15 PM to 06:00 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 05:00 PM																		
05:00 PM	1	2	13	0	16	1	122	4	0	127	0	0	7	124	3	0	134	277
05:15 PM	1	1	4	0	6	1	135	3	0	139	0	0	6	99	1	0	106	251
05:30 PM	1	0	12	0	13	1	145	3	0	149	0	0	9	116	4	0	129	291
05:45 PM	3	0	14	0	17	0	162	6	0	168	0	0	6	103	0	0	109	294
Total Volume	6	3	43	0	52	3	564	16	0	583	0	0	28	442	8	0	478	1113
% App. Total	11.5	5.8	82.7	0		0.5	96.7	2.7	0		0		5.9	92.5	1.7	0		
PHF	.500	.375	.768	.000	.765	.750	.870	.667	.000	.868	.000	.000	.778	.891	.500	.000	.892	.946
Lights	6	3	42	0	51	3	537	15	0	555	0	0	27	426	8	0	461	1067
% Lights	100	100	97.7	0	98.1	100	95.2	93.8	0	95.2	0	0	96.4	96.4	100	0	96.4	95.9
Buses	0	0	1	0	1	0	3	1	0	4	0	0	0	1	0	0	1	6
% Buses	0	0	2.3	0	1.9	0	0.5	6.3	0	0.7	0	0	0	0.2	0	0	0.2	0.5
Trucks	0	0	0	0	0	0	24	0	0	24	0	0	1	15	0	0	16	40
% Trucks	0	0	0	0	0	0	4.3	0	0	4.1	0	0	3.6	3.4	0	0	3.3	3.6

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
Henry Ave & Alley
Wednesday, November 4, 2020
40.110318, -76.509662

File Name : Henry St & Alley - Weekda
Site Code :
Start Date : 11/4/20
Page No : 1

Groups Printed- Lights - Buses - Trucks

	Alley Southbound					W Henry Street Westbound					Private Driveway Northbound					W Henry Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	0	1	0	0	1	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	4
06:15 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	2
06:45 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	1	0	0	1	0	1	5	0	6	0	1	0	0	1	0	0	0	0	0	8
08:15 AM	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	4
03:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
03:15 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
03:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	5
04:00 PM	1	0	0	0	1	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
Total	4	0	0	0	4	0	2	5	0	7	0	0	0	0	0	0	1	0	0	1	12
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	2
05:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	4
Total	1	0	0	0	1	0	2	3	0	5	0	0	0	0	0	0	1	0	0	1	7
Grand Total	6	1	0	0	7	0	5	21	0	26	0	1	0	0	1	0	2	0	0	2	36
Apprch %	85.7	14.3	0	0		0	19.2	80.8	0		0	100	0	0		0	100	0	0		
Total %	16.7	2.8	0	0	19.4	0	13.9	58.3	0	72.2	0	2.8	0	0	2.8	0	5.6	0	0	5.6	
Lights	6	1	0	0	7	0	5	21	0	26	0	1	0	0	1	0	2	0	0	2	36
% Lights	100	100	0	0	100	0	100	100	0	100	0	100	0	0	100	0	100	0	0	100	100
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
Henry Ave & Alley
Wednesday, November 4, 2020
40.110318, -76.509662

File Name : Henry St & Alley - Weekd
Site Code :
Start Date : 11/4/20
Page No : 2

	Alley Southbound					W Henry Street Westbound					Private Driveway Northbound					W Henry Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 12:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:00 AM																					
06:00 AM	0	1	0	0	1	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	4
06:15 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	2
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	1	0	0	1	0	1	5	0	6	0	1	0	0	1	0	0	0	0	0	8
% App. Total	0	100	0	0		0	16.7	83.3	0		0	100	0	0		0	0	0	0		
PHF	.000	.250	.000	.000	.250	.000	.250	.625	.000	.750	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.500
Lights	0	1	0	0	1	0	1	5	0	6	0	1	0	0	1	0	0	0	0	0	8
% Lights	0	100	0	0	100	0	100	100	0	100	0	100	0	0	100	0	0	0	0	0	100
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Analysis From 12:15 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	0	0	0	1	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
Total Volume	4	0	0	0	4	0	2	5	0	7	0	0	0	0	0	0	1	0	0	1	12
% App. Total	100	0	0	0		0	28.6	71.4	0		0	0	0	0		0	100	0	0		
PHF	1.00	.000	.000	.000	1.00	.000	.500	.313	.000	.438	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.600
Lights	4	0	0	0	4	0	2	5	0	7	0	0	0	0	0	0	1	0	0	1	12
% Lights	100	0	0	0	100	0	100	100	0	100	0	0	0	0	0	0	100	0	0	100	100
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
Route 230 & Manheim St
Wednesday, February 24, 2021
40.110532, -76.506829

File Name : Main Street & New Haven - Weekday - 02-24-202:
Site Code :
Start Date : 2/24/21
Page No : 1

Groups Printed- Lights - Buses - Trucks

	Manheim Street Southbound					Main Street Westbound					New Haven Street Northbound					Main Street Eastbound					
Start Time	Left	Thru	Right	Right Turn on Red	App. Total	Left	Thru	Right	Right Turn on Red	App. Total	Left	Thru	Right	Right Turn on Red	App. Total	Left	Thru	Right	Right Turn on Red	App. Total	Int. Total
06:00 AM	0	16	7	1	24	0	18	1	0	19	4	26	1	1	32	16	27	2	0	45	120
06:15 AM	1	20	7	1	29	3	14	0	0	17	7	48	1	2	58	19	47	3	0	69	173
06:30 AM	2	21	9	0	32	2	28	1	0	31	4	55	7	1	67	19	39	0	0	58	188
06:45 AM	1	34	10	0	45	1	25	2	0	28	8	51	2	0	61	35	45	2	0	82	216
Total	4	91	33	2	130	6	85	4	0	95	23	180	11	4	218	89	158	7	0	254	697
07:00 AM	3	28	16	0	47	5	34	2	0	41	3	61	4	0	68	19	45	4	0	68	224
07:15 AM	4	42	21	0	67	2	37	4	0	43	9	64	8	0	81	33	57	2	0	92	283
07:30 AM	2	39	19	0	60	3	48	3	0	54	8	74	7	0	89	10	50	1	0	61	264
07:45 AM	3	35	13	0	51	4	44	2	0	50	10	81	2	0	93	17	43	3	0	63	257
Total	12	144	69	0	225	14	163	11	0	188	30	280	21	0	331	79	195	10	0	284	1028
08:00 AM	2	23	17	0	42	6	57	1	0	64	6	51	6	0	63	20	41	3	0	64	233
08:15 AM	2	18	16	0	36	5	52	2	0	59	12	26	3	0	41	17	66	2	0	85	221
08:30 AM	6	30	26	0	62	2	40	4	1	47	4	35	6	0	45	18	56	3	0	77	231
08:45 AM	3	22	23	0	48	2	50	3	0	55	11	39	7	0	57	12	67	11	0	90	250
Total	13	93	82	0	188	15	199	10	1	225	33	151	22	0	206	67	230	19	0	316	935
09:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
03:00 PM	3	36	20	0	59	7	99	6	0	112	13	61	5	0	79	19	75	11	0	105	355
03:15 PM	2	54	31	0	87	11	93	5	1	110	13	44	5	1	63	9	90	11	0	110	370
03:30 PM	2	58	32	0	92	8	100	2	0	110	12	47	7	0	66	15	79	15	0	109	377
03:45 PM	6	48	29	0	83	8	110	3	0	121	11	46	6	0	63	14	89	11	0	114	381
Total	13	196	112	0	321	34	402	16	1	453	49	198	23	1	271	57	333	48	0	438	1483
04:00 PM	2	58	29	0	89	8	113	3	0	124	14	38	14	0	66	10	89	4	0	103	382
04:15 PM	5	40	36	0	81	4	106	1	0	111	16	43	14	1	74	26	81	15	0	122	388
04:30 PM	1	47	30	0	78	8	103	1	0	112	11	59	13	0	83	20	78	9	0	107	380
04:45 PM	7	48	38	0	93	8	102	3	0	113	11	52	12	0	75	19	75	7	0	101	382
Total	15	193	133	0	341	28	424	8	0	460	52	192	53	1	298	75	323	35	0	433	1532
05:00 PM	5	58	28	0	91	6	89	1	0	96	8	62	5	1	76	13	82	11	0	106	369
05:15 PM	3	55	20	0	78	9	109	1	0	119	16	39	11	2	68	18	88	16	0	122	387
05:30 PM	3	60	21	0	84	11	88	3	0	102	13	36	7	0	56	15	64	17	0	96	338
05:45 PM	4	50	28	0	82	5	82	2	0	89	11	32	7	0	50	9	56	13	0	78	299
Total	15	223	97	0	335	31	368	7	0	406	48	169	30	3	250	55	290	57	0	402	1393
06:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	72	941	526	2	1541	123	1641	56	2	1827	236	1171	160	9	1576	422	1529	176	0	2127	7071
Apprch %	4.7	61.1	34.1	0.1		7	89.8	3.1	0.1		15	74.3	10.2	0.6		19.8	71.9	8.3	0		
Total %	1	13.3	7.4	0	21.8	1.8	23.2	0.8	0	25.8	3.3	16.6	2.3	0.1	22.3	6	21.6	2.5	0	30.1	
Lights	62	900	498	2	1462	126	1579	49	1	1755	228	1128	155	9	1520	403	1490	167	0	2060	6797
% Lights	86.1	95.6	94.7	100	94.9	98.4	96.2	87.5	50	96.1	96.6	96.3	96.9	100	96.4	95.5	97.4	94.9	0	96.9	96.1
Buses	2	8	2	0	12	0	7	1	0	8	5	10	1	0	16	0	9	7	0	16	52
% Buses	2.8	0.9	0.4	0	0.8	0	0.4	1.8	0	0.4	2.1	0.9	0.6	0	1	0	0.6	4	0	0.8	0.7
Trucks	8	33	26	0	67	2	55	6	1	64	3	33	4	0	40	19	30	2	0	51	222
% Trucks	11.1	3.5	4.9	0	4.3	1.6	3.4	10.7	50	3.5	1.3	2.8	2.5	0	2.5	4.5	2	1.1	0	2.4	3.1

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
Route 230 & Manheim St
Wednesday, February 24, 2021
40.110532, -76.506829

File Name : Main Street & New Haven - Weekday - 02-24-20
Site Code :
Start Date : 2/24/21
Page No : 2

	Manheim Street Southbound					Main Street Westbound					New Haven Street Northbound					Main Street Eastbound					
Start Time	Left	Thru	Right	Right Turn on Red	App. Total	Left	Thru	Right	Right Turn on Red	App. Total	Left	Thru	Right	Right Turn on Red	App. Total	Left	Thru	Right	Right Turn on Red	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	4	42	21	0	67	2	37	4	0	43	9	64	8	0	81	33	57	2	0	92	283
07:30 AM	2	39	19	0	60	3	48	3	0	54	8	74	7	0	89	10	50	1	0	61	264
07:45 AM	3	35	13	0	51	4	44	2	0	50	10	81	2	0	93	17	43	3	0	63	257
08:00 AM	2	23	17	0	42	6	57	1	0	64	6	51	6	0	63	20	41	3	0	64	233
Total Volume	11	139	70	0	220	15	186	10	0	211	33	270	23	0	326	80	191	9	0	280	1037
% App. Total	5	63.2	31.8	0		7.1	88.2	4.7	0		10.1	82.8	7.1	0		28.6	68.2	3.2	0		
PHF	.688	.827	.833	.000	.821	.625	.816	.625	.000	.824	.825	.833	.719	.000	.876	.606	.838	.750	.000	.761	.916
Lights	9	127	64	0	200	15	178	8	0	201	30	262	23	0	315	76	176	8	0	260	976
% Lights	81.8	91.4	91.4	0	90.9	100	95.7	80.0	0	95.3	90.9	97.0	100	0	96.6	95.0	92.1	88.9	0	92.9	94.1
Buses	1	1	1	0	3	0	0	0	0	0	2	4	0	0	6	0	5	1	0	6	15
% Buses	9.1	0.7	1.4	0	1.4	0	0	0	0	0	6.1	1.5	0	0	1.8	0	2.6	11.1	0	2.1	1.4
Trucks	1	11	5	0	17	0	8	2	0	10	1	4	0	0	5	4	10	0	0	14	46
% Trucks	9.1	7.9	7.1	0	7.7	0	4.3	20.0	0	4.7	3.0	1.5	0	0	1.5	5.0	5.2	0	0	5.0	4.4
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	2	58	29	0	89	8	113	3	0	124	14	38	14	0	66	10	89	4	0	103	382
04:15 PM	5	40	36	0	81	4	106	1	0	111	16	43	14	1	74	26	81	15	0	122	388
04:30 PM	1	47	30	0	78	8	103	1	0	112	11	59	13	0	83	20	78	9	0	107	380
04:45 PM	7	48	38	0	93	8	102	3	0	113	11	52	12	0	75	19	75	7	0	101	382
Total Volume	15	193	133	0	341	28	424	8	0	460	52	192	53	1	298	75	323	35	0	433	1532
% App Total	4.4	56.6	39	0		6.1	92.2	1.7	0		17.4	64.4	17.8	0.3		17.3	74.6	8.1	0		
PHF	.536	.832	.875	.000	.917	.875	.938	.667	.000	.927	.813	.814	.946	.250	.898	.721	.907	.583	.000	.887	.987
Lights	15	189	130	0	334	27	411	8	0	446	51	187	52	1	291	74	318	35	0	427	1498
% Lights	100	97.9	97.7	0	97.9	96.4	96.9	100	0	97.0	98.1	97.4	98.1	100	97.7	98.7	98.5	100	0	98.6	97.8
Buses	0	0	1	0	1	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	5
% Buses	0	0	0.8	0	0.3	0	0.5	0	0	0.4	1.9	0	0	0	0.3	0	0.3	0	0	0.2	0.3
Trucks	0	4	2	0	6	1	11	0	0	12	0	5	1	0	6	1	4	0	0	5	29
% Trucks	0	2.1	1.5	0	1.8	3.6	2.6	0	0	2.6	0	2.6	1.9	0	2.0	1.3	1.2	0	0	1.2	1.9

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
New Haven St & Henry St
Wednesday, February 24, 2021
40.109853, -76.507167

File Name : New Haven & Henry - Weekday - 02-24-202:
Site Code :
Start Date : 2/24/21
Page No : 1

Groups Printed- Lights - Buses - Trucks

	New Haven Street Southbound					Henry Street Westbound					New Haven Street Northbound					Henry Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	1	15	0	0	16	0	0	0	0	0	0	35	0	0	35	0	0	0	0	0	51
06:15 AM	1	25	1	0	27	0	0	1	0	1	0	56	1	0	57	0	0	0	0	0	85
06:30 AM	0	22	0	0	22	0	0	2	0	2	0	64	0	0	64	1	0	1	0	2	90
06:45 AM	2	36	0	0	38	1	0	0	0	1	1	58	1	0	60	1	0	0	0	1	100
Total	4	98	1	0	103	1	0	3	0	4	1	213	2	0	216	2	0	1	0	3	326
07:00 AM	0	34	1	0	35	0	0	0	0	0	0	65	2	0	67	2	0	1	0	3	105
07:15 AM	0	47	0	0	47	1	0	3	0	4	1	79	0	0	80	0	0	0	0	0	131
07:30 AM	0	41	1	0	42	1	0	0	0	1	0	91	3	0	94	0	0	4	0	4	141
07:45 AM	1	42	0	0	43	0	0	1	0	1	0	88	3	0	91	0	0	0	0	0	135
Total	1	164	2	0	167	2	0	4	0	6	1	323	8	0	332	2	0	5	0	7	512
08:00 AM	0	29	0	0	29	0	0	2	0	2	0	62	0	0	62	0	1	0	0	1	94
08:15 AM	2	23	1	0	26	2	1	2	0	5	0	39	1	0	40	0	0	1	0	1	72
08:30 AM	0	35	1	0	36	0	0	0	0	0	1	44	1	0	46	2	1	2	0	5	87
08:45 AM	3	34	0	0	37	0	2	0	0	2	1	60	2	0	63	1	0	2	0	3	105
Total	5	121	2	0	128	2	3	4	0	9	2	205	4	0	211	3	2	5	0	10	358
03:00 PM	1	46	4	0	51	1	0	3	0	4	1	76	1	0	78	2	0	5	0	7	140
03:15 PM	2	71	2	0	75	2	1	3	0	6	4	61	6	0	71	3	1	5	0	9	161
03:30 PM	3	72	2	0	77	1	0	2	0	3	0	64	3	0	67	1	0	4	0	5	152
03:45 PM	1	62	0	0	63	0	1	1	0	2	2	62	3	0	67	4	0	2	0	6	138
Total	7	251	8	0	266	4	2	9	0	15	7	263	13	0	283	10	1	16	0	27	591
04:00 PM	3	61	3	0	67	5	3	2	0	10	1	60	0	0	61	2	0	3	0	5	143
04:15 PM	3	61	0	0	64	1	1	3	0	5	1	68	1	0	70	4	0	4	0	8	147
04:30 PM	7	52	2	0	61	2	1	1	0	4	4	77	2	0	83	3	1	4	0	8	156
04:45 PM	6	59	1	0	66	5	0	3	0	8	1	67	2	0	70	4	1	4	0	9	153
Total	19	233	6	0	258	13	5	9	0	27	7	272	5	0	284	13	2	15	0	30	599
05:00 PM	3	66	1	0	70	3	1	4	0	8	1	71	1	0	73	3	2	2	0	7	158
05:15 PM	3	73	2	0	78	5	0	4	0	9	3	59	2	0	64	3	0	1	0	4	155
05:30 PM	4	85	2	0	91	2	1	4	0	7	2	50	4	0	56	0	0	0	0	0	154
05:45 PM	7	56	2	0	65	0	0	4	0	4	0	42	3	0	45	2	0	2	0	4	118
Total	17	280	7	0	304	10	2	16	0	28	6	222	10	0	238	8	2	5	0	15	585
06:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	53	1148	26	0	1227	32	12	45	0	89	24	1498	42	0	1564	38	7	47	0	92	2972
Apprch %	4.3	93.6	2.1	0		36	13.5	50.6	0		1.5	95.8	2.7	0		41.3	7.6	51.1	0		
Total %	1.8	38.6	0.9	0	41.3	1.1	0.4	1.5	0	3	0.8	50.4	1.4	0	52.6	1.3	0.2	1.6	0	3.1	
Lights	53	1099	26	0	1178	31	12	44	0	87	24	1446	42	0	1512	37	7	47	0	91	2868
% Lights	100	95.7	100	0	96	96.9	100	97.8	0	97.8	100	96.5	100	0	96.7	97.4	100	100	0	98.9	96.5
Buses	0	15	0	0	15	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	32
% Buses	0	1.3	0	0	1.2	0	0	0	0	0	0	1.1	0	0	1.1	0	0	0	0	0	1.1
Trucks	0	34	0	0	34	1	0	1	0	2	0	35	0	0	35	1	0	0	0	1	72
% Trucks	0	3	0	0	2.8	3.1	0	2.2	0	2.2	0	2.3	0	0	2.2	2.6	0	0	0	1.1	2.4

RETTEW Associates, Inc.
3020 Columbia Avenue
Lancaster, PA 17603
We Answer to you...

Lancaster County, PA
New Haven St & Henry St
Wednesday, February 24, 2021
40.109853, -76.507167

File Name : New Haven & Henry - Weekday - 02-24-202
Site Code :
Start Date : 2/24/21
Page No : 2

	New Haven Street Southbound					Henry Street Westbound					New Haven Street Northbound					Henry Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 12:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	34	1	0	35	0	0	0	0	0	0	65	2	0	67	2	0	1	0	3	105
07:15 AM	0	47	0	0	47	1	0	3	0	4	1	79	0	0	80	0	0	0	0	0	131
07:30 AM	0	41	1	0	42	1	0	0	0	1	0	91	3	0	94	0	0	4	0	4	141
07:45 AM	1	42	0	0	43	0	0	1	0	1	0	88	3	0	91	0	0	0	0	0	135
Total Volume	1	164	2	0	167	2	0	4	0	6	1	323	8	0	332	2	0	5	0	7	512
% App. Total	0.6	98.2	1.2	0		33.3	0	66.7	0		0.3	97.3	2.4	0		28.6	0	71.4	0		
PHF	.250	.872	.500	.000	.888	.500	.000	.333	.000	.375	.250	.887	.667	.000	.883	.250	.000	.313	.000	.438	.908
Lights	1	151	2	0	154	2	0	4	0	6	1	313	8	0	322	2	0	5	0	7	489
% Lights	100	92.1	100	0	92.2	100	0	100	0	100	100	96.9	100	0	97.0	100	0	100	0	100	95.5
Buses	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
% Buses	0	1.8	0	0	1.8	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	1.6
Trucks	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	15
% Trucks	0	6.1	0	0	6.0	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	2.9
Peak Hour Analysis From 12:15 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	7	52	2	0	61	2	1	1	0	4	4	77	2	0	83	3	1	4	0	8	156
04:45 PM	6	59	1	0	66	5	0	3	0	8	1	67	2	0	70	4	1	4	0	9	153
05:00 PM	3	66	1	0	70	3	1	4	0	8	1	71	1	0	73	3	2	2	0	7	158
05:15 PM	3	73	2	0	78	5	0	4	0	9	3	59	2	0	64	3	0	1	0	4	155
Total Volume	19	250	6	0	275	15	2	12	0	29	9	274	7	0	290	13	4	11	0	28	622
% App. Total	6.9	90.9	2.2	0		51.7	6.9	41.4	0		3.1	94.5	2.4	0		46.4	14.3	39.3	0		
PHF	.679	.856	.750	.000	.881	.750	.500	.750	.000	.806	.563	.890	.875	.000	.873	.813	.500	.688	.000	.778	.984
Lights	19	248	6	0	273	15	2	12	0	29	9	268	7	0	284	13	4	11	0	28	614
% Lights	100	99.2	100	0	99.3	100	100	100	0	100	100	97.8	100	0	97.9	100	100	100	0	100	98.7
Buses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Buses	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0.3	0	0	0	0	0	0.2
Trucks	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
% Trucks	0	0.8	0	0	0.7	0	0	0	0	0	0	1.8	0	0	1.7	0	0	0	0	0	1.1

PennDOT Crash Summary

Date Range: 01/01/2015 to 12/31/2019

USER ID / QUERY ID:
b-joschick / 0320201109151

MONTH OF YEAR

	MAR	SEP	TOTAL
CRASHES	1	1	2
PCT	50%	50%	100%

DAY OF WEEK

	THR	FRI	TOTAL
CRASHES	1	1	2
PCT	50%	50%	100%

HOUR OF DAY

	04	16	TOTAL
CRASHES	1	1	2
PCT	50%	50%	100%

YEAR

	CRASHES	PCT
2016	1	50%
2018	1	50%
TOTAL	2	100%

COLLISION TYPE

	CRASHES	PCT
REAR END	1	50%
SAME DIR SS	1	50%
TOTAL	2	100%

CRASH SEVERITY LEVEL

	CRASHES	PCT
SUSP SERIOUS	1	50%
PDO	1	50%
TOTAL	2	100%

SEVERITY COUNT

	PERSONS
FATALITIES	0
SUSPECTED SERIOUS	1
SUSPECTED MINOR	0
POSSIBLE INJURY	0
UNK SEVERITY	0
UNK IF INJURED	0

DRIVER ACTIONS

	ACTIONS	PCT
AFFECTED PHYSICAL COND	2	40%
NO CONTRIBUTING ACTION	2	40%
TAILGATING	1	20%
TOTAL	5	100%

VEHICLE TYPE

	VEHICLES	PCT
AUTOMOBILE	3	75%
SUV	1	25%
TOTAL	4	100%

ROAD CONDITION

	CRASHES	PCT
DRY	1	50%
WET	1	50%
TOTAL	2	100%

ILLUMINATION

	CRASHES	PCT
DAYLIGHT	1	50%
STREET LIGHTS	1	50%
TOTAL	2	100%

WEATHER

	CRASHES	PCT
CLEAR	1	50%
RAIN	1	50%
TOTAL	2	100%

ENVIR/ROADWAY FACTORS

	FACTORS	PCT
NONE	2	100%
TOTAL	2	100%

Date Range: 01/01/2015 to 12/31/2019*

CRASH SEVERITY LEVEL BY YEAR

	2016 CRASHES	2018 CRASHES	ALL YEARS CRASHES
SUSPECTED SERIOUS INJURY	0	1	1
PROPERTY DMG ONLY	1	0	1
TOTAL	1	1	2

CRASH DESCRIPTION TYPES BY YEAR

	2016 CRASHES	2018 CRASHES	ALL YEARS CRASHES
REAR END	0	1	1
SAME DIRECTION SIDESWIPE	1	0	1
TOTAL	1	1	2

PERSON INJURY SUMMARY BY YEAR

	2016 PERSONS	2018 PERSONS	ALL YEARS PERSONS
FATALITIES	0	0	0
SUSPECTED SERIOUS INJURIES	0	1	1
SUSPECTED MINOR INJURIES	0	0	0
POSSIBLE INJURIES	0	0	0
UNKNOWN SEVERITY	0	0	0
UNKNOWN IF INJURED	0	0	0

* **PLEASE NOTE: Years which do not appear in the report contain zero crashes for this request.**
* Complete records of reportable crashes are available in PCIT for the following years: 2000 - 2019
* Crash information for 2020 is incomplete at the time of this printing. As such, data for 2020 is not included in this report.

Print Date: 11/09/2020

Crash Investigation

Sorted by County, Route, Segment, Offset

Date Range: 01/01/2015 to 12/31/2019

USER ID / QUERY ID:
b-joschick / 0320201109149

	CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
1	2016113699	36	09/29/2016	THR	04:24	STREET LT	WET	RAIN	0	0	0	3	PROP DMG ONLY

ENV RDWY FACTORS: NONE
MIDB 0230/0220/0651 SAME DIR SIDESW

VEH: 1 SUV TRAVELING EAST IN RIGHT LANE GOING STRAIGHT
VEH EVENTS: HIT UNIT 02 HIT UNIT 03 ALC TEST: 95
DVR ACTIONS: AFFECTED BY PHYSICAL COND

	CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
2	2018026230	36	03/02/2018	FRI	16:44	DAYLIGHT	DRY	CLEAR	0	1	0	3	SUSPECTED SERIOUS INJURY REAR-END

ENV RDWY FACTORS: NONE
MIDB 0230/0220/1005

VEH: 1 AUTOMOBILE TRAVELING EAST IN RIGHT LANE SLOWING OR STOPPING IN LANE
VEH EVENTS: HIT UNIT 02 HIT OTHER FIXED OBJECT HIT OTHER FIXED OBJECT
DVR ACTIONS: AFFECTED BY PHYSICAL COND TAILGATING

VEH: 2 AUTOMOBILE TRAVELING EAST IN RIGHT LANE SLOWING OR STOPPING IN LANE
VEH EVENTS: STRUCK BY UNIT 01 HIT UNIT 03
DVR ACTIONS: NO CONTRIBUTING ACTION

VEH: 3 AUTOMOBILE TRAVELING EAST IN RIGHT LANE SLOWING OR STOPPING IN LANE
VEH EVENTS: STRUCK BY UNIT 02
DVR ACTIONS: NO CONTRIBUTING ACTION

Crash Investigation

Sorted by County, Route, Segment, Offset

NOTES:

1 Injury Severity Disclaimer
Please note that beginning January 1, 2016, PennDOT adopted the Federal standard for collecting injury severity data. The field descriptions and definitions changed from the state standard that had been in use for decades. This resulted in a substantial shift in severity levels. Therefore, comparison of the "Suspected Serious Injury", "Suspected Minor Injury" and "Possible Injury" categories will not be consistent for crashes taking place before versus after the adoption of the new standard.

REPORT PARAMETERS:

Query ID: 0320201109149

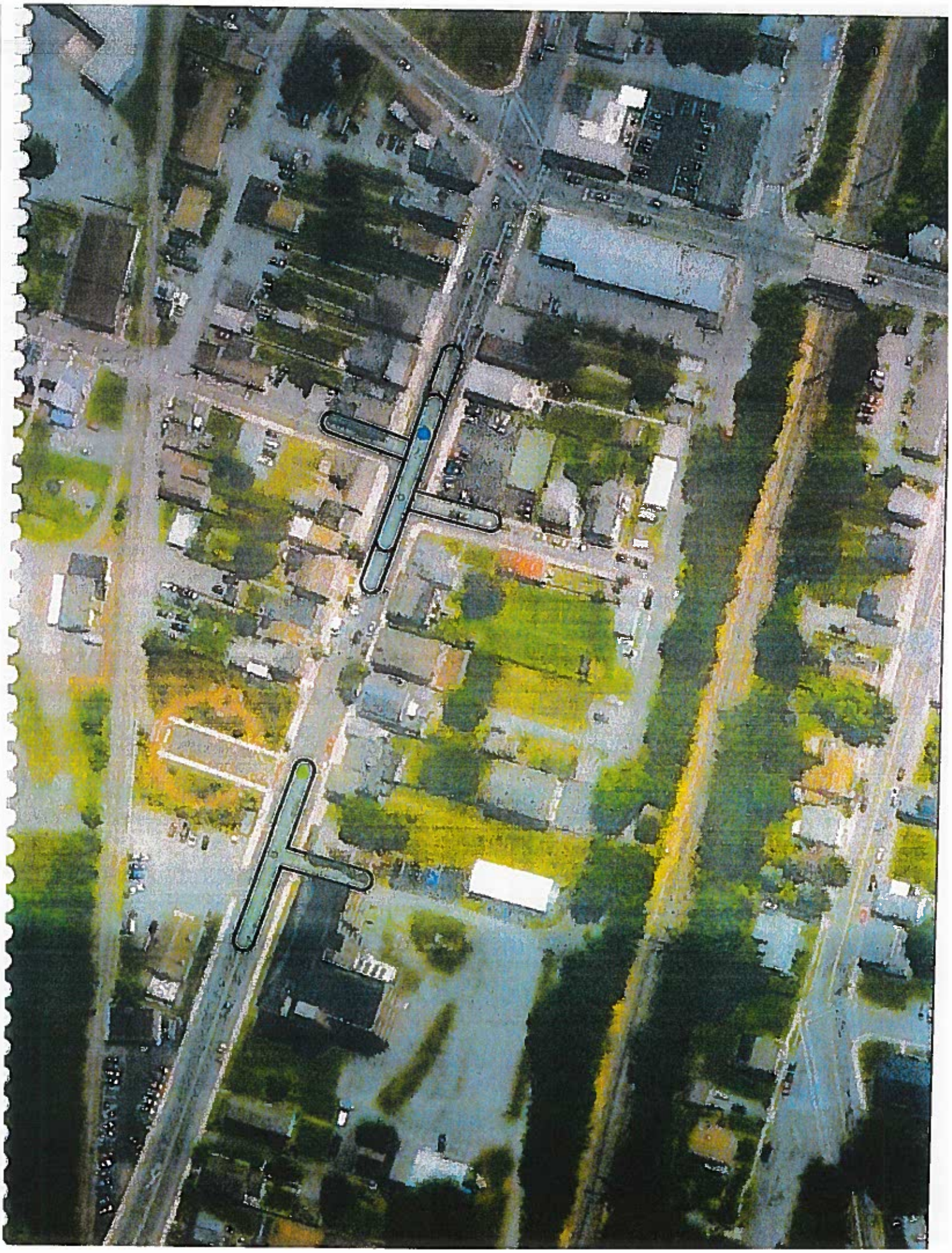
User ID: b-joschick

Title: Crash Investigation

Date Range: 01/01/2015 to 12/31/2019

Selected Shapes: W MAIN ST x NO NAME AL - Buffer (100 Feet),W MAIN ST x NO NAME AL,W MAIN ST x LUMBER ST - Buffer (100 Feet).W MAIN ST x LUMBER ST.W MAIN ST x FAIRVIEW ST - Buffer (100 Feet).W

Filter Characteristics:



Crash Analysis - Addendum

Date Range: 01/01/2015 to 12/31/2019

USER ID / QUERY ID:
b-joschick / *0320210311221*

MONTH OF YEAR

	JAN	FEB	MAR	MAY	JUL	SEP	TOTAL
CRASHES	1	2	1	1	1	1	7
PCT	14%	29%	14%	14%	14%	14%	100%

DAY OF WEEK

	SUN	MON	THR	FRI	TOTAL
CRASHES	1	3	1	2	7
PCT	14%	43%	14%	29%	100%

HOUR OF DAY

	01	12	14	16	17	TOTAL
CRASHES	2	1	1	1	2	7
PCT	29%	14%	14%	14%	29%	100%

YEAR

	CRASHES	PCT
2015	2	29%
2016	3	43%
2017	1	14%
2019	1	14%
TOTAL	7	100%

COLLISION TYPE

	CRASHES	PCT
ANGLE	4	57%
HIT FIX OBJ	2	29%
REAR END	1	14%
TOTAL	7	100%

CRASH SEVERITY LEVEL

	CRASHES	PCT
POSSIBLE INJURY	2	29%
PDO	5	71%
TOTAL	7	100%

SEVERITY COUNT

	PERSONS
FATALITIES	0
SUSPECTED SERIOUS	0
SUSPECTED MINOR	0
POSSIBLE INJURY	2
UNK SEVERITY	0
UNK IF INJURED	0

DRIVER ACTIONS

	ACTIONS	PCT
IMPROPER/CARELESS TURN	4	27%
NO CONTRIBUTING ACTION	4	27%
SUDDEN SLOWING/STOP	2	13%
RUNNING RED LIGHT	1	7%
SPEEDING	1	7%
TAILGATING	1	7%
TOO FAST FOR CONDITION	1	7%
TURN FROM WRONG LANE	1	7%
TOTAL	15	100%

VEHICLE TYPE

	VEHICLES	PCT
AUTOMOBILE	7	58%
SMALL TRUCK	2	17%
SUV	2	17%
LARGE TRUCK	1	8%
TOTAL	12	100%

ROAD CONDITION

	CRASHES	PCT
DRY	6	86%
WET	1	14%
TOTAL	7	100%

ILLUMINATION

	CRASHES	PCT
DAYLIGHT	5	71%
STREET LIGHTS	2	29%
TOTAL	7	100%

WEATHER

	CRASHES	PCT
CLEAR	6	86%
RAIN	1	14%
TOTAL	7	100%

ENVIR/ROADWAY FACTORS

	FACTORS	PCT
NONE	6	86%
SLIPPERY ICE/SNOW	1	14%
TOTAL	7	100%

Date Range: 01/01/2015 to 12/31/2019*

CRASH SEVERITY LEVEL BY YEAR

	2015 CRASHES	2016 CRASHES	2017 CRASHES	2019 CRASHES	ALL YEARS CRASHES
POSSIBLE INJURY	1	1	0	0	2
PROPERTY DMG ONLY	1	2	1	1	5
TOTAL	2	3	1	1	7

CRASH DESCRIPTION TYPES BY YEAR

	2015 CRASHES	2016 CRASHES	2017 CRASHES	2019 CRASHES	ALL YEARS CRASHES
ANGLE	2	2	0	0	4
HIT FIXED OBJECT	0	1	1	0	2
REAR END	0	0	0	1	1
TOTAL	2	3	1	1	7

PERSON INJURY SUMMARY BY YEAR

	2015 PERSONS	2016 PERSONS	2017 PERSONS	2019 PERSONS	ALL YEARS PERSONS
FATALITIES	0	0	0	0	0
SUSPECTED SERIOUS INJURIES	0	0	0	0	0
SUSPECTED MINOR INJURIES	0	0	0	0	0
POSSIBLE INJURIES	1	1	0	0	2
UNKNOWN SEVERITY	0	0	0	0	0
UNKNOWN IF INJURED	0	0	0	0	0

*** PLEASE NOTE: Years which do not appear in the report contain zero crashes for this request.**

* Complete records of reportable crashes are available in PCIT for the following years: 2000 - 2019
* Crash information for 2020 to 2021 is incomplete at the time of this printing. As such, data for 2020 to 2021 is not included in this report.

Print Date: 03/11/2021

Crash Analysis - Addendum

Sorted by County, Route, Segment, Offset

Date Range: 01/01/2015 to 12/31/2019

USER ID / QUERY ID:
b-joschick / 0320210311222

CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
2016090524	36	07/25/2016	MON	01:02	STREET LT	DRY	CLEAR	0	0	0	2	PROP DMG ONLY

ENV RDWY FACTORS: NONE — ANGLE
4WAY 0230/0220/1255 0230/0230/0000 0772/0110/0000 4002/0160/1944 UNNAMED AL

VEH: 1 SMALL TRUCK TRAVELING WEST IN RIGHT LANE GOING STRAIGHT
VEH EVENTS: HIT UNIT 02
DVR ACTIONS: NO CONTRIBUTING ACTION

VEH: 2 AUTOMOBILE TRAVELING EAST IN LEFT TURN LANE TURNING LEFT
VEH EVENTS: STRUCK BY UNIT 01
DVR ACTIONS: IMPROPER/CARELESS TURN

CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
2016090525	36	09/02/2016	FRI	17:07	DAYLIGHT	DRY	CLEAR	0	0	0	2	PROP DMG ONLY

ENV RDWY FACTORS: NONE — ANGLE
4WAY 0230/0220/1255 0230/0230/0000 0772/0110/0000 4002/0160/1944 UNNAMED AL

VEH: 1 AUTOMOBILE TRAVELING WEST IN RIGHT LANE TURNING LEFT
VEH EVENTS: HIT UNIT 02
DVR ACTIONS: IMPROPER/CARELESS TURN

VEH: 2 AUTOMOBILE TRAVELING EAST IN RIGHT LANE GOING STRAIGHT
VEH EVENTS: STRUCK BY UNIT 01
DVR ACTIONS: NO CONTRIBUTING ACTION

CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
2015033469	36	02/19/2015	THR	12:39	DAYLIGHT	DRY	CLEAR	0	1	0	2	POSSIBLE INJURY

ENV RDWY FACTORS: NONE — ANGLE
4WAY 0230/0230/0000 0772/0110/0000 4002/0160/1944

VEH: 1 SUV TRAVELING EAST IN RIGHT LANE GOING STRAIGHT
VEH EVENTS: HIT UNIT 02 HIT BUILDING
DVR ACTIONS: RUNNING RED LIGHT

VEH: 2 SMALL TRUCK TRAVELING SOUTH IN RIGHT LANE GOING STRAIGHT
VEH EVENTS: STRUCK BY UNIT 01
DVR ACTIONS: NO CONTRIBUTING ACTION

CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
2015048507	36	05/04/2015	MON	14:52	DAYLIGHT	DRY	CLEAR	0	0	0	2	PROP DMG ONLY

ENV RDWY FACTORS: NONE — ANGLE
4WAY 0230/0230/0000 0772/0110/0000 4002/0160/1944

VEH: 1 AUTOMOBILE TRAVELING EAST IN LEFT TURN LANE TURNING LEFT
VEH EVENTS: STRUCK BY UNIT 02
DVR ACTIONS: NO CONTRIBUTING ACTION

VEH: 2 LARGE TRUCK TRAVELING EAST IN RIGHT LANE TURNING LEFT
VEH EVENTS: HIT UNIT 01
DVR ACTIONS: TURNING FROM WRONG LANE

CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
2017022239	36	02/24/2017	FRI	17:21	DAYLIGHT	DRY	CLEAR	0	0	0	1	PROP DMG ONLY

ENV RDWY FACTORS: NONE — HIT FIXED OBJ
4WAY 0230/0230/0000 0772/0110/0000 4002/0160/1944

VEH: 1 AUTOMOBILE TRAVELING SOUTH IN LEFT TURN LANE TURNING LEFT
VEH EVENTS: HIT OTHER FIXED OBJECT
DVR ACTIONS: IMPROPER/CARELESS TURN TOO FAST FOR CONDITIONS

Crash Analysis - Addendum

Sorted by County, Route, Segment, Offset

Date Range: 01/01/2015 to 12/31/2019

USER ID / QUERY ID:
b-joschick / *0320210311222*

	CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
3	2019033247	36	03/25/2019	MON	16:18	DAYLIGHT	WET	RAIN	0	0	0	2	PROP DMG ONLY

ENV RDWY FACTORS: SLIPPERY ROAD (ICE/SNOW)
4WAY 0230/0230/0000 0772/0110/0000 4002/0160/1944 REAR-END

VEH: 1 AUTOMOBILE TRAVELING NORTH IN RIGHT LANE SLOWING OR STOPPING IN LANE
VEH EVENTS: HIT UNIT 02
DVR ACTIONS: SUDDEN SLOWING / STOPPING TAILGATING

VEH: 2 SUV TRAVELING NORTH IN RIGHT LANE SLOWING OR STOPPING IN LANE
VEH EVENTS: STRUCK BY UNIT 01
DVR ACTIONS: SUDDEN SLOWING / STOPPING

	CRN	CO	DATE	DAY	TIME	LIGHTING	ROAD SURF	WEATHER	FAT	INJ	PED	VEH	MAX SEVERITY
7	2016008428	36	01/17/2016	SUN	01:48	STREET LT	DRY	CLEAR	0	1	0	1	POSSIBLE INJURY

ENV RDWY FACTORS: NONE
MIDB NEW HAVEN ST HIT FIXED OBJ

VEH: 1 AUTOMOBILE TRAVELING SOUTH IN RIGHT LANE TURNING LEFT ALC TEST: 95
VEH EVENTS: HIT UTILITY POLE OVERTURN/ROLL OVER
DVR ACTIONS: SPEEDING IMPROPER/CARELESS TURN

Crash Analysis - Addendum

Sorted by County, Route, Segment, Offset

NOTES:

1 Injury Severity Disclaimer
Please note that beginning January 1, 2016, PennDOT adopted the Federal standard for collecting injury severity data. The field descriptions and definitions changed from the state standard that had been in use for decades. This resulted in a substantial shift in severity levels. Therefore, comparison of the "Suspected Serious Injury", "Suspected Minor Injury" and "Possible Injury" categories will not be consistent for crashes taking place before versus after the adoption of the new standard.

REPORT PARAMETERS:

Query ID: 0320210311222

User ID: b-joschick

Title: Crash Analysis - Addendum

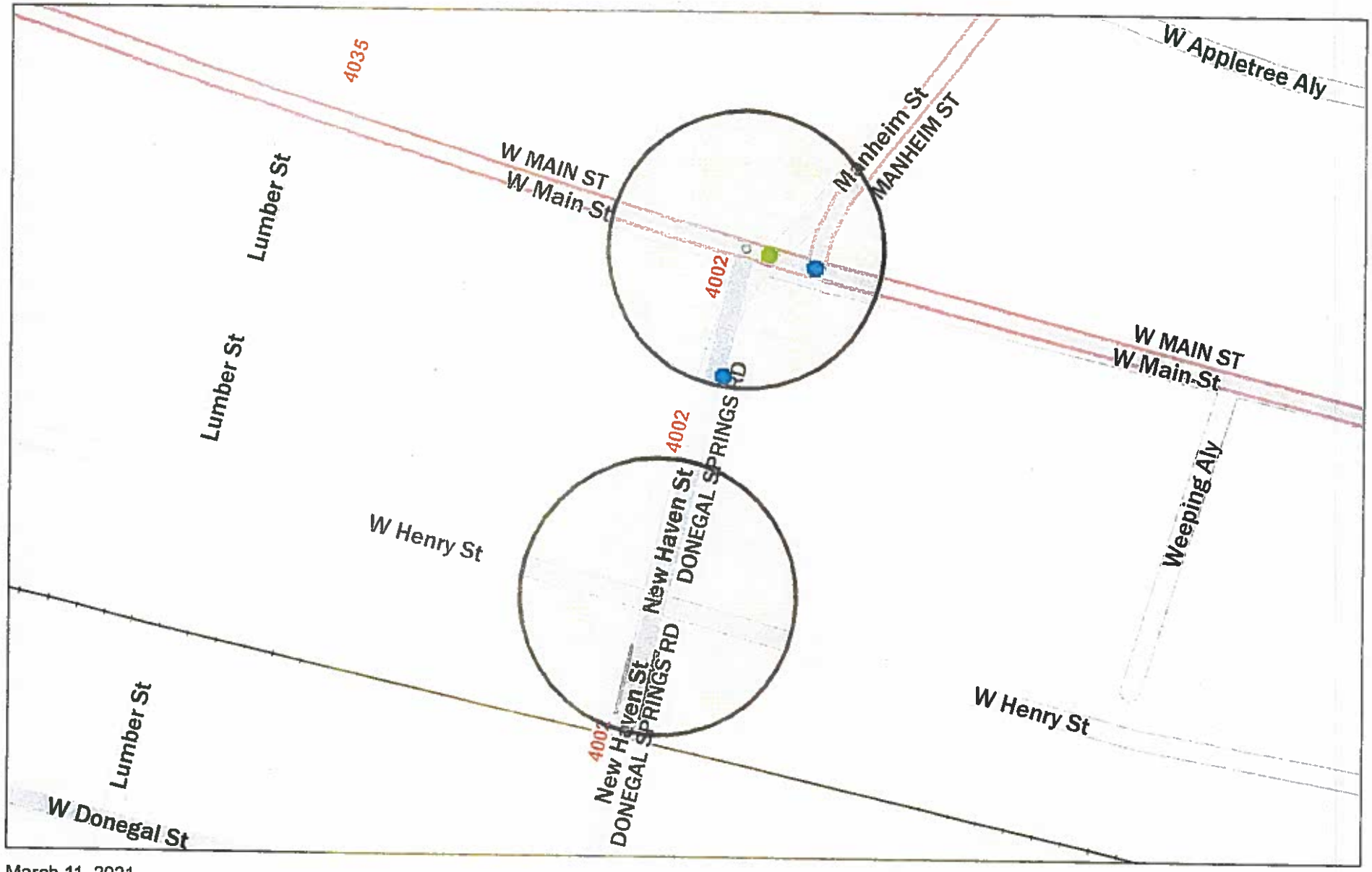
Date Range: 01/01/2015 to 12/31/2019

Selected Shapes: DONEGAL SPRINGS RD x HENRY STREET - Buffer (100 Feet),DONEGAL SPRINGS RD x HENRY STREET.W MAIN ST x DONEGAL SPRINGS RD - Buffer (100 Feet).W MAIN ST x DONEGAL

Filter Characteristics:

pennsylvania
DEPARTMENT OF TRANSPORTATION

Crash Map



March 11, 2021

- Fatal Injury
- Injury Crash
- Unknown
- Property damage Only
- County
- DONEGAL SPRINGS RD x HENRY STREET - Buffer (100 Feet)
- DONEGAL SPRINGS RD x HENRY STREET
- W MAIN ST x DONEGAL SPRINGS RD - Buffer (100 Feet)
- W MAIN ST x DONEGAL SPRINGS RD

1:1,571

0 70 140 280 ft

0 20 40 80 m

RETTEW Associates, Inc.
PennDOT

Trip Generation Program

Gerberich Payne Shoe Company

Scenario Name: 2021-03-09 Scenario
User Group:
Dev. phase:
No. of Years to Project Traffic:
Analyst Note:
Warning:

VEHICLE TRIPS

Land Use & Data Source	Location	IV	Size	Time Period	Method / Rate/Equation	Entry Split%	Exit Split%	Total
252 - Senior Adult Housing - Attached Data Source: Trip Gen Manual, 10th Ed + Supplement	General Urban/Suburban	Dwelling Units	36	Weekday	Best Fit (LIN)	60	60	120
					T = 4.02(X) - 25.37	50%	50%	
		Dwelling Units	36	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Best Fit (LIN)	2	5	7
					T = 0.20(X) - 0.18	35%	65%	
		Dwelling Units	36	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LIN)	6	5	11
					T = 0.24(X) + 2.26	55%	45%	
720 - Medical-Dental Office Building Data Source: Trip Gen Manual, 10th Ed + Supplement	General Urban/Suburban	1000 Sq. Ft. GFA	3	Weekday	Best Fit (LIN)	14	14	28
					T = 38.42(X) - 87.62	50%	50%	
		1000 Sq. Ft. GFA	3	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Best Fit (LOG)	8	2	10
					Ln(T) =0.89Ln(X) + 1.31	78%	22%	
		1000 Sq. Ft. GFA	3	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LIN)	3	9	12
					T = 3.39(X) + 2.02	28%	72%	
820 - Shopping Center Data Source: Trip Gen Manual, 10th Ed + Supplement	General Urban/Suburban	1000 Sq. Ft. GLA	3	Weekday	Average	57	57	114
					37.75	50%	50%	
		1000 Sq. Ft. GLA	3	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average	2	1	3
					0.94	62%	38%	
		1000 Sq. Ft. GLA	3	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average	5	6	11
					3.81	48%	52%	

Capacity Analyses Printouts

Existing Conditions Capacity Analyses
Printouts

Intersection Level Of Service Report
Intersection 1: Main Street, Lumber Street, and Fairview Street

Control Type:	Two-way stop	Delay (sec / veh):	16.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			25.00			25.00		
Grade [%]	0.00			2.20			2.00			-2.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Base Volume Input [veh/h]	0	0	0	7	0	17	15	304	0	1	265	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	28.60	0.00	5.90	0.00	8.90	0.00	0.00	9.80	25.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	7	0	17	15	304	0	1	265	8
Peak Hour Factor	1.000	1.000	1.000	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	2	0	5	4	81	0	0	71	2
Total Analysis Volume [veh/h]	0	0	0	7	0	18	16	325	0	1	283	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	16.65	15.42	10.26	7.85	0.00	0.00	7.89	0.00	0.00
Movement LOS				C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.15	0.15	0.15	0.04	0.04	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	3.67	3.67	3.67	0.95	0.95	0.95	0.06	0.06	0.06
d_A, Approach Delay [s/veh]	0.00			12.05			0.37			0.03		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	0.66											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Henry Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Alley		Henry Street		Henry Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	9.00	9.00	9.00	9.00	9.00	9.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		15.00		15.00	
Grade [%]	5.00		0.07		-0.07	
Crosswalk	No		No		No	

Volumes

Name	Alley		Henry Street		Henry Street	
Base Volume Input [veh/h]	0	1	0	0	1	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	0	1	5
Peak Hour Factor	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	0	1	3
Total Analysis Volume [veh/h]	0	2	0	0	2	10
Pedestrian Volume [ped/h]						

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.54	8.34	7.22	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.14	0.14	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.34		3.61		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.19					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Main Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Alley		Main Street		Main Street	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	9.00	9.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		25.00		25.00	
Grade [%]	-5.00		2.00		-2.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Alley		Main Street		Main Street	
Base Volume Input [veh/h]	0	3	301	2	1	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	9.00	0.00	10.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	301	2	1	260
Peak Hour Factor	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	83	1	0	72
Total Analysis Volume [veh/h]	0	3	333	2	1	288
Pedestrian Volume [ped/h]	0				0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.72	9.84	0.00	0.00	8.05	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.30	0.30	0.00	0.00	0.06	0.06
d_A, Approach Delay [s/veh]	9.84		0.00		0.03	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.06					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Main Street, Manheim Street, and New Haven Street

Control Type:	Signalized	Delay (sec / veh):	48.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.493

Intersection Setup

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	35.00	100.0	100.0	100.0	100.0	100.0	107.0	100.0	100.0	90.00	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			25.00			25.00		
Grade [%]	-3.00			-2.67			1.10			1.70		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Base Volume Input [veh/h]	33	270	23	11	139	70	80	191	9	15	186	10
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	9.10	3.00	0.00	18.20	8.60	8.60	5.00	7.90	11.10	0.00	4.30	20.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	270	23	11	139	70	80	191	9	15	186	10
Peak Hour Factor	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	9	74	6	3	38	19	22	52	2	4	51	3
Total Analysis Volume [veh/h]	36	295	25	12	152	76	87	209	10	16	203	11
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	131
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	4	0	0	4	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	51	0	0	51	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	0.0	0.0	3.5	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Split [s]	0	36	0	0	37	0	0	58	0	0	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	20	0	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	4.5	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			Yes			Yes	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	-10.0	0.0	0.0	-10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	L	C
C, Cycle Length [s]	131	131	131	131	131	131	131
L, Total Lost Time per Cycle [s]	6.00	6.00	7.00	7.50	7.50	7.50	7.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.50	0.00	2.50	0.00
l2, Clearance Lost Time [s]	3.50	3.50	4.50	5.00	5.00	5.00	5.00
g_i, Effective Green Time [s]	26	26	22	51	51	51	51
g / C, Green / Cycle	0.20	0.20	0.17	0.39	0.39	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.02	0.18	0.15	0.08	0.13	0.01	0.13
s, saturation flow rate [veh/h]	1592	1733	1586	1112	1634	1139	1660
c, Capacity [veh/h]	320	348	268	378	630	382	640
d1, Uniform Delay [s]	42.81	51.32	53.33	28.55	22.09	27.06	21.97
k, delay calibration	0.11	0.29	0.17	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	21.56	15.24	1.42	1.52	0.21	1.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.92	0.90	0.23	0.35	0.04	0.33
d, Delay for Lane Group [s/veh]	42.97	72.87	68.58	29.97	23.60	27.26	23.38
Lane Group LOS	D	E	E	C	C	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.99	12.46	8.88	1.97	4.08	0.33	3.96
50th-Percentile Queue Length [ft/ln]	24.68	311.42	221.90	49.26	102.07	8.26	99.08
95th-Percentile Queue Length [veh/ln]	1.78	18.25	13.76	3.55	7.35	0.60	7.13
95th-Percentile Queue Length [ft/ln]	44.43	456.13	344.06	88.68	183.72	14.88	178.34

Movement, Approach, & Intersection Results

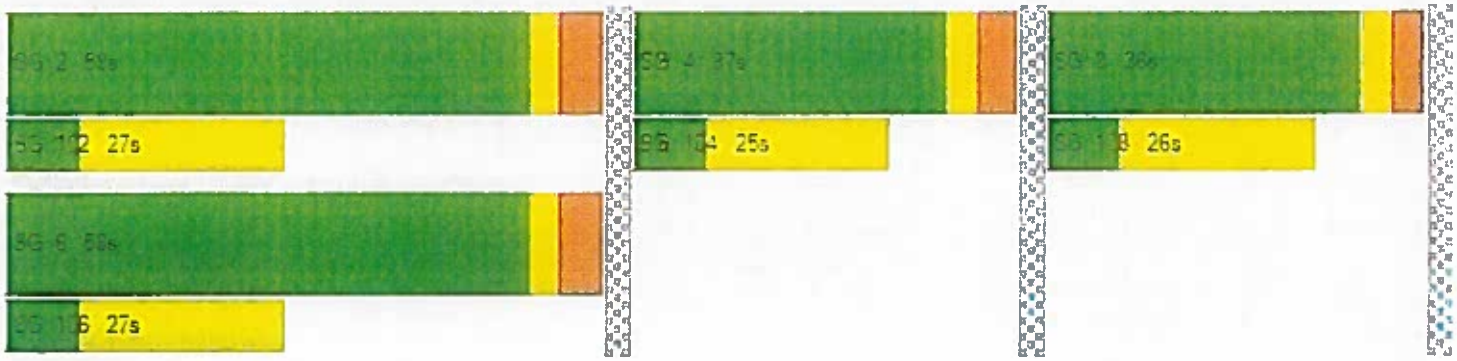
d_M, Delay for Movement [s/veh]	42.97	72.87	72.87	68.58	68.58	68.58	29.97	23.60	23.60	27.26	23.38	23.38
Movement LOS	D	E	E	E	E	E	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	69.85			68.58			25.41			23.65		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	48.18											
Intersection LOS	D											
Intersection V/C	0.493											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.96	54.96	54.96	54.96
l_p,int, Pedestrian LOS Score for Intersection	2.126	2.165	2.126	2.087
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	466	466	779	779
d_b, Bicycle Delay [s]	38.55	38.55	24.43	24.43
l_b,int, Bicycle LOS Score for Intersection	2.147	1.956	2.065	1.939
Bicycle LOS	B	A	B	A

Sequence

Ring 1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: New Haven and Henry Street

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	-3.00			3.00			1.33			3.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Base Volume Input [veh/h]	1	323	8	1	164	2	2	0	5	2	0	4
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.10	0.00	0.00	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	323	8	1	164	2	2	0	5	2	0	4
Peak Hour Factor	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	89	2	0	45	1	1	0	1	1	0	1
Total Analysis Volume [veh/h]	1	356	9	1	181	2	2	0	6	2	0	4
Pedestrian Volume [ped/h]												

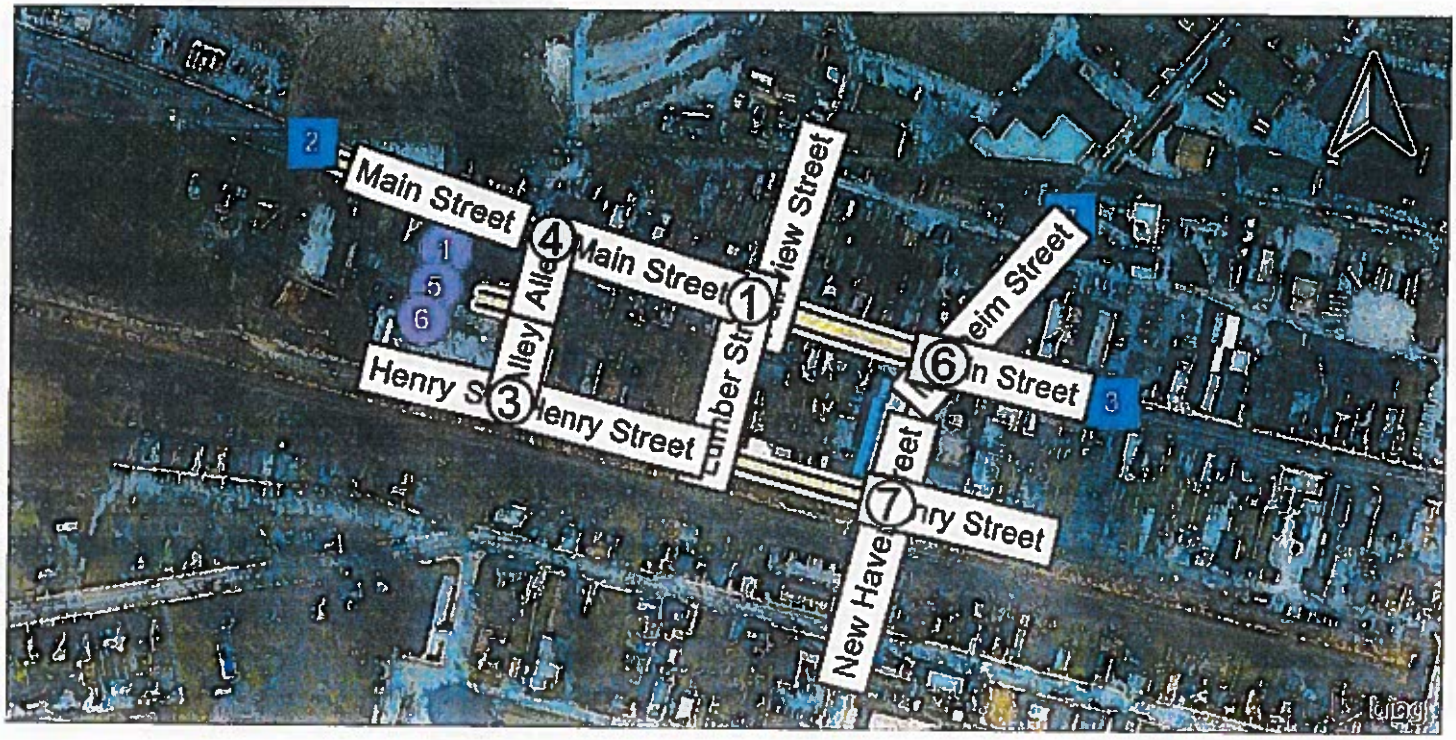
Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

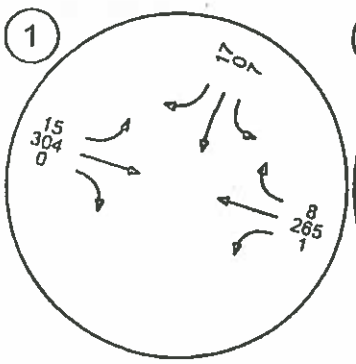
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	7.57	0.00	0.00	7.99	0.00	0.00	13.46	13.50	9.25	13.93	13.91	10.46
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.05	0.06	0.06	0.06	0.88	0.89	0.88	0.83	0.83	0.83
d_A, Approach Delay [s/veh]	0.02			0.04			10.30			11.62		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	0.30											
Intersection LOS	B											

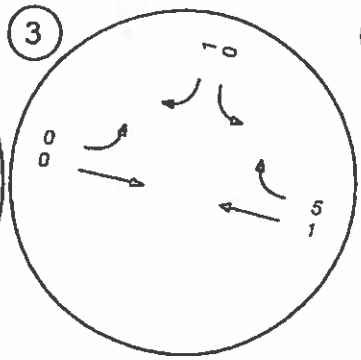
Report Figure 1a: Traffic Volume - Base Volume



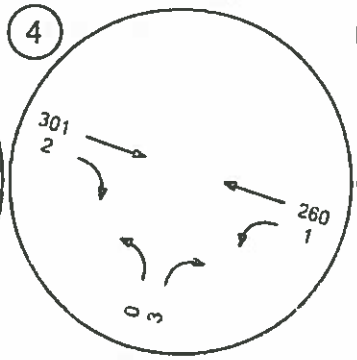
Main Street, Lumber Street, a



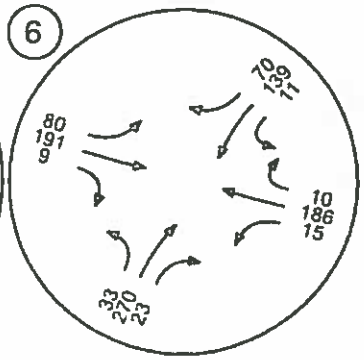
Henry Street and Alley



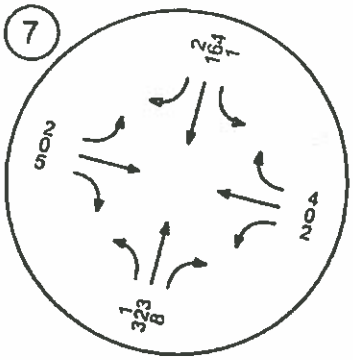
Main Street and Alley



Main Street, Manheim Street,



New Haven and Henry Street



Intersection Level Of Service Report
Intersection 1: Main Street, Lumber Street, and Fairview Street

Control Type:	Two-way stop	Delay (sec / veh):	32.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			25.00			25.00		
Grade [%]	0.00			2.20			2.00			-2.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Base Volume Input [veh/h]	0	0	0	6	3	43	28	442	8	3	564	16
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	2.30	3.60	3.60	0.00	0.00	4.80	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	9	5	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	6	3	43	28	451	13	7	564	16
Peak Hour Factor	1.000	1.000	1.000	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	2	1	11	7	119	3	2	149	4
Total Analysis Volume [veh/h]	0	0	0	6	3	45	30	477	14	7	596	17
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.02	0.09	0.03	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	32.14	29.40	14.39	8.88	0.00	0.00	8.35	0.00	0.00
Movement LOS				D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.54	0.54	0.54	0.10	0.10	0.10	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	13.53	13.53	13.53	2.42	2.42	2.42	0.49	0.49	0.49
d_A, Approach Delay [s/veh]	0.00			17.19			0.51			0.09		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	1.05											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 3: Henry Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Alley		Henry Street		Henry Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	9.00	9.00	9.00	9.00	9.00	9.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		15.00		15.00	
Grade [%]	5.00		0.07		-0.07	
Crosswalk	No		No		No	

Volumes

Name	Alley		Henry Street		Henry Street	
Base Volume Input [veh/h]	4	0	0	1	2	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	13
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	0	1	2	18
Peak Hour Factor	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	0	1	8
Total Analysis Volume [veh/h]	12	0	0	2	3	30
Pedestrian Volume [ped/h]						

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.66	8.43	7.26	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.66		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.21					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Main Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	16.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	Alley		Main Street		Main Street	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	9.00	9.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		25.00		25.00	
Grade [%]	-5.00		2.00		-2.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Alley		Main Street		Main Street	
Base Volume Input [veh/h]	5	0	438	0	2	561
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.70	0.00	4.80	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	9	5	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	9	443	0	2	561
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	117	0	1	148
Total Analysis Volume [veh/h]	14	9	466	0	2	591
Pedestrian Volume [ped/h]	0				0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.01	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	16.27	11.13	0.00	0.00	8.34	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	4.42	4.42	0.00	0.00	0.14	0.14
d_A, Approach Delay [s/veh]	14.26		0.00		0.03	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.32					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: Main Street, Manheim Street, and New Haven Street

Control Type:	Signalized	Delay (sec / veh):	21.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.663

Intersection Setup

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	35.00	100.0	100.0	100.0	100.0	100.0	107.0	100.0	100.0	90.00	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			25.00			25.00		
Grade [%]	-3.00			-2.67			1.10			1.70		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Base Volume Input [veh/h]	52	192	54	15	193	133	75	323	35	28	424	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	1.90	2.60	1.90	0.00	2.10	1.50	1.30	1.50	0.00	3.60	3.10	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	2	1	5	4	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	1	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	192	53	15	195	134	80	327	35	28	427	8
Peak Hour Factor	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	13	49	13	4	49	34	20	83	9	7	108	2
Total Analysis Volume [veh/h]	53	195	54	15	198	136	81	331	35	28	433	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	88.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	4	0	0	4	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	51	0	0	51	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	0.0	0.0	3.5	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Split [s]	0	26	0	0	33	0	0	31	0	0	31	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	20	0	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]		2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0		2.5	
I2, Clearance Lost Time [s]	0.0	3.5			4.5	0.0	0.0	5.0			5.0	
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			Yes			Yes	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	-10.0	0.0	0.0	-10.0	0.0	0.0		0.0			
Detector Length [ft]		50.0			50.0							
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	7.00	7.50	7.50	7.50	7.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.50	0.00	2.50	0.00
l2, Clearance Lost Time [s]	3.50	3.50	4.50	5.00	5.00	5.00	5.00
g_i, Effective Green Time [s]	16	16	21	50	50	50	50
g / C, Green / Cycle	0.18	0.18	0.24	0.56	0.56	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.03	0.15	0.21	0.09	0.21	0.03	0.26
s, saturation flow rate [veh/h]	1688	1698	1653	931	1709	966	1687
c, Capacity [veh/h]	296	298	393	472	957	513	945
d1, Uniform Delay [s]	31.58	35.84	33.16	10.20	5.88	8.55	6.18
k, delay calibration	0.11	0.11	0.15	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.29	6.11	9.51	0.79	1.16	0.20	1.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.84	0.89	0.17	0.38	0.05	0.47
d, Delay for Lane Group [s/veh]	31.86	41.95	42.67	10.99	7.05	8.75	7.83
Lane Group LOS	C	D	D	B	A	A	A
Critical Lane Group	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.01	5.74	8.19	0.78	2.31	0.22	2.92
50th-Percentile Queue Length [ft/ln]	25.15	143.62	204.85	19.55	57.67	5.46	72.99
95th-Percentile Queue Length [veh/ln]	1.81	9.68	12.89	1.41	4.15	0.39	5.26
95th-Percentile Queue Length [ft/ln]	45.26	241.88	322.22	35.19	103.81	9.83	131.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.86	41.95	41.95	42.67	42.67	42.67	10.99	7.05	7.05	8.75	7.83	7.83
Movement LOS	C	D	D	D	D	D	B	A	A	A	A	A
d_A, Approach Delay [s/veh]	40.18			42.67			7.76			7.89		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	21.82											
Intersection LOS	C											
Intersection V/C	0.663											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersection	2.134	2.138	2.229	2.175
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	456	589	533	533
d_b, Bicycle Delay [s]	26.83	22.40	24.20	24.20
l_b,int, Bicycle LOS Score for Intersection	2.060	2.135	2.297	2.333
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: New Haven and Henry Street

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	-3.00			3.00			1.33			3.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Base Volume Input [veh/h]	9	274	7	19	250	6	13	4	11	15	2	12
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	2.20	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	2	0	0	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	274	7	19	250	8	13	4	14	15	2	12
Peak Hour Factor	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	3	70	2	5	64	2	3	1	4	4	1	3
Total Analysis Volume [veh/h]	11	278	7	19	254	8	13	4	14	15	2	12
Pedestrian Volume [ped/h]	0			0			0			0		

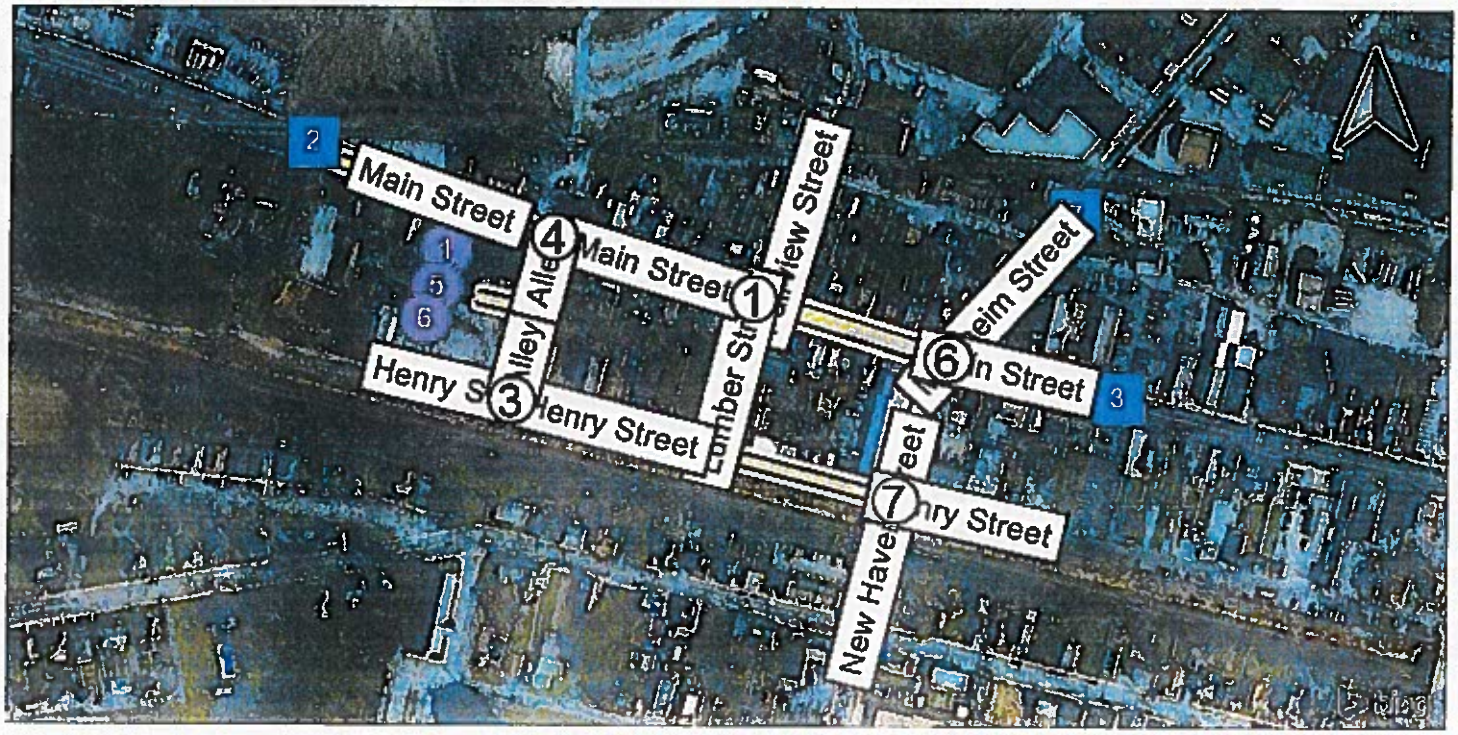
Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

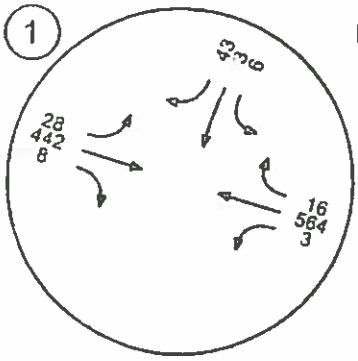
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.00	0.03	0.01	0.02	0.04	0.01	0.02
d_M, Delay for Movement [s/veh]	7.76	0.00	0.00	7.84	0.00	0.00	15.02	14.79	10.11	15.72	15.39	10.38
Movement LOS	A	A	A	A	A	A	C	B	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.04	0.04	0.04	0.20	0.20	0.20	0.20	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.63	0.63	0.63	1.12	1.12	1.12	5.00	5.00	5.00	5.11	5.11	5.11
d_A, Approach Delay [s/veh]	0.29			0.53			12.77			13.49		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.60											
Intersection LOS	C											

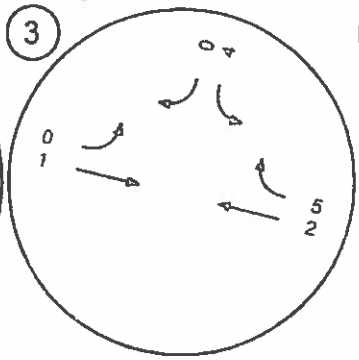
Report Figure 1a: Traffic Volume - Base Volume



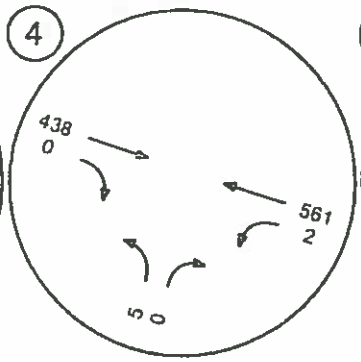
Main Street, Lumber Street, a



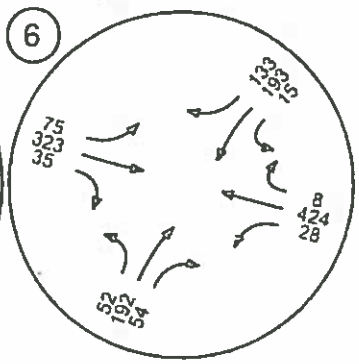
Henry Street and Alley



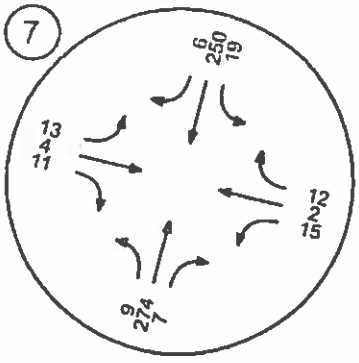
Main Street and Alley



Main Street, Manheim Street,



New Haven and Henry Street



2022 Projected Capacity Analyses Printouts

Intersection Level Of Service Report
Intersection 1: Main Street, Lumber Street, and Fairview Street

Control Type:	Two-way stop	Delay (sec / veh):	17.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			25.00			25.00		
Grade [%]	0.00			2.20			2.00			-2.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Base Volume Input [veh/h]	0	0	0	7	0	17	15	304	0	1	265	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	28.60	0.00	5.90	0.00	8.90	0.00	0.00	9.80	25.00
Growth Factor	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	4	5	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	2	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	7	0	17	15	314	7	4	271	8
Peak Hour Factor	1.000	1.000	1.000	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	2	0	5	4	84	2	1	72	2
Total Analysis Volume [veh/h]	0	0	0	7	0	18	16	336	7	4	290	9
Pedestrian Volume [ped/h]	0			0			0			2		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	17.26	15.93	10.33	7.86	0.00	0.00	7.94	0.00	0.00
Movement LOS				C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.15	0.15	0.15	0.04	0.04	0.04	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	3.78	3.78	3.78	0.95	0.95	0.95	0.25	0.25	0.25
d_A, Approach Delay [s/veh]	0.00			12.27			0.35			0.10		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	0.68											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Henry Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Alley		Henry Street		Henry Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	9.00	9.00	9.00	9.00	9.00	9.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		15.00		15.00	
Grade [%]	5.00		0.07		-0.07	
Crosswalk	No		No		No	

Volumes

Name	Alley		Henry Street		Henry Street	
Base Volume Input [veh/h]	0	1	0	0	1	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0210	1.0210	1.0210	1.0210	1.0210	1.0210
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	0	0	1	15
Peak Hour Factor	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	0	0	1	8
Total Analysis Volume [veh/h]	2	2	0	0	2	30
Pedestrian Volume [ped/h]						

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.61	8.39	7.26	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.29	0.29	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.50		3.63		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.94					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Main Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Alley		Main Street		Main Street	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	9.00	9.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		25.00		25.00	
Grade [%]	-5.00		2.00		-2.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Alley		Main Street		Main Street	
Base Volume Input [veh/h]	0	3	301	2	1	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	9.00	0.00	10.00	0.00
Growth Factor	1.0210	1.0210	1.0210	1.0210	1.0210	1.0210
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	4	5	0	0	0
Diverted Trips [veh/h]	0	0	2	-2	-1	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	7	314	0	0	265
Peak Hour Factor	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	87	0	0	73
Total Analysis Volume [veh/h]	4	8	348	0	0	293
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.92	10.01	0.00	0.00	8.08	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.41	1.41	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.64		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.20					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Main Street, Manheim Street, and New Haven Street

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	35.00	100.0	100.0	100.0	100.0	100.0	107.0	100.0	100.0	90.00	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			25.00			25.00		
Grade [%]	-3.00			-2.67			1.10			1.70		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Base Volume Input [veh/h]	33	270	23	11	139	70	80	191	9	15	186	10
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	9.10	3.00	0.00	18.20	8.60	8.60	5.00	7.90	11.10	0.00	4.30	20.00
Growth Factor	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	2	1	3	1	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	276	23	11	144	72	85	196	9	15	192	10
Peak Hour Factor	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916	0.916
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	9	75	6	3	39	20	23	53	2	4	52	3
Total Analysis Volume [veh/h]	37	301	25	12	157	79	93	214	10	16	210	11
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	131
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	4	0	0	4	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	51	0	0	51	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	0.0	0.0	3.5	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Split [s]	0	36	0	0	37	0	0	58	0	0	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	20	0	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]		2.5			2.5			2.5			2.5	
l2, Clearance Lost Time [s]		3.5			4.5			5.0			5.0	
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			Yes			Yes	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	-10.0	0.0	0.0	-10.0	0.0	0.0					
Detector Length [ft]	0.0	50.0	0.0	0.0	50.0	0.0	0.0					
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	L	C
C, Cycle Length [s]	131	131	131	131	131	131	131
L, Total Lost Time per Cycle [s]	6.00	6.00	7.00	7.50	7.50	7.50	7.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.50	0.00	2.50	0.00
l2, Clearance Lost Time [s]	3.50	3.50	4.50	5.00	5.00	5.00	5.00
g_i, Effective Green Time [s]	27	27	23	51	51	51	51
g / C, Green / Cycle	0.20	0.20	0.17	0.39	0.39	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.02	0.19	0.16	0.08	0.14	0.01	0.13
s, saturation flow rate [veh/h]	1592	1734	1586	1105	1634	1134	1661
c, Capacity [veh/h]	324	353	275	373	630	378	640
d1, Uniform Delay [s]	42.51	51.14	53.03	29.01	22.16	27.24	22.06
k, delay calibration	0.11	0.30	0.19	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	22.30	16.40	1.60	1.57	0.21	1.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.92	0.90	0.25	0.36	0.04	0.35
d, Delay for Lane Group [s/veh]	42.67	73.43	69.43	30.61	23.73	27.45	23.54
Lane Group LOS	D	E	E	C	C	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	No
50th Percentile Queue Length [veh/ln]	1.01	12.76	9.25	2.15	4.19	0.33	4.11
50th Percentile Queue Length [ft/ln]	25.27	318.89	231.27	53.63	104.74	8.31	102.78
95th Percentile Queue Length [veh/ln]	1.82	18.61	14.24	3.86	7.54	0.60	7.40
95th Percentile Queue Length [ft/ln]	45.49	465.33	355.97	96.54	188.53	14.97	185.00

Movement, Approach, & Intersection Results

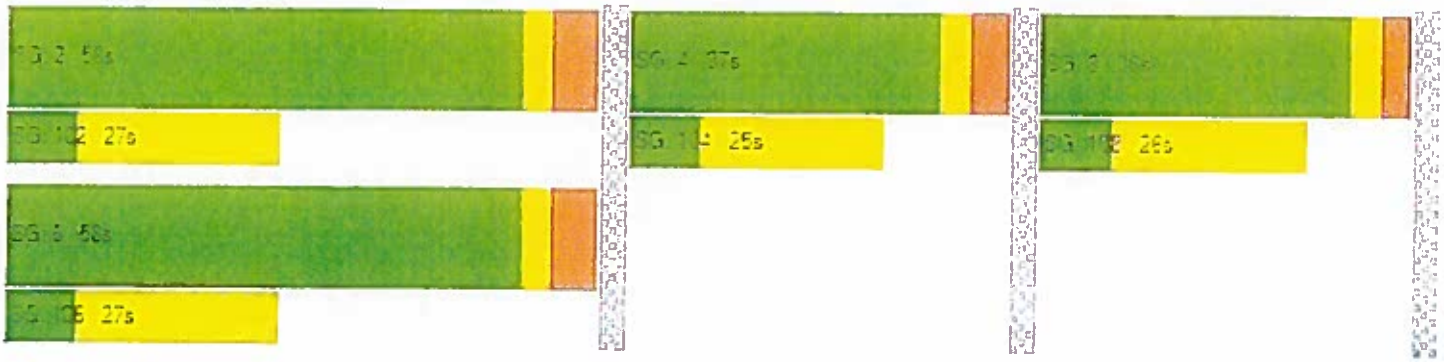
d_M, Delay for Movement [s/veh]	42.67	73.43	73.43	69.43	69.43	69.43	30.61	23.73	23.73	27.45	23.54	23.54
Movement LOS	D	E	E	E	E	E	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	70.30			69.43			25.75			23.80		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	48.53											
Intersection LOS	D											
Intersection V/C	0.505											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.96	54.96	54.96	54.96
l_p,int, Pedestrian LOS Score for Intersection	2.129	2.183	2.132	2.090
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	466	466	779	779
d_b, Bicycle Delay [s]	38.55	38.55	24.43	24.43
l_b,int, Bicycle LOS Score for Intersection	2.159	1.969	2.083	1.951
Bicycle LOS	B	A	B	A

Sequence

Ring 1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: New Haven and Henry Street

Control Type:	Two-way stop	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	-3.00			3.00			1.33			3.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Base Volume Input [veh/h]	1	323	8	1	164	2	2	0	5	2	0	4
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.10	0.00	0.00	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	2	0	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	330	8	1	167	4	2	0	6	2	0	4
Peak Hour Factor	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908	0.908
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	1	91	2	0	46	1	1	0	2	1	0	1
Total Analysis Volume [veh/h]	2	363	9	1	184	4	2	0	7	2	0	4
Pedestrian Volume [ped/h]												

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01
d_M, Delay for Movement [s/veh]	7.58	0.00	0.00	8.01	0.00	0.00	13.65	13.67	9.28	14.15	14.11	10.51
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.11	0.11	0.11	0.06	0.06	0.06	0.98	0.98	0.98	0.84	0.84	0.84
d_A, Approach Delay [s/veh]	0.04			0.04			10.25			11.73		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	0.32											
Intersection LOS	B											

Gerberich Payne Shoe Company

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Scenario 3 AM Peak - 2022 Build Conditions

Report File: Z:\...\22BDAM.pdf

3/11/21

Trip Generation summary

Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: AM Senior Housing	DU's	252	DU's	1.000	0.000	50.00	50.00	2	5	7	33.33
5: AM Retail	SF	820	SF	1.000	0.000	50.00	50.00	2	2	4	19.05
6: AM Med Office	SF	720	SF	1.000	0.000	50.00	50.00	8	2	10	47.62
					Added Trips Total			12	9	21	100.00

Gerberich Payne Shoe Company

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Scenario 3 AM Peak - 2022 Build Conditions

Report File: Z:\...\22BDAM.pdf

3/11/21

Trip Distribution summary

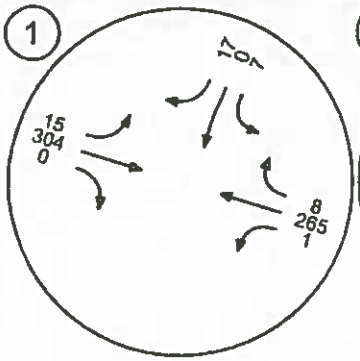
Zone / Gate	Zone 1: AM Senior Housing			
	To AM Senior Housing:		From AM Senior Housing:	
	Share %	Trips	Share %	Trips
5: AM Retail	0.00	0	0.00	0
6: AM Med Office	0.00	0	0.00	0
2: Main Street - West	40.00	1	40.00	2
3: Main Street - East	20.00	0	20.00	1
4: New Haven Street - South	15.00	0	15.00	1
7: Manheim Street	25.00	1	25.00	1
Total	100.00	2	100.00	5

Zone / Gate	Zone 5: AM Retail			
	To AM Retail:		From AM Retail:	
	Share %	Trips	Share %	Trips
1: AM Senior Housing	0.00	0	0.00	0
6: AM Med Office	0.00	0	0.00	0
2: Main Street - West	40.00	1	40.00	1
3: Main Street - East	20.00	0	20.00	0
4: New Haven Street - South	15.00	0	15.00	0
7: Manheim Street	25.00	1	25.00	1
Total	100.00	2	100.00	2

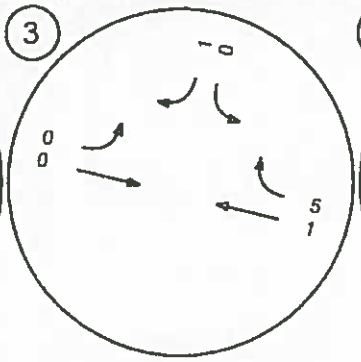
Zone / Gate	Zone 6: AM Med Office			
	To AM Med Office:		From AM Med Office:	
	Share %	Trips	Share %	Trips
1: AM Senior Housing	0.00	0	0.00	0
5: AM Retail	0.00	0	0.00	0
2: Main Street - West	40.00	3	40.00	1
3: Main Street - East	20.00	2	20.00	0
4: New Haven Street - South	15.00	1	15.00	0
7: Manheim Street	25.00	2	25.00	1
Total	100.00	8	100.00	2

Report Figure 1a: Traffic Volume - Base Volume

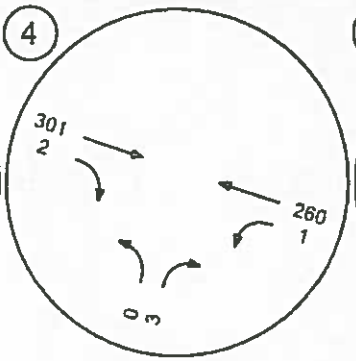
Main Street, Lumber Street, a



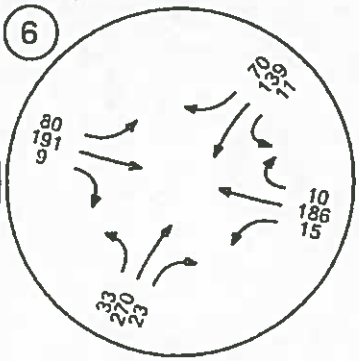
Henry Street and Alley



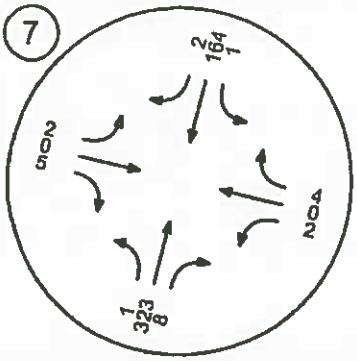
Main Street and Alley



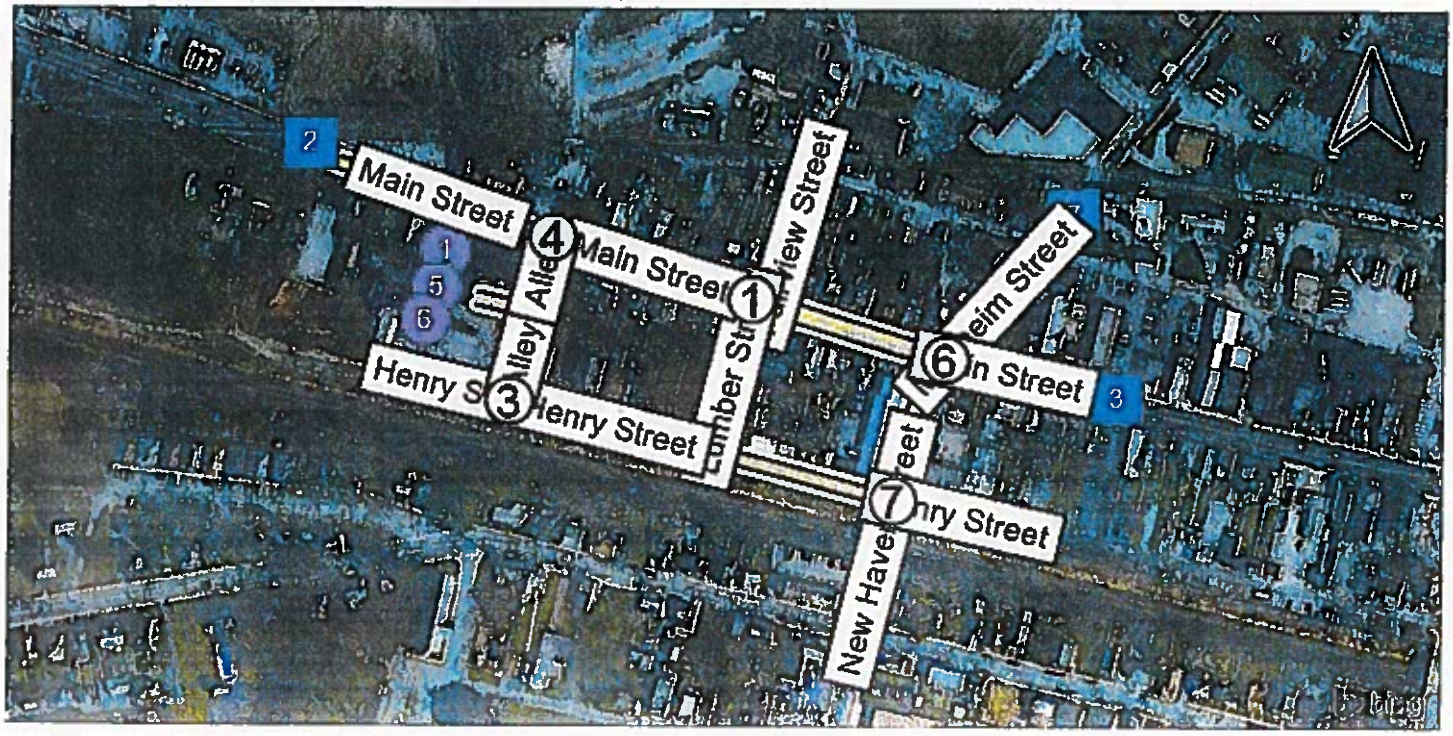
Main Street, Manheim Street,



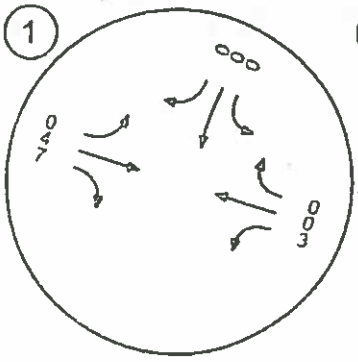
New Haven and Henry Street



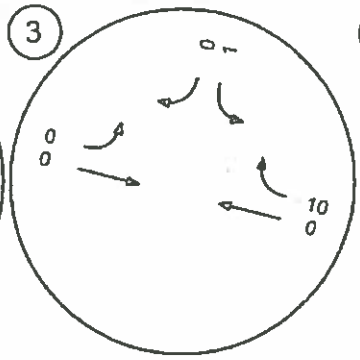
Report Figure 1d: Traffic Volume - Net New Site Trips



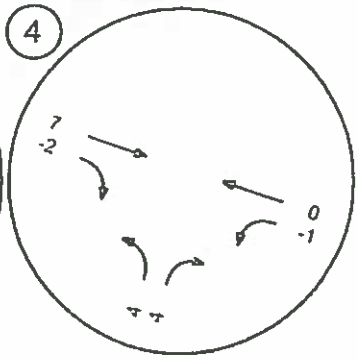
Main Street, Lumber Street, a



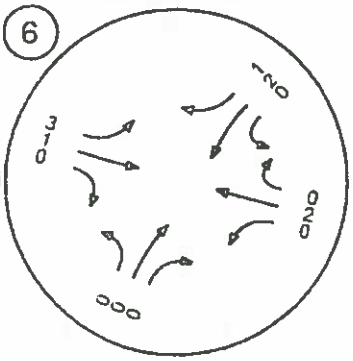
Henry Street and Alley



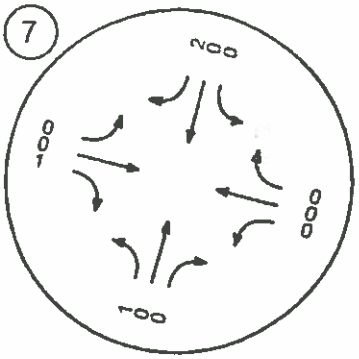
Main Street and Alley



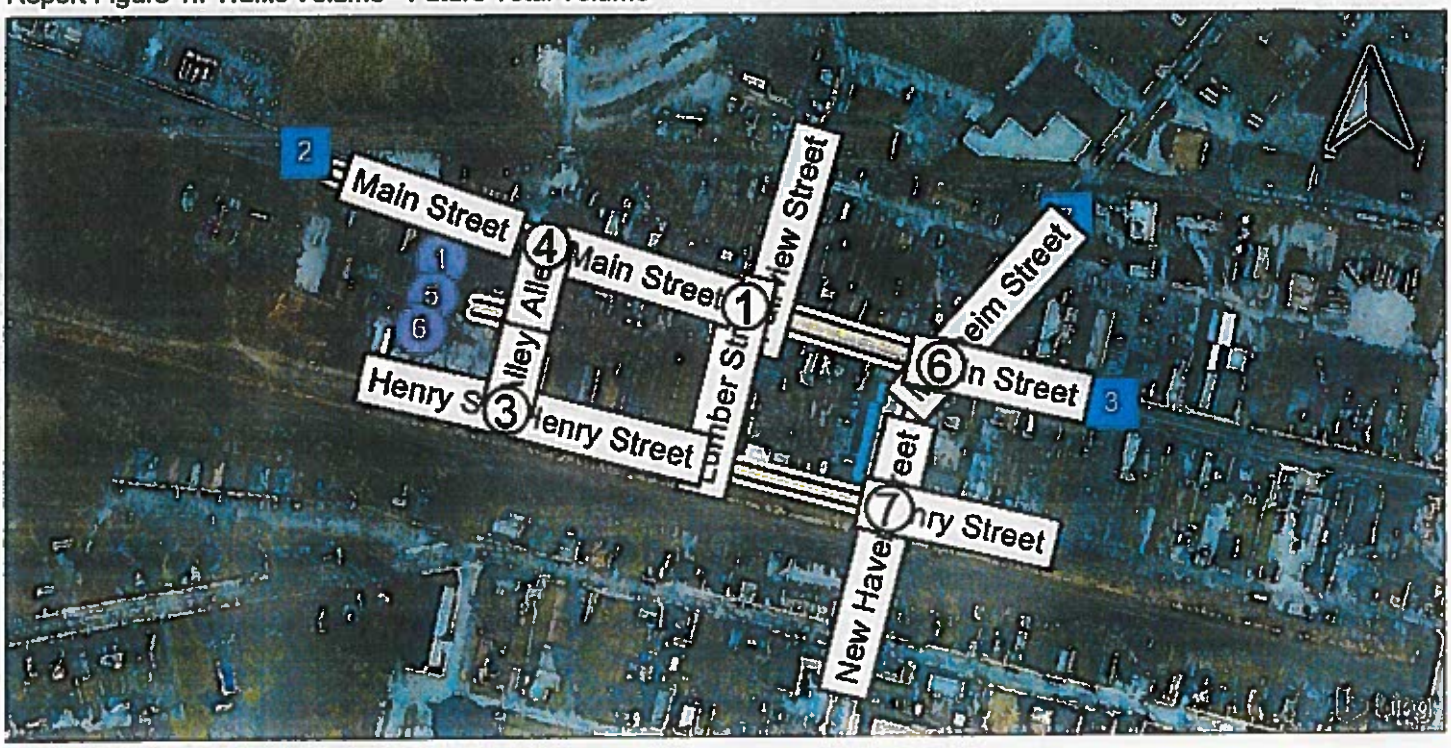
Main Street, Manheim Street,



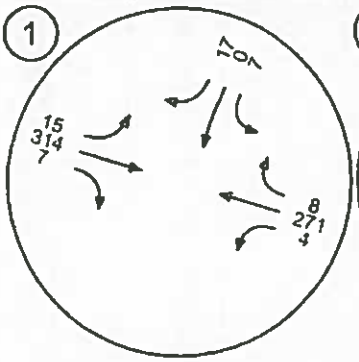
New Haven and Henry Street



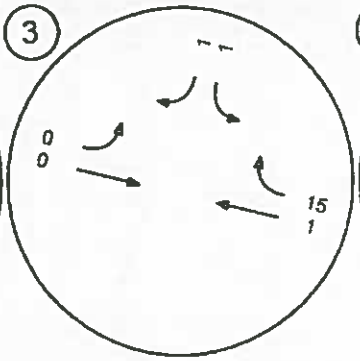
Report Figure 1f: Traffic Volume - Future Total Volume



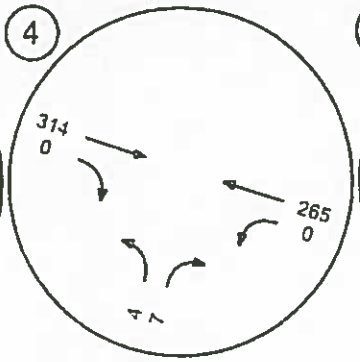
Main Street, Lumber Street, a



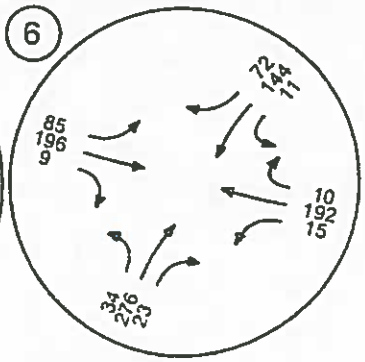
Henry Street and Alley



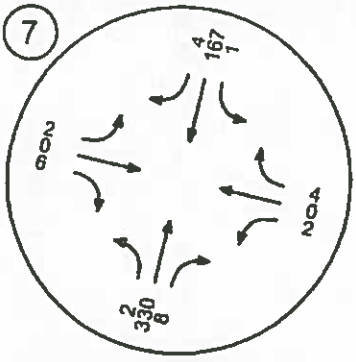
Main Street and Alley



Main Street, Manheim Street,



New Haven and Henry Street



Intersection Level Of Service Report
Intersection 1: Main Street, Lumber Street, and Fairview Street

Control Type:	Two-way stop	Delay (sec / veh):	33.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.044

Intersection Setup

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			25.00			25.00		
Grade [%]	0.00			2.20			2.00			-2.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Lumber Street			Fairview Street			Main Street			Main Street		
Base Volume Input [veh/h]	0	0	0	6	3	43	28	442	8	3	564	16
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	2.30	3.60	3.60	0.00	0.00	4.80	0.00
Growth Factor	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]				0	0	0	0	9	5	4	0	0
Diverted Trips [veh/h]				0	0	0	0	0	4	0	0	0
Pass-by Trips [veh/h]				0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]				0	0	0	0	0	0	0	0	0
Other Volume [veh/h]				0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]				6	3	44	29	460	17	7	576	16
Peak Hour Factor			1.000	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]				2	1	12	8	121	4	2	152	4
Total Analysis Volume [veh/h]	0	0	0	6	3	46	31	484	18	7	606	17
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.02	0.10	0.03	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	33.24	30.36	14.61	8.92	0.00	0.00	8.38	0.00	0.00
Movement LOS				D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.56	0.56	0.56	0.10	0.10	0.10	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	14.12	14.12	14.12	2.53	2.53	2.53	0.49	0.49	0.49
d_A, Approach Delay [s/veh]	0.00			17.50			0.52			0.09		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	1.07											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 3: Henry Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Alley		Henry Street		Henry Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	9.00	9.00	9.00	9.00	9.00	9.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		15.00		15.00	
Grade [%]	5.00		0.07		-0.07	
Crosswalk	No		No		No	

Volumes

Name	Alley		Henry Street		Henry Street	
Base Volume Input [veh/h]	4	0	0	1	2	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0210	1.0210	1.0210	1.0210	1.0210	1.0210
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	13
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	0	1	2	18
Peak Hour Factor	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	0	1	8
Total Analysis Volume [veh/h]	12	0	0	2	3	30
Pedestrian Volume [ped/h]						

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.66	8.43	7.26	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.66		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.21					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Main Street and Alley

Control Type:	Two-way stop	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

Name	Alley		Main Street		Main Street	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	9.00	9.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00		25.00		25.00	
Grade [%]	-5.00		2.00		-2.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	Alley		Main Street		Main Street	
Base Volume Input [veh/h]	5	0	438	0	2	561
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	3.70	0.00	4.80	0.00
Growth Factor	1.0210	1.0210	1.0210	1.0210	1.0210	1.0210
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	9	5	0	0	0
Diverted Trips [veh/h]	0	0	4	-4	-2	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	9	456	0	0	573
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	120	0	0	151
Total Analysis Volume [veh/h]	14	9	480	0	0	603
Pedestrian Volume [ped/h]	0				0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.01	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	16.52	11.25	0.00	0.00	8.37	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.52	4.52	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.46		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.30					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: Main Street, Manheim Street, and New Haven Street

Control Type:	Signalized	Delay (sec / veh):	21.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	35.00	100.0	100.0	100.0	100.0	100.0	107.0	100.0	100.0	90.00	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			25.00			25.00		
Grade [%]	-3.00			-2.67			1.10			1.70		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	New Haven Street			Manheim Street			Main Street			Main Street		
Base Volume Input [veh/h]	52	192	54	15	193	133	75	323	35	28	424	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	1.90	2.60	1.90	0.00	2.10	1.50	1.30	1.50	0.00	3.60	3.10	0.00
Growth Factor	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	2	1	5	4	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	196	55	15	199	137	82	334	36	29	436	8
Peak Hour Factor	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	13	49	14	4	50	35	21	84	9	7	110	2
Total Analysis Volume [veh/h]	54	198	56	15	201	138	83	337	36	29	440	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	88.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	4	0	0	4	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	51	0	0	51	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	0.0	0.0	3.5	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Split [s]	0	26	0	0	33	0	0	31	0	0	31	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	20	0	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0
I2, Clearance Lost Time [s]	0	3.5	0.0	0.0	4.5	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			Yes			Yes	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	-10.0	0.0	0.0	-10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	7.00	7.50	7.50	7.50	7.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.50	0.00	2.50	0.00
l2, Clearance Lost Time [s]	3.50	3.50	4.50	5.00	5.00	5.00	5.00
g_i, Effective Green Time [s]	16	16	22	50	50	50	50
g / C, Green / Cycle	0.18	0.18	0.24	0.56	0.56	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.03	0.15	0.21	0.09	0.22	0.03	0.27
s, saturation flow rate [veh/h]	1688	1697	1653	925	1709	960	1687
c, Capacity [veh/h]	302	303	397	467	957	508	945
d1, Uniform Delay [s]	31.36	35.70	33.04	10.35	5.91	8.64	6.21
k, delay calibration	0.11	0.11	0.16	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	6.11	9.86	0.83	1.20	0.21	1.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.84	0.89	0.18	0.39	0.06	0.47
d, Delay for Lane Group [s/veh]	31.64	41.81	42.90	11.18	7.11	8.86	7.91
Lane Group LOS	C	D	D	B	A	A	A
Critical Lane Group	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.02	5.85	8.34	0.81	2.36	0.23	2.98
50th-Percentile Queue Length [ft/ln]	25.52	146.36	208.59	20.35	59.01	5.73	74.47
95th-Percentile Queue Length [veh/ln]	1.84	9.82	13.08	1.47	4.25	0.41	5.36
95th-Percentile Queue Length [ft/ln]	45.93	245.56	327.02	36.63	106.21	10.31	134.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.64	41.81	41.81	42.90	42.90	42.90	11.18	7.11	7.11	8.86	7.91	7.91
Movement LOS	C	D	D	D	D	D	B	A	A	A	A	A
d_A, Approach Delay [s/veh]	40.03			42.90			7.85			7.97		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	21.88											
Intersection LOS	C											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersection	2.136	2.146	2.234	2.179
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	456	589	533	533
d_b, Bicycle Delay [s]	26.83	22.40	24.20	24.20
l_b,int, Bicycle LOS Score for Intersection	2.068	2.144	2.312	2.347
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: New Haven and Henry Street

Control Type:	Two-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	-3.00			3.00			1.33			3.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Haven Street			New Haven Street			Henry Street			Henry Street		
Base Volume Input [veh/h]	9	274	7	19	250	6	13	4	11	15	2	12
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	2.20	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021	1.021
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	2	0	0	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	280	7	19	255	8	13	4	14	15	2	12
Peak Hour Factor	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	3	71	2	5	65	2	3	1	4	4	1	3
Total Analysis Volume [veh/h]	11	286	7	19	260	8	13	4	14	15	2	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.02	0.04	0.01	0.02
d_M, Delay for Movement [s/veh]	7.78	0.00	0.00	7.85	0.00	0.00	15.26	15.00	10.17	15.99	15.62	10.45
Movement LOS	A	A	A	A	A	A	C	B	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.05	0.05	0.05	0.20	0.20	0.20	0.21	0.21	0.21
95th-Percentile Queue Length [ft/ln]	0.64	0.64	0.64	1.13	1.13	1.13	5.10	5.10	5.10	5.22	5.22	5.22
d_A, Approach Delay [s/veh]	0.28			0.52			12.93			13.67		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.59											
Intersection LOS	C											

Gerberich Payne Shoe Company

Vistro File: C:\...\Gerberich Payne Shoe Company (2021-03-10).vistro

Scenario 4 PM Peak - 2022 Build Conditions

Report File: Z:\...\22BDPM.pdf

3/11/21

Trip Generation summary

Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: PM Senior Housing	DU's	252	DU's	1.000	0.000	50.00	50.00	6	5	11	32.35
5: PM Retail	SF	820	SF	1.000	0.000	50.00	50.00	5	6	11	32.35
6: PM Med Office	SF	720	SF	1.000	0.000	50.00	50.00	3	9	12	35.29
					Added Trips Total			14	20	34	100.00

Gerberich Payne Shoe Company

Vistro File: C:\...\Gerberich Payne Shoe Company (2021-03-10).vistro

Scenario 4 PM Peak - 2022 Build Conditions

Report File: Z:\...\22BDPM.pdf

3/11/21

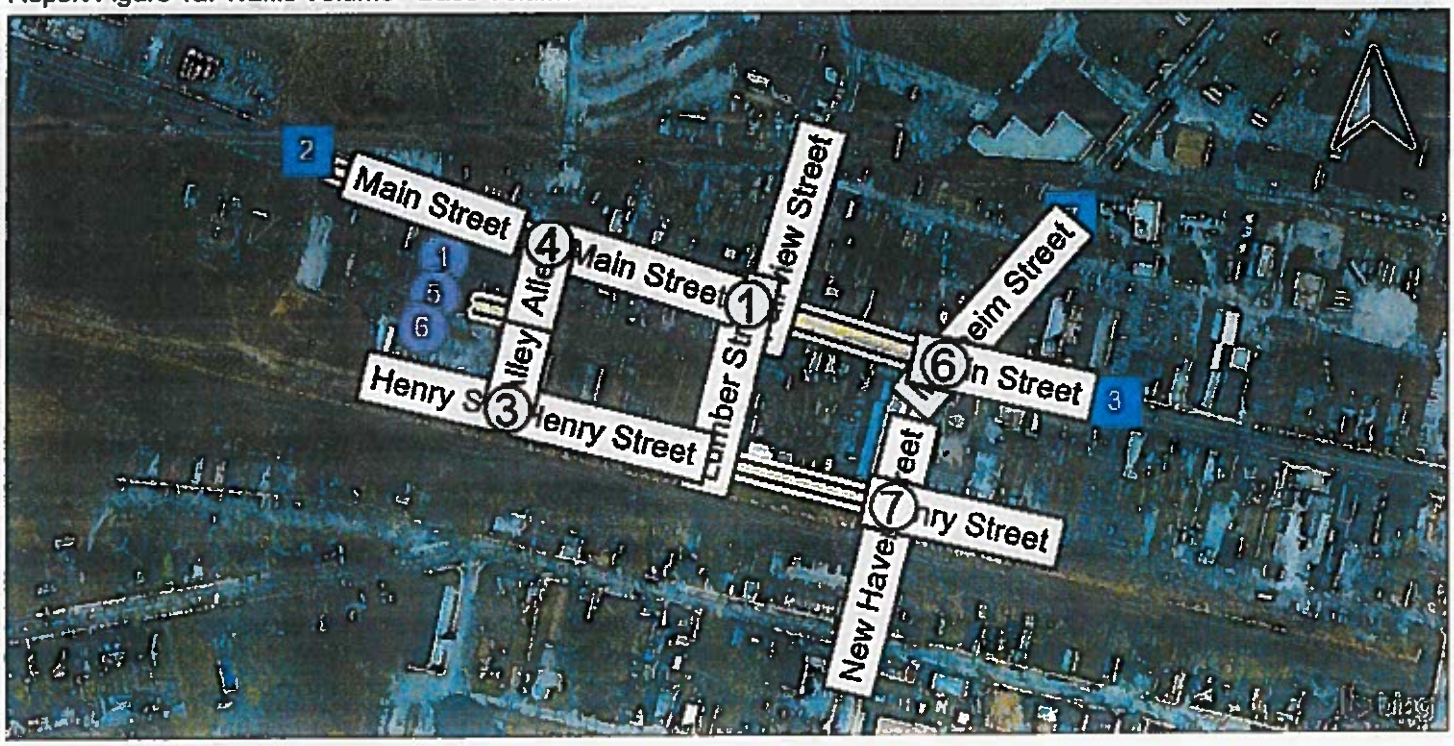
Trip Distribution summary

Zone / Gate	Zone 1: PM Senior Housing			
	To PM Senior Housing:		From PM Senior Housing:	
	Share %	Trips	Share %	Trips
5: PM Retail	0.00	0	0.00	0
6: PM Med Office	0.00	0	0.00	0
2: Main Street - West	40.00	2	40.00	2
3: Main Street - East	20.00	1	20.00	1
4: New Haven Street - South	15.00	1	15.00	1
7: Manheim Street	25.00	2	25.00	1
Total	100.00	6	100.00	5

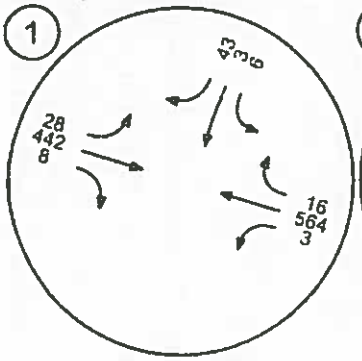
Zone / Gate	Zone 5: PM Retail			
	To PM Retail:		From PM Retail:	
	Share %	Trips	Share %	Trips
1: PM Senior Housing	0.00	0	0.00	0
6: PM Med Office	0.00	0	0.00	0
2: Main Street - West	40.00	2	40.00	2
3: Main Street - East	20.00	1	20.00	1
4: New Haven Street - South	15.00	1	15.00	1
7: Manheim Street	25.00	1	25.00	2
Total	100.00	5	100.00	6

Zone / Gate	Zone 6: PM Med Office			
	To PM Med Office:		From PM Med Office:	
	Share %	Trips	Share %	Trips
1: PM Senior Housing	0.00	0	0.00	0
5: PM Retail	0.00	0	0.00	0
2: Main Street - West	40.00	1	40.00	4
3: Main Street - East	20.00	1	20.00	2
4: New Haven Street - South	15.00	0	15.00	1
7: Manheim Street	25.00	1	25.00	2
Total	100.00	3	100.00	9

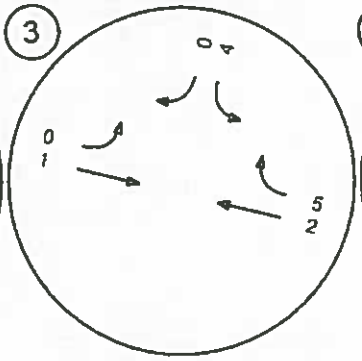
Report Figure 1a: Traffic Volume - Base Volume



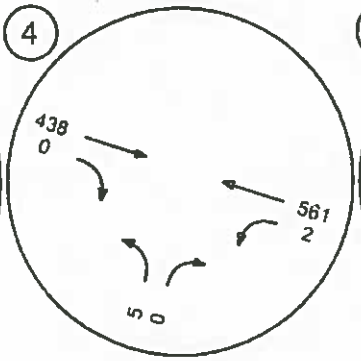
Main Street, Lumber Street, a



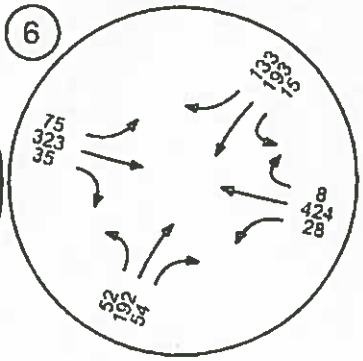
Henry Street and Alley



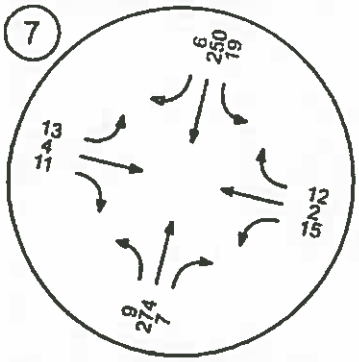
Main Street and Alley



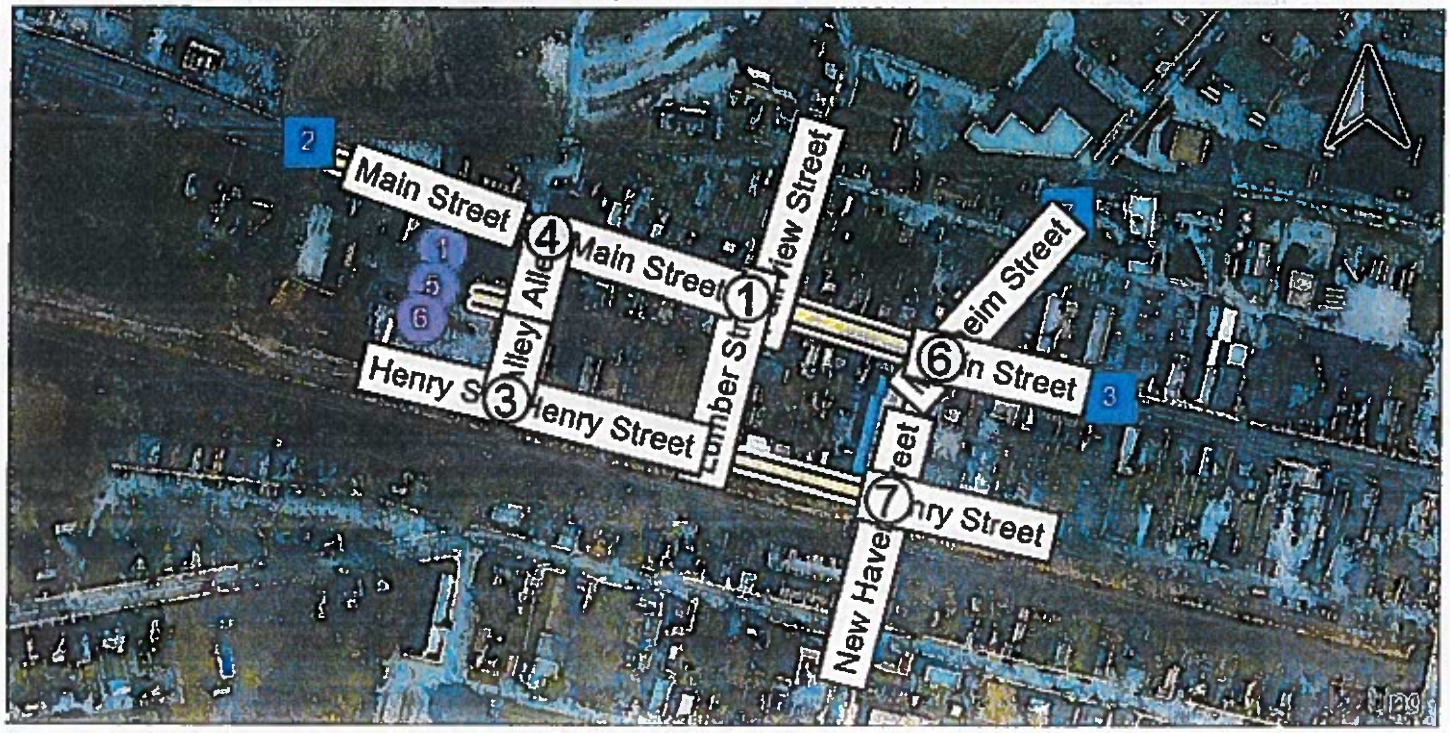
Main Street, Manheim Street,



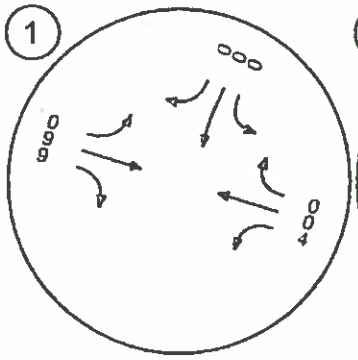
New Haven and Henry Street



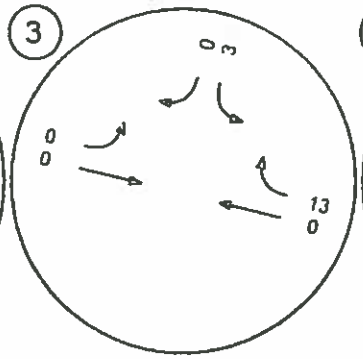
Report Figure 1d: Traffic Volume - Net New Site Trips



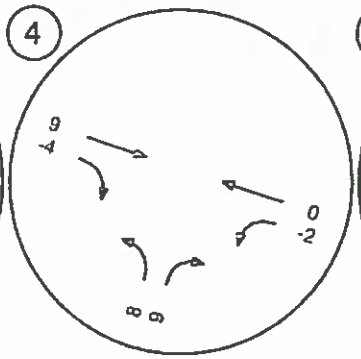
Main Street, Lumber Street, a



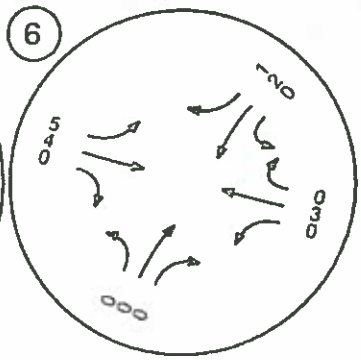
Henry Street and Alley



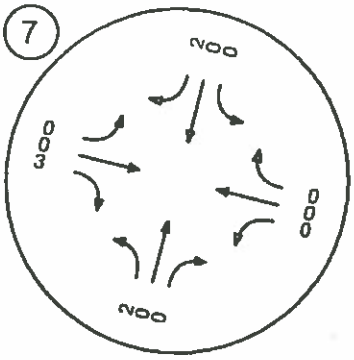
Main Street and Alley



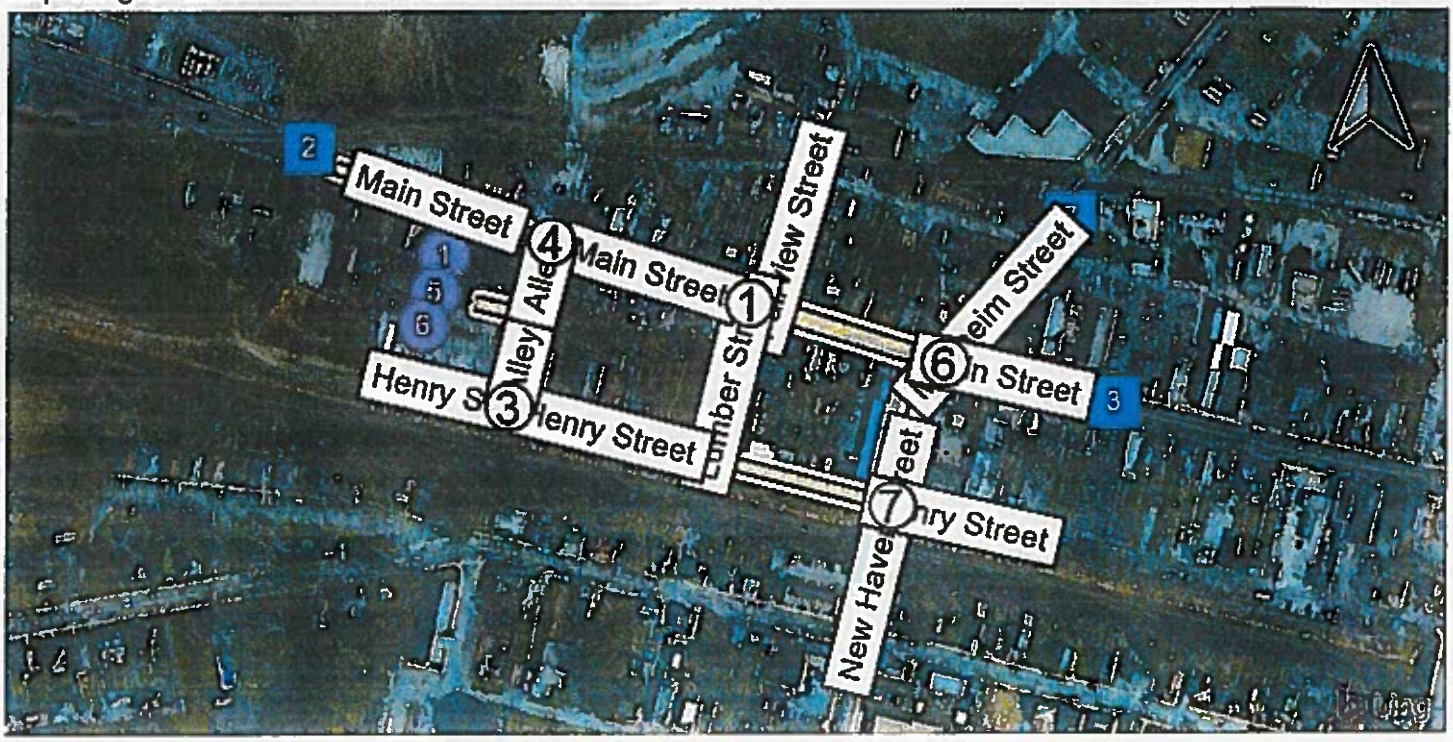
Main Street, Manheim Street,



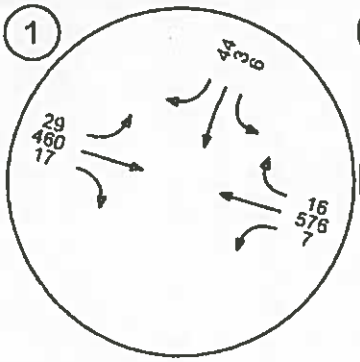
New Haven and Henry Street



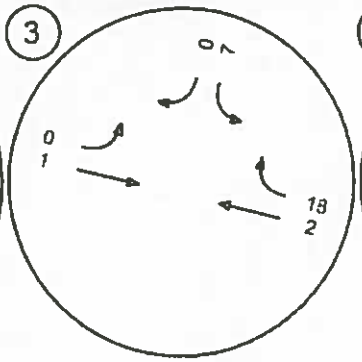
Report Figure 1f: Traffic Volume - Future Total Volume



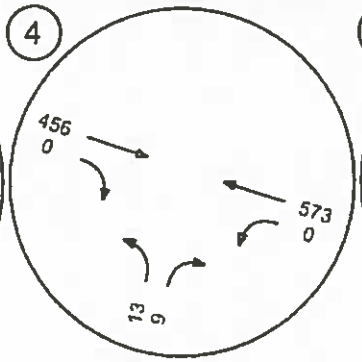
Main Street, Lumber Street, a



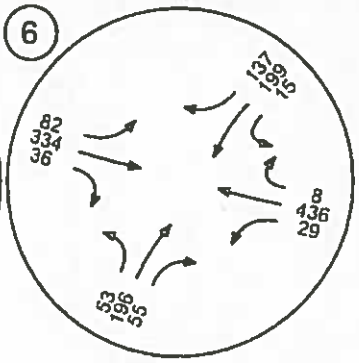
Henry Street and Alley



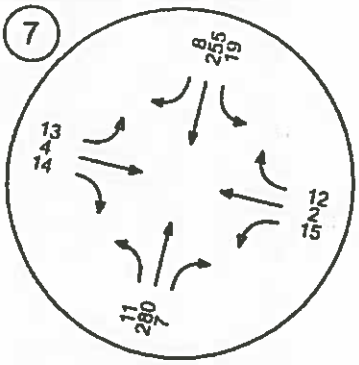
Main Street and Alley



Main Street, Manheim Street,



New Haven and Henry Street



Auxiliary Turn Lane Warrant Analyses

Turn Lane Warrant and Length Analysis Workbook

STUDY LOCATION AND ANALYSIS INFORMATION

Municipality:	Mount Joy Borough	Analysis Date:	3/10/21
County:	Lancaster County	Conducted By:	John M. Schick
PennDOT Engineering District:	8	Checked By:	
		Agency/Company Name:	RETTEW Associates, Inc.

Intersection & Approach Description: Main Street (SR 0230) and Lumber Street / Fairview Street

Analysis Period:	2022	Number of Approach Lanes:	1
Design Hour:	AM Peak Hour	Undivided or Divided Highway:	Undivided
Intersection Control:	Unsignalized		
Posted Speed Limit (MPH):	25		
Type of Terrain:	Level	Type of Analysis	
		Left or Right-Turn Lane Analysis?:	Left Turn Lane

VOLUME CALCULATIONS

Left Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	4	0.0%	4
	Through	-	271	9.8%	285
	Right	Yes	25	25.0%	29
Opposing	Left	Yes	15	0.0%	15
	Through	-	314	8.9%	328
	Right	Yes	7	0.0%	7

Advancing Volume:	318
Opposing Volume:	350
Left Turn Volume:	4
% Left Turns in Advancing Volume:	1.26%

Right Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	15	0.0%	N/A
	Through	-	314	8.9%	N/A
	Right	-	7	0.0%	N/A

Advancing Volume:	N/A
Right Turn Volume:	N/A

TURN LANE WARRANT FINDINGS

Left Turn Lane Warrant Findings

Applicable Warrant Figure: Figure 1

Warrant Met?: No

Right Turn Lane Warrant Findings

Applicable Warrant Figure: N/A

Warrant Met?: N/A

TURN LANE LENGTH CALCULATIONS

Intersection Control:	Unsignalized
Design Hour Volume of Turning Lane:	4
Cycles Per Hour (Assumed):	60
Cycles Per Hour (If Known):	40

Average # of Vehicles/Cycle: N/A

PennDOT Publication 46, Exhibit 11-6

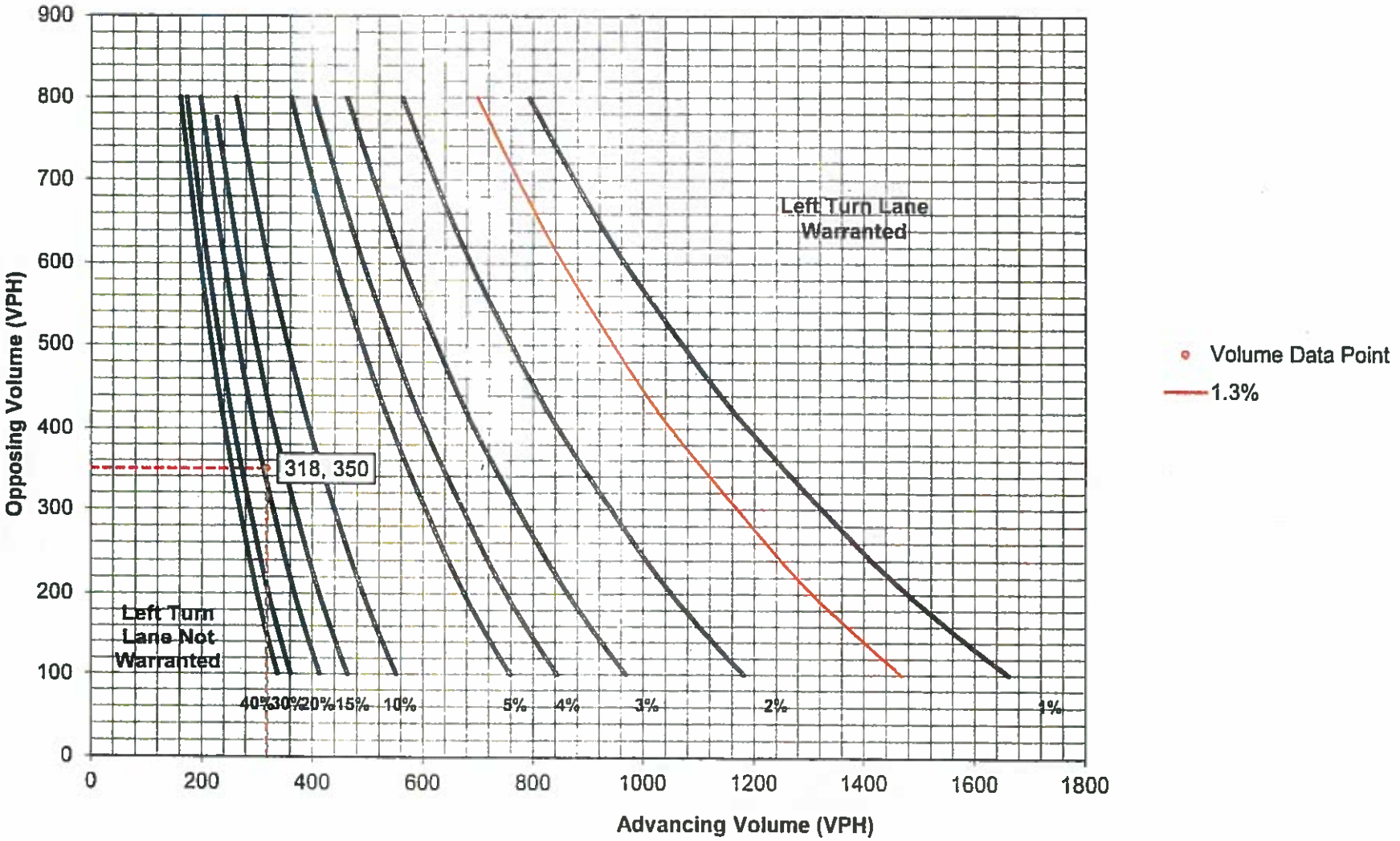
Type of Traffic Control	Speed (MPH)					
	25-35		40-45		50-60	
	Turn Demand Volume					
	High	Low	High	Low	High	Low
Signalized	A	A	B or C	B or C	B or C	B or C
Unsignalized	A	A	C	B	B or C	B

Left Turn Lane Storage Length, Condition A:	N/A	Feet
Condition B:	N/A	Feet
Condition C:	N/A	Feet
Required Left Turn Lane Storage Length:	N/A	Feet

Additional Findings: N/A

Additional Comments / Justifications:

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)



Turn Lane Warrant and Length Analysis Workbook

STUDY LOCATION AND ANALYSIS INFORMATION

Municipality:	Mount Joy Borough	Analysis Date:	3/10/21
County:	Lancaster County	Conducted By:	John M. Schick
PennDOT Engineering District:	8	Checked By:	
		Agency/Company Name:	RETTEW Associates, Inc.

Intersection & Approach Description: Main Street (SR 0230) and Lumber Street / Fairview Street

Analysis Period:	2022	Number of Approach Lanes:	1
Design Hour:	AM Peak Hour	Undivided or Divided Highway:	Undivided
Intersection Control:	Unsignalized		
Posted Speed Limit (MPH):	25		Type of Analysis
Type of Terrain:	Level	Left or Right-Turn Lane Analysis?:	Right Turn Lane

VOLUME CALCULATIONS

Left Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	4	0.0%	N/A
	Through	-	271	9.8%	N/A
	Right	Yes	25	25.0%	N/A
Opposing	Left	Yes	15	0.0%	N/A
	Through	-	314	8.9%	N/A
	Right	Yes	7	0.0%	N/A

Advancing Volume:	N/A
Opposing Volume:	N/A
Left Turn Volume:	N/A
% Left Turns in Advancing Volume:	N/A

Right Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	15	0.0%	15
	Through	-	314	8.9%	328
	Right	-	7	0.0%	7

Advancing Volume:	350
Right Turn Volume:	7

TURN LANE WARRANT FINDINGS

Left Turn Lane Warrant Findings

Applicable Warrant Figure: N/A

Warrant Met?: N/A

Right Turn Lane Warrant Findings

Applicable Warrant Figure: Figure 9

Warrant Met?: No

TURN LANE LENGTH CALCULATIONS

Intersection Control:	Unsignalized
Design Hour Volume of Turning Lane:	7
Cycles Per Hour (Assumed):	60
Cycles Per Hour (If Known):	40

Average # of Vehicles/Cycle: N/A

PennDOT Publication 46, Exhibit 11-6

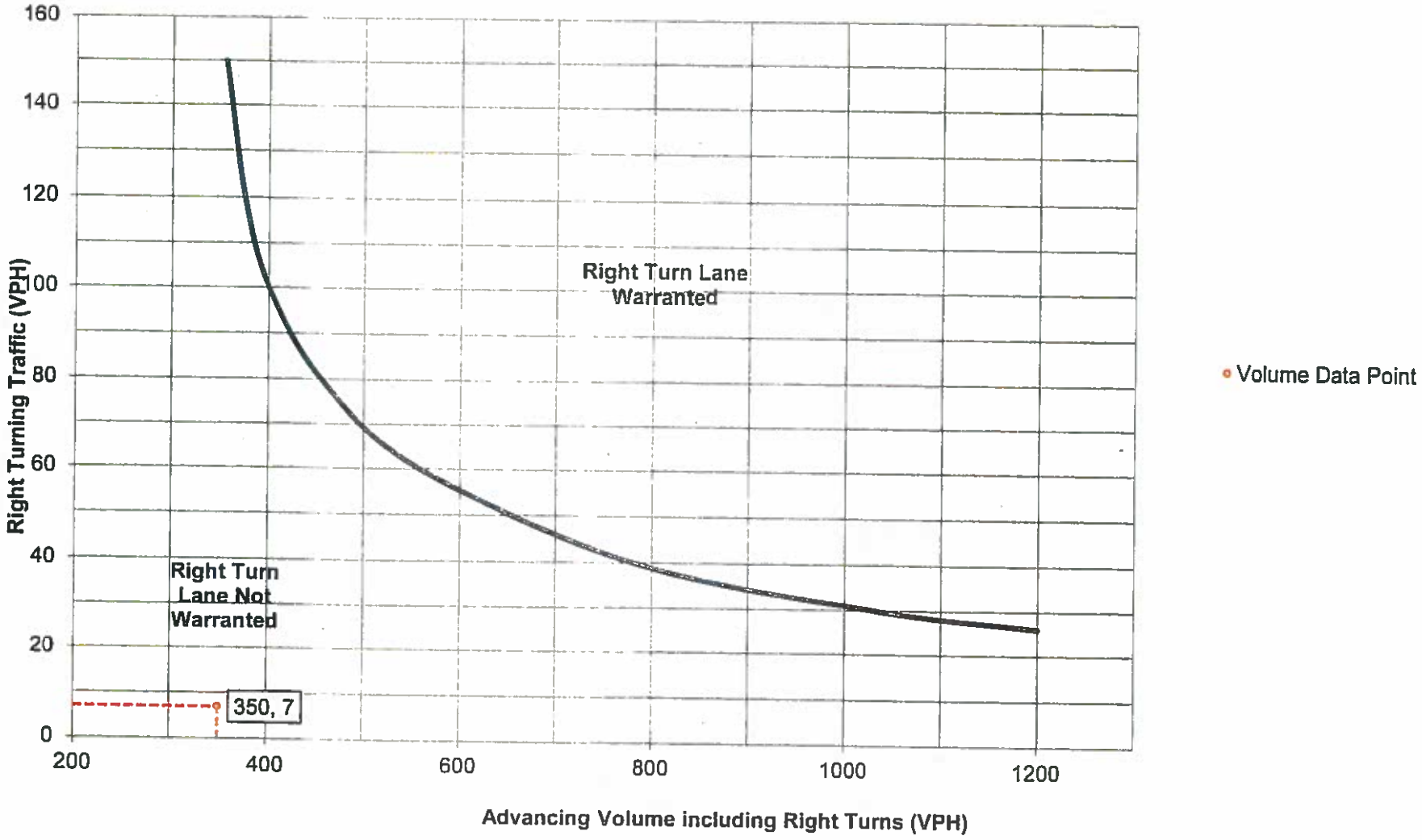
Type of Traffic Control	Speed (MPH)					
	25-35		40-45		50-60	
	Turn Demand Volume					
	High	Low	High	Low	High	Low
Signalized	A	A	B or C	B or C	B or C	B or C
Unsignalized	A	A	C	B	B or C	B

Right Turn Lane Storage Length, Condition A:	N/A	Feet
Condition B:	N/A	Feet
Condition C:	N/A	Feet
Required Right Turn Lane Storage Length:	N/A	Feet

Additional Findings: N/A

Additional Comments / Justifications:

Figure 9. Warrant for right turn lanes on two-lane roadways
(40 mph or lower speeds, unsignalized and signalized intersections)



Turn Lane Warrant and Length Analysis Workbook

STUDY LOCATION AND ANALYSIS INFORMATION

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County:	Lancaster County	Conducted By:	John M. Schick
PennDOT Engineering District:	8	Checked By:	
		Agency/Company Name:	RETTEW Associates, Inc.

Intersection & Approach Description: Main Street (SR 0230) and Lumber Street / Fairview Street

Analysis Period:	2022	Number of Approach Lanes:	1
Design Hour:	PM Peak Hour	Undivided or Divided Highway:	Undivided
Intersection Control:	Unsignalized		
Posted Speed Limit (MPH):	25	Type of Analysis	
Type of Terrain:	Level	Left or Right-Turn Lane Analysis?:	Left Turn Lane

VOLUME CALCULATIONS

Left Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	7	0.0%	7
	Through	-	576	4.8%	590
	Right	Yes	16	0.0%	16
Opposing	Left	Yes	29	3.6%	30
	Through	-	460	3.6%	469
	Right	Yes	17	0.0%	17

Advancing Volume:	613
Opposing Volume:	516
Left Turn Volume:	7
% Left Turns in Advancing Volume:	1.14%

Right Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	29	3.6%	N/A
	Through	-	460	3.6%	N/A
	Right	-	17	0.0%	N/A

Advancing Volume:	N/A
Right Turn Volume:	N/A

TURN LANE WARRANT FINDINGS

Left Turn Lane Warrant Findings

Applicable Warrant Figure: Figure 1

Warrant Met?: No

Right Turn Lane Warrant Findings

Applicable Warrant Figure: N/A

Warrant Met?: N/A

TURN LANE LENGTH CALCULATIONS

Intersection Control:	Unsignalized
Design Hour Volume of Turning Lane:	7
Cycles Per Hour (Assumed):	60
Cycles Per Hour (If Known):	40

Average # of Vehicles/Cycle: N/A

PennDOT Publication 46, Exhibit 11-6

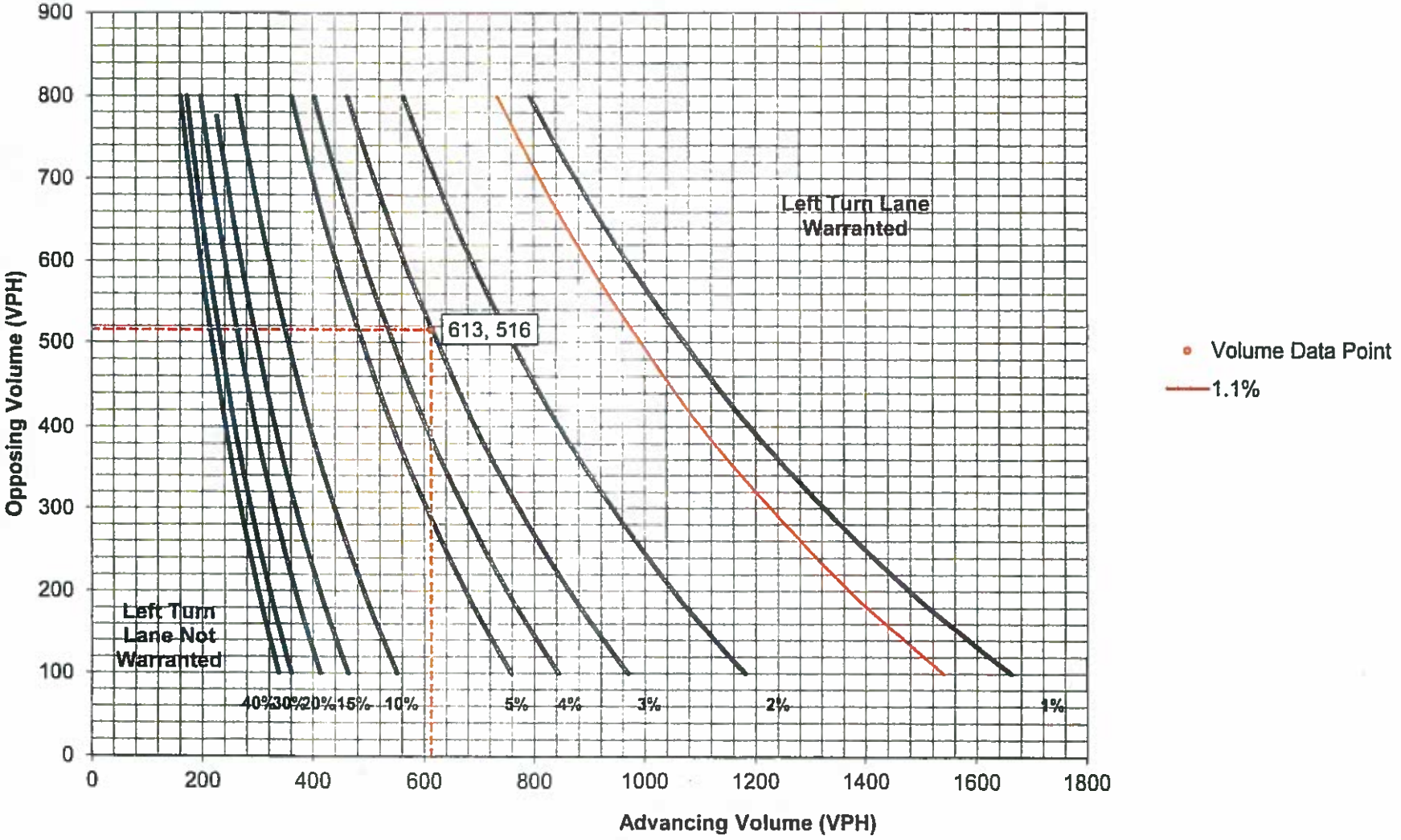
Type of Traffic Control	Speed (MPH)					
	25-35		40-45		50-60	
	Turn Demand Volume					
	High	Low	High	Low	High	Low
Signalized	A	A	B or C	B or C	B or C	B or C
Unsignalized	A	A	C	B	B or C	B

Left Turn Lane Storage Length, Condition A:	N/A	Feet
Condition B:	N/A	Feet
Condition C:	N/A	Feet
Required Left Turn Lane Storage Length:	N/A	Feet

Additional Findings: N/A

Additional Comments / Justifications:

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)



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Analysis Period:	2022	Number of Approach Lanes:	1
Design Hour:	PM Peak Hour	Undivided or Divided Highway:	Undivided
Intersection Control:	Unsignalized		
Posted Speed Limit (MPH):	25	Type of Analysis	
Type of Terrain:	Level	Left or Right-Turn Lane Analysis?:	Right Turn Lane

VOLUME CALCULATIONS

Left Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	7	0.0%	N/A
	Through	-	576	4.8%	N/A
	Right	Yes	16	0.0%	N/A
Opposing	Left	Yes	29	3.6%	N/A
	Through	-	460	3.6%	N/A
	Right	Yes	17	0.0%	N/A

Advancing Volume:	N/A
Opposing Volume:	N/A
Left Turn Volume:	N/A
% Left Turns in Advancing Volume:	N/A

Right Turn Lane Volume Calculations

Movement		Include?	Volume	% Trucks	PCEV
Advancing	Left	Yes	29	3.6%	30
	Through	-	460	3.6%	469
	Right	-	17	0.0%	17

Advancing Volume:	516
Right Turn Volume:	17

TURN LANE WARRANT FINDINGS

Left Turn Lane Warrant Findings

Applicable Warrant Figure: N/A

Warrant Met?: N/A

Right Turn Lane Warrant Findings

Applicable Warrant Figure: Figure 9

Warrant Met?: No

TURN LANE LENGTH CALCULATIONS

Intersection Control:	Unsignalized
Design Hour Volume of Turning Lane:	17
Cycles Per Hour (Assumed):	60
Cycles Per Hour (If Known):	40

Average # of Vehicles/Cycle: N/A

PennDOT Publication 46, Exhibit 11-6

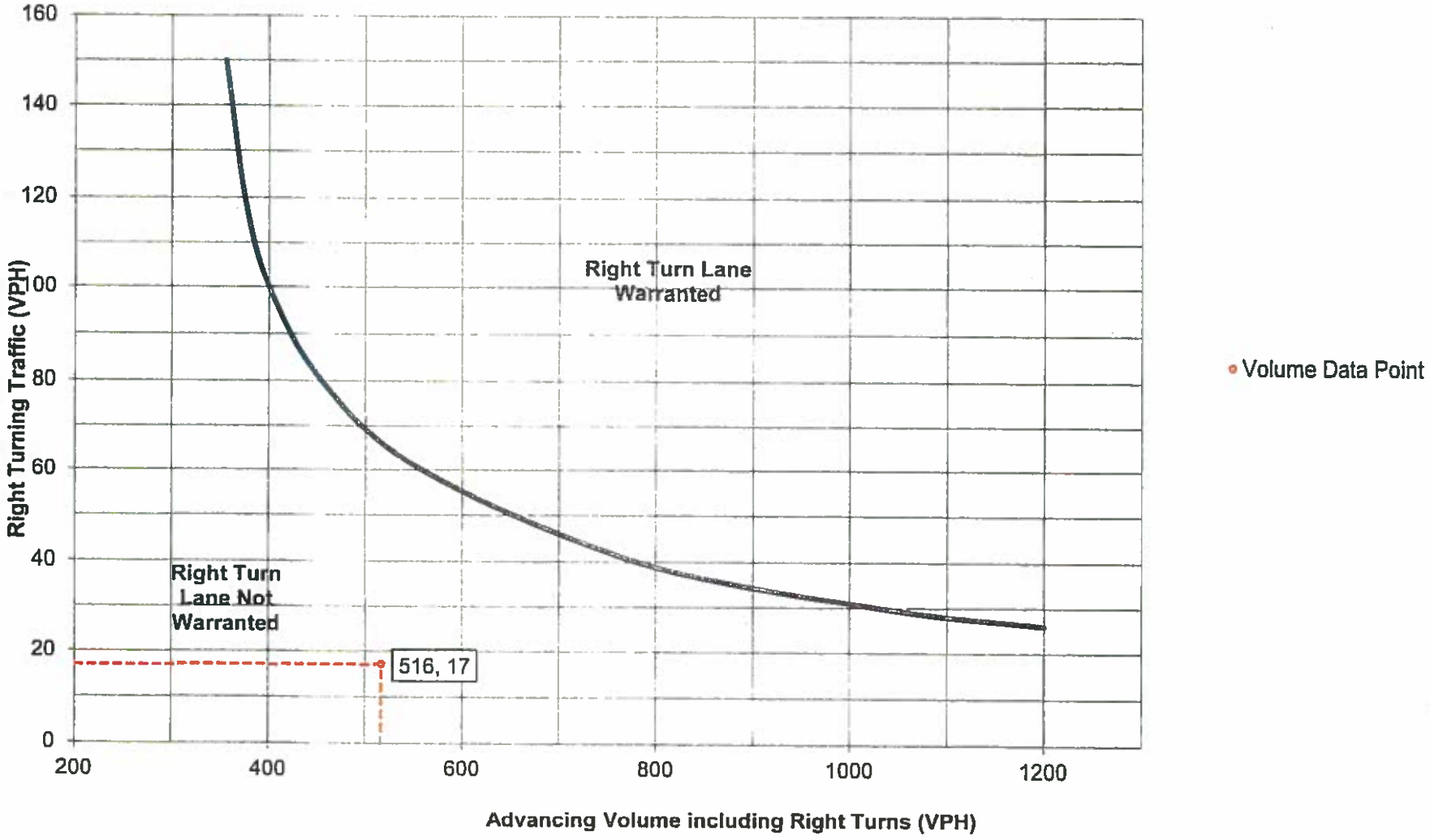
Type of Traffic Control	Speed (MPH)					
	25-35		40-45		50-60	
	Turn Demand Volume					
	High	Low	High	Low	High	Low
Signalized	A	A	B or C	B or C	B or C	B or C
Unsignalized	A	A	C	B	B or C	B

Right Turn Lane Storage Length, Condition A:	N/A	Feet
Condition B:	N/A	Feet
Condition C:	N/A	Feet
Required Right Turn Lane Storage Length:	N/A	Feet

Additional Findings: N/A

Additional Comments / Justifications:

Figure 9. Warrant for right turn lanes on two-lane roadways
(40 mph or lower speeds, unsignalized and signalized intersections)



County of Lancaster

Planning Commission
160 North Queen Street
Suite #320
Lancaster, PA 17603
Phone: 717-299-8333
Fax: 717-295-3659
www.lancastercountyplanning.org

County Commissioners
Joshua G. Parsons, Chairman
Ray D'Agostino, Vice-Chairman
Craig E. Lehman, Commissioner

Executive Director
Scott W. Standish

21LP

MEMORANDUM

To: Samuel Sulkosky, Manager
Mount Joy Borough

From: Brad Stewart
Senior Planner

Thru: Dean S. Severson, AICP
Director for Planning Services

Date: May 3, 2021

Re: Advisory Plan Review Comments
LCPC # 75-212-2, Gerberich Payne Shoe Company
Mount Joy Borough

The Pennsylvania Municipalities Planning Code establishes standards and procedures for the review of subdivision and land development plans. The Lancaster County Planning Department offers the following advisory comments and recommendations, which are for your consideration in the application of municipal subdivision and land development regulations to the project.

GENERAL INFORMATION

Subject:	**Final Land Development Plan**
Proposal:	**Proposal to redevelop the Gerberich Payne Shoe Company building into a mixed-use senior living facility that will consist of 36 senior apartment units, a 1st floor commercial space and a reconfigured off-street parking area that will accommodate 40 parking spaces. The acreage of the lot is 1.28 acres.**
Owner(s):	**Mount Joy Senior Housing, LP**
Applicant:	**Same**
Firm:	**DC Gohn Associates, Inc.**
Received:	**April 1, 2021**

LOCATION

Parcel ID #:	**4503425600000**
Address:	**240 W. Main Street**
Location:	**South side of West Main Street, Rt. 230, north side of west Henry Street**
Places2040:	**The project is located inside the Donegal Urban Growth Area and is located within the urban core character zone.**

PATTERN

Zoning:	**CBD – Commercial Business**
Present Use:	**Abandoned Factory**

TIMING
Utilities: **Public Sewer and Public Water**

RECOMMENDATIONS

PLACES2040 COMMENTARY

Connecting People, Place & Opportunity
- ***Make it easier for residents and visitors to get around without a car.***
  - Provides pedestrian transportation network for all users.

Taking Care of What We Have
- ***Use existing buildings and maintain public infrastructure.***

Growing Responsibly
- ***The project is located inside of the Urban Growth Area.***
- ***Prioritize opportunities to redevelop built areas and fill in the gaps in urban areas.***
- ***Build more compactly and efficiently.***

SITE DESIGN COMMENTARY

1. Please add the LCPC File # **75-212-2** to the lower right-hand corner of the plan

Please note that no land shall be conveyed, transferred, or agreed to be sold, nor shall the construction of any improvements be initiated, until authorized by the local municipal officials.

---

* * *

DSS/BLS

Copy: Brian Cooley, D.C. Gohn Associates, Inc. (Mount Joy)

S:\COMMUNPL\LCPC\2021\5-10-21\DRAFT\75-212-2 Gerberich Payne Shoe Company BLS.docx

dc gohn Associates, Inc.
Surveyors - Engineers - Landscape Architects

May 17, 2021

Stacie Gibbs, BCO
Planning, Zoning, & Code Administrator
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: Gatesburg Road Development
Gerberich Payne Shoe Company Land Development Plan
ARRO # 10863.39
D.C. Gohn No. 1378-20

Dear Ms. Gibbs:

Please accept this letter and the accompanying plans and documents as our response on behalf of Gatesburg Road Development / Gerberich Payne Shoe Company to the ARRO letter dated May 3, 2021. We respond to that engineering review letter as follows:

There is a future ADA sidewalk proposed between the parking lot and the building entrance on the west side. The purpose to show the future walk is to account for the 500 square feet of impervious area associated with future walk. The stormwater calculations, report, and waiver request letter have been revised to include the future walk area. The entire future walk drains to the proposed rain garden.

There is an age restriction letter and standard rental agreement included with this submission which addresses the comment in the Borough Solicitor letter dated April 9, 2021.

Subdivision and Land Development

1. The applicant shall post financial security to the Borough [§240-31.A]
   The applicant will post financial security prior to plan approval.

2. As-built plans shall be provided after construction is complete and the cost for preparation of the plans shall be included in the financial security. [§240-37]. A note shall be added to the plans requiring the submission of as-built plans.
   The note has been added to Sheet 4 under Plan Notes, Note 10 and the line item for the as built is provided in the cost estimate.

3. Any change to a street or access intersection with a state road, such as changing Williams Alley from two-way to one-way, shall require a Highway Occupancy Permit Application submission to PennDOT and the following note shall be shown on the plan: "A Highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L.

1242, No.428), known as the 'State Highway Law', before access to a state highway is permitted. Access to the state highway shall be authorized by a highway occupancy permit and the Borough Council's approval of this plan in no way implies that such a permit can be acquired." [§240-61.D.12.c]
Since there is no physical alterations to Williams Alley, a Highway Occupancy Permit Application to PennDOT is not required.

4. The plans shall be signed and sealed by a registered engineer, surveyor, or landscape architect. [§240-61.A.5]
The plans will be signed and sealed prior to plan recording.

5. The right-of-way for Williams Alley is 15' wide and the cartway at the intersection of West Henry Street is wider. The applicant shall clarify if additional right-of-way will be dedicated to the Borough. [§240-43.H]
There is additional right of way proposed for the widening of Williams Alley along the property frontage. Sheet 3 indicates the additional right of way. A legal description and exhibit is included with this submission which will be used to offer the additional right of way through a deed of dedication to the Borough. The waiver letter has been revised based on the additional right of way offered for dedication.

6. Proposed pavement markings and signage shall be shown on the plan. Based on the response from previous Comment 8, Williams Alley is to be on way northbound 190' north of West Henry Street. The applicant shall provide appropriate signage to indicate this change. Changing from existing two-way traffic to one-way traffic requires a PennDOT Highway Occupancy Permit. The Highway Occupancy Permit plan shall be submitted to the Borough for review prior to submission to PennDOT. [§240-61.D.2]
The signage is provided on Sheet 3. Since there is no physical alterations to Williams Alley, a Highway Occupancy Permit Application to PennDOT is not required.

7. Clear sight triangles shall be shown on the plan for the intersections of Williams Alley with Main Street and West Henry Street. [§240-61.D.11]
The safe stopping sight distance is provided on Sheet 3 which is consistent with the Borough ordinances. The safe stopping sight distance chart is included with this submission. Section B and C of the chart is not required since the alley is one way northbound.

Stormwater Management

8. The measurement of impervious area shall include the proposed future parking area. This area shall be included in the volume calculations. [§226-31.H.1]
A note has been added to Page 14 of the PCSM Report which indicates that the stormwater volume calculations include 2,447 square feet of impervious area associated with the future parking spaces and road widening associated with West Henry Street and the 500 square feet associated with the future ADA sidewalk. A

similar note is provided on Page 9 of the PCSM Report. The stormwater rate and volume calculations account for the future impervious areas.

9. The rain garden detail on Sheet 9 shows the spillway at an elevation of 376.30' and shall be corrected. [§226-43.J.5]
   The spillway elevation of 376.50 has been provided on the rain garden detail on Sheet 9.

10. Financial security shall be provided in the amount indicated in an approved construction cost estimate. [§226-60]
    A cost estimate is included with this submission.

11. An Operation and Maintenance Agreement shall be prepared, signed, and provided to the Borough. [§226-62]
    The Borough Solicitor will provide a draft of the O&M Agreement for review by the applicant.

Zoning

12. The electrical line to the proposed lighting fixtures shall be provided to show there are no conflicts with other proposed features. [§270-76]
    The exact electrical line locations to the light fixtures are unknown at this time based on the ongoing electrical design inside the building and the final locations of the outside electrical transformers and utility pole locations. Based on the site lighting locations, there are no known potential conflicts with other features. The water and sewer connections are located along Main Street. There is adequate room to accommodate the electrical lines and the storm sewer conveyance systems.

Traffic

13. Williams Alley is proposed to be one way northbound from 190' north of West Henry Street. The analysis shall reflect this change.
    The analysis is based on the assumption that Williams Alley is one way northbound.

14. The study indicate that the peak hour for each intersection varies and that the analysis utilized the highest peak hour at each intersection in order to analyze the "worst-case" scenario.
    This comment was addressed in the Memo prepared by RETTEW that addressed comments received during the sketch plan review.

15. The plans indicate that the proposed use is to be senior housing and retail or restaurant space. The analysis shall provide the trip generation calculations and analysis for the "worst-case" scenario.
    Sheet 1 under Site Data has been revised to General Retail or Medical Office which is consistent with the assessment.

General

16. The sidewalk detail on Sheet 7 of 12 shall be revised to state 4' minimum-varies, see plan.
The detail has been revised with the additional note.

17. A note shall be provided on the plan indicating that the curb shall be painted yellow or "No Parking" signs shall be installed along Main Street between Williams Alley and the proposed parking spaces to the west.
A "No Parking Here To Corner" sign has been added at the eastern parking space along Main Street.

18. Notes on the plan state the West Henry Street may be widened and parking constructed in the future. If the developer/owner decides to proceed with construction, approval by Borough Council must be obtained and maintenance and other applicable agreements must be executed with the Borough prior to beginning construction.
The note has been added to Sheet 4 under Plan Notes, Note 11.

19. A "Tenant Parking Only" sign shall be shown on the plans at the entrance to the parking lot.
The sign has been added to Sheet 3.

Waivers – Subdivision and Land Development

20. The applicant is requesting to waive the requirement to improve streets in which a subdivision or land development abuts an existing Borough and/or state street [§240-43.H.1] Based on the justification provided in the applicant's modification request letter, **ARRO recommends grating this waiver request.**

21. The applicant is requesting to waive the requirement for street intersections with a local street to be a minimum radius of 20' [§240-43.I.4]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

22. The applicant is requesting to waive the requirement that curbing shall be provided along the edge of any landscaped portion of a parking facility [§240-46.C.1]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

23. The applicant is requesting to waive the requirement to dedicate recreation land to the Borough because there is limited area on the site for this purpose. As an alternative, the applicant is proposing to pay a fee in lieu of dedication of recreation land. Based on the justification provided, **ARRO recommends granting this waiver request.**

24. The applicant is requesting to waive the requirement to provide a fee in lieu of dedication of recreation [§240-57.G]. The applicant proposes paying a fee of $2,000.00 per unit for a total fee of $72,000.00. However, because land is not being provided on the subject property, the fair market value cannot be determined. Therefore, Borough Council must decide if $72,000.00 is an acceptable fee in lieu of land dedication.

25. The applicant is requesting to waive the requirement that applications for all residential developments with 20 or more dwelling units and buildings containing 1,000 square feet of usable space provide a traffic study and report [§240-62.B]. Because a traffic assessment was prepared with provides adequate information to evaluate the traffic impacts on the adjacent roadway system, **ARRO recommends granting this waiver request.**

26. The applicant is requesting to waive the requirement that the applicant shall make an estimated contribution of the sum necessary to defray the costs of improvements recommended by the Traffic Impact Study [§240-63.B.5]. After discussion with Borough staff and the applicant's engineer, this waiver is not required because the traffic study is not recommending improvements.
    The waiver has been removed from the plans and the waiver request letter.

Waivers – Stormwater Management

27. The applicant is requesting to waive the requirement for the loading ratios in Karst areas to be a maximum of 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area. The site is very limited in space which limits the size of the infiltration area [§226-32.A.2.c]. Based on the justification provided, **ARRO recommends granting this waiver request.**

28. The applicant is requesting to waive the requirement that the use of the emergency spillway to convey flows greater than the 50-year storm is permitted. The spillway is designed as the primary outlet for the rain garden and will convey flows from the 2-year through 100-year events without erosion. Based on the justification provided, **ARRO recommends granting this waiver request.**

Plans are being submitted directly to ARRO for review.

We submit the following for review:

1. 15 copies 11 x 17 of the Preliminary/Final Land Development Plan
2. 1 copy of the cost estimate
3. 1 copy of the legal description for additional right of way
4. 1 copy of the exhibit for additional right of way
5. 1 copy of the PCSM Report
6. 1 copy of the waiver request letter
7. 1 copy of the PADOT SSSD Chart

8. 1 copy of the age restriction letter
9. 1 copy of the rental agreement

Respectfully,

D. C. Gohn Associates, Inc.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

cc: Mount Joy Senior Housing LP
Steve Funk, LeFevre Funk Architects Inc.
ARRO
File

dc gohn Associates, Inc.

Surveyors - Engineers - Landscape Architects

May 17, 2021

Stacie Gibbs, BCO
Planning, Zoning & Code Administrator
Mount Joy Borough
21 E. Main Street
Mount Joy, PA 17552

SUBJECT: Gerberich-Payne Shoe Company Re-Development
Preliminary/Final Land Development Plan Modification Requests
DCG Project Number **1378-20**

Ms. Stacie Gibbs:

On behalf of our client, Gatesburg Road Development, we are submitting the requested modifications for the Preliminary/Final Land Development Plan for the Gerberich-Payne Shoe Company Re-Development.

Subdivision and Land Development Ordinance

1. **Section 240-43.H.1 – Improvement of Existing Streets**
We request relief from the requirement that in cases where a subdivision or land development abuts an existing Borough and/or state street, the street shall be improved to the ultimate width in accordance with Subsection H(1) or as indicated on the Official Map, whichever is greater, and additional right of way shall be provided, concrete curbing, and sidewalk, and any other street improvements that are required by this Chapter, shall be constructed.

   The Official Map indicates that the Alley and the portion of West Henry Street along the property frontage as proposed local streets. There are no additional requirements for any adjacent streets noted on the Official Map.

   The Alley requires a 16 feet cartway and a 20 feet right of way. If improved to local street standards, it requires a 24 feet cartway and a 50 feet right of way. Currently, the Alley consists of a 15' right of way and a 12' cartway. The proposal is to offer for dedication 9 feet to 17 feet of additional right of way on the western side of the alley which will encompass the alley widening along the project frontage to accommodate the re-configured access to the site and provide for better maneuverability into the site. This results in a total right of way of 24 feet to 32 feet. In addition, there is 7.8 feet to 15 feet of additional widening of the alley along the property frontage. This results in a total cartway width of 19.8 feet to 25 feet. The existing building and sidewalk on the subject property and the existing building on the adjacent property are directly adjacent to the Alley which would prohibit expanding the cartway or right of way in this area.

West Henry Street requires a 24 feet cartway with curbing and no parking and a 50 feet right of way. Currently, West Henry Street consists of a 49.5 feet right of way and a cartway width of 18.1 feet. The existing street is adequate for access to the site.

West Main Street is classified as arterial which requires 36 feet cartway with curb and no parking and a 60 feet right of way. Currently, West Main Street consists of a 39 feet cartway with curb and a 60 feet right of way. The street meets current standards.

2. **Section 240-43.I.(4) – Street Radius**
   We request relief from the requirement that the street intersection with a local street shall be a minimum radius of 20 feet. The request is to provide a radius of 15 feet and 8 feet for the parking lot access drive to Williams Alley. The smaller radius are a result of the layout of the parking lot and access drives which accommodate the required number of parking spaces and provides access to the building. The smaller radius permit resident vehicles and emergency vehicles from entering and exiting the parking lot to the alley.

3. **Section 240-46.C.(1) – Curbing**
   We request relief from the requirement that curbing shall be provided along the edge of any landscaped portions of a parking facility. The request is to provide curbing in the area of the handicap parking area, the center landscape island, and the northern portion of the parking lot adjacent to the building. The remaining parking areas do not propose curbing. The parking lot is designed to sheet flow stormwater from Henry Street to the storm sewer system along the curbed areas for collection to the stormwater BMP. There is a landscape and grass buffer between the areas adjacent to the parking lot which do not contain curbing along Henry Street and the western property line.

4. **Section 240-57.D.(1) – Dedication of Recreation**
   We request relief from the requirement to dedicate recreation land. There is limited areas of the site to dedicate areas for recreation. As an alternate, the project proposes to pay a fee in lieu of dedication of recreation as indicated in Section 240-57.G.

5. **Section 240-57.G – Fee In Lieu of Dedication**
   We request relief from the requirement to provide a fee in lieu of dedication of recreation. As an alternate, the applicant is proposing a fee in lieu of $2,000 per unit. Based on the 36 residential units, the proposed fee in lieu of is $72,000.

6. **Section 240-62.B – Traffic Study**
   We request relief from the requirement for applications for all residential developments containing 20 or more dwelling units and all nonresidential developments with buildings containing 1,000 square feet of usable space shall provide a traffic study and report. The alternate is a traffic assessment. The traffic assessment has been revised based on comments received from the public meetings regarding the review of the sketch plan and previous traffic assessment. In particular, the New Haven Street and Henry Street and West Main Street, Manheim Street, and New Haven Street intersections have been analyzed in addition to the previous intersections. The revisions are incorporated into the revised assessment.

The assessment is based on the 36 senior apartment units, 3,000 square feet of general retail, and 3,000 square feet of medical office. The traffic assessment indicates that there are approximately 21 AM peak trips and 34 PM peak trips for the senior housing, retail, and medical office. The results of the capacity analyses indicate that the studied intersections currently operate at an overall acceptable level of service and will continue to operate at an overall acceptable level of service for the project. The results of the queue analyses indicated that the proposed redevelopment will not have any significant impact on the studied intersections. The results of the auxiliary turn lane warrant analysis indicates that turn lanes are not warranted for traffic along Main Street turning right or left onto Lumber Street. The crash data for the area indicated 9 reportable crashes at the five intersections over the past 5 years. Based on the traffic assessment, the redevelopment will not create any adverse traffic conditions to the surrounding street network and no roadway improvements are warranted.

Stormwater Management Ordinance

1. **Section 226-32.A.(2)(c) – Loading Ratios**
   We request relief of the requirement that the maximum loading ratios in Karst areas shall be 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area.

   The loading ratio for the proposed rain garden is 18.9:1 for the total area to infiltration area and 12.2:1 for the impervious area to the infiltration area. The rain garden is designed to infiltrate stormwater from a portion of West Henry Street, parking lot, sidewalks, and grass areas. A soil amended area is installed at the bottom of the rain garden which will promote infiltration and aid in water quality. A spillway is used as an overflow during larger storm events. The dewatering time is 24 hours for the volume storage area. The rain garden is routed for the 100 year storm to ensure that stormwater drains to the infiltration basin without impacting the adjacent areas of development.

   Currently, there are no stormwater detention facilities on-site. Based on the re-configured parking lot, the existing building, and the surrounding street network, there is limited areas for stormwater infiltration and detention. The proposed rain garden is designed to infiltrate the net increase in the 2 year volume associated with Area A and designed to detain stormwater for the 2, 10, 25, 50, and 100 year rate. The addition of the rain garden will provide a stormwater facility which provides infiltration, treats water quality, and detains rate for an existing site which did not contain any such facility.

2. **Section 226-37.A.(6)(b) — Emergency Spillway Conveyance**
   We request relief of the requirement that the use of the emergency spillway to convey flows greater than the 50 year storm is permitted. The request is to use the emergency spillway to convey flows from the 2, 10, and 25 year storm events. This is in addition to the emergency spillway conveying the 50 and 100 year storms which is permitted. The spillway is designed with the required erosion control liner for the 100 year storm inflow hydrograph to the rain garden to prevent erosion. The stormwater overflow will drain to

the existing inlet located in West Main Street similar to the pre development stormwater flow condition.

Call me directly if you have any questions or concerns. Thank you.

Sincerely,

D. C. GOHN ASSOCIATES, INC.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

cc: Mount Joy Senior Housing LP
Steve Funk, LeFevre Funk Architects Inc.
ARRO
File

ENGINEER'S OPINION OF PROBABLE COST
FOR

GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH

PROJECT NO: 1378-20

May 17, 2021

SITE IMPROVEMENTS

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
EROSION CONTROL				
ORANGE CONSTRUCTION FENCE	215	L.F.	$ 5.00	$ 1,075.00
12" COMPOST FILTER SOCK	112	L.F.	$ 3.50	$ 392.00
18" COMPOST FILTER SOCK	71	L.F.	$ 5.00	$ 355.00
STABILIZED CONSTRUCTION ENTRANCE	1	EA.	$ 1,200.00	$ 1,200.00
ECS-2 - RAIN GARDEN SPILLWAY PROTECTION	15	S.Y.	$ 5.00	$ 75.00
NAG S75 SLOPE MATTING	360	S.Y.	$ 5.00	$ 1,800.00
INLET PROTECTION	5	E.A.	$ 250.00	$ 1,250.00
PERMANENT SEED AND MULCH	1,630	S.Y.	$ 0.20	$ 326.00
RIP-RAP APRON (R-3)	2	S.Y.	$ 28.00	$ 56.00
PAVEMENT				
1.5" COMPACTED SUPERPAVE ASPHALT MIXTURE DESIGN HMA WEARING COURSE, PG 64-22, 0.3 TO 3M ESALS, 12.5 MM	2,256	S.Y.	$ 10.00	$ 22,560.00
3" COMPACTED SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 64-22, 0.3 TO 3M ESALS, 25 MM	2,256	S.Y.	$ 12.00	$ 27,072.00
6" 3A AGGREGATE STONE	2,256	S.Y.	$ 8.00	$ 18,048.00
STORM SEWER				
TYPE "C" INLET TOP	4	EA.	$ 636.00	$ 2,544.00
INLET BOX	4	EA.	$ 1,590.00	$ 6,360.00
CONCRETE HEADWALL / ENDWALL, TYPE D-W	1	EA.	$ 2,400.00	$ 2,400.00
15" HDPE	247	L.F.	$ 40.00	$ 9,880.00
STORM WATER MANAGEMENT				
AMENDED SOIL (RAIN GARDEN), 2' DEPTH	90	C.Y.	$ 25.00	$ 2,250.00
RAIN GARDEN EXCAVATION	267	C.Y.	$ 25.00	$ 6,675.00
MISCELLANEOUS				
AS-BUILT DRAWINGS	1	EA.	$ 2,000.00	$ 2,000.00
SIDEWALK	200	S.Y.	$ 25.00	$ 5,000.00
VERTICAL CURB	645	L.F.	$ 20.00	$ 12,900.00
SIGNS	5	EA.	$ 200.00	$ 1,000.00
BUFFER TREES	7	EA.	$ 200.00	$ 1,400.00
BUFFER SHRUBS	42	EA.	$ 50.00	$ 2,100.00
STREET TREES	11	EA.	$ 200.00	$ 2,200.00
PARKING LOT TREES	4	EA.	$ 200.00	$ 800.00
SITE LIGHTING	1	EA.	$ 5,000.00	$ 5,000.00
CONCRETE PARKING CURB STOPS	4	EA.	$ 200.00	$ 800.00
DUMPSTER ENCLOSURE AND PAD	1	EA.	$ 3,000.00	$ 3,000.00
			SUBTOTAL:	$ 140,518.00
			10% CONTINGENCY:	$ 14,051.80
			5% INSPECTION:	$ 7,025.90
			TOTAL:	$ 161,595.70

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
TODD E. SMEIGH
ENGINEER
No. PE038099E

SEALED BY: _____ 5/17/2021
Todd E. Smeigh, P.E. Date

P:\1378\1378-20\Correspondence\Site Cost Estimate

Corporate Headquarters
108 West Airport Road
Lititz, PA 17543
T 717.569.7021
www.arroconsulting.com

May 25, 2021

Stacie Gibbs, BCO
Planning, Zoning, & Code Administrator
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: Gatesburg Road Development
Gerberich Payne Shoe Company Land Development
ARRO #10863.39

Dear Stacie:

ARRO Consulting, Inc. ("ARRO") reviewed the following information in accordance with the Mount Joy Borough Subdivision and Land Development, Zoning, and Stormwater Management Ordinances and ARRO's May 3, 2021 Review Letter:

1. Comment Response Letter for Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc., dated May 17, 2021.
2. Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc. with Drawing # CG-3049 dated March 22, 2021, last revised May 17, 2021.
3. Legal Description of Right-of-Way Dedication on Williams Alley for Gerberich Payne Shoe Company, dated May 18, 2021.
4. Preliminary/Final Land Development Plan Modification Request Letter submitted by D.C. Gohn Associates, Inc. with Project No. 1378-20 dated May 17, 2021.
5. Post-Construction Stormwater Management Report for Preliminary/Final Land Development Plan: Gerberich Payne Shoe Company – 240 West Main Street prepared by D.C. Gohn Associates, Inc. with DCG Project No. 1378-20 dated March 22, 2021, last revised May 17, 2021.
6. Engineer's Opinion of Probable Cost for Gerberich Payne Shoe Company, dated May 17, 2021.
7. Proposed Right-of-Way Exhibit for Mount Joy Senior Housing LP prepared by D.C. Gohn Associates, Inc., dated May 6, 2021.
8. Driveway Sight Distance Measurements for Mount Joy Senior Housing dated May 17, 2021.

We offer the following comments:

Subdivision and Land Development

1. The plans shall be signed and sealed by a registered engineer, surveyor, or landscape architect. [§240-61.A.5]

   The applicant indicated that the plans will be signed and sealed prior to plan recording.

Stormwater Management

2. The soils found on site are Hagerstown-Urban Land Complex (Hc), not Urban Land (Uc), as utilized in the stormwater report. Hc is a hydrologic soil group (HSG) of B, not D. Volume calculations shall be revised utilizing a HSG of B given that it will make a difference in the amount of volume increase [§226-32]. However, rate calculations do not have to be redone as there is less impervious area on the site and, therefore, the rate will be less regardless of HSG. And, considering the soils as D is also conservative in terms of flow for pipe capacity and spillway stability so these calculations do not have to be revised.
3. The volume control calculations shall encompass the entire limit of disturbance as well as the additional parking area (approx. 1.15 acres) [§226-32].
4. The applicant shall include the limit of disturbance on the plans. This area can exclude the future parking area. If the limit of disturbance is greater than one acre, applicable state permits shall be acquired and provided to the Borough [§226.44.A and §226-31.D].
5. The Kleinfelder recommendations shall be addressed. Therefore, notes shall be provided on the plans requiring water-tight joints at all stormwater pipe connections as well as an elimination of the weep holes in the inlets [§226-31.J.(5)].
6. Erosion control matting (ECS-2) shall be shown for the spillway on the plans [§226-34.H].
7. An Operation and Maintenance Agreement shall be prepared, signed, and provided to the Borough [§226-62].

Zoning

8. The electrical lines to the proposed lighting fixtures shall be provided to show there are no conflicts with other proposed features [§270-76].

   The applicant responded that the electrical line locations to the proposed lighting fixtures cannot be determined at this time because the outside transformer and pole locations have not been determined at this time. Locations of the electrical lines shall be provided to show there are no conflicts with other proposed features prior to plan approval.

Traffic

9. Williams Alley is proposed to be one way northbound from 190' north of West Henry Street. The analysis shall reflect this change.

This comment remains because the proposed analysis still showed vehicles entering Williams Alley from Main Street.

10. The study shall indicate that the peak hour for each intersection varies and that the analysis utilized the highest peak hour at each intersection in order to analyze the "worst-case" scenario.

    This comment remains because a letter from RETTEW was submitted but was not attached as correspondence in the Traffic Assessment.

General

11. A Highway Occupancy Permit is required when working within the state right-of-way and shall be submitted to the Borough for review prior to submission to PennDOT.

Waivers – Subdivision and Land Development

12. The applicant is requesting to waive the requirement to improve streets in which a subdivision or land development abuts an existing Borough and/or state street (§240-43.H.1). Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

13. The applicant is requesting to waive the requirement for street intersections with a local street to be a minimum radius of 20' [§240-43.I.4]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

14. The applicant is requesting to waive the requirement that curbing shall be provided along the edge of any landscaped portion of a parking facility [§240-46.C.1]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

15. The applicant is requesting to waive the requirement to dedicate recreation land to the Borough [§240-57.D]. Because there is limited area on the site for this purpose and, as an alternative, the applicant is proposing to pay a fee in lieu of dedication of recreation land, **ARRO recommends granting this waiver request.**

16. The applicant is requesting to waive the requirement to provide a fee in lieu of dedication of recreation [§240-57.G]. The applicant proposes paying a fee of $2,000.00 per unit for a total fee of $72,000.00. However, because land is not being provided on the subject property, the fair market value cannot be determined. Therefore, Borough Council must decide if $72,000.00 is an acceptable fee in lieu of land dedication.

17. The applicant is requesting to waive the requirement that applications for all residential developments with 20 or more dwelling units and buildings containing 1,000 square feet of usable space provide a traffic study and report [§240-62.B]. Because a traffic assessment was prepared which provides adequate information to evaluate the traffic impacts on the adjacent roadway system, **ARRO recommends granting this waiver request.**

18. The applicant is requesting to waive the requirement that the applicant shall make an estimated contribution of the sum necessary to defray the costs of improvements recommended by the Traffic Impact Study [§240-62.B.5]. After discussion with Borough staff and the applicant's engineer, this waiver is not required because the traffic study is not recommending improvements.

Waivers – Stormwater Management

19. The applicant is requesting to waive the requirement for the loading ratios in Karst areas to be a maximum of 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area. The site is very limited in space which limits the size of the infiltration area [§226-32.A.2.c]. Based on the justification provided, **ARRO recommends granting this waiver request**.

20. The applicant is requesting to waive the requirement that the use of the emergency spillway to convey flows greater than the 50-year storm is permitted [§226-37.A.6.b]. The spillway is designed as the primary outlet for the rain garden and will convey flows from the 2-year through 100-year events without erosion. Based on the justification provided, **ARRO recommends granting this waiver request**.

Please call me at 717-560-6065 if you have questions.

Sincerely,

Darrell L. Becker, P.E.
Vice President

DLB:ely

c: Jill Frey, Interim Manager – Borough of Mount Joy
Brian R. Cooley – D.C. Gohn Associates, Inc.
Josele Cleary, Esq. – Morgan, Hallgren, Crosswell, & Kane, PC

dc gohn Associates, Inc.

Surveyors - Engineers - Landscape Architects

June 1, 2021

Stacie Gibbs, BCO
Planning, Zoning, & Code Administrator
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: Gatesburg Road Development
Gerberich Payne Shoe Company Land Development Plan
ARRO # 10863.39
D.C. Gohn No. 1378-20

Dear Ms. Gibbs:

Please accept this letter and the accompanying plans and documents as our response on behalf of Gatesburg Road Development / Gerberich Payne Shoe Company to the ARRO letter dated May 25, 2021. We respond to that engineering review letter as follows:

Subdivision and Land Development

1. The plans shall be signed and sealed by a registered engineer, surveyor, or landscape architect. [§240-61.A.5]
   The applicant indicated that the plans will be signed and sealed prior to plan recording.

Stormwater Management

2. The soils found on site are Hagerstown-Urban Land Complex (Hc), not Urban Land (Uc), as utilized in the stormwater report. Hc is a hydrologic soil group (HSG) of B, not D. Volume calculations shall be revised utilizing a HSG of B given that it will make a difference in the amount of volume increase [§226-32]. However, rate calculations do not have to be redone as there is less impervious area on the site and therefore, the rate will be less regardless of HSG. And considering the soils as D is also conservative in terms of flow for pipe capacity and spillway stability so these calculations do not have to be revised.
   The volume worksheet has been revised to indicate a HSG of B for the two disturbed areas and the area to the rain garden. Page 14 and 15 of the PCSM Report contain the revised volumes. Listed below is a summary of the revisions:

   Disturbed Area A:
   - ***The previous increase in volume was 0.039 acre feet and the revised increase in volume is 0.040 acre feet which is a 0.01 volume increase.***

- ***The rain garden spillway elevation of 376.50 corresponds to 0.054 acre feet which is greater than the 0.040 acre feet of two year volume increase. As a result, the rain garden as designed meets the volume requirements. There are no revisions proposed for the rain garden.***

Disturbed Area B:

- ***The previous decrease in volume was 0.022 acre feet and the revised decrease in volume is 0.016 acre feet. Since there continues to be a net decrease in volume, no stormwater BMP's are required.***

To Rain Garden:

- ***The previous volume to the rain garden is 0.150 acre feet and the revised volume to the rain garden is 0.129 acre feet. The 0.129 acre feet to the rain garden remains greater than the 0.040 acre feet of the net increase in the two year volume.***

3. The volume control calculations shall encompass the entire limit of disturbance as well as the additional parking area (approx.. 1.15 acres) [§226-32].
   The limit of disturbance includes the on-site disturbed areas and the future parking and road widening of West Henry Street. The stormwater volume and stormwater rate calculations include the future parking and road widening of West Henry Street and the rain garden is designed based on the future impervious areas.

4. The applicant shall include the limit of disturbance on the plans. This area can exclude the future parking area. If the limit of disturbance is greater than one acre, applicable state permits shall be acquired and provided to the Borough [§226-44.A and §226-31.D].
   The limit of disturbance is 0.94 acres and is noted on Sheet 4 under Storm Drainage Notes, Note 13.

5. The Kleinfelder recommendations shall be addressed. Therefore, notes shall be provided on the plans requiring water-tight joints at all stormwater pipe connections as well as an elimination of the weep holes in the inlets [§226-31.J.(5)].
   The watertight note has been added to Sheet 4 under Storm Drainage Notes, Note 3 under the notes taken from the geology report. The weep holes have been removed from the inlet box on the Precast Concrete Box Inlet detail on Sheet 8.

6. Erosion control matting (ECS-2) shall be shown for the spillway on the plans [§226-34.H].
   The matting for the spillway is shown on Sheet 5 and 6. It is extended to the extent of the site grading to ensure erosion protection of the slopes.

7. An Operation and Maintenance Agreement shall be prepared, signed and provided to the Borough. [§226-61].

The Borough Solicitor will provide a draft of the O&M Agreement for the applicant to review.

Zoning

8. The electrical line to the proposed lighting fixtures shall be provided to show there are no conflicts with other proposed features. [§270-76]
   The applicant responded that the electrical line locations to the proposed lighting fixtures cannot be determined at this time because the outside transformer and pole locations have not been determined at this time. Locations of the electrical lines shall be provided to show there are no conflicts with other proposed features prior to plan approval.
   The underground electrical lines and light pole locations have been added to Sheet 3

Traffic

9. Williams Alley is proposed to be one way northbound from 190' north of West Henry Street. The analysis shall reflect this change.
   This comment remains because the proposed analysis still showed vehicles entering Williams Alley from Main. Street.
   Based on a conversation with the applicant's traffic consultant (RETTEW), the comment has been addressed.

10. The study indicate that the peak hour for each intersection varies and that the analysis utilized the highest peak hour at each intersection in order to analyze the "worst-case" scenario.
    This comment remains because a letter from RETTEW was submitted but was not attached as correspondence in the Traffic Assessment.
    Based on a conversation with the applicant's traffic consultant (RETTEW), the comment has been addressed.

General

11. A Highway Occupancy Permit is required when working within the state right-of-way and shall be submitted to the Borough for review prior to submission to PennDOT.
    Since there is no physical alterations to Williams Alley, a Highway Occupancy Permit Application to PennDOT is not required.

Waivers – Subdivision and Land Development

12. The applicant is requesting to waive the requirement to improve streets in which a subdivision or land development abuts an existing Borough and/or state street [§240-43.H.1] Based on the justification provided in the applicant's modification request letter, **ARRO recommends grating this waiver request.**

13. The applicant is requesting to waive the requirement for street intersections with a local street to be a minimum radius of 20' [§240-43.I.4]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

14. The applicant is requesting to waive the requirement that curbing shall be provided along the edge of any landscaped portion of a parking facility [§240-46.C.1]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

15. The applicant is requesting to waive the requirement to dedicate recreation land to the Borough [§240-57.D.1]. Because there is limited area on the site for this purpose and, as an alternative, the applicant is proposing to pay a fee in lieu of dedication of recreation land, **ARRO recommends denying this waiver request.**

16. The applicant is requesting to waive the requirement to provide a fee in lieu of dedication of recreation [§240-57.G]. The applicant proposes paying a fee of $2,000.00 per unit for a total fee of $72,000.00. However, because land is not being provided on the subject property, the fair market value cannot be determined. Therefore, Borough Council must decide if $72,000.00 is an acceptable fee in lieu of land dedication.

17. The applicant is requesting to waive the requirement that applications for all residential developments with 20 or more dwelling units and buildings containing 1,000 square feet of usable space provide a traffic study and report [§240-62.B]. Because a traffic assessment was prepared with provides adequate information to evaluate the traffic impacts on the adjacent roadway system, **ARRO recommends granting this waiver request.**

18. The applicant is requesting to waive the requirement that the applicant shall make an estimated contribution of the sum necessary to defray the costs of improvements recommended by the Traffic Impact Study [§240-63.B.5]. After discussion with Borough staff and the applicant's engineer, **this waiver is not required because the traffic study is not recommending improvements.**

Waivers – Stormwater Management

19. The applicant is requesting to waive the requirement for the loading ratios in Karst areas to be a maximum of 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area. The site is very limited in space which limits the size of the infiltration area [§226-32.A.2.c]. Based on the justification provided, **ARRO recommends granting this waiver request.**

20. The applicant is requesting to waive the requirement that the use of the emergency spillway to convey flows greater than the 50-year storm is permitted [§226-37.A.6.b]. The spillway is designed as the primary outlet for the rain garden and will convey flows from the 2-year through 100-year events without erosion. Based on the justification provided, **ARRO recommends granting this waiver request.**

Plans are being submitted directly to ARRO for review.

We submit the following for review:

1. 15 copies 11 x 17 Preliminary/Final Land Development Plan
2. 1 copy of the PCSM Report
3. 1 copy of the LCCD approval letter

Respectfully,

D. C. Gohn Associates, Inc.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

Cc: Mount Joy Senior Housing LP
Steve Funk
File

POST CONSTRUCTION STORMWATER MANAGEMENT REPORT

For

PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

GERBERICH PAYNE SHOE COMPANY – 240 WEST MAIN STREET

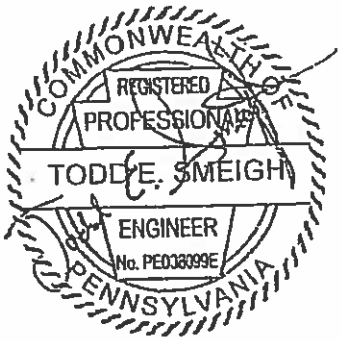
DCG Project No.: **1378-20**

Mount Joy Borough

Lancaster County, PA

March 22, 2021

REVISIONS
May 17, 2021
June 1, 2021



dc gohn Associates, Inc.

Surveyors – Engineers – Landscape Architects

32 Mount Joy Street P.O. Box 128
Mount Joy, PA 17552

OUR BENCHMARK IS QUALITY

(717) 653-5308

TABLE OF CONTENTS

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LIST OF FIGURES

APPENDICES

1 PROJECT INTRODUCTION

The enclosed information should be considered part of the Preliminary / Final Land Development Plan for Gerberich Payne Shoe Company located in Mount Joy Borough, Lancaster County, PA.

1.1 Project Intent

Mount Joy Senior Housing LP, the owner and developer of the property, is proposing to renovate the existing building to provide 36 senior apartment units, commercial space on the ground floor, re-configure the existing paved areas for the parking lot, stormwater facilities, utilities, landscaping, sidewalks, and other site improvements.

1.2 Project Location

The site is located at 240 West Main Street. Refer to Figure 1 for the site location.

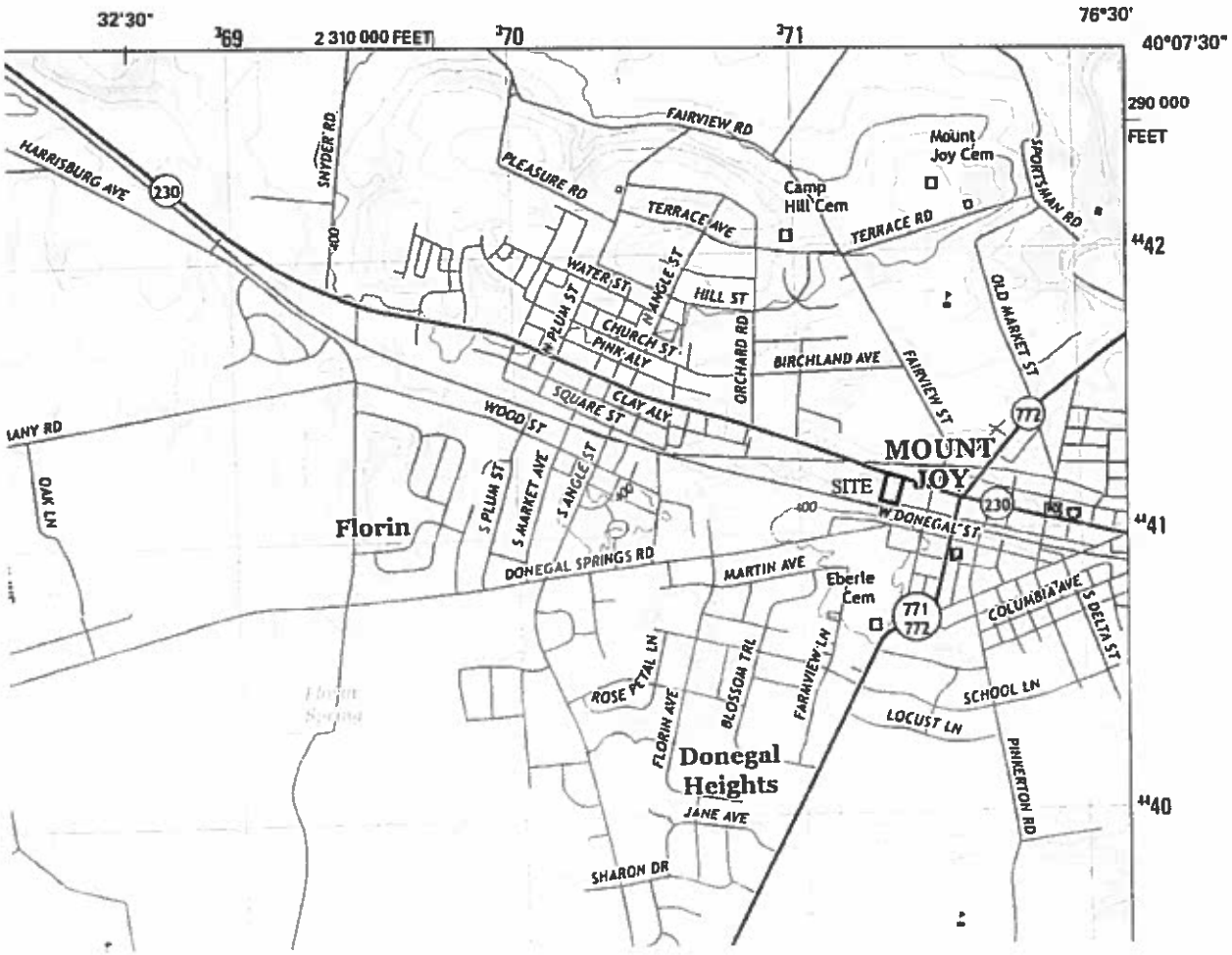
1.3 Site Description

The area of the proposed improvements consists of an existing building, existing gravel and paved areas to be removed, and grass areas. There are no wetlands. All stormwater ultimately drains to the Little Chickies Creek which is designated as TSF, MF. The past land use is commercial, the present land use is vacant, and the proposed land use is senior housing and office space.

Governing Ordinance

The governing ordinance is the Mount Joy Borough Stormwater Management Ordinance, Ordinance No. 2-14, as amended.

Figure 1 - USGS Map
Columbia West, PA Quadrangle



PRE-DEVELOPMENT CONDITION

1.4 Land Cover Conditions

The area of the proposed improvements consists of an existing building, existing gravel and paved areas to be removed, and grass areas.

1.5 Soils

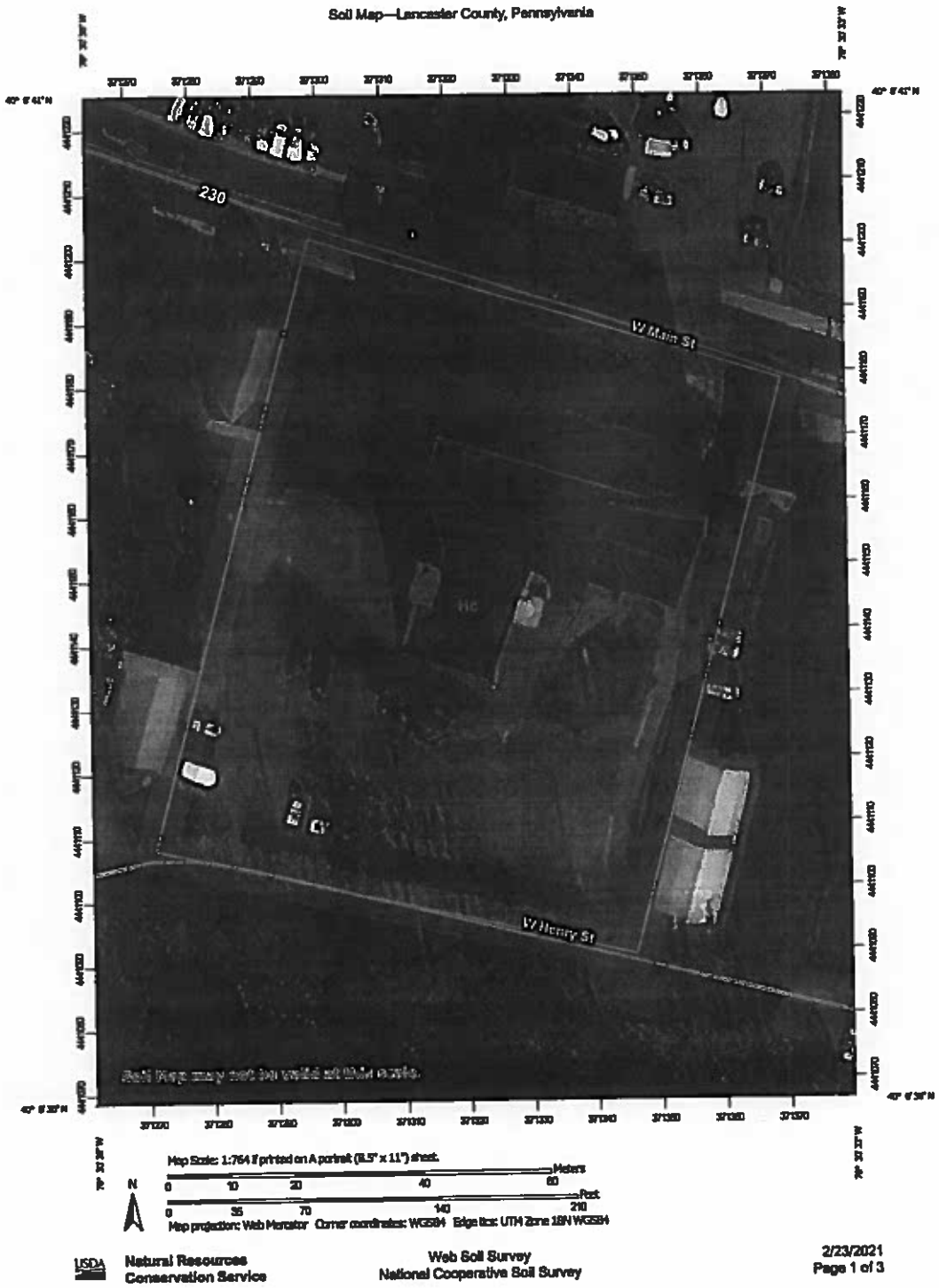
According to the Soil Survey of Lancaster County, the site contains the soil types listed below. Table 1 provides a summary of the present soil types.

Table 1 – Soils Series

MAP SYMBOL	SOIL NAME	HYDRO. SOIL GROUP
Uc	Urban Land	D

Figure 3 presents an excerpt from the Soil Survey of Lancaster County.

Figure 2 – Soils Map



1.6 Drainage Areas

There are two drainage areas associated with the project.

Pre Area A is analyzed from the highpoint of the site along the existing parking lot and building to the property line adjacent to West Main Street. There is a portion of off-site drainage which drains to the analyzed area.

Pre Area B is analyzed from the highpoint of the site along the existing parking lot and building to the property line adjacent to West Main Street. There is a portion of off-site drainage which drains to the analyzed area.

1.7 Peak Runoff Determination

1.7.1 Calculation Method

In accordance with the ordinance, the Rational Method has been used to calculate the stormwater runoff for the project site. The runoff coefficients used are based upon the information provided in the Appendix of the Mount Joy Borough Stormwater Management Ordinance. The Rainfall Intensity data used is based upon PADOT Region 4 for the project site.

1.7.2 Drainage Area Properties

The following table summarizes the pre-development drainage areas as required to utilize the Rational Method to calculate stormwater runoff. Please refer to Appendix 'A' for the detailed calculations.

Table 2 - Pre-Development Drainage Areas

Drainage Area	Total Area (acres)	Weighted 'C'	Tc (Min.)
Pre Area A	1.23	0.643	6.08
Pre Area B	0.58	0.681	7.15

1.7.3 Drainage Area Peak Flows

The following table summarizes the peak flows calculated for the pre-development drainage areas using the Rational Method. Please refer to Appendix 'A' for the detailed calculations.

Table 3 - Pre-Development Drainage Area Peak Flows

Drainage Area	2 Year	10 Year	25 Year	50 Year	100 Year
Pre Area A	3.10	4.06	4.50	4.95	5.48
Pre Area B	1.46	1.93	2.14	2.35	2.61

2 POST-DEVELOPMENT CONDITION

2.1 Overview

Mount Joy Senior Housing LP, the owner and developer of the property, is proposing to renovate the existing building to provide 36 senior apartment units, office space on the ground floor, re-configure the existing paved areas for the parking lot, stormwater facilities, utilities, landscaping, sidewalks, and other site improvements.

The actual proposed improvements have been used to determine the impervious coverage utilized within the hydrologic calculations. The stormwater calculations include 2,447 square feet of impervious area associated with the future parking spaces and road widening associated with West Henry Street and 500 square feet of impervious area associated with the future ADA handicap sidewalk connection from the parking lot to the sidewalk at the existing building entrance.

2.2 Peak Runoff Determination

2.2.1 Calculation Method

Similar to pre-development, the Rational Method has been used to calculate the stormwater runoff for the project site. The runoff coefficients used are based upon the information provided in the Appendix of the Mount Joy Borough Stormwater Management Ordinance. The Rainfall Intensity data used is based upon PADOT Region 4 for the project site.

2.2.2 Calculation Approach

There is a proposed rain garden which is designed to mitigate stormwater from the proposed improvements. There are no existing stormwater storage facilities on-site.

2.2.3 Drainage Area Properties

The following table summarizes the post-development drainage areas as required to utilize the Rational Method to calculate stormwater runoff. Please refer to Appendix 'B' and Appendix 'C' for the detailed calculations.

Table 4 - Post-Development Drainage Area Properties

Drainage Area	Total Area (acres)	Weighted 'C'	Tc (Min.)
To Rain Garden	0.78	0.643	5.0
Post Area A Undetained	0.62	0.603	5.0
Post Area B Undetained	0.42	0.633	5.0

2.2.4 Drainage Area Peak Flows

The following table summarizes the peak flows for the Post-Development Drainage Areas. Please refer to Appendix 'B' and Appendix 'C' for the detailed calculations.

Please note that the values presented in the table for the "Rain Garden" represents the peak inflows to the proposed rain garden.

Table 5 - Post-Development Drainage Area Peak Flows

Drainage Area	2 Year	10 Year	25 Year	50 Year	100 Year
To Rain Garden	2.10	2.71	3.01	3.31	3.67
Post Area A Undetained	1.57	2.02	2.24	2.47	2.74
Post Area B Undetained	1.11	1.44	1.59	1.76	1.95

2.2.5 Pre/Post Peak Runoff Comparison

As required by the ordinance, the post-development runoff for the 2, 10, 25, 50, and 100 year storm events shall not exceed the peak rates of runoff prior to development.

Table 6 – Pre Area A / Post Area A Undetained / Rain Garden Discharge Pre/Post Peak Runoff Comparison

Storm Event	*Pre-Development*	*Post-Development*			
	Pre Area A Peak Flow, cfs	Rain Garden Discharge, cfs	Post Area A Undetained Peak Flow, cfs	Total Post Development Flow, cfs	Total Allowable Post Peak Flow, cfs
2 year	3.10	0.14	1.57	1.71	3.10
10 year	4.06	0.46	2.02	2.48	4.06
25 Year	4.50	0.68	2.24	2.92	4.50
50 Year	4.95	0.92	2.47	3.39	4.95
100 Year	5.48	1.25	2.74	3.99	5.48

Table 7 – Pre Area B / Post Area B Undetained Pre/Post Peak Runoff Comparison

Storm Event	*Pre-Development*	*Post-Development*			
	Pre Area B Peak Flow, cfs		Post Area B Undetained Peak Flow, cfs		Total Allowable Post Peak Flow, cfs
2 year	1.46		1.11		1.46
10 year	1.93		1.44		1.93
25 Year	2.14		1.59		2.14
50 Year	2.35		1.76		2.35
100 Year	2.61		1.95		2.61

3 STORMWATER MANAGEMENT FACILITY DESIGN

One proposed rain garden has been designed to mitigate the increase in stormwater generated by the proposed development.

3.1 Rain Garden Design

The proposed rain garden has been designed to control the stormwater rate for the 2, 10, 25, 50 and 100 year storm events and infiltrate the net increase in the two year volume. An emergency spillway is designed to discharge stormwater from the basin. The results of the proposed rain garden routing is presented in the following table. Please refer to Appendix 'C' for the detailed calculations.

Table 8 - Proposed Rain Garden Routings Summary

Storm Frequency	Peak Elevation (ft)	Peak Storage (acre-ft)	Peak Outflow (cfs)
2 Year	376.51	0.054	0.14
10 Year	376.55	0.056	0.46
25 Year	376.57	0.056	0.68
50 Year	376.60	0.058	0.92
100 Year	376.62	0.058	1.25

3.1.1 Emergency Spillway Design

The emergency spillway has been designed to safely convey the one hundred (100) year storm in the event that the principle outlet becomes clogged. As required by the ordinance, the emergency spillways have been designed for the peak 100-year inflow to the rain garden. Please refer to Appendix 'C' and Appendix 'D' of this report for the detailed calculations.

Table 9 - Proposed Emergency Spillway Design

BMP ID	Top of Berm Elevation (ft)	Emergency Spillway Crest Elev. (ft)	100-year Peak Elevation (ft)	Flow Depth thru Spillway (ft)
Rain Garden	377.00	376.50	376.62	0.12

3.1.2 Rain Garden Dewatering Time

The rain garden must completely drain the rate control storage volume over a period of time less than or equal to in less than twenty-four (24) hours from the peak 100 year water surface design elevation. The dewatering time for the rain garden is 0.10 hours.

The rain garden shall completely drain the volume storage over a period of time not less than 24 hours and not more than 72 hours from the end of the design storm. The dewatering time is 24 hours. The infiltration rate of 0.75 inches per hour and the 18" depth of stormwater results in the 24 hour dewatering time. Please refer to Appendix 'C' and Appendix 'E' for the detailed calculations.

4 CONVEYANCE SYSTEMS DESIGN

4.1 Storm Sewer Design

The storm sewers were designed using the Autodesk Hydraflow Storm Sewers 2021 program. As required by the ordinance, the storm sewer systems were designed to convey the twenty-five year storm event for stormwater conveying on-site flow and the 50 year storm event for stormwater conveying off-site flow. The storm sewer systems were also checked for the one hundred year (100-year) storm event to verify that the systems can safely convey the runoff generated by the larger storm event without adversely affecting the adjoining properties. Please refer to Appendix 'D' for the detailed calculations.

4.2 Swale Design

All proposed swales have been analyzed for the 100 year storm event and temporary and/or permanent swale linings have been proposed where required to limit soil erosion. Please refer to Appendix 'D' for the detailed calculations for the emergency spillway design.

4.3 Outfall Erosion Protection

The exit velocities at each pipe outfall have been checked to ensure that no erosion problems will occur. Rip-rap aprons have been designed at the pipe outfalls where it was determined that erosion was likely. Please Refer to Appendix 'D' for the detailed calculations.

5 INFILTRATION REQUIREMENTS

The Borough requirements state that the increased runoff volume shall be managed from the 2 YR/24 HR Storm Event. The stormwater volume calculations include 2,447 square feet of impervious area associated with the future parking spaces and road widening associated with West Henry Street and 500 square feet of impervious area associated with the future ADA handicap sidewalk connection from the parking lot to the sidewalk at the existing building entrance.

A stormwater infiltration summary report was completed by Kleinfelder dated February 19, 2021. The report indicates 4 test pit locations in the area of the proposed improvements and the test pit locations are shown on the Final Grading / PCSM Plans.

Based on the report, there is one limiting zone noted in Test Pit 2 with shallow boulder which was attributed to the existing fill. There are no limiting zones at Test Pit 1, 2, and 3. There was no groundwater or soil mottling encountered in any test pit. There is existing fill encountered in Test Pit 1, 2, and 4, extending to depths of 2 to 4 feet below existing grades. The fill is poorly graded, plastic, and compromised of predominately clay with secondary amounts of sand, gravel, cobble to boulder size rock fragments as well as brick and plastic fragments. The fill is free of deleterious materials such as ash, cinder, slag, and topsoil/organic debris.

The infiltration rates ranged from 0.20 inches per hour to 3.0 inches per hour which are field rates and are unfactored.

The project site is underlain by carbonate geology. The geologic and karst features map in the Kleinfelder report did not indicate any karst features on the subject property or in the area adjacent to the subject property.

There are two areas analyzed for the net volume increase in the 2 year storm which corresponds to the disturbed area for the pre and post development drainage areas.

Disturbed Area A:

- The net increase in volume is 0.040 acre feet. The disturbed area assumes 20% of the existing impervious area being disturbed is converted to meadow. The 2 year volume to the rain garden is 0.129 acre feet. The proposed rain garden is

designed with a bottom elevation of 375.00. The spillway is set at 376.50 which provides 1.50 feet of infiltration storage. The 376.50 elevation corresponds to 0.054 acre feet which is greater than the 0.040 acre feet net two year increase. As a result, the two year net increase in volume is infiltrated within the proposed rain garden. The emergency spillway is used to discharge stormwater rate above the infiltration storage area.

Disturbed Area B:

- The net decrease in volume is -0.016 acre feet. The disturbed area assumes 20% of the existing impervious area being disturbed is converted to meadow. As a result of the net decrease, there are no proposed stormwater facilities associated with Disturbed Area B.

The thermal impacts of the project were minimized using the rain garden by treating the first flush of stormwater. There are no naturally occurring geological formations or soil conditions that have the potential to cause pollution during or after earth disturbance activities.

The loading ratio for the proposed infiltration basin is listed in the chart below. Since this site is located in a Karst area, the PA BMP Manual and Borough stormwater ordinance notes that the loading ratio is 5:1 for total drainage area to infiltration area and 3:1 for impervious area to infiltration area. The infiltration area is based on the square footage at the spillway elevation of 376.50.

Table 10 - Proposed Stormwater Infiltration Facility Loading Ratios

Stormwater Facility	Infiltration Area, s.f.	Total Drainage Area, s.f.	Total Impervious Area, s.f.	Proposed Loading Ratio (Total; Impervious)	Required Loading Ratio (Total; Impervious)
Rain Garden	1,786	33,820	21,859	18.9:1; 12.2:1	5:1; 3:1

APPENDICES

APPENDIX A

PRE-DEVELOPMENT CALCULATIONS

1/14/2021

Pre Development Drainage Areas

	Total Area, SF	Total Area, acres	Wtd. 'C'	T_C, min.	On-site Areas - Good Condition						Off-site Areas - Good Condition					
					Parking, sf.			Open Space, sf.			Parking, sf.			Open Space, sf.		
					0-2%	2-6%	6+%	0-2%	2-6%	6+%	0-2%	2-6%	6+%	0-2%	2-6%	6+%
					D	D	D	D	D	D	D	D	D	D	D	D
Soil Type C' Value					0.85	0.86	0.87	0.15	0.21	0.28	0.85	0.86	0.87	0.15	0.21	0.28
Pre Area																
Pre Area A	53,627	1.23	0.643	6.08	9,498	16,134			8,043	2,638	7,082		2,961		7,271	
Pre Area B	25,413	0.58	0.681	7.15	3,242	13,275			2,790		1,865				3,304	937

SCS Segmental Travel Time

Summary for Pre Area A

Segment 1: Overland Flow
L = 25 ft, S = 0.02 ft/ft, n = 0.24, P(2yr/24hr) = 3.1 in
Travel Time = 4.8 minutes

Segment 2: Concentrated Flow
L = 20 ft, S = 0.03 ft/ft, Paved surface
Travel Time = 0.1 minutes

Segment 3: Concentrated Flow
L = 13 ft, S = 0.167 ft/ft, Unpaved surface
Travel Time = 0 minutes

Segment 4: Concentrated Flow
L = 110 ft, S = 0.055 ft/ft, Paved surface
Travel Time = 0.4 minutes

Segment 5: Concentrated Flow
L = 28 ft, S = 0.143 ft/ft, Unpaved surface
Travel Time = 0.1 minutes

Segment 6: Concentrated Flow
L = 45 ft, S = 0.038 ft/ft, Paved surface
Travel Time = 0.2 minutes

Segment 7: Concentrated Flow
L = 6 ft, S = 0.33 ft/ft, Unpaved surface
Travel Time = 0 minutes

Segment 8: Concentrated Flow
L = 100 ft, S = 0.042 ft/ft, Unpaved surface
Travel Time = 0.5 minutes

Total Travel Time = 6.08 Minutes

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 6.08 min.
Drainage Area: 1.2300 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
6	0.07	0.07	0.73	0.58
12	0.14	0.22	1.41	1.11
18	**0.40**	**0.61**	**3.92**	**3.10**
24	0.21	0.82	2.02	1.60
30	0.11	0.93	1.08	0.85
36	0.09	1.02	0.87	0.69
43	0.06	1.08	0.62	0.49
49	0.05	1.13	0.54	0.43
55	0.05	1.18	0.47	0.38
61	0.04	1.22	0.41	0.32

At time = 152 minutes, the flow is 0.14 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 6.08 min.
Drainage Area: 1.2300 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
6	0.10	0.10	1.02	0.81
12	0.21	0.31	2.06	1.63
18	**0.52**	**0.83**	**5.13**	**4.06**
24	0.30	1.13	2.96	2.34
30	0.16	1.29	1.56	1.24
36	0.13	1.42	1.24	0.98
43	0.09	1.50	0.86	0.68
49	0.07	1.58	0.73	0.58
55	0.06	1.64	0.63	0.50
61	0.06	1.70	0.58	0.46

At time = 152 minutes, the flow is 0.24 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 6.08 min.
Drainage Area: 1.2300 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
6	0.12	0.12	1.17	0.93
12	0.23	0.35	2.30	1.82
18	**0.58**	**0.93**	**5.68**	**4.50**
24	0.33	1.26	3.27	2.59
30	0.18	1.44	1.76	1.39
36	0.14	1.58	1.41	1.12
43	0.10	1.68	0.99	0.78
49	0.09	1.77	0.85	0.67
55	0.08	1.84	0.74	0.59
61	0.07	1.91	0.71	0.57

At time = 152 minutes, the flow is 0.30 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 6.08 min.
Drainage Area: 1.2300 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
6	0.14	0.14	1.37	1.09
12	0.26	0.40	2.55	2.02
18	**0.63**	**1.03**	**6.25**	**4.95**
24	0.36	1.39	3.57	2.82
30	0.20	1.60	1.99	1.58
36	0.17	1.76	1.63	1.29
43	0.12	1.88	1.18	0.93
49	0.10	1.98	1.03	0.81
55	0.09	2.08	0.91	0.72
61	0.09	2.17	0.89	0.71

At time = 152 minutes, the flow is 0.35 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 6.08 min.
Drainage Area: 1.2300 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
6	0.16	0.16	1.54	1.22
12	0.29	0.45	2.85	2.26
18	0.70	1.15	6.93	5.48
24	0.40	1.55	3.98	3.15
30	0.23	1.78	2.23	1.76
36	0.18	1.96	1.83	1.44
43	0.13	2.10	1.32	1.05
49	0.12	2.21	1.16	0.92
55	0.10	2.32	1.03	0.81
61	0.10	2.42	1.02	0.81

At time = 152 minutes, the flow is 0.42 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 4 at Pre Area B
Time of Concentration: 7.15 min.
Drainage Area: 0.5800 acres.
Weighted 'C' Factor: 0.6810

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
7	0.07	0.07	0.62	0.25
14	0.15	0.22	1.25	0.49
21	**0.44**	**0.66**	**3.70**	**1.46**
29	0.22	0.88	1.82	0.72
36	0.11	0.99	0.94	0.37
43	0.09	1.08	0.76	0.30
50	0.06	1.15	0.53	0.21
57	0.05	1.20	0.46	0.18
64	0.04	1.24	0.36	0.14
72	0.04	1.28	0.33	0.13

At time = 179 minutes, the flow is 0.06 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 4 at Pre Area B
Time of Concentration: 7.15 min.
Drainage Area: 0.5800 acres.
Weighted 'C' Factor: 0.6810

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
7	0.10	0.10	0.86	0.34
14	0.22	0.32	1.81	0.72
21	**0.58**	**0.90**	**4.89**	**1.93**
29	0.32	1.22	2.67	1.05
36	0.16	1.38	1.35	0.53
43	0.13	1.51	1.06	0.42
50	0.09	1.59	0.72	0.28
57	0.07	1.67	0.60	0.24
64	0.07	1.73	0.55	0.22
72	0.06	1.79	0.51	0.20

At time = 179 minutes, the flow is 0.11 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at Pre Area B
Time of Concentration: 7.15 min.
Drainage Area: 0.5800 acres.
Weighted 'C' Factor: 0.6810

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
7	0.12	0.12	1.00	0.39
14	0.24	0.36	2.03	0.80
21	**0.65**	**1.01**	**5.42**	**2.14**
29	0.35	1.36	2.95	1.17
36	0.18	1.54	1.53	0.61
43	0.14	1.69	1.21	0.48
50	0.10	1.79	0.84	0.33
57	0.09	1.87	0.72	0.29
64	0.09	1.96	0.71	0.28
72	0.08	2.04	0.67	0.26

At time = 179 minutes, the flow is 0.13 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Pre Area B
Time of Concentration: 7.15 min.
Drainage Area: 0.5800 acres.
Weighted 'C' Factor: 0.6810

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
7	0.14	0.14	1.19	0.47
14	0.27	0.41	2.28	0.90
21	**0.71**	**1.12**	**5.95**	**2.35**
29	0.39	1.51	3.24	1.28
36	0.21	1.72	1.75	0.69
43	0.17	1.89	1.42	0.56
50	0.12	2.01	1.01	0.40
57	0.10	2.11	0.88	0.35
64	0.10	2.22	0.87	0.34
72	0.09	2.31	0.77	0.30

At time = 179 minutes, the flow is 0.16 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Pre Area B
Time of Concentration: 7.15 min.
Drainage Area: 0.5800 acres.
Weighted 'C' Factor: 0.6810

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
7	0.16	0.16	1.33	0.53
14	0.30	0.46	2.55	1.01
21	**0.79**	**1.25**	**6.60**	**2.61**
29	0.43	1.68	3.62	1.43
36	0.23	1.91	1.97	0.78
43	0.19	2.10	1.59	0.63
50	0.14	2.24	1.14	0.45
57	0.12	2.36	1.01	0.40
64	0.12	2.48	0.99	0.39
72	0.11	2.59	0.91	0.36

At time = 179 minutes, the flow is 0.18 CFS.

APPENDIX B

POST-DEVELOPMENT CALCULATIONS

Post Development Drainage Areas

5/13/2021

	Total Area, SF	Total Area, acres	Wtd. 'C'	T_c, min.	On-site Areas - Good Condition						Off-site Areas - Good Condition					
					Parking, sf.			Open Space, sf.			Parking, sf.			Open Space, sf.		
					0-2%	2-6%	6+%	0-2%	2-6%	6+%	0-2%	2-6%	6+%	0-2%	2-6%	6+%
Soil Type					D	D	D	D	D	D	D	D	D	D	D	D
C' Value					0.85	0.86	0.87	0.15	0.21	0.28	0.85	0.86	0.87	0.15	0.21	0.28
Post Area to Rain Garden																
I-A1	13,162	0.30	0.700	5.00		8,482				2,420	1,183				1,067	
I-A2	10,747	0.25	0.702	5.00		4,886				836	3,162				1,510	353
I-A3	112	0.00	0.860	5.00		112										
I-A4	4,122	0.09	0.734	5.00		3,223				899						
Direct to Rain Garden	5,687	0.13	0.334	5.00	311	500		1,221		3,655						
TOTAL to Rain Garden	33,820	0.78	0.643	5.00	311	17,203	0	1,221	0	7,810	4,345	0	0	0	2,577	353
Post Undetained Areas																
Post Area A Undetained	26,872	0.62	0.603	5.00	8,818				1,803	1,568	4,451		2,961		7,271	
Post Area B Undetained	18,348	0.42	0.633	5.00	3,242	6,185			5,022		2,598				1,301	

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 4 at Post Area A Undetained
Time of Concentration: 5 min. * Assume 5 min.
Drainage Area: 0.6200 acres.
Weighted 'C' Factor: 0.6030

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.07	0.07	0.87	0.32
10	0.14	0.21	1.62	0.61
15	**0.35**	**0.56**	**4.19**	**1.57**
20	0.19	0.75	2.28	0.85
25	0.11	0.85	1.26	0.47
30	0.09	0.94	1.03	0.39
35	0.06	1.00	0.75	0.28
40	0.05	1.05	0.65	0.24
45	0.05	1.10	0.58	0.22
50	0.04	1.15	0.52	0.19

At time = 125 minutes, the flow is 0.08 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 4 at Post Area A Undetained
Time of Concentration: 5 min.
Drainage Area: 0.6200 acres.
Weighted 'C' Factor: 0.6030

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.10	0.10	1.24	0.46
10	0.20	0.30	2.38	0.89
15	**0.45**	**0.75**	**5.41**	**2.02**
20	0.28	1.03	3.33	1.24
25	0.15	1.18	1.84	0.69
30	0.12	1.31	1.49	0.56
35	0.09	1.39	1.05	0.39
40	0.08	1.47	0.91	0.34
45	0.07	1.53	0.79	0.29
50	0.06	1.59	0.70	0.26

At time = 125 minutes, the flow is 0.13 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at Post Area A Undetained
Time of Concentration: 5 min.
Drainage Area: 0.6200 acres.
Weighted 'C' Factor: 0.6030

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.12	0.12	1.41	0.53
10	0.22	0.34	2.64	0.99
15	**0.50**	**0.84**	**5.99**	**2.24**
20	0.31	1.14	3.66	1.37
25	0.17	1.31	2.06	0.77
30	0.14	1.45	1.67	0.63
35	0.10	1.55	1.20	0.45
40	0.09	1.64	1.04	0.39
45	0.08	1.72	0.92	0.34
50	0.07	1.78	0.82	0.31

At time = 125 minutes, the flow is 0.16 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Post Area A Undetained
Time of Concentration: 5 min.
Drainage Area: 0.6200 acres.
Weighted 'C' Factor: 0.6030

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.13	0.13	1.62	0.61
10	0.24	0.38	2.91	1.09
15	**0.55**	**0.93**	**6.61**	**2.47**
20	0.33	1.26	3.98	1.49
25	0.19	1.45	2.31	0.86
30	0.16	1.61	1.91	0.71
35	0.12	1.73	1.41	0.53
40	0.10	1.83	1.24	0.46
45	0.09	1.92	1.10	0.41
50	0.08	2.01	0.99	0.37

At time = 125 minutes, the flow is 0.19 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Post Area A Undetained
Time of Concentration: 5 min.
Drainage Area: 0.6200 acres.
Weighted 'C' Factor: 0.6030

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.15	0.15	1.82	0.68
10	0.27	0.42	3.25	1.22
15	0.61	1.03	7.32	2.74
20	0.37	1.40	4.44	1.66
25	0.21	1.62	2.58	0.96
30	0.18	1.80	2.13	0.80
35	0.13	1.93	1.58	0.59
40	0.12	2.04	1.39	0.52
45	0.10	2.15	1.24	0.46
50	0.09	2.24	1.11	0.42

At time = 125 minutes, the flow is 0.23 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm In PA. Region 4 at Post Area B Undetained
Time of Concentration: 5 min. * Assume 5 min.
Drainage Area: 0.4200 acres.
Weighted 'C' Factor: 0.6330

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.07	0.07	0.87	0.23
10	0.14	0.21	1.62	0.43
15	**0.35**	**0.56**	**4.19**	**1.11**
20	0.19	0.75	2.28	0.61
25	0.11	0.85	1.26	0.34
30	0.09	0.94	1.03	0.27
35	0.06	1.00	0.75	0.20
40	0.05	1.05	0.65	0.17
45	0.05	1.10	0.58	0.15
50	0.04	1.15	0.52	0.14

At time = 125 minutes, the flow is 0.06 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm In PA. Region 4 at Post Area B Undetained
Time of Concentration: 5 min.
Drainage Area: 0.4200 acres.
Weighted 'C' Factor: 0.6330

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.10	0.10	1.24	0.33
10	0.20	0.30	2.38	0.63
15	**0.45**	**0.75**	**5.41**	**1.44**
20	0.28	1.03	3.33	0.88
25	0.15	1.18	1.84	0.49
30	0.12	1.31	1.49	0.40
35	0.09	1.39	1.05	0.28
40	0.08	1.47	0.91	0.24
45	0.07	1.53	0.79	0.21
50	0.06	1.59	0.70	0.19

At time = 125 minutes, the flow is 0.09 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at Post Area B Undetained
Time of Concentration: 5 min.
Drainage Area: 0.4200 acres.
Weighted 'C' Factor: 0.6330

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.12	0.12	1.41	0.37
10	0.22	0.34	2.64	0.70
15	**0.50**	**0.84**	**5.99**	**1.59**
20	0.31	1.14	3.66	0.97
25	0.17	1.31	2.06	0.55
30	0.14	1.45	1.67	0.45
35	0.10	1.55	1.20	0.32
40	0.09	1.64	1.04	0.28
45	0.08	1.72	0.92	0.24
50	0.07	1.78	0.82	0.22

At time = 125 minutes, the flow is 0.12 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Post Area B Undetained
Time of Concentration: 5 min.
Drainage Area: 0.4200 acres.
Weighted 'C' Factor: 0.6330

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.13	0.13	1.62	0.43
10	0.24	0.38	2.91	0.77
15	**0.55**	**0.93**	**6.61**	**1.76**
20	0.33	1.26	3.98	1.06
25	0.19	1.45	2.31	0.61
30	0.16	1.61	1.91	0.51
35	0.12	1.73	1.41	0.37
40	0.10	1.83	1.24	0.33
45	0.09	1.92	1.10	0.29
50	0.08	2.01	0.99	0.26

At time = 125 minutes, the flow is 0.14 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Post Area B Undetained
Time of Concentration: 5 min.
Drainage Area: 0.4200 acres.
Weighted 'C' Factor: 0.6330

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.15	0.15	1.82	0.48
10	0.27	0.42	3.25	0.86
15	0.61	1.03	7.32	1.95
20	0.37	1.40	4.44	1.18
25	0.21	1.62	2.58	0.69
30	0.18	1.80	2.13	0.57
35	0.13	1.93	1.58	0.42
40	0.12	2.04	1.39	0.37
45	0.10	2.15	1.24	0.33
50	0.09	2.24	1.11	0.30

At time = 125 minutes, the flow is 0.16 CFS.

Pre/Post-Development Comparison

Study Points for Pre-Post Development Flow Analysis

Pre Area A / Post Area A Undetained / Rain Garden

Storm Event	*Pre-Development*	*Post-Development*			
	Pre Area A Peak Flow, cfs	Rain Garden Discharge, cfs	Post Area A Undetained Peak Flow, cfs	Total Post Development Flow, cfs	Total Allowable Post Peak Flow, cfs
2 year	3.10	0.14	1.57	1.71	3.10
10 year	4.06	0.46	2.02	2.48	4.06
25 Year	4.50	0.68	2.24	2.92	4.50
50 Year	4.95	0.92	2.47	3.39	4.95
100 Year	5.48	1.25	2.74	3.99	5.48

Pre Area B / Post Area B Undetained

Storm Event	*Pre-Development*	*Post-Development*			
	Pre Area B Peak Flow, cfs		Post Area B Undetained Peak Flow, cfs		Total Allowable Post Peak Flow, cfs
2 year	1.46		1.11		1.46
10 year	1.93		1.44		1.93
25 Year	2.14		1.59		2.14
50 Year	2.35		1.76		2.35
100 Year	2.61		1.95		2.61

APPENDIX C

RAIN GARDEN DESIGN CALCULATIONS

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 4 at To Rain Garden
Time of Concentration: 5 min. * Assume 5 min.
Drainage Area: 0.7800 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.07	0.07	0.87	0.44
10	0.14	0.21	1.62	0.81
15	**0.35**	**0.56**	**4.19**	**2.10**
20	0.19	0.75	2.28	1.14
25	0.11	0.85	1.26	0.63
30	0.09	0.94	1.03	0.52
35	0.06	1.00	0.75	0.38
40	0.05	1.05	0.65	0.33
45	0.05	1.10	0.58	0.29
50	0.04	1.15	0.52	0.26

At time = 125 minutes, the flow is 0.11 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 4 at To Rain Garden
Time of Concentration: 5 min.
Drainage Area: 0.7800 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.10	0.10	1.24	0.62
10	0.20	0.30	2.38	1.19
15	**0.45**	**0.75**	**5.41**	**2.71**
20	0.28	1.03	3.33	1.67
25	0.15	1.18	1.84	0.92
30	0.12	1.31	1.49	0.75
35	0.09	1.39	1.05	0.53
40	0.08	1.47	0.91	0.45
45	0.07	1.53	0.79	0.40
50	0.06	1.59	0.70	0.35

At time = 125 minutes, the flow is 0.18 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at To Rain Garden
Time of Concentration: 5 min.
Drainage Area: 0.7800 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.12	0.12	1.41	0.70
10	0.22	0.34	2.64	1.32
15	**0.50**	**0.84**	**5.99**	**3.01**
20	0.31	1.14	3.66	1.84
25	0.17	1.31	2.06	1.03
30	0.14	1.45	1.67	0.84
35	0.10	1.55	1.20	0.60
40	0.09	1.64	1.04	0.52
45	0.08	1.72	0.92	0.46
50	0.07	1.78	0.82	0.41

At time = 125 minutes, the flow is 0.22 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at To Rain Garden
Time of Concentration: 5 min.
Drainage Area: 0.7800 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.13	0.13	1.62	0.81
10	0.24	0.38	2.91	1.46
15	**0.55**	**0.93**	**6.61**	**3.31**
20	0.33	1.26	3.98	2.00
25	0.19	1.45	2.31	1.16
30	0.16	1.61	1.91	0.96
35	0.12	1.73	1.41	0.71
40	0.10	1.83	1.24	0.62
45	0.09	1.92	1.10	0.55
50	0.08	2.01	0.99	0.50

At time = 125 minutes, the flow is 0.26 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at To Rain Garden
Time of Concentration: 5 min.
Drainage Area: 0.7800 acres.
Weighted 'C' Factor: 0.6430

Time (min)	Rainfall Incr. (inches)	Rainfall Total (inches)	Rainfall Intensity (in/hr)	Flow (cfs)
0	0.00	0.00	0.00	0.00
5	0.15	0.15	1.82	0.91
10	0.27	0.42	3.25	1.63
15	**0.61**	**1.03**	**7.32**	**3.67**
20	0.37	1.40	4.44	2.23
25	0.21	1.62	2.58	1.29
30	0.18	1.80	2.13	1.07
35	0.13	1.93	1.58	0.79
40	0.12	2.04	1.39	0.70
45	0.10	2.15	1.24	0.62
50	0.09	2.24	1.11	0.56

At time = 125 minutes, the flow is 0.30 CFS.

Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES

Basin Storage/Elevation Input

Elevation (ft)	Area (acres)	Storage (acre-ft)
375.00	0.029	0.000
376.00	0.036	0.033
377.00	0.046	0.074

2 yr. volume → elev = 376.16

← 2 yr. volume increase = 1,704 ft³ or 0.039 ac/ft.

Project Files:
Outlet Structure Configuration: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.OSC
Discharge/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Outlet Structure Configuration for: Emergency Spillway

Stage 1: Emergency Spillway
Crest Elevation = 376.5 feet
Crest Length = 10 feet
Discharge Coefficient = 3

Basin Rating Curve

Basin Water Elevation	Basin Outflow (cfs)	Riser Box Water Elevation	Tailwater Elevation (ft)	Outfall Culvert Control	Outfall Culvert Override?
375.00	0.00	N/A	N/A	N/A	N/A
375.10	0.00	N/A	N/A	N/A	N/A
375.20	0.00	N/A	N/A	N/A	N/A
375.30	0.00	N/A	N/A	N/A	N/A
375.40	0.00	N/A	N/A	N/A	N/A
375.50	0.00	N/A	N/A	N/A	N/A
375.60	0.00	N/A	N/A	N/A	N/A
375.70	0.00	N/A	N/A	N/A	N/A
375.80	0.00	N/A	N/A	N/A	N/A
375.90	0.00	N/A	N/A	N/A	N/A
376.00	0.00	N/A	N/A	N/A	N/A
376.10	0.00	N/A	N/A	N/A	N/A
376.20	0.00	N/A	N/A	N/A	N/A
376.30	0.00	N/A	N/A	N/A	N/A
376.40	0.00	N/A	N/A	N/A	N/A
376.50	0.00	N/A	N/A	N/A	N/A
376.60	0.95	N/A	N/A	N/A	N/A
376.70	2.68	N/A	N/A	N/A	N/A
376.80	4.93	N/A	N/A	N/A	N/A
376.90	7.59	N/A	N/A	N/A	N/A
377.00	10.61	N/A	N/A	N/A	N/A

Modified Puls Routing

Inflow Hydrograph: P:\1378\1378-20\Correspondence\Drainage\2 year.HYD
Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES
Discharge/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Basin Bypass Capacity = 0.0 cfs
Starting Pool Elevation = 375.00 feet
Time Interval = 2.083333E-02 hours

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
0.00	0.00	0.00	0.0000	375.00	0.000	0.000
0.02	0.11	0.11	0.0001	375.00	0.000	0.000
0.04	0.22	0.22	0.0004	375.01	0.000	0.000
0.06	0.33	0.33	0.0008	375.03	0.000	0.000
0.08	0.44	0.44	0.0015	375.05	0.000	0.000
0.10	0.53	0.53	0.0023	375.07	0.000	0.000
0.12	0.62	0.62	0.0033	375.10	0.000	0.000
0.15	0.72	0.72	0.0045	375.14	0.000	0.000
0.17	0.81	0.81	0.0058	375.18	0.000	0.000
0.19	1.14	1.14	0.0075	375.23	0.000	0.000
0.21	1.46	1.46	0.0097	375.29	0.000	0.000
0.23	1.78	1.78	0.0125	375.38	0.000	0.000
0.25	2.10	2.10	0.0158	375.48	0.000	0.000
0.27	1.86	1.86	0.0192	375.58	0.000	0.000
0.29	1.62	1.62	0.0222	375.67	0.000	0.000
0.31	1.38	1.38	0.0248	375.75	0.000	0.000
0.33	1.14	1.14	0.0270	375.82	0.000	0.000
0.35	1.02	1.02	0.0289	375.87	0.000	0.000
0.37	0.89	0.89	0.0305	375.92	0.000	0.000
0.40	0.76	0.76	0.0319	375.97	0.000	0.000
0.42	0.63	0.63	0.0331	376.00	0.000	0.000
0.44	0.60	0.60	0.0342	376.03	0.000	0.000
0.46	0.57	0.57	0.0352	376.05	0.000	0.000
0.48	0.55	0.55	0.0362	376.08	0.000	0.000
0.50	0.52	0.52	0.0371	376.10	0.000	0.000
0.52	0.48	0.48	0.0379	376.12	0.000	0.000
0.54	0.45	0.45	0.0387	376.14	0.000	0.000
0.56	0.41	0.41	0.0395	376.16	0.000	0.000
0.58	0.38	0.38	0.0402	376.17	0.000	0.000
0.60	0.36	0.36	0.0408	376.19	0.000	0.000
0.62	0.35	0.35	0.0414	376.21	0.000	0.000
0.65	0.34	0.34	0.0420	376.22	0.000	0.000
0.67	0.33	0.33	0.0426	376.23	0.000	0.000
0.69	0.32	0.32	0.0431	376.25	0.000	0.000
0.71	0.31	0.31	0.0437	376.26	0.000	0.000
0.73	0.30	0.30	0.0442	376.27	0.000	0.000
0.75	0.29	0.29	0.0447	376.29	0.000	0.000
0.77	0.28	0.28	0.0452	376.30	0.000	0.000
0.79	0.27	0.27	0.0457	376.31	0.000	0.000
0.81	0.27	0.27	0.0461	376.32	0.000	0.000
0.83	0.26	0.26	0.0466	376.33	0.000	0.000
0.85	0.25	0.25	0.0470	376.34	0.000	0.000
0.87	0.25	0.25	0.0475	376.35	0.000	0.000
0.90	0.24	0.24	0.0479	376.36	0.000	0.000
0.92	0.23	0.23	0.0483	376.37	0.000	0.000
0.94	0.23	0.23	0.0487	376.38	0.000	0.000
0.96	0.22	0.22	0.0491	376.39	0.000	0.000
0.98	0.22	0.22	0.0495	376.40	0.000	0.000

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.00	0.21	0.21	0.0498	376.41	0.000	0.000
1.02	0.20	0.20	0.0502	376.42	0.000	0.000
1.04	0.19	0.19	0.0505	376.43	0.000	0.000
1.06	0.18	0.18	0.0509	376.44	0.000	0.000
1.08	0.17	0.17	0.0511	376.44	0.000	0.000
1.10	0.17	0.17	0.0514	376.45	0.000	0.000
1.12	0.17	0.17	0.0517	376.46	0.000	0.000
1.15	0.17	0.17	0.0520	376.46	0.000	0.000
1.17	0.16	0.16	0.0523	376.47	0.000	0.000
1.19	0.16	0.16	0.0526	376.48	0.000	0.000
1.21	0.16	0.16	0.0529	376.48	0.000	0.000
1.23	0.16	0.16	0.0531	376.49	0.000	0.000
1.25	0.16	0.16	0.0534	376.50	0.000	0.000
1.27	0.15	0.15	0.0536	376.50	0.031	0.031
1.29	0.15	0.15	0.0538	376.51	0.072	0.072
1.31	0.15	0.15	0.0539	376.51	0.098	0.098
1.33	0.15	0.15	0.0540	376.51	0.115	0.115
1.35	0.15	0.15	0.0540	376.51	0.126	0.126
1.37	0.15	0.15	0.0541	376.51	0.133	0.133
1.40	0.14	0.14	0.0541	376.51	0.137	0.137
1.42	0.14	0.14	0.0541	376.51	0.139	0.139
1.44	0.14	0.14	0.0541	376.51	0.140	0.140
1.46	0.14	0.14	0.0541	376.51	0.140	0.140
1.48	0.14	0.14	0.0541	376.51	0.139	0.139
1.50	0.14	0.14	0.0541	376.51	0.138	0.138
1.52	0.13	0.13	0.0541	376.51	0.137	0.137
1.54	0.13	0.13	0.0541	376.51	0.136	0.136
1.56	0.13	0.13	0.0541	376.51	0.135	0.135
1.58	0.13	0.13	0.0541	376.51	0.134	0.134
1.60	0.13	0.13	0.0541	376.51	0.132	0.132
1.62	0.13	0.13	0.0541	376.51	0.131	0.131
1.65	0.13	0.13	0.0541	376.51	0.130	0.130
1.67	0.13	0.13	0.0541	376.51	0.129	0.129
1.69	0.13	0.13	0.0541	376.51	0.128	0.128
1.71	0.12	0.12	0.0540	376.51	0.127	0.127
1.73	0.12	0.12	0.0540	376.51	0.126	0.126
1.75	0.12	0.12	0.0540	376.51	0.124	0.124
1.77	0.12	0.12	0.0540	376.51	0.123	0.123
1.79	0.12	0.12	0.0540	376.51	0.122	0.122
1.81	0.12	0.12	0.0540	376.51	0.121	0.121
1.83	0.12	0.12	0.0540	376.51	0.120	0.120
1.85	0.12	0.12	0.0540	376.51	0.119	0.119
1.87	0.11	0.11	0.0540	376.51	0.118	0.118
1.90	0.11	0.11	0.0540	376.51	0.117	0.117
1.92	0.11	0.11	0.0540	376.51	0.115	0.115
1.94	0.11	0.11	0.0540	376.51	0.114	0.114
1.96	0.11	0.11	0.0540	376.51	0.113	0.113
1.98	0.11	0.11	0.0540	376.51	0.113	0.113
2.00	0.11	0.11	0.0540	376.51	0.112	0.112
2.02	0.11	0.11	0.0540	376.51	0.111	0.111
2.04	0.11	0.11	0.0540	376.51	0.110	0.110
2.06	0.11	0.11	0.0540	376.51	0.110	0.110
2.08	0.11	0.11	0.0540	376.51	0.109	0.109

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\1378\1378-20\Correspondence\Drainage\10 year.HYD
Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES
Discharge/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Basin Bypass Capacity = 0.0 cfs
Starting Pool Elevation = 375.00 feet
Time Interval = 2.083333E-02 hours

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
0.00	0.00	0.00	0.0000	375.00	0.000	0.000
0.02	0.15	0.15	0.0001	375.00	0.000	0.000
0.04	0.31	0.31	0.0005	375.02	0.000	0.000
0.06	0.46	0.46	0.0012	375.04	0.000	0.000
0.08	0.62	0.62	0.0021	375.06	0.000	0.000
0.10	0.76	0.76	0.0033	375.10	0.000	0.000
0.12	0.91	0.91	0.0048	375.14	0.000	0.000
0.15	1.05	1.05	0.0064	375.20	0.000	0.000
0.17	1.19	1.19	0.0084	375.25	0.000	0.000
0.19	1.57	1.57	0.0108	375.33	0.000	0.000
0.21	1.95	1.95	0.0138	375.42	0.000	0.000
0.23	2.33	2.33	0.0175	375.53	0.000	0.000
0.25	2.71	2.71	0.0218	375.66	0.000	0.000
0.27	2.45	2.45	0.0263	375.80	0.000	0.000
0.29	2.19	2.19	0.0303	375.92	0.000	0.000
0.31	1.93	1.93	0.0338	376.02	0.000	0.000
0.33	1.67	1.67	0.0369	376.10	0.000	0.000
0.35	1.48	1.48	0.0396	376.16	0.000	0.000
0.37	1.29	1.29	0.0420	376.22	0.000	0.000
0.40	1.11	1.11	0.0441	376.27	0.000	0.000
0.42	0.92	0.92	0.0458	376.31	0.000	0.000
0.44	0.88	0.88	0.0474	376.35	0.000	0.000
0.46	0.83	0.83	0.0488	376.39	0.000	0.000
0.48	0.79	0.79	0.0502	376.42	0.000	0.000
0.50	0.75	0.75	0.0516	376.45	0.000	0.000
0.52	0.69	0.69	0.0528	376.48	0.000	0.000
0.54	0.64	0.64	0.0539	376.51	0.083	0.083
0.56	0.58	0.58	0.0546	376.53	0.257	0.257
0.58	0.53	0.53	0.0550	376.54	0.356	0.356
0.60	0.51	0.51	0.0553	376.54	0.410	0.410
0.62	0.49	0.49	0.0554	376.55	0.439	0.439
0.65	0.47	0.47	0.0555	376.55	0.454	0.454
0.67	0.45	0.45	0.0555	376.55	0.457	0.457
0.69	0.44	0.44	0.0555	376.55	0.454	0.454
0.71	0.43	0.43	0.0554	376.55	0.447	0.447
0.73	0.41	0.41	0.0554	376.55	0.437	0.437
0.75	0.40	0.40	0.0553	376.54	0.426	0.426
0.77	0.38	0.38	0.0553	376.54	0.414	0.414
0.79	0.37	0.37	0.0552	376.54	0.402	0.402
0.81	0.36	0.36	0.0552	376.54	0.390	0.390
0.83	0.35	0.35	0.0551	376.54	0.379	0.379
0.85	0.34	0.34	0.0551	376.54	0.367	0.367
0.87	0.33	0.33	0.0550	376.54	0.357	0.357
0.90	0.32	0.32	0.0550	376.54	0.347	0.347
0.92	0.31	0.31	0.0550	376.54	0.337	0.337
0.94	0.30	0.30	0.0549	376.53	0.327	0.327
0.96	0.30	0.30	0.0549	376.53	0.318	0.318
0.98	0.29	0.29	0.0548	376.53	0.309	0.309

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.00	0.28	0.28	0.0548	376.53	0.300	0.300
1.02	0.28	0.28	0.0548	376.53	0.293	0.293
1.04	0.28	0.28	0.0547	376.53	0.288	0.288
1.06	0.28	0.28	0.0547	376.53	0.285	0.285
1.08	0.28	0.28	0.0547	376.53	0.283	0.283
1.10	0.27	0.27	0.0547	376.53	0.281	0.281
1.12	0.27	0.27	0.0547	376.53	0.278	0.278
1.15	0.27	0.27	0.0547	376.53	0.275	0.275
1.17	0.26	0.26	0.0547	376.53	0.272	0.272
1.19	0.26	0.26	0.0547	376.53	0.268	0.268
1.21	0.26	0.26	0.0546	376.53	0.265	0.265
1.23	0.25	0.25	0.0546	376.53	0.262	0.262
1.25	0.25	0.25	0.0546	376.53	0.259	0.259
1.27	0.25	0.25	0.0546	376.53	0.256	0.256
1.29	0.25	0.25	0.0546	376.53	0.254	0.254
1.31	0.25	0.25	0.0546	376.53	0.253	0.253
1.33	0.25	0.25	0.0546	376.53	0.252	0.252
1.35	0.25	0.25	0.0546	376.53	0.251	0.251
1.37	0.24	0.24	0.0546	376.53	0.249	0.249
1.40	0.24	0.24	0.0546	376.53	0.247	0.247
1.42	0.24	0.24	0.0546	376.53	0.245	0.245
1.44	0.24	0.24	0.0545	376.53	0.243	0.243
1.46	0.24	0.24	0.0545	376.53	0.241	0.241
1.48	0.23	0.23	0.0545	376.53	0.238	0.238
1.50	0.23	0.23	0.0545	376.52	0.236	0.236
1.52	0.23	0.23	0.0545	376.52	0.234	0.234
1.54	0.22	0.22	0.0545	376.52	0.232	0.232
1.56	0.22	0.22	0.0545	376.52	0.229	0.229
1.58	0.22	0.22	0.0545	376.52	0.226	0.226
1.60	0.22	0.22	0.0545	376.52	0.223	0.223
1.62	0.22	0.22	0.0545	376.52	0.221	0.221
1.65	0.21	0.21	0.0544	376.52	0.219	0.219
1.67	0.21	0.21	0.0544	376.52	0.217	0.217
1.69	0.21	0.21	0.0544	376.52	0.215	0.215
1.71	0.21	0.21	0.0544	376.52	0.213	0.213
1.73	0.21	0.21	0.0544	376.52	0.212	0.212
1.75	0.21	0.21	0.0544	376.52	0.210	0.210
1.77	0.20	0.20	0.0544	376.52	0.208	0.208
1.79	0.20	0.20	0.0544	376.52	0.206	0.206
1.81	0.20	0.20	0.0544	376.52	0.204	0.204
1.83	0.20	0.20	0.0544	376.52	0.202	0.202
1.85	0.20	0.20	0.0544	376.52	0.201	0.201
1.87	0.19	0.19	0.0544	376.52	0.199	0.199
1.90	0.19	0.19	0.0544	376.52	0.197	0.197
1.92	0.19	0.19	0.0543	376.52	0.195	0.195
1.94	0.19	0.19	0.0543	376.52	0.194	0.194
1.96	0.19	0.19	0.0543	376.52	0.192	0.192
1.98	0.19	0.19	0.0543	376.52	0.191	0.191
2.00	0.19	0.19	0.0543	376.52	0.189	0.189
2.02	0.18	0.18	0.0543	376.52	0.187	0.187
2.04	0.18	0.18	0.0543	376.52	0.186	0.186
2.06	0.18	0.18	0.0543	376.52	0.184	0.184
2.08	0.18	0.18	0.0543	376.52	0.182	0.182

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\1378\1378-20\Correspondence\Drainage\25 year.HYD
Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES
Discharge/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Basin Bypass Capacity = 0.0 cfs
Starting Pool Elevation = 375.00 feet
Time Interval = 2.083333E-02 hours

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
0.00	0.00	0.00	0.0000	375.00	0.000	0.000
0.02	0.18	0.18	0.0002	375.00	0.000	0.000
0.04	0.35	0.35	0.0006	375.02	0.000	0.000
0.06	0.53	0.53	0.0014	375.04	0.000	0.000
0.08	0.70	0.70	0.0024	375.07	0.000	0.000
0.10	0.86	0.86	0.0038	375.11	0.000	0.000
0.12	1.01	1.01	0.0054	375.16	0.000	0.000
0.15	1.17	1.17	0.0073	375.22	0.000	0.000
0.17	1.32	1.32	0.0094	375.29	0.000	0.000
0.19	1.74	1.74	0.0121	375.37	0.000	0.000
0.21	2.17	2.17	0.0154	375.47	0.000	0.000
0.23	2.59	2.59	0.0195	375.59	0.000	0.000
0.25	3.01	3.01	0.0243	375.74	0.000	0.000
0.27	2.71	2.71	0.0292	375.89	0.000	0.000
0.29	2.42	2.42	0.0337	376.02	0.000	0.000
0.31	2.13	2.13	0.0376	376.11	0.000	0.000
0.33	1.84	1.84	0.0410	376.20	0.000	0.000
0.35	1.64	1.64	0.0440	376.27	0.000	0.000
0.37	1.43	1.43	0.0466	376.33	0.000	0.000
0.40	1.23	1.23	0.0489	376.39	0.000	0.000
0.42	1.03	1.03	0.0509	376.44	0.000	0.000
0.44	0.98	0.98	0.0526	376.48	0.000	0.000
0.46	0.94	0.94	0.0541	376.52	0.149	0.149
0.48	0.89	0.89	0.0552	376.54	0.402	0.402
0.50	0.84	0.84	0.0559	376.56	0.56	0.56
0.52	0.78	0.78	0.0563	376.57	0.64	0.64
0.54	0.72	0.72	0.0564	376.57	0.68	0.68
0.56	0.66	0.66	0.0564	376.57	0.68	0.68
0.58	0.60	0.60	0.0564	376.57	0.67	0.67
0.60	0.58	0.58	0.0563	376.57	0.64	0.64
0.62	0.56	0.56	0.0562	376.57	0.62	0.62
0.65	0.54	0.54	0.0561	376.56	0.60	0.60
0.67	0.52	0.52	0.0560	376.56	0.58	0.58
0.69	0.51	0.51	0.0559	376.56	0.56	0.56
0.71	0.49	0.49	0.0558	376.56	0.54	0.54
0.73	0.48	0.48	0.0557	376.55	0.52	0.52
0.75	0.46	0.46	0.0557	376.55	0.50	0.50
0.77	0.45	0.45	0.0556	376.55	0.486	0.486
0.79	0.43	0.43	0.0555	376.55	0.471	0.471
0.81	0.42	0.42	0.0555	376.55	0.457	0.457
0.83	0.41	0.41	0.0554	376.55	0.443	0.443
0.85	0.40	0.40	0.0554	376.55	0.431	0.431
0.87	0.40	0.40	0.0553	376.54	0.420	0.420
0.90	0.39	0.39	0.0553	376.54	0.411	0.411
0.92	0.38	0.38	0.0552	376.54	0.403	0.403
0.94	0.38	0.38	0.0552	376.54	0.396	0.396
0.96	0.38	0.38	0.0552	376.54	0.389	0.389
0.98	0.37	0.37	0.0552	376.54	0.384	0.384

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.00	0.37	0.37	0.0551	376.54	0.379	0.379
1.02	0.36	0.36	0.0551	376.54	0.374	0.374
1.04	0.35	0.35	0.0551	376.54	0.368	0.368
1.06	0.34	0.34	0.0551	376.54	0.361	0.361
1.08	0.34	0.34	0.0550	376.54	0.354	0.354
1.10	0.33	0.33	0.0550	376.54	0.348	0.348
1.12	0.33	0.33	0.0550	376.54	0.343	0.343
1.15	0.33	0.33	0.0550	376.54	0.339	0.339
1.17	0.33	0.33	0.0550	376.54	0.336	0.336
1.19	0.33	0.33	0.0549	376.54	0.334	0.334
1.21	0.33	0.33	0.0549	376.53	0.331	0.331
1.23	0.32	0.32	0.0549	376.53	0.329	0.329
1.25	0.32	0.32	0.0549	376.53	0.327	0.327
1.27	0.32	0.32	0.0549	376.53	0.324	0.324
1.29	0.31	0.31	0.0549	376.53	0.321	0.321
1.31	0.31	0.31	0.0549	376.53	0.318	0.318
1.33	0.30	0.30	0.0549	376.53	0.314	0.314
1.35	0.30	0.30	0.0548	376.53	0.311	0.311
1.37	0.30	0.30	0.0548	376.53	0.307	0.307
1.40	0.30	0.30	0.0548	376.53	0.304	0.304
1.42	0.29	0.29	0.0548	376.53	0.301	0.301
1.44	0.29	0.29	0.0548	376.53	0.297	0.297
1.46	0.29	0.29	0.0548	376.53	0.294	0.294
1.48	0.28	0.28	0.0548	376.53	0.291	0.291
1.50	0.28	0.28	0.0547	376.53	0.288	0.288
1.52	0.28	0.28	0.0547	376.53	0.285	0.285
1.54	0.27	0.27	0.0547	376.53	0.282	0.282
1.56	0.27	0.27	0.0547	376.53	0.279	0.279
1.58	0.27	0.27	0.0547	376.53	0.276	0.276
1.60	0.27	0.27	0.0547	376.53	0.273	0.273
1.62	0.26	0.26	0.0547	376.53	0.270	0.270
1.65	0.26	0.26	0.0547	376.53	0.268	0.268
1.67	0.26	0.26	0.0546	376.53	0.266	0.266
1.69	0.26	0.26	0.0546	376.53	0.263	0.263
1.71	0.26	0.26	0.0546	376.53	0.261	0.261
1.73	0.25	0.25	0.0546	376.53	0.259	0.259
1.75	0.25	0.25	0.0546	376.53	0.256	0.256
1.77	0.25	0.25	0.0546	376.53	0.254	0.254
1.79	0.25	0.25	0.0546	376.53	0.252	0.252
1.81	0.24	0.24	0.0546	376.53	0.250	0.250
1.83	0.24	0.24	0.0546	376.53	0.248	0.248
1.85	0.24	0.24	0.0546	376.53	0.246	0.246
1.87	0.24	0.24	0.0546	376.53	0.244	0.244
1.90	0.24	0.24	0.0545	376.53	0.242	0.242
1.92	0.23	0.23	0.0545	376.53	0.239	0.239
1.94	0.23	0.23	0.0545	376.53	0.237	0.237
1.96	0.23	0.23	0.0545	376.52	0.235	0.235
1.98	0.23	0.23	0.0545	376.52	0.233	0.233
2.00	0.23	0.23	0.0545	376.52	0.231	0.231
2.02	0.22	0.22	0.0545	376.52	0.229	0.229
2.04	0.22	0.22	0.0545	376.52	0.227	0.227
2.06	0.22	0.22	0.0545	376.52	0.226	0.226
2.08	0.22	0.22	0.0545	376.52	0.224	0.224

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\1378\1378-20\Correspondence\Drainage\50 year.HYD
Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES
Discharge/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Basin Bypass Capacity = 0.0 cfs
Starting Pool Elevation = 375.00 feet
Time Interval = 2.083333E-02 hours

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
0.00	0.00	0.00	0.0000	375.00	0.000	0.000
0.02	0.20	0.20	0.0002	375.01	0.000	0.000
0.04	0.41	0.41	0.0007	375.02	0.000	0.000
0.06	0.61	0.61	0.0016	375.05	0.000	0.000
0.08	0.81	0.81	0.0028	375.08	0.000	0.000
0.10	0.97	0.97	0.0043	375.13	0.000	0.000
0.12	1.14	1.14	0.0061	375.19	0.000	0.000
0.15	1.30	1.30	0.0082	375.25	0.000	0.000
0.17	1.46	1.46	0.0106	375.32	0.000	0.000
0.19	1.92	1.92	0.0135	375.41	0.000	0.000
0.21	2.39	2.39	0.0172	375.52	0.000	0.000
0.23	2.85	2.85	0.0218	375.66	0.000	0.000
0.25	3.31	3.31	0.0271	375.82	0.000	0.000
0.27	2.99	2.99	0.0325	375.98	0.000	0.000
0.29	2.66	2.66	0.0373	376.11	0.000	0.000
0.31	2.33	2.33	0.0416	376.21	0.000	0.000
0.33	2.00	2.00	0.0454	376.30	0.000	0.000
0.35	1.79	1.79	0.0486	376.38	0.000	0.000
0.37	1.58	1.58	0.0515	376.45	0.000	0.000
0.40	1.37	1.37	0.0540	376.51	0.106	0.106
0.42	1.16	1.16	0.0556	376.55	0.490	0.490
0.44	1.11	1.11	0.0565	376.57	0.70	0.70
0.46	1.06	1.06	0.0571	376.59	0.83	0.83
0.48	1.01	1.01	0.0574	376.59	0.90	0.90
0.50	0.96	0.96	0.0575	376.60	0.92	0.92
0.52	0.89	0.89	0.0575	376.60	0.92	0.92
0.54	0.83	0.83	0.0574	376.60	0.90	0.90
0.56	0.77	0.77	0.0573	376.59	0.87	0.87
0.58	0.71	0.71	0.0571	376.59	0.83	0.83
0.60	0.68	0.68	0.0569	376.58	0.78	0.78
0.62	0.66	0.66	0.0567	376.58	0.75	0.75
0.65	0.64	0.64	0.0566	376.58	0.71	0.71
0.67	0.62	0.62	0.0565	376.57	0.69	0.69
0.69	0.60	0.60	0.0564	376.57	0.66	0.66
0.71	0.59	0.59	0.0563	376.57	0.64	0.64
0.73	0.57	0.57	0.0562	376.57	0.62	0.62
0.75	0.55	0.55	0.0561	376.56	0.60	0.60
0.77	0.54	0.54	0.0560	376.56	0.58	0.58
0.79	0.52	0.52	0.0559	376.56	0.57	0.57
0.81	0.51	0.51	0.0559	376.56	0.55	0.55
0.83	0.50	0.50	0.0558	376.56	0.53	0.53
0.85	0.49	0.49	0.0557	376.55	0.52	0.52
0.87	0.47	0.47	0.0557	376.55	0.51	0.51
0.90	0.46	0.46	0.0556	376.55	0.494	0.494
0.92	0.45	0.45	0.0556	376.55	0.482	0.482
0.94	0.45	0.45	0.0555	376.55	0.472	0.472
0.96	0.45	0.45	0.0555	376.55	0.465	0.465
0.98	0.45	0.45	0.0555	376.55	0.460	0.460

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.00	0.45	0.45	0.0555	376.55	0.456	0.456
1.02	0.44	0.44	0.0555	376.55	0.452	0.452
1.04	0.43	0.43	0.0554	376.55	0.447	0.447
1.06	0.42	0.42	0.0554	376.55	0.439	0.439
1.08	0.41	0.41	0.0554	376.55	0.432	0.432
1.10	0.41	0.41	0.0553	376.54	0.424	0.424
1.12	0.40	0.40	0.0553	376.54	0.417	0.417
1.15	0.39	0.39	0.0553	376.54	0.410	0.410
1.17	0.39	0.39	0.0552	376.54	0.403	0.403
1.19	0.38	0.38	0.0552	376.54	0.397	0.397
1.21	0.38	0.38	0.0552	376.54	0.392	0.392
1.23	0.37	0.37	0.0552	376.54	0.387	0.387
1.25	0.37	0.37	0.0551	376.54	0.382	0.382
1.27	0.37	0.37	0.0551	376.54	0.377	0.377
1.29	0.36	0.36	0.0551	376.54	0.372	0.372
1.31	0.36	0.36	0.0551	376.54	0.368	0.368
1.33	0.35	0.35	0.0551	376.54	0.363	0.363
1.35	0.35	0.35	0.0550	376.54	0.359	0.359
1.37	0.34	0.34	0.0550	376.54	0.354	0.354
1.40	0.34	0.34	0.0550	376.54	0.351	0.351
1.42	0.34	0.34	0.0550	376.54	0.347	0.347
1.44	0.33	0.33	0.0550	376.54	0.343	0.343
1.46	0.33	0.33	0.0550	376.54	0.340	0.340
1.48	0.33	0.33	0.0550	376.54	0.336	0.336
1.50	0.32	0.32	0.0549	376.54	0.332	0.332
1.52	0.32	0.32	0.0549	376.53	0.329	0.329
1.54	0.32	0.32	0.0549	376.53	0.326	0.326
1.56	0.31	0.31	0.0549	376.53	0.322	0.322
1.58	0.31	0.31	0.0549	376.53	0.319	0.319
1.60	0.31	0.31	0.0549	376.53	0.316	0.316
1.62	0.31	0.31	0.0549	376.53	0.313	0.313
1.65	0.30	0.30	0.0548	376.53	0.310	0.310
1.67	0.30	0.30	0.0548	376.53	0.307	0.307
1.69	0.30	0.30	0.0548	376.53	0.304	0.304
1.71	0.30	0.30	0.0548	376.53	0.302	0.302
1.73	0.29	0.29	0.0548	376.53	0.299	0.299
1.75	0.29	0.29	0.0548	376.53	0.297	0.297
1.77	0.29	0.29	0.0548	376.53	0.295	0.295
1.79	0.29	0.29	0.0548	376.53	0.292	0.292
1.81	0.28	0.28	0.0548	376.53	0.290	0.290
1.83	0.28	0.28	0.0547	376.53	0.287	0.287
1.85	0.28	0.28	0.0547	376.53	0.285	0.285
1.87	0.28	0.28	0.0547	376.53	0.282	0.282
1.90	0.27	0.27	0.0547	376.53	0.280	0.280
1.92	0.27	0.27	0.0547	376.53	0.278	0.278
1.94	0.27	0.27	0.0547	376.53	0.276	0.276
1.96	0.27	0.27	0.0547	376.53	0.273	0.273
1.98	0.26	0.26	0.0547	376.53	0.271	0.271
2.00	0.26	0.26	0.0547	376.53	0.268	0.268
2.02	0.26	0.26	0.0546	376.53	0.266	0.266
2.04	0.26	0.26	0.0546	376.53	0.264	0.264
2.06	0.26	0.26	0.0546	376.53	0.262	0.262
2.08	0.26	0.26	0.0546	376.53	0.260	0.260

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\1378\1378-20\Correspondence\Drainage\100 year.HYD
Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES
Discharge/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Basin Bypass Capacity = 0.0 cfs
Starting Pool Elevation = 375.00 feet
Time Interval = 2.083333E-02 hours

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
0.00	0.00	0.00	0.0000	375.00	0.000	0.000
0.02	0.23	0.23	0.0002	375.01	0.000	0.000
0.04	0.46	0.46	0.0008	375.02	0.000	0.000
0.06	0.68	0.68	0.0018	375.05	0.000	0.000
0.08	0.91	0.91	0.0031	375.10	0.000	0.000
0.10	1.09	1.09	0.0049	375.15	0.000	0.000
0.12	1.27	1.27	0.0069	375.21	0.000	0.000
0.15	1.45	1.45	0.0092	375.28	0.000	0.000
0.17	1.63	1.63	0.0119	375.36	0.000	0.000
0.19	2.14	2.14	0.0151	375.46	0.000	0.000
0.21	2.65	2.65	0.0193	375.58	0.000	0.000
0.23	3.16	3.16	0.0243	375.74	0.000	0.000
0.25	3.67	3.67	0.0302	375.91	0.000	0.000
0.27	3.31	3.31	0.0362	376.08	0.000	0.000
0.29	2.95	2.95	0.0416	376.21	0.000	0.000
0.31	2.59	2.59	0.0463	376.32	0.000	0.000
0.33	2.23	2.23	0.0505	376.43	0.000	0.000
0.35	1.99	1.99	0.0540	376.51	0.114	0.114
0.37	1.76	1.76	0.0565	376.57	0.70	0.70
0.40	1.53	1.53	0.0578	376.61	1.05	1.05
0.42	1.29	1.29	0.0583	376.62	1.24	1.24
0.44	1.24	1.24	0.0583	376.62	1.25	1.25
0.46	1.18	1.18	0.0583	376.62	1.23	1.23
0.48	1.13	1.13	0.0582	376.61	1.19	1.19
0.50	1.07	1.07	0.0581	376.61	1.14	1.14
0.52	1.00	1.00	0.0579	376.61	1.08	1.08
0.54	0.93	0.93	0.0578	376.60	1.02	1.02
0.56	0.86	0.86	0.0576	376.60	0.95	0.95
0.58	0.79	0.79	0.0574	376.60	0.91	0.91
0.60	0.77	0.77	0.0572	376.59	0.87	0.87
0.62	0.74	0.74	0.0571	376.59	0.83	0.83
0.65	0.72	0.72	0.0569	376.58	0.80	0.80
0.67	0.70	0.70	0.0568	376.58	0.77	0.77
0.69	0.68	0.68	0.0567	376.58	0.74	0.74
0.71	0.66	0.66	0.0566	376.58	0.72	0.72
0.73	0.64	0.64	0.0565	376.57	0.69	0.69
0.75	0.62	0.62	0.0564	376.57	0.67	0.67
0.77	0.61	0.61	0.0563	376.57	0.65	0.65
0.79	0.59	0.59	0.0562	376.57	0.63	0.63
0.81	0.57	0.57	0.0562	376.57	0.62	0.62
0.83	0.56	0.56	0.0561	376.56	0.60	0.60
0.85	0.55	0.55	0.0560	376.56	0.58	0.58
0.87	0.55	0.55	0.0560	376.56	0.57	0.57
0.90	0.54	0.54	0.0559	376.56	0.56	0.56
0.92	0.53	0.53	0.0559	376.56	0.55	0.55
0.94	0.53	0.53	0.0559	376.56	0.55	0.55
0.96	0.52	0.52	0.0558	376.56	0.54	0.54
0.98	0.51	0.51	0.0558	376.56	0.53	0.53

Spillway = 376.50

Berm = 377.00

Event Time (hours)	Hydrograph Inflow (cfs)	Basin Inflow (cfs)	Storage Used (acre-ft)	Elevation Above MSL (feet)	Basin Outflow (cfs)	Outflow Total (cfs)
1.00	0.51	0.51	0.0558	376.56	0.52	0.52
1.02	0.50	0.50	0.0557	376.55	0.52	0.52
1.04	0.48	0.48	0.0557	376.55	0.51	0.51
1.06	0.47	0.47	0.0557	376.55	0.498	0.498
1.08	0.46	0.46	0.0556	376.55	0.488	0.488
1.10	0.46	0.46	0.0556	376.55	0.479	0.479
1.12	0.46	0.46	0.0555	376.55	0.473	0.473
1.15	0.46	0.46	0.0555	376.55	0.468	0.468
1.17	0.46	0.46	0.0555	376.55	0.465	0.465
1.19	0.45	0.45	0.0555	376.55	0.462	0.462
1.21	0.45	0.45	0.0555	376.55	0.457	0.457
1.23	0.44	0.44	0.0555	376.55	0.453	0.453
1.25	0.43	0.43	0.0554	376.55	0.448	0.448
1.27	0.43	0.43	0.0554	376.55	0.443	0.443
1.29	0.43	0.43	0.0554	376.55	0.438	0.438
1.31	0.42	0.42	0.0554	376.55	0.433	0.433
1.33	0.42	0.42	0.0553	376.55	0.428	0.428
1.35	0.41	0.41	0.0553	376.54	0.423	0.423
1.37	0.41	0.41	0.0553	376.54	0.418	0.418
1.40	0.40	0.40	0.0553	376.54	0.413	0.413
1.42	0.40	0.40	0.0553	376.54	0.409	0.409
1.44	0.39	0.39	0.0552	376.54	0.404	0.404
1.46	0.39	0.39	0.0552	376.54	0.400	0.400
1.48	0.38	0.38	0.0552	376.54	0.396	0.396
1.50	0.38	0.38	0.0552	376.54	0.391	0.391
1.52	0.38	0.38	0.0552	376.54	0.387	0.387
1.54	0.37	0.37	0.0552	376.54	0.383	0.383
1.56	0.37	0.37	0.0551	376.54	0.380	0.380
1.58	0.37	0.37	0.0551	376.54	0.377	0.377
1.60	0.37	0.37	0.0551	376.54	0.373	0.373
1.62	0.36	0.36	0.0551	376.54	0.370	0.370
1.65	0.36	0.36	0.0551	376.54	0.367	0.367
1.67	0.36	0.36	0.0551	376.54	0.364	0.364
1.69	0.35	0.35	0.0551	376.54	0.360	0.360
1.71	0.35	0.35	0.0550	376.54	0.357	0.357
1.73	0.34	0.34	0.0550	376.54	0.353	0.353
1.75	0.34	0.34	0.0550	376.54	0.350	0.350
1.77	0.34	0.34	0.0550	376.54	0.346	0.346
1.79	0.34	0.34	0.0550	376.54	0.343	0.343
1.81	0.33	0.33	0.0550	376.54	0.341	0.341
1.83	0.33	0.33	0.0550	376.54	0.338	0.338
1.85	0.33	0.33	0.0549	376.54	0.335	0.335
1.87	0.33	0.33	0.0549	376.54	0.333	0.333
1.90	0.32	0.32	0.0549	376.53	0.330	0.330
1.92	0.32	0.32	0.0549	376.53	0.328	0.328
1.94	0.32	0.32	0.0549	376.53	0.325	0.325
1.96	0.32	0.32	0.0549	376.53	0.322	0.322
1.98	0.31	0.31	0.0549	376.53	0.320	0.320
2.00	0.31	0.31	0.0549	376.53	0.317	0.317
2.02	0.31	0.31	0.0549	376.53	0.314	0.314
2.04	0.31	0.31	0.0548	376.53	0.312	0.312
2.06	0.30	0.30	0.0548	376.53	0.310	0.310
2.08	0.30	0.30	0.0548	376.53	0.307	0.307

Total Routing Mass Balance Discrepancy is 0.00%

Basin Empty Time Calculation

P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES
P:\1378\1378-20\Correspondence\Drainage\Rain Garden.EO

Basin Outflow Multiplier = 1
Top of Riser Elevation = 376.62 100 year elevation
Cleanout Elevation = 376.50 spillway

Elevation (ft)	Storage (acre-ft)	Outflow (cfs)	Time (hours)
376.62	0.058	1.40	
376.58	0.057	0.75	0.0194
376.50	0.053	0.19	0.083

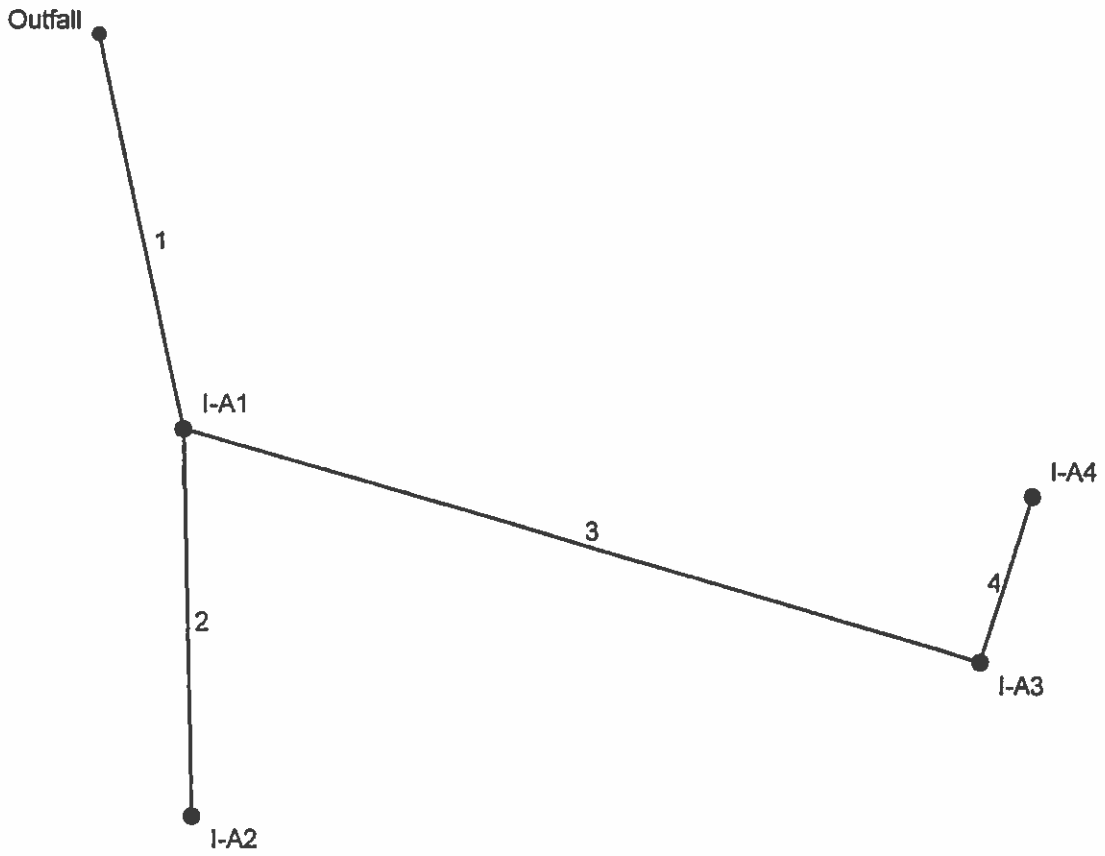
Total Basin Empty Time

0.1027 Hours or 0.00 Days

APPENDIX D

CONVEYANCE FACILITY DESIGN CALCULATIONS

EW-A



Project File: EW-A.stm	Number of lines: 4	Date: 2/23/2021

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(In/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	56.105	0.30	0.65	0.70	0.21	0.46	5.0	5.8	7.3	3.34	4.56	2.83	15	0.50	375.00	375.28	376.25	376.37	376.36	382.77	I-A1 TO EW-A
2	1	53.755	0.25	0.25	0.70	0.18	0.18	5.0	5.0	7.5	1.31	10.71	4.60	15	2.75	379.52	381.00	379.82	381.45	382.77	385.80	I-A2 TO I-A1
3	1	112.888	0.01	0.10	0.86	0.01	0.07	5.0	5.2	7.5	0.55	7.54	3.08	15	1.36	379.52	381.06	379.75	381.35	382.77	384.86	I-A3 TO I-A1
4	3	24.033	0.09	0.09	0.73	0.07	0.07	5.0	5.0	7.5	0.49	4.56	2.37	15	0.50	381.06	381.18	381.35	381.46	384.86	384.56	I-A4 TO I-A3

EW-A

Number of lines: 4

Run Date: 5/13/2021

NOTES:Intensity = 84.77 / (Inlet time + 15.20) ^ 0.81; Return period =Yrs. 50 ; c = cir e = ellip b = box

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1	I-A1	1.58	0.00	1.58	0.00	Comb	4.0	4.00	5.30	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.10	4.97	0.27	4.97	2.0	Off
2	I-A2	1.31	0.00	1.31	0.00	Comb	4.0	4.00	5.30	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.08	4.04	0.25	4.04	2.0	Off
3	I-A3	0.06	0.00	0.06	0.00	Comb	4.0	4.00	0.00	4.00	2.00	0.015	2.00	0.020	0.020	0.013	0.04	2.22	0.17	0.01	2.0	1
4	I-A4	0.49	0.00	0.49	0.00	Comb	4.0	4.00	5.30	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.02	1.80	0.19	1.80	2.0	Off

EW-A

Number of lines: 4

Run Date: 5/13/2021

NOTES: Inlet N-Values = 0.016; Intensity = 84.77 / (Inlet time + 15.20) ^ 0.81; Return period = 50 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

100 Year

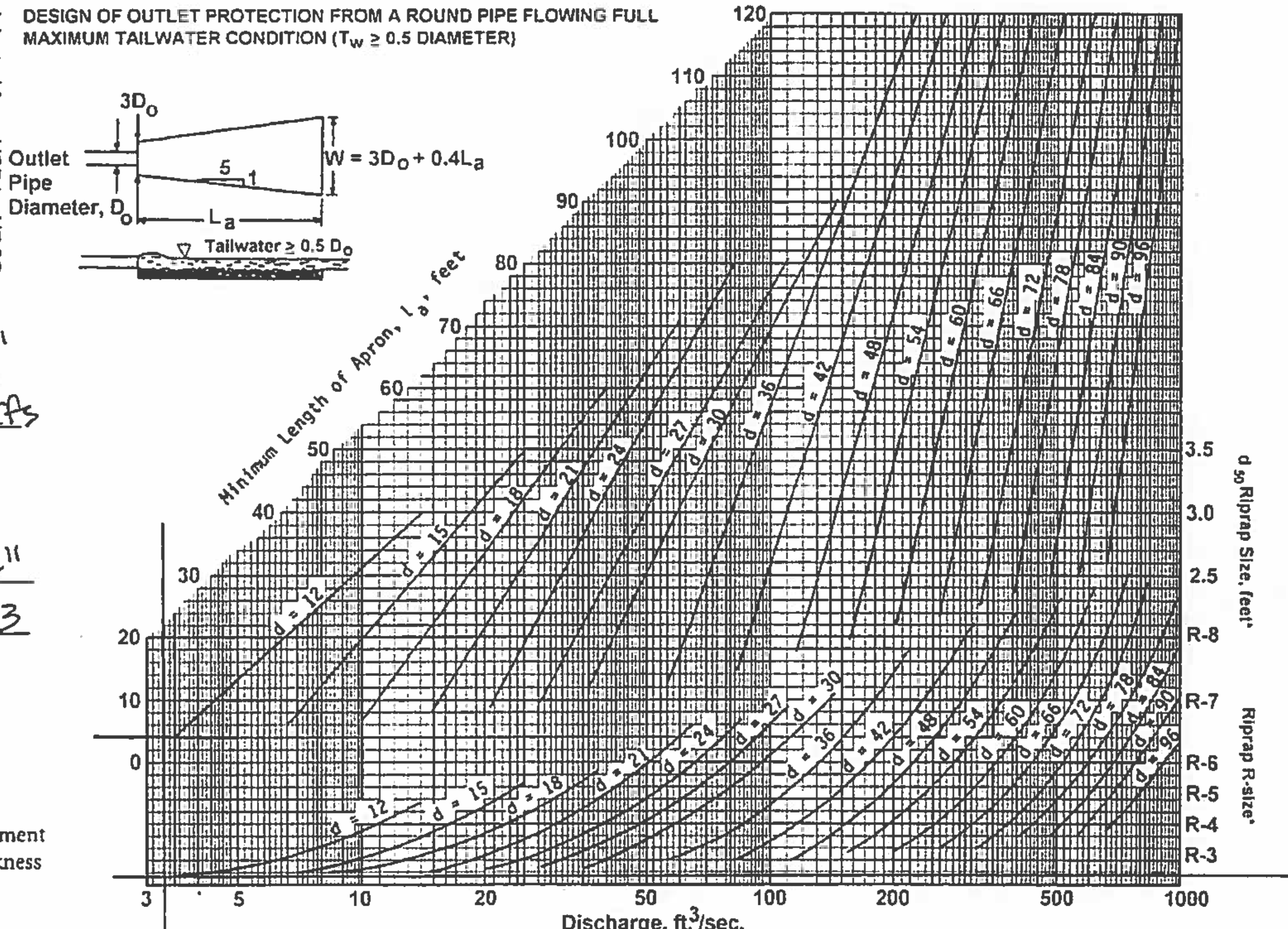
Line No.	Line ID	HGL Dn (ft)	HGL Up (ft)	Gnd/Rim El Dn (ft)	Gnd/Rim El Up (ft)	Inlet ID	Line ID	Line Length (ft)	Line Size (in)	Line Slope (%)	Q Byp (cfs)	Q Capt (cfs)	Q Carry (cfs)	
1	I-A1 TO EW-A	376.25	376.40	376.36	382.77	I-A1	I-A1 TO EW-A	56.105	15	0.50	0.00	1.72	0.00	
2	I-A2 TO I-A1	379.83	381.47	382.77	385.80	I-A2	I-A2 TO I-A1	53.755	15	2.75	0.00	1.43	0.00	
3	I-A3 TO I-A1	379.76	381.36	382.77	384.86	I-A3	I-A3 TO I-A1	112.888	15	1.36	0.00	0.07	0.00	
4	I-A4 TO I-A3	381.36	381.47 j	384.86	384.56	I-A4	I-A4 TO I-A3	24.033	15	0.50	0.00	0.54	0.00	

EW-A | Number of lines: 4 | Date: 5/13/2021

NOTES: ** Critical depth

FIGURE 9.4
Riprap Apron Design, Maximum Tailwater Condition

DESIGN OF OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MAXIMUM TAILWATER CONDITION ($T_w \geq 0.5$ DIAMETER)



*For discharge velocities exceeding Maximum Allowable for Riprap Indicated, increase d_{50} stone size and/or provide velocity reduction device.

Adapted from USDA - NRCS

Do = 1.25'

3Do = 3.75'

Qmax = 3.3 cfs

D50 = 3"

Placement

Thickness = 12"

Rip-Rap = R-3

La = 4'

W = 5.35'

d = 12"

D50 Sizes	Placement Thickness
R-3=3"	12"
R-4=6"	18"
R-5=9"	27"
R-6=12"	36"
R-7=15"	45"
R-8=24"	72"

Channel Design Data

Project Name: Gerberich Payne Shoe Company
Project Number: 1378-20
Prepared By: BRC
Checked By: BRC
Date: 2/21/2021
Date:

Bare Earth (Table 4.7a)	Rain Garden Spillway							
Silt Loam, noncolloidal	*Type of Channel*	Trapezoidal			*Type of Channel*	Trapezoidal		
Design Criteria	**Bare Earth**	**Lining** ECS-2	**Grass (Vel)**	**Grass (Cap)**	**Bare Earth**	**Lining** ECS-1	**Grass (Vel)**	**Grass (Cap)**
Installation Depth,ft	1.00	1.00	1.00	1.00				
Manning's 'n' Value	0.020	0.029	0.060	0.060				
Bottom Slope, ft/ft	0.250	0.250	0.250	0.250				
Right Slope, _H: 1V	3.0	3.0	3.0	3.0				
Left Slope, _H: 1V	3.0	3.0	3.0	3.0				
Top Width (Parabolic Only) Bottom Width (Other), ft	10.0	10.0	10.0	10.0				
Flow, cfs	3.63	3.63	3.63	3.63				
Length of Channel, ft	8	8	8	8				
Allowable Shear, lb/ft^2		2.05						
Bottom Width:Depth Ratio *12:1 Maximum*	161	129 Stable:	84	84				
Lining Quantity, yd^2		14.5						
Design Comments	100 year design storm							
Design Capacity								
Flow Depth,ft	0.06	0.08	0.12	0.12				
Top Width,ft	10.37	10.46	10.72	10.72				
Area,ft^2	0.63	0.79	1.24	1.24				
Wetted Perimeter,ft	10.39	10.49	10.76	10.76				
Hydraulic Radius,ft	0.06	0.08	0.12	0.12				
Hydraulic Depth,ft	0.06	0.08	0.12	0.12				
Froude Number	4.10	2.93	1.52	1.52				
Velocity, ft/s -	5.74	4.58	2.93	2.93				
Velocity Head, ft	0.51	0.33	0.13	0.13				
Total Energy, ft	0.57	0.40	0.25	0.25				
Critical Slope	0.015	0.029	0.108	0.108				
Required Freeboard, ft	0.50	0.50	0.50	0.50				
Design Depth, ft	0.6	0.6	0.6	0.6				
Maximum Capacity								
Flow, ft^3 /s	415	286	138	138				
Flow Depth, ft	1.00	1.00	1.00	1.00				
Area, ft^2	13.00	13.00	13.00	13.00				
Top Width, ft	16.00	16.00	16.00	16.00				
Wetted Perimeter, ft	16.32	16.32	16.32	16.32				
Hydraulic Radius, ft	0.80	0.80	0.80	0.80				
Hydraulic Depth, ft	0.81	0.81	0.81	0.81				
Froude Number	5.62	3.88	1.87	1.87				
Velocity, ft/s	31.92	22.01	10.64	10.64				
Velocity Head, ft	15.82	7.52	1.76	1.76				
Total Energy, ft	16.82	8.52	2.76	2.76				

Shear stress = 62.4 x 0.25 (slope) x 0.08 (depth) = 1.25 lb/ft^2

ECS-2 = 2.05 lb/ft^2

EASTCOAST erosion control

Proud Member and Participant of:
www.eastcoasterosion.com
443 Bricker Road Bernville, PA 19506
1.800.582.4005 +1.610.488.8496 Fax +1.610.488.8494

Material and Performance Specification

ECS-2® Double Net Straw Rolled Erosion Control Product

Description:

The ECS-2® is made with uniformly distributed 100% agricultural straw and two polypropylene nets securely sewn together with degradable thread. The tightly compressed blankets are wrapped and include a product label, code and installation guide. The blankets are palletized for easy transportation.
The ECS-2® has functional longevity of approximately 12 months, but will vary depending on soil and climatic conditions, and is suitable for slopes 2:1 or less and low to medium flow channels. The ECS-2® meets Type 2.D specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

Matrix:	1	2
	100% Straw	

Netting:	Type	Net Color
Top:	Lightweight Photodegradable Polypropylene	Green
Middle:	None	
Bottom:	Lightweight Photodegradable Polypropylene	

Net Opening:	Top	Middle	Bottom
	0.5" x 0.5"		0.5" x 0.5"

Thread:	Type	Color
	Degradable Thread	White

Roll Sizes:	Standard		"A" Size		Mega	
Width:	8 ft	2.4 m	4 ft	1.2 m	16 ft	4.9 m
Length:	112.5 ft	34.3 m	225 ft	68.6 m	112.5 ft	34.3 m
Weight*:	53 lbs	24.0 kg	53 lbs	24.0 kg	106 lbs	48.1 kg
Area:	100 yd²	83.6 m²	100 yd²	83.6 m²	200 yd²	167.2 m²
#/Pallet:	25		9		25	

*Weight at time of manufacturing.

Index Value Properties*:

Property	Test Method	Typical			
Mass/Unit Area	ASTM D6475	8.50	oz/yd²	288.2	g/m2
Thickness	ASTM D6525	0.32	in	8.13	mm
Tensile Strength-MD	ASTM D6818	150	lb/ft	2.19	kN/m
Elongation-MD	ASTM D6818	28	%		
Tensile Strength-TD	ASTM D6818	80	lb/ft	1.17	kN/m
Elongation-TD	ASTM D6818	29.4	%		
Light Penetration	ASTM D6567	19	%		
Density / Specific Gravity	ASTM D792	N/A	g/cm³		
Water Absorption	ASTM D1117	390	%		

*May differ depending upon raw material variations

Bench Scale Testing* (NTPEP*):**

Test Method	Parameters	Results
ECTC Method 2 Rainfall	50mm (2in) / hr-30 min	SLR**=5.84
	100mm (4in) / hr-30 min	SLR**=6.87
	150mm (6in) / hr-30 min	SLR**=8.09
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	1.61 lb/ft²
ECTC Method 4 Germination	Top soil; Fescue; 21 day Incubation	455 %

*Bench scale tests should not be used for design purposes.
**Soil Loss Ratio=Soil Loss Bare Soil/Soil Loss with RECP=1/C-Factor
***The preceding test data excerpts were reproduced with the permission of AASHTO, however, this does not constitute endorsement or approval of the product, material or device by AASHTO

Slope Performance Design Values*:

Property	Test Method		Value
C-Factors	ASTM D6459		0.01
Slope Length (L)	≤ 3:1	3:1-2:1	≥ 2:1
< 50 ft (15 m)	0.014	0.077	N/A
50 ft – 100 ft	0.048	0.084	N/A
>100 ft (30 m)	0.086	0.125	N/A

*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory

Shear stress

Channel Performance Design Values*:

Property	Test Method	Value			
Unvegetated Shear Stress	ASTM D 6460	2.05	lbs/ft²	98.15	Pa
Unvegetated Velocity	ASTM D 6460	7.5	ft/s	2.29	m/s
Vegetated Shear Stress	NA	N/A	lbs/ft²	N/A	Pa
Vegetated Velocity	NA	N/A	ft/s	N/A	m/s
Manning's N (Value Represents a Range)		0.029			

*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory

Revised 1/11/2016

APPENDIX E

BOROUGH VOLUME REQUIREMENTS

Worksheet 4: Change in Runoff Volume for 2-YR Storm Event

Project:	Gerberich Payne Shoe Company
Drainage Area:	Disturbed Area A
2-Year Rainfall:	3.10 in

Total Site Area:	0.70	acres
Protected Site Area:	0.00	acres
Managed Area:	0.70	acres

Existing Conditions:

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (cf)
Impervious	B	12,558	0.29	98	0.20	0.04	2.87	3,001
Impervious	D		-	98				
Meadow	B	11,689	0.27	58	7.24	1.45	0.31	299
Meadow	C		-	71				
Meadow	D		-	78				
Woods	B		-	55				
Woods	C		-	70				
Woods	D		-	77				
Total		24,247	0.56				3.17	3,300

Developed Conditions

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (cf)
Impervious	B	19,656	0.45	98	0.20	0.04	2.87	4,698
Impervious	C		-	98				
Impervious	D		-	98				
Grass	B	10,657	0.24	61	6.39	1.28	0.40	359
Grass	C		-	74				
Grass	D		-	80				
Meadow	D		-	78				
Woods	B		-	55				
Woods	C		-	70				
Woods	D		-	77				
Total		30,313	0.70				3.27	5,056

2-Year Volume Increase (ft3):	1,756	0.040 acre/feet

2-Year Volume Increase = Developed Conditions Runoff Volume - Existing Conditions Runoff Volume

1. Runoff (in) = $Q = (P-0.2S)^2 / (P+0.8S)$ where
   P = 2-Year Rainfall (in)
   S = (1000/CN) - 10
2. Runoff Volume CF = Q x Area x 1/12
   Q = Runoff (in)
   Area = Land use area (sq. ft.)

Note: Runoff Volume must be calculated for EACH land use type/condition and HSGI.
The Use of a weighted CN value for volume calculations is not acceptable.
20% of the existing impervious area being disturbed has been been converted to a meadown condition.

Worksheet 4: Change in Runoff Volume for 2-YR Storm Event

Project:	Gerberich Payne Shoe Company
Drainage Area:	Disturbed Area B
2-Year Rainfall:	3.10 in

Total Site Area:	0.24	acres
Protected Site Area:	0.00	acres
Managed Area:	0.24	acres

Existing Conditions:

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (cf)
Impervious	B	9,728	0.22	98	0.20	0.04	2.87	2,325
Impervious	D		-	98				
Meadow	B	6,850	0.16	58	7.24	1.45	0.31	175
Meadow	C		-	71				
Meadow	D		-	78				
Woods	B		-	55				
Woods	C		-	70				
Woods	D		-	77				
Total		16,578	0.38				3.17	2,500

Developed Conditions

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (cf)
Impervious	B	6,997	0.16	98	0.20	0.04	2.87	1,672
Impervious	C		-	98				
Impervious	D		-	98				
Grass	B	3,515	0.08	61	6.39	1.28	0.40	118
Grass	C		-	74				
Grass	D		-	80				
Meadow	D		-	78				
Woods	B		-	55				
Woods	C		-	70				
Woods	D		-	77				
Total		10,512	0.24				3.27	1,790

2-Year Volume Increase (ft3):	(710)	-0.016 acre/feet

2-Year Volume Increase = Developed Conditions Runoff Volume - Existing Conditions Runoff Volume

1. Runoff (in) = $Q = (P-0.2S)^2 / (P+0.8S)$ where
   P = 2-Year Rainfall (in)
   S = (1000/CN) - 10
2. Runoff Volume CF = Q x Area x 1/12
   Q = Runoff (in)
   Area = Land use area (sq. ft.)

Note: Runoff Volume must be calculated for EACH land use type/condition and HSGI.
The Use of a weighted CN value for volume calculations is not acceptable.
20% of the existing impervious area being disturbed has been been converted to a meadown condition.

Worksheet 4: Change in Runoff Volume for 2-YR Storm Event

Project:	Gerberich Payne Shoe Company
Drainage Area:	To Rain Garden
2-Year Rainfall:	3.10 in

Total Site Area:		acres
Protected Site Area:		acres
Managed Area:		acres

Existing Conditions:

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (cf)
Impervious	B		-	98				
Impervious	D		-	98				
Meadow	B		-	58				
Meadow	C		-	71				
Meadow	D		-	78				
Woods	B		-	55				
Woods	C		-	70				
Woods	D		-	77				
Total		-	-				-	-

Developed Conditions

Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (cf)
Impervious	B	21,659	0.50	98	0.20	0.04	2.87	5,224
Impervious	C		-	98				
Impervious	D		-	98				
Grass	B	11,961	0.27	61	6.39	1.28	0.40	402
Grass	C		-	74				
Grass	D		-	80				
Meadow	D		-	78				
Woods	B		-	55				
Woods	C		-	70				
Woods	D		-	77				
Total		33,820	0.78				3.27	5,627

2-Year Volume Increase (ft3):	5,627

0.129 acre/feet

2-Year Volume Increase = Developed Conditions Runoff Volume - Existing Conditions Runoff Volume

1. Runoff (in) = Q = $(P-0.2S)^2 / (P+0.8S)$ where
   - P = 2-Year Rainfall (in)
   - S = (1000/CN) - 10
2. Runoff Volume CF = Q x Area x 1/12
   - Q = Runoff (in)
   - Area = Land use area (sq. ft.)

Note: Runoff Volume must be calculated for EACH land use type/condition and HSGI.
The Use of a weighted CN value for volume calculations is not acceptable.
20% of the existing impervious area being disturbed has been been converted to a meadown condition.

Storage/Elevation Curve: P:\1378\1378-20\Correspondence\Drainage\Rain Garden.ES

Basin Storage/Elevation Input

Elevation (ft)	Area (acres)	Storage (acre-ft)
375.00	0.029	0.000
376.00	0.036	0.033
377.00	0.046	0.074

2 yr. volume elev = 376.19 → 376.00

← 0.033 2 yr. volume

Increase = 1,756 ft³ or 0.040 ac/ft.

Spillway elev = 376.50

Berm elev = 377.00

Test Pit 1 = 1.80 in/hr

Test Pit 2 = 1.20 in/hr.

3.00 in/hr / 2 (average) / 2 (safety factor) = 0.75 in/hr

Depth of water = 1.50' or 18.0"

18.0" / 0.75 in/hr = 24 hours dewatering time.

LANCASTER COUNTY
CONSERVATION DISTRICT

Conserving Natural Resources for Our Future

May 27, 2021

Mount Joy Senior Housing LP
2121 Old Gatesburg Road, Suite 200
State College, PA 16803

RE: **Project Name – Gerberich Payne Shoe Company**
LCCD Plan ID: ESP03359
Mount Joy Borough

Dear Sir:

I have reviewed the Erosion and Sediment Pollution Control Plan dated March 22, 2021 and revised April 28, 2021 for the above referenced project. If the Erosion and Sediment Pollution Control Plan is fully implemented as described, it should be adequate to meet the intent of the rules and regulations adopted under the PA Clean Streams Law relating to erosion and sedimentation control.

The Conservation District reviews this plan solely to determine whether it is adequate to satisfy the requirements of 25 PA Code §102.1 et.seq, the erosion control regulations of the Department of Environmental Protection. By a determination that the plan is adequate to meet those requirements, neither the Conservation District nor the County assumes any responsibility for the implementation of the plan or the proper construction and operations of the facilities contained in the plan.

A representative of the Lancaster County Conservation District may conduct periodic inspections of the erosion and sedimentation control facilities during the construction of this project. The approved Erosion and Sediment Pollution Control Plan must be available at the site of the earthmoving activity at all times.

Yours for a better environment,

Eric Hout
Resource Conservationist

C: Mount Joy Borough
DC Gohn Associates – Brian Cooley

EH/slk

Birdsboro Office
321 North Furnace Street, Ste. 200
Birdsboro, PA 19508
T 610.374.5285
F 717.560.2778

May 27, 2021

Mr. Scott Kapcsos, Operations Manager
Mount Joy Borough Authority
P.O. Box 25
Mount Joy, PA 17552

RE: Gerberich Payne Shoe Company
Water and Sewer Plan, Construction Schedule and Cost Opinion review
ARRO # 10818.21

Dear Scott:

ARRO has completed its review of the Gerberich Payne Shoe Company Preliminary/Final Development Plan, Cost Opinion and Construction Schedule dated March 22, 2021, latest revision date April 30, 2021, and offers the following comments based on the Authority's specifications and current engineering practices.

1. Sheet 4 – Sanitary Sewer Note 12 refers to water service work not sanitary sewer work. ARRO recommends this note is moved to avoid confusion during construction.

2. Sheet 5 – The proposed 6" water service line will require a valve at the connection to the existing 8" water main. ARRO recommends this be shown on the plan prior to approval.

3. As for the Construction Cost Opinion, ARRO agrees with the estimate therefore we recommend setting the Financial Security at $37,202.00.

4. Based upon the provided anticipated schedule ARRO recommends setting the Construction Escrow at $14,110.00 to cover the cost of pre-construction meeting, shop drawing submittal reviews, construction observation services, "as-constructed" document review, etc.

Should you have any questions, please feel free to contact me.

Sincerely,

Jimmy L. Dennis
Engineering Specialist

JLD:acb

c: Joe Ardini – MJBA
Angie Fenicle – MJBA
Stacie Gibbs – MJB
Brian Cooley – D.C. Gohn

Birdsboro Office
321 North Furnace Street, Ste. 200
Birdsboro, PA 19508
T 610.374.5285
F 717.560.2778

June 7, 2021

Mr. Scott Kapcsos, Operations Manager
Mount Joy Borough Authority
P.O. Box 25
Mount Joy, PA 17552

RE: Gerberich Payne Shoe Company
Water and Sewer Plan, Construction Schedule and Cost Opinion review
ARRO # 10818.21

Dear Scott:

ARRO has completed its review of the Gerberich Payne Shoe Company Preliminary/Final Development Plan, Cost Opinion and Construction Schedule dated March 22, 2021, latest revision date June 1, 2021. All previous comments have been properly addressed. Therefore, ARRO recommends approval of the plan as presented.

Should you have any questions, please feel free to contact me.

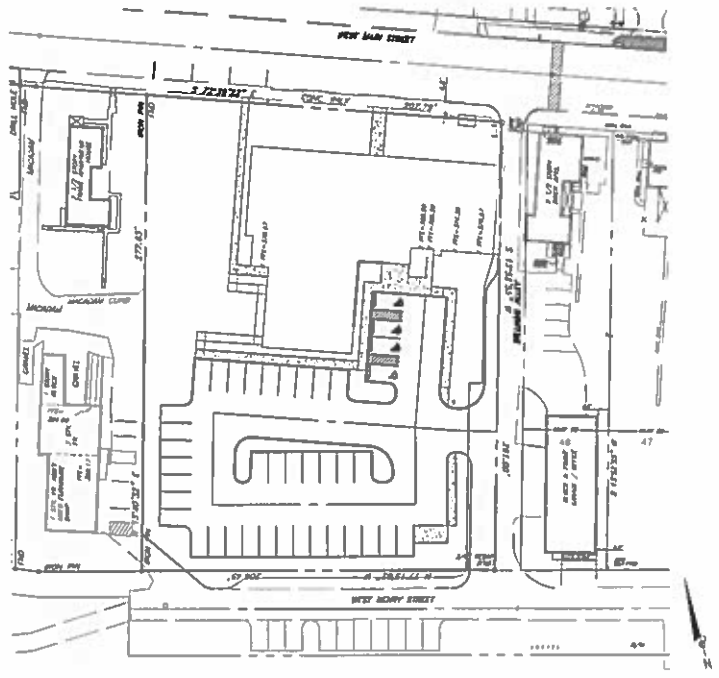
Sincerely,

Jimmy L. Dennis
Engineering Specialist

JLD:acb

c: Joe Ardini – MJBA
Angie Fenicle – MJBA
Stacie Gibbs – MJB
Brian Cooley – D.C. Gohn

\\LANCFILE3\Lancaster-Technical\Active Projects\Mount Joy Borough Authority\Gerberich-Payne Shoe Company 10818.21\Correspondence\10818.21.06.docx



PRELIMINARY/FINAL LAND DEVELOPMENT PLAN
FOR
GERBERICH PAYNE SHOE COMPANY
240 WEST MAIN STREET
MOUNT JOY, PA 17552
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

LIST OF DRAWINGS

– ALL PLAN SHEETS TO BE RECORDED –

REQUESTED MODIFICATIONS:

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE:

1. SECTION 240-43.H.1 - IMPROVEMENT OF EXISTING STREETS
2. SECTION 240-43.I.(4) - STREET RADIUS
3. SECTION 240-46.C.(1) - CURBING
4. SECTION 240-57.D.(1) - DEDICATION OF RECREATION
5. SECTION 240-57.G - FEE IN LIEU OF DEDICATION
6. SECTION 240-62.B - TRAFFIC STUDY

STORMWATER MANAGEMENT ORDINANCE:

1. SECTION 226-32.A.(2)(C) - LOADING RATIOS
2. SECTION 226-37.A.(6)(B) — EMERGENCY SPILLWAY CONVEYANCE

CERTIFICATE OF ACCURACY - PLAN I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY CHAPTER 240, SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. SIGNATURE DATE	
CERTIFICATE OF ACCURACY - SURVEY I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY CHAPTER 240, SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. SIGNATURE DATE	
STORM DRAINAGE PLAN CERTIFICATION I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE STORMWATER MANAGEMENT FACILITIES SHOWN AND DESCRIBED HEREON ARE DESIGNED IN CONFORMANCE WITH CHAPTER 240, SUBDIVISION AND LAND DEVELOPMENT AND CHAPTER 226, STORMWATER MANAGEMENT. SIGNATURE DATE	
GEOLOGY CERTIFICATION I, ____________________ CERTIFY THAT THE PROPOSED STORMWATER/BMP FACILITY IS UNDERLAIN BY CARBONATE GEOLOGY. SIGNATURE DATE	

CERTIFICATE

TO THE BEST OF MY ABILITY I HAVE REVIEWED THE RECORDS OF THE LANCASTER CO. RECORDER OF DEEDS AND RECORDS OF D. C. GOHN ASSOCIATES, INC. AND FIND THE FOLLOWING RECORDED PLANS:

FINAL PLAN FOR GERBERICH PAYNE SHOE COMPANY, DATED MAY 20, 2915, RECORDED AS SUBDIVISION PLAN BOOK J-93, PAGE 43 ON JUNE 13, 1975.

____
JEFFREY M. JOPCHAK, PLS

COMPANY LISTINGS

COMPANY: MOUNT JOY BOROUGH
ADDRESS: 21 EAST MAIN STREET
MOUNT JOY, PA 17552
CONTACT: STACIE GIBBS, ZONING OFFICER
EMAIL: Staci@mountjoypa.org
PHONE: (717) 653-6938

COMPANY: MOUNT JOY BOROUGH AUTHORITY
ADDRESS: 21 EAST MAIN STREET
MOUNT JOY, PA 17552
CONTACT: JOE ARDINI
PHONE: (717) 653-5938

COMPANY: SOUTH CENTRAL TRANSIT AUTHORITY
ADDRESS: 45 ERICK ROAD
LANCASTER, PA 17601
CONTACT: JEFF GLISSON, DIRECTOR OF CAPITAL PROJECTS/PLANNING
EMAIL: jglisson@sctapa.com
PHONE: (717) 358-1928

COMPANY: PPL ELECTRIC UTILITIES
ADDRESS: 651 DELP ROAD
LANCASTER, PA 17601-3034
CONTACT: OFFICE PERSONNEL
PHONE: (717) 291-3000

COMPANY: COMCAST CABLE
ADDRESS: MIDDLETOWN, PA 17057
CONTACT: OFFICE PERSONNEL
PHONE: 1-800-266-2278

COMPANY: UGI UTILITIES INC.
ADDRESS: 1301 AIP DRIVE
MIDDLETOWN, PA 17057
CONTACT: JOANNE ARCHFIELD
EMAIL: jarchfield@ugi.com

BOROUGH COUNCIL FINAL PLAN APPROVAL CERTIFICATE

AT A MEETING HELD ON ______________ 20___, THE MOUNT JOY BOROUGH COUNCIL APPROVED THIS PROJECT, INCLUDING THE COMPLETE SET OF PLANS AND INFORMATION WHICH ARE FILED WITH THE COUNCIL, BASED UPON ITS CONFORMITY WITH THE STANDARDS OF CHAPTER 240, SUBDIVISION AND LAND DEVELOPMENT

____________________ ____________________

PLANNING COMMISSION FINAL PLAN REVIEW CERTIFICATE

AT A MEETING HELD ON ______________ 20___, THE MOUNT JOY BOROUGH PLANNING COMMISSION REVIEWED THIS PROJECT, BASED UPON ITS CONFORMITY WITH THE STANDARDS OF CHAPTER 240, SUBDIVISION AND LAND DEVELOPMENT

____________________ ____________________

LANCASTER COUNTY PLANNING DEPARTMENT'S REVIEW CERTIFICATE

THIS PLAN, BEARING LCPC FILE NO. ____________ REVIEWED BY STAFF OF THE LANCASTER COUNTY PLANNING DEPARTMENT ON ______________________, AS REQUIRED BY THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT 247, OF 1968, AS AMENDED. THIS CERTIFICATE DOES NOT REPRESENT NOR GUARANTEE THAT THIS PLAN COMPLIES WITH THE VARIOUS ORDINANCES, RULES, REGULATIONS, OR LAWS OF THE LOCAL MUNICIPALITY, THE COMMONWEALTH, OR THE FEDERAL GOVERNMENT.

* ____________________
* SIGNATURE OF THE CHAIRPERSON OR THEIR DESIGNEE

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LANCASTER

ON THIS, THE _____ DAY OF ____________________, 20__
BEFORE ME, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED

____________________ BEING ____________ OF MOUNT JOY SENIOR HOUSING LP

WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSES AND SAYS THAT THE CORPORATION IS THE ____OWNER____ OF THE PROPERTY SHOWN ON THIS PLAN, THAT HE IS AUTHORIZED TO EXECUTE SAID PLAN ON BEHALF OF THE CORPORATION, THAT THE PLAN IS THE ACT AND DEED OF THE CORPORATION, THAT THE CORPORATION DESIRES THE SAME TO BE RECORDED AND ON BEHALF OF THE CORPORATION FURTHER ACKNOWLEDGE, THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY ARE HEREBY DEDICATED TO THE PUBLIC USE – (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION").

WITNESS MY HAND AND SEAL THE DAY AND DATE ABOVE WRITTEN

____________________ ____________________
AUTHORIZED CORPORATE SIGNATURE NOTARY SIGNATURE

____
NOTARY SEAL

ZONING DATA

1. DISTRICT	CBD COMMERCIAL BUSINESS
2. MIN. LOT AREA	1,200 S.F.
3. MIN. LOT WIDTH	22' @ MIN BUILDING SETBACK LINE
4. MIN. FRONT YARD	0'
5. MIN. SIDE YARD	0' (EXCEPT 10' FOR A PRINCIPAL NONRESIDENTIAL USE FROM A DIRECTLY ABUTTING PRIMARILY RESIDENTIAL LOT IN A RESIDENTIAL DISTRICT)
6. MIN. REAR YARD	0' (EXCEPT 10' FOR A PRINCIPAL NONRESIDENTIAL USE FROM A DIRECTLY ABUTTING PRIMARILY RESIDENTIAL LOT IN A RESIDENTIAL DISTRICT)
7. MAX BLDG COVERAGE	90%
8. MAX LOT COVERAGE	100%
9. MIN. DWELLING SIZE	500 S.F.
10. MAX HEIGHT	6 STORIES OR 90'
11. BUFFER YARD	5' WIDTH (SIDE AND REAR LOT LINES: ABUTTING OR ACROSS AN ALLEY FROM AN EXISTING DWELLING WITHIN A RESIDENTIAL DISTRICT AND VISIBLE FROM SUCH DWELLING, OR ABUTTING AN OCCUPIED EXISTING PRIMARILY RESIDENTIAL USE, REGARDLESS OF WHETHER THE DWELLING UNIT IS WITHIN AN RESIDENTIAL DISTRICT)

ZONING DATA SHOWN AS PER ZONING ORDINANCES
IN EFFECT AT THE TIME OF THIS SKETCH PLAN.

LOCATION MAP
GRAPHIC SCALE IN FEET
0 2000 4000

SITE DATA (TO STREET RIGHT-OF-WAY)

1. LOT AREA	55,723.15 SQUARE FEET
2. NUMBER OF LOTS	1
3. NUMBER OF ACRES	1.279 ACRES
4. DENSITY	31.3 DWELLING UNITS PER ACRE
5. ZONING	CBD COMMERCIAL BUSINESS
6. EXISTING LAND USE	VACANT LAND / VACANT BUILDING
7. PROPOSED LAND USE	SENIOR HOUSING / GENERAL RETAIL OR MEDICAL OFFICE
8. UNITS OF OCCUPANCY	36, 1 AND 2 BEDROOM APARTMENTS; GENERAL RETAIL OR MEDICAL OFFICE
9. EX BUILDING COVERAGE	21.8% (12,120 S.F.)
10. PROP BUILDING COVERAGE	20.5% (11,440 S.F.)
11. EX IMPERVIOUS COVERAGE	75.6% (42,149 S.F.)
12. PROP IMPERVIOUS COVERAGE	63.3% (35,259 S.F.)
13. PROP HEIGHT	4 STORIES (SAME AS EXISTING HEIGHT)
14. PARKING REQUIREMENTS	APARTMENTS: HOUSING PERMANENTLY RESTRICTED TO PERSON 62 YEARS AND OLDER AND/OR THE PHYSICALLY HANDICAPPED (OTHER THAN A RETIREMENT COMMUNITY)

12 1 BEDROOM APARTMENTS
24 2 BEDROOM APARTMENTS
36 TOTAL APARTMENTS

36 APARTMENTS × 1 / DWELLING UNIT = 36 SPACES REQUIRED

1 SPACE PER NONRESIDENT EMPLOYEE

1 MANAGER / 1 MAINTENANCE EMPLOYEE

2 EMPLOYEES

TOTAL SPACES REQUIRED = 38
TOTAL SPACES PROVIDED = 40

RETAIL:

THE FOLLOWING INFORMATION WAS TAKEN FROM THE ZONING REVIEW REQUEST DOCUMENT PREPARED BY STACIE GIBBS, ZONING, CODE, AND PLANNING ADMINISTRATOR, DATED SEPTEMBER 19, 2019, ON BEHALF OF THE REQUEST OF GATESBURG ROAD DEVELOPMENT:

THE PARKING REQUIREMENTS IN THE TABLE OF OFF STREET PARKING REQUIREMENTS SHALL BE MODIFIED WITHIN THE CBD DISTRICT AS FOLLOWS: NO OFF STREET PARKING SHALL BE REQUIRED FOR LAWFUL NONRESIDENTIAL USES WITHIN THE CBD DISTRICT WITHIN BUILDINGS THAT EXISTED PRIOR TO THE ADOPTION OF THIS CHAPTER.

THE BUILDING LOCATED PROPERTY EXISTED PRIOR TO ENACTMENT OF THE ZONING ORDINANCE AND PROVIDED THE PROPOSED COMMERCIAL USES ON THE FIRST FLOOR ARE ALLOWED IN THE CBD DISTRICT, THEY WOULD CONSTITUTE "LAWFUL NONRESIDENTIAL USES WITHIN THE CBD DISTRICT". THEREFORE, NO ADDITIONAL PARKING WOULD BE REQUIRED FOR THE PERMITTED PRINCIPAL USE OCCUPYING THE MAJORITY OF STREET LEVEL FRONTING A PUBLIC STREET.

ACT 187 UNDERGROUND UTILITY PROTECTION ACT

D. C. GOHN ASSOCIATES, INC. HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974, AS AMENDED BY ACT 187 OF 1996, OF THE PENNSYLVANIA LEGISLATURE, IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) SHOWN ON THE DRAWINGS:

1. *PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, D. C. GOHN ASSOCIATES, INC. REQUESTED FROM EACH USER'S OFFICE DESIGNATED ON SUCH LIST PROVIDED BY THE ONE CALL SYSTEM NOTIFICATION, THE INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (4) OF SAID ACT, NOT LESS THAN (10) NOR MORE THAN (90) WORKING DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.*
2. *PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, D. C. GOHN ASSOCIATES, INC. HAS MET THEIR OBLIGATIONS OF CLAUSE (2) BY CALLING THE ONE CALL SYSTEM SERVING THE LOCATION WHERE EXCAVATION IS TO BE PERFORMED.*
3. *PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, D. C. GOHN ASSOCIATES, INC. HAS SHOWN UPON THESE DRAWINGS "THE POSITION AND TYPE OF EACH LINE, AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY CLAUSE (2), THE SERIAL NUMBER PROVIDED BY THE ONE CALL SYSTEM, THE TOLL-FREE ON CALL SYSTEM PHONE NUMBER, AND THE NAME OF THE USER, THE USER'S DESIGNATED OFFICE ADDRESS AND PHONE NUMBER AS SHOWN ON THE LIST REFERRED TO IN SECTION 4, CLAUSE (5) OF SAID ACT."*

AND D. C. GOHN ASSOCIATES, INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO SAID REQUEST AND AS REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE, BUT D. C. GOHN ASSOCIATES, INC. IS REFLECTING SAID INFORMATION ON THESE DRAWINGS ONLY DUE TO THE REQUIREMENTS OF THE SAID ACT NO. 187 OF DECEMBER 19, 1996.

ONE CALL SYSTEM SERIAL NO. NOTIFICATION BY D. C. GOHN ASSOCIATES, INC.

DATE: OCTOBER 15, 2020

ONE CALL SYSTEM SERIAL NUMBER: 20202892031

TOTAL SITE AREA
55,723.15 SQ. FT = 1.279 AC.
(INCLUDES EASEMENTS)

TENTATIVE CONSTRUCTION SCHEDULE

BEGIN SITE WORK	SUMMER/FALL 2021
COMPLETE BUILDING	FALL 2022
COMPLETE SITE IMPROVEMENTS	FALL 2022

THE STORMWATER FACILITIES ARE PERMANENT FIXTURES THAT CANNOT BE ALTERED OR REMOVED UNLESS A REVISED PLAN IS APPROVED BY MOUNT JOY BOROUGH.

OWNER SIGNATURE DATE

THE MOUNT JOY BOROUGH AUTHORITY HEREBY CERTIFIES THAT: (A) THE AUTHORITY ENGINEER HAS APPROVED THE PROPOSED DESIGN AND CONSTRUCTION AND (B) SUFFICIENT FINANCIAL SECURITY HAS BEEN PROVIDED TO THE AUTHORITY TO FULLY COVER THE COSTS FOR CAPACITY AND INSTALLATION OF THE PLANNED IMPROVEMENTS, IF REQUIRED.

BOARD CHAIRMAN DATE	ALTERNATE AUTHORIZED OFFICIAL DATE

L.C.P.C. #: 75-212-2

OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2121 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-8945
DEED REFERENCE: 6574192
TAX ACCOUNT NO.: 450-34236-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

dc gohn Associates, Inc.
32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552
Ph- (717) 653-5308
www.dcgohn.com
Surveyors - Engineers - Landscape Architects

COVER SHEET
FOR
GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.: 1378-20
DATE: MARCH 22, 2021
DRAWN BY: GRN
CHECKED BY: BRC
SCALE: 1"=50'
50 0 25 50
SCALE IN FEET

DRAWING #: CG-3049
SHEET #: 1 OF 12

LEGEND:

(M)	= MEASURED	GEN.	= GENERATOR
(C)	= CALCULATED	TRANS.	= TRANSFORMER
(D)	= DEED	APPROX	= APPROXIMATE
R/W	= RIGHT-OF-WAY	GAL	= GALLON
BM ◆	= BENCH MARK	RCP	= REINFORCED CONCRETE PIPE
C/W	= CARTWAY	■ WS	= WATER SERVICE
D.B.	= DEED BOOK	■ GV	= GAS VALVE
℄	= CENTER LINE	○ CO	= CLEAN-OUT
ALUM.	= ALUMINUM	⊤	= SIGN
⟷	= TIE BAR/OWNERSHIP INDICATOR	☼ L/S	= LIGHT STANDARD
(FND)	= FOUND	UG	= UNDER GROUND
BND	= BOUNDARY	UE	= UNDERGROUND ELECTRIC
(TYP)	= TYPICAL	FH	= FIRE HYDRANT
SQ.FT.	= SQUARE FEET	Ø	= UTILITY POLE (U.P.)
MIN.	= MINIMUM	☒	= COVERED CONCRETE
MAX.	= MAXIMUM	▨	= CONCRETE
BLDG	= BUILDING		= FENCE
SWK	= SIDEWALK		= OVERHEAD ELECTRIC LINE
CONC.	= CONCRETE		= UNDERGROUND ELECTRIC LINE
SAN.	= SANITARY	▒	EXISTING PAVEMENT TO BE REMOVED
TELE.	= TELEPHONE	▓	EXISTING BUILDING AREA TO BE REMOVED
UGI	= UNITED GAS IMPROVEMENT, CO		
PP&L	= PENNSYLVANIA POWER & LIGHT		
H/C	= HANDICAP		
○	= HANDICAP PARKING		
▨	= STORM INLET		
○ MH	= MANHOLE		
● WV	= WATER VALVE		

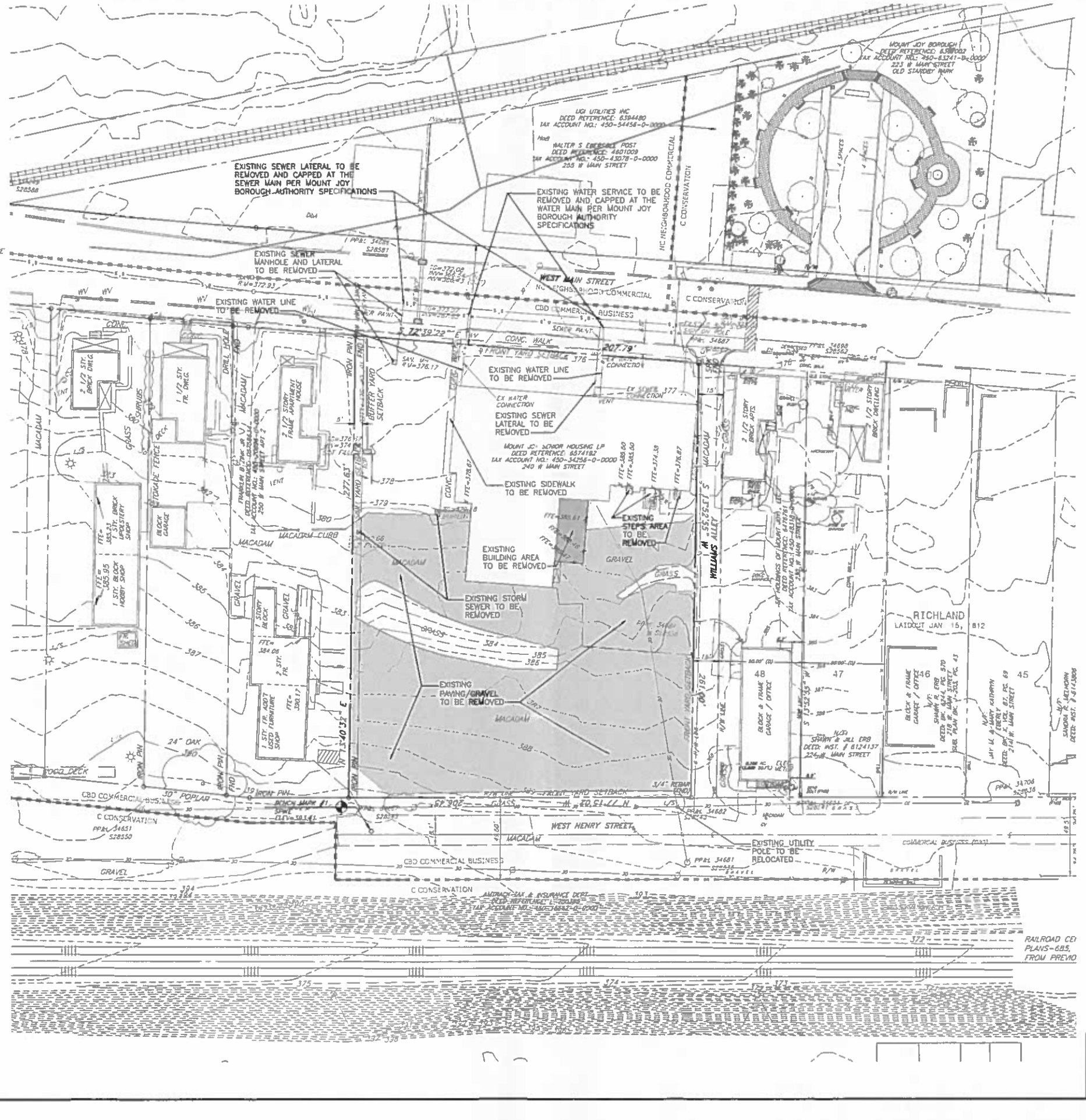
SURVEYOR'S NOTES

1. THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS), SOUTH ZONE (3702), NORTH AMERICAN DATUM OF 1983 (NAD 83).
2. THE ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THIS SURVEY HAS BEEN SUPPLEMENTED WITH CONTOURS FROM GIS.
3. THE LAST DATE OF SURVEY WAS OCTOBER 27, 2020.
4. THE SURVEYOR HAS REVIEWED A TITLE COMMITMENT ISSUED BY LAND SERVICES USA, INC., FILE NUMBER PAFA18-1905 MM, DATED 4/20/2018.
5. OWNERSHIP INFORMATION AND DEED REFERENCES SHOWN HEREON WERE COMPILED FROM THE PUBLIC RECORDS OF LANCASTER COUNTY RECORDER OF DEEDS.
6. UNDERGROUND IMPROVEMENTS SUCH AS FOUNDATIONS AND UTILITIES WERE NOT LOCATED, UNLESS OTHERWISE SHOWN.

SOILS LEGEND

Uc– Hagerstown – Urban Land Complex, 'D'

All site improvements are within the Uc soil type.



L.C.P.C. #: 75-212-2

OWNER		
NAME:	MOUNT JOY SENIOR HOUSING LP C/O GATESBURG ROAD DEVELOPMENT	
ADDRESS:	2121 OLD GATESBURG ROAD SUITE 200 STATE COLLEGE, PA 16803	
TELEPHONE:	814-272-4945	
DEED REFERENCE:	6574192	
TAX ACCOUNT NO.:	450-34256-0-0000	

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
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PROJECT NO.: 1378-20
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SCALE: 1"=30'
30 0 15 30
SCALE IN FEET

EXISTING CONDITIONS AND DEMO PLAN

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

DRAWING #: CG-3049
SHEET #: 2 OF 12

QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	BB / CONTS
STREET TREES					
4	RM	Acer rebrum	Red Maple	6' Min Height	BB
3	JZ	Zelkova serrata	Japanese zelkova	6' Min Height	BB
4	TL	Gleditsia triacanthos inermis	Thornless honey locust	6' Min Height	BB

QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	BB / CONTS
PARKING LOT TREES					
2	RM	Acer rebrum	Red Maple	6' Min Height	BB
2	JZ	Zelkova serrata	Japanese zelkova	6' Min Height	BB

QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	BB / CONTS
BUFFER YARD LANDSCAPING					
7	RM	Acer rubrum 'Armstrong'	Armstrong Red Maple	6' Min Height	BB
22	JZ	Taxus x media 'Hatfieldii'	Hatfield Yew	2' Min Height	1 Gallon
20	JZ	Buxus sempervirens	American Boxwood	2' Min Height	1 Gallon

LANDSCAPING NOTES:

A. ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE. PLANT MATERIALS SHALL CONFORM TO THE STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMAN, INC., IN THE AMERICAN STANDARD OF NURSERY STOCK, ANZI Z60, CURRENT EDITION, OR ANY AMENDMENTS MADE HEREAFTER.

1. THE TOP OF THE MAIN ORDER ROOT (FIRST LARGE SET OF ROOTS THAT DIVIDE FROM THE TRUNK) SHALL BE PLANTED NO LOWER THAN ONE (1) OR TWO (2) INCHES INTO THE SOIL.

2. NO STAKING AND WIRING OF TREES SHALL BE ALLOWED WITHOUT A MAINTENANCE NOTE FOR THE STAKING AND WIRING TO BE REMOVED WITHIN ONE (1) YEAR OF PLANTING.

3. ALL REQUIRED LANDSCAPE PLANTS SHALL BE MAINTAINED AND GUARANTEED FOR A LENGTH OF 18 MONTHS FROM THE DATE OF PLANTING. NO MORE THAN ONE-THIRD (1/3) OF THE TREE OR SHRUB SHALL BE DAMAGED OR DEAD WITHOUT REPLACEMENT. REPLACEMENT PLANTS SHALL CONFORM TO ALL REQUIREMENTS OF THIS SECTION AND SHALL BE MAINTAINED AFTER REPLANTING FOR AN ADDITIONAL 18 MONTHS.

B. THE PLANT'S GROWTH SHALL NOT INTERFERE WITH THE STREET CARTWAY, ACCESS DRIVES OR DRIVEWAY LOCATIONS, SIDEWALK, SIGNAGE, EASEMENT LOCATIONS, CLEAR SIGHT TRIANGLES, OR UTILITY LINE LOCATIONS. NO LANDSCAPING WITH SIGHT TRIANGLE EASEMENT LOCATIONS SHALL EXCEED TWO (2) FEET IN HEIGHT.

C. IN ORDER TO AID SURVEILLANCE AND MINIMIZE THE POTENTIAL FOR CRIME, PLANTINGS SHALL BE SITED, MASSED, AND SCALED TO MAINTAIN VISIBILITY OF DOORS AND FIRST FLOOR WINDOWS FROM THE STREET AND FROM WITHIN THE DEVELOPMENT TO THE GREATEST EXTENT POSSIBLE. PLANTING PATTERNS SHALL NOT OBSTRUCT SIGHT LINES OR CREATE ISOLATED AREAS, ESPECIALLY NEAR PEDESTRIAN WALKING PATHS.

D. ALL TREES SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY, AND VIGOROUS; THEY SHALL BE FREE FROM DISEASE, INSECT EGGS, AND LARVAE.

E. THE TRUNK CALIPER, MEASURED AT A HEIGHT OF SIX (6) INCHES ABOVE FINISH GRADE SHALL BE A MINIMUM OF TWO (2) INCHES.

F. TREE PLANTING DEPTH SHALL BEAR THE SAME RELATIONSHIP TO THE FINISHED GRADE AS THE TOP OF THE ROOTBALL OR ORIGINAL GRADE OF ORIGIN.

PARKING LOT TREE CALCULATION:

ONE DECIDUOUS TREE SHALL BE REQUIRED FOR EVERY 10 NEW OFF STREET PARKING SPACES

THERE ARE 40 OFF STREET PARKING SPACES WHICH REQUIRES 4 TREES. THERE ARE 4 TREES PROVIDED.

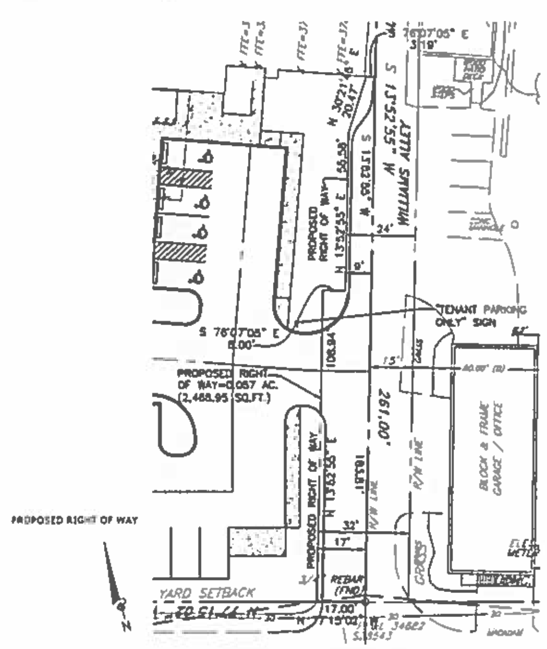
BUFFER YARD LANDSCAPE CALCULATION:

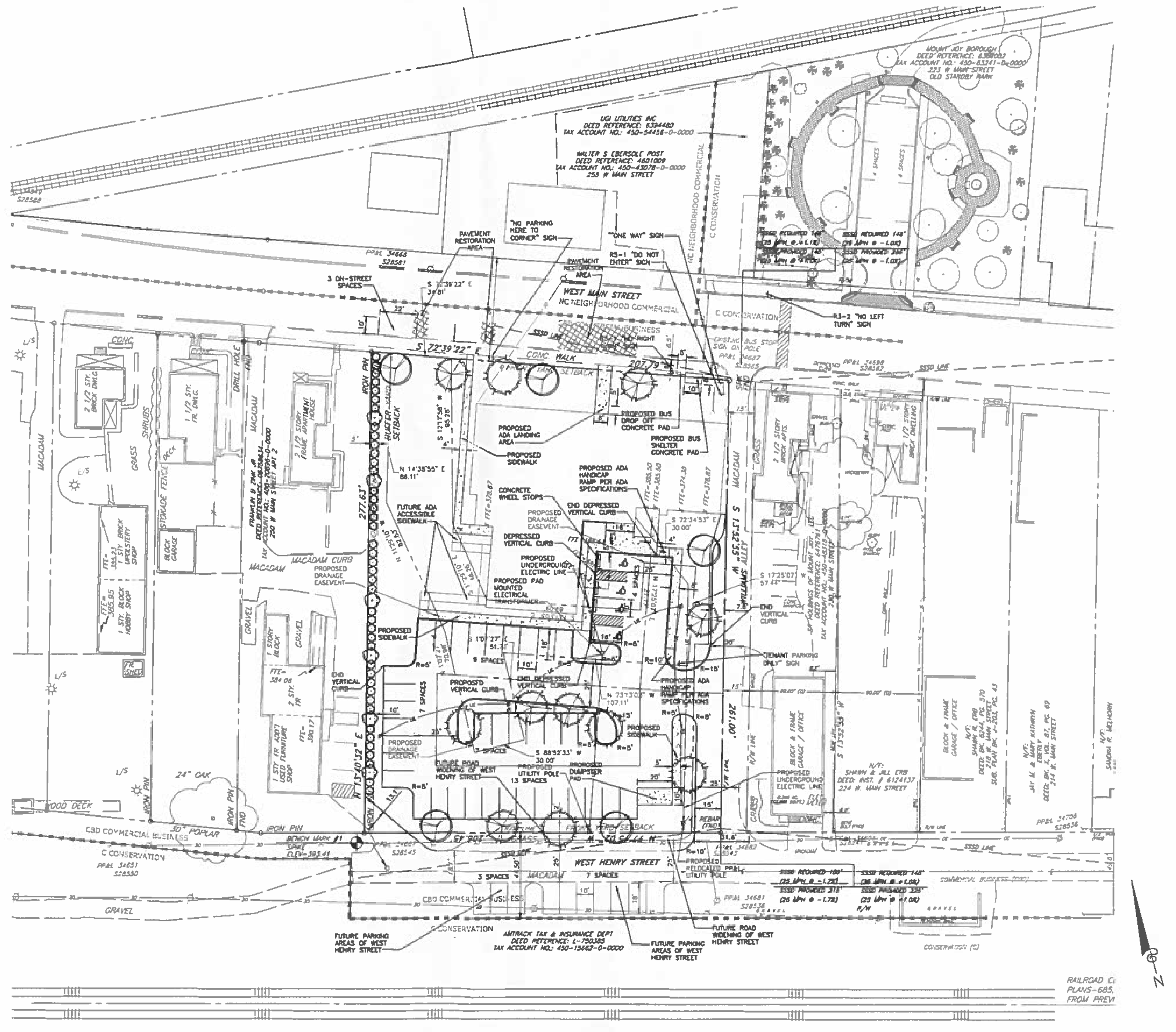
ONE DECIDUOUS TREE SHALL BE REQUIRED FOR EVERY 40 FEET OF LENGTH OF THE BUFFER YARD

THE BUFFER YARD LENGTH IS 278 FEET WHICH REQUIRES 7 TREES. THERE ARE 7 TREES PROVIDED.

SIGNAGE NOTES:

A. ALL SIGNS SHALL MEET CURRENT PENNDOT SPECIFICATIONS.





PAVING LEGEND

ROUTE 230 PAVEMENT RESTORATION

BUS SHELTER NOTES:
1. THE SOUTH CENTRAL TRANSIT AUTHORITY (SCTA) PROVIDES THE BUS SHELTER.
2. CONTRACTOR TO COORDINATE WITH SCTA AND MANUFACTURER FOR THE INSTALLATION OF THE BUS SHELTER.

L.C.P.C. # 75-212-2

PROPOSED LAYOUT, EASEMENT, AND LANDSCAPE PLAN

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.: 1378-20
DATE: MARCH 22, 2021
DRAWN BY: GRN
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30 0 15 30 SCALE IN FEET

dc gohn Associates, Inc.
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TELEPHONE: 814-272-4945
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TAX ACCOUNT NO.: 450-34256-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

DRAWING #: CG-3049
SHEET #: 3 OF 12

FILENAME: C:\Users\bcooley\appdata\local\temp\AcPublish_2760\Final Plan.dwg XREFS:

PLOTTED: June 02,2021 @ 09:59AM

PLAN NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE IMPROVEMENTS WHICH CONSIST OF CONVERTING THE EXISTING BUILDING INTO 36 SENIOR HOUSING APARTMENT UNITS, COMMERCIAL SPACE ON THE GROUND FLOOR, RE-CONFIGURE THE EXISTING PARKING AREAS, STORMWATER FACILITIES, SITE UTILITIES, AND OTHER SITE IMPROVEMENTS.
2. NO IMPROVEMENTS ARE INTENDED FOR DEDICATION TO MOUNT JOY BOROUGH.
3. AS OF THE DATE OF THIS PLAN, EXACT LOCATION AND ROUTING OF UNDERGROUND FACILITIES MAY VARY AND MUST BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.
4. THE SITE IS CURRENTLY SERVED BY PUBLIC WATER AND SEWER FACILITIES PROVIDED BY MOUNT JOY BOROUGH AUTHORITY.
5. NOTHING WILL BE PLACED, PLANTED, SET, OR PUT WITHIN THE AREAS OF ANY EASEMENTS THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE EASEMENT AGREEMENT. ACCESS TO EASEMENTS INDICATED AS STORM WATER EASEMENTS APPLIES TO LOCAL MUNICIPAL OFFICIALS.
6. NO STRUCTURES, LANDSCAPING, OR GRADING WOULD BE CONSTRUCTED, INSTALLED OR PERFORMED WITHIN THE AREAS OF THE PROPOSED ACCESS DRIVE INTERSECTIONS WHICH WOULD OBSCURE THE VISION OF THE MOTORIST TO A HEIGHT OF 3 FT.
7. FEATURES SHOWN WITHIN 200' OF THE SITE BASED UPON INFORMATION FROM LANCASTER COUNTY GIS, DEEDS OBTAINED FROM THE LANCASTER COUNTY RECORDER OF DEEDS, AND PASDA.
8. A STORMWATER INFILTRATION SUMMARY REPORT PREPARED BY KLEINFELDER, DATED FEBRUARY 19, 2021, KLEINFELDER PROJECT NO. 20213553.001A, ACCOMPANIES THIS PROJECT.
9. CLEAR SIGHT TRIANGLES NEED TO BE CLEAR OF ANY PERMANENT OBSTRUCTIONS AND PLANT MATERIALS OVER THIRTY (30) INCHES HIGH AND BELOW TEN (10) FEET.
10. AS-BUILT PLANS SHALL BE PROVIDED AFTER CONSTRUCTION IS COMPLETE AND THE COST FOR PREPARATION OF THE PLANS SHALL BE INCLUDED IN THE FINANCIAL SECURITY.
11. WEST HENRY STREET MAY BE WIDENED AND PARKING CONSTRUCTED IN THE FUTURE. IF THE DEVELOPER/OWNER DECIDES TO PROCEED WITH CONSTRUCTION, APPROVAL BY BOROUGH COUNCIL MUST BE OBTAINED AND MAINTENANCE AND OTHER APPLICABLE AGREEMENTS MUST BE EXECUTED WITH THE BOROUGH PRIOR TO BEGINNING CONSTRUCTION.

BOROUGH NOTES AND REQUIREMENTS:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH BOROUGH ORDINANCES OR SPECIFICATIONS AS APPLICABLE.
2. ALL CONSTRUCTION STANDARDS AND MATERIALS NOT SPECIFIED BY BOROUGH REGULATIONS SHALL BE IN ACCORDANCE WITH DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, PUBLICATION 408, LATEST EDITION AND STANDARDS FOR ROADWAY CONSTRUCTION, PUBLICATION 72, LATEST EDITION, UNLESS CERTAIN LOCAL REGULATIONS APPLY.
3. MAINTENANCE OF ALL DRAINAGE SWALES, DETENTION FACILITIES, AND DRAINAGE EASEMENTS SHALL BE THE RESPONSIBILITY OF THE LOT OWNER. THE BOROUGH RESERVES THE RIGHT TO ENTER ANY EASEMENT TO MONITOR, INSPECT, OR REPAIR FACILITIES LOCATED WITHIN. ALL COSTS INVOLVED IN MAINTENANCE BY THE BOROUGH SHALL BE THE RESPONSIBILITY OF THE LOT OWNERS. ALL FACILITIES MUST REMAIN AS DESIGNED AND SHOWN ON THESE PLANS.
4. THE BOROUGH IS NOT RESPONSIBLE FOR THE CONSTRUCTION OR MAINTENANCE OF ANY AREA, PLANTINGS, OR STREET NOT DEDICATED FOR PUBLIC USE.
5. IF SUBSURFACE WATER IS ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION, THE SITE ENGINEER, MOUNT JOY BOROUGH, MOUNT JOY BOROUGH ENGINEER AND OWNER SHALL BE NOTIFIED AND THE INSTALLATION OF UNDER DRAINS SHOULD BE CONSIDERED FOR PARKING AND ROADWAY AREAS.

CONTRACTOR NOTES:

1. AREAS DISTURBED BY CONSTRUCTION ARE NOT TO BE COVERED BY IMPERVIOUS SURFACES OR LANDSCAPING SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS AS LISTED WITHIN THE SEDIMENTATION AND EROSION CONTROL PLAN NARRATIVE FOR THIS SITE.
2. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND INFORMATION SHOWN ON THIS PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES WHICH ARISE BEFORE AND DURING CONSTRUCTION SHALL BE CONVEYED TO THE OFFICERS OF D. C. GOHN ASSOCIATES, INC. AND NO CONSTRUCTION SHALL COMMENCE OR CONTINUE UNTIL THE DISCREPANCY IS VERIFIED AND REMEDIED. D. C. GOHN ASSOCIATES, INC. WILL ASSUME NO RESPONSIBILITY OR LIABILITY FOR THE CONTRACTOR'S FAILURE TO PERFORM THE ABOVE.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FORM THE LOCAL MUNICIPALITY, COUNTY, STATE, ETC. AS REQUIRED AND AS IT RELATES TO CONSTRUCTION ACTIVITY BEING UNDERTAKEN PRIOR TO COMMENCING CONSTRUCTION ON THE PROJECT SITE OR OFF-SITE AREAS.
5. ANY DISTURBANCE OF STEEP SLOPES SHALL BE COMPLETED IN ONE CONSTRUCTION SEASON, AND DISTURBED AREAS SHALL NOT BE LEFT BARE AND EXPOSED DURING THE WINTER AND SPRING THAW PERIODS. PERMANENT VEGETATIVE COVER SHALL BE PLANTED WITHIN THREE (3) DAYS AFTER COMPLETION OF GRADING.

MISCELLANEOUS NOTES:

1. THIS PLAN IS NOT TO BE CONSTRUED AS AN ENVIRONMENTAL AUDIT/ASSESSMENT PLAN. THIS PLAN MAKES NO WARRANTY OR GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE ENVIRONMENTAL CONDITIONS OF THE PREMISES HEREON DESCRIBED, I.E. THE DETECTION OF SURFACE OR SUBSURFACE CONTAMINANTS AS DEFINED IN D.E.R. TITLE 25-PA CODES 71, 101, 271, 273, 275, 27, 279, 281, 283, AND 285.
2. CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE RESULTING FROM HIS NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT HIS EXPENSE.
3. CONTRACTOR IS TO BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRENCH BARRICADING, COVERING, SHEETING, AND SHORING.
4. NO ONE SHALL SCALE FROM THESE PLANS.
5. CONTRACTOR SHALL COORDINATE UNDERGROUND ELECTRICAL AND OTHER UTILITY PROVIDERS FOR SERVICE AS APPLICABLE.
6. D. C. GOHN ASSOCIATES, INC. MAKES NO REPRESENTATION AS TO THE SUBSURFACE CONDITIONS OF THE PROJECT SITE AREA (I.E. THE EXISTENCE OR DEPTH OF ROCK, WATER TABLE, SOIL CONDITIONS, ETC.).

STORM DRAINAGE NOTES:

1. ALL SWALES, STORM WATER MANAGEMENT FACILITIES, AND FLOODPLAIN AREAS SHALL BE KEPT FREE OF STRUCTURES, FILL, AND OTHER ENCROACHMENTS.
2. NOTHING EXCEPT EROSION CONTROL AND/OR STORM WATER MANAGEMENT FACILITIES SHALL BE PLACED, PLANTED, OR PUT WITHIN THE AREA OF A STORM WATER MANAGEMENT EASEMENT. NOTHING SHALL BE PLACED, PLANTED, SET, OR PUT WITHIN THE AREA OF AN EASEMENT THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR CONFLICT WITH THE EASEMENT AGREEMENT.
3. ALL INLETS SHALL BE PENNDOT STANDARD INLET BOX WITH TYPE M OR TYPE C TOP UNIT AS SHOWN, UNLESS OTHERWISE SPECIFIED. THE GRATES SHALL BE PENNDOT STRUCTURAL STEEL, BICYCLE SAFE.
4. PROPOSED INLETS, EXCEPT THOSE IN GRASSED AREAS, ARE TO BE SUMPED 2" FROM FINISHED GRADE.
5. CONSTRUCTION OF STORM WATER MANAGEMENT AND EROSION CONTROL FACILITIES SHALL BE IN ACCORDANCE WITH MOUNT JOY BOROUGH STANDARDS AND SPECIFICATIONS.
6. ALL STORM SEWER PIPES, CULVERTS, MANHOLES, INLETS, END WALLS, AND ENDWALL SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND 72M AND THE MUNICIPALITY'S STORM WATER MANAGEMENT ORDINANCE.
7. A MINIMUM OF ONE (1) FOOT OF COVER IS REQUIRED OVER ALL PIPES.
8. ALL STORM SEWER PIPES SHALL HAVE WATERTIGHT JOINTS.
9. THE MAINTENANCE OF ALL STORM WATER CONVEYANCE AND MANAGEMENT FACILITIES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, NORMAL MAINTENANCE AS WELL AS REPAIR OF STRUCTURAL DAMAGE OR DETERIORATION OF ANY KIND, INCLUDING THAT CAUSED BY SINKHOLES OR OTHER EVENTS. THE BOROUGH SHALL HAVE THE RIGHT, BUT NOT THE DUTY, OF ACCESS AT ANY TIME TO INSPECT AND MAINTAIN THE FACILITY AT THE PROPERTY OWNER'S EXPENSE IF THE OWNER SHOULD FAIL TO PROPERLY MAINTAIN THE FACILITY.
10. THE PROPOSED IMPERVIOUS AREA TO THE RAIN GARDEN IS 21,350 S.F.
11. INLETS, JUNCTION BOXES, OR MANHOLES GREATER THAN 5 FEET IN DEPTH SHALL BE EQUIPPED WITH NON-ALUMINUM LADDER RUNGS.
12. THE BOROUGH SHALL HAVE THE RIGHT OF ENTRY FOR THE PURPOSES OF INSPECTING ALL STORMWATER CONVEYANCE, TREATMENT, OR STORAGE FACILITIES.
13. THE LIMIT OF DISTURBANCE IS 0.94 ACRES OR 40,825 SQUARE FEET.

THE FOLLOWING NOTES WERE TAKEN FROM THE STORMWATER INFILTRATION SUMMARY REPORT PREPARED BY KLEINFELDER:

1. SURFACE WATER IS NOT RECOMMENDED TO COLLECT OR POOL IN LOW LYING AREAS OF THE SITE FOR EXTENDED PERIODS OF TIME AND SHOULD BE DIRECTED TO APPROPRIATE STORM WATER CHANNELS. EXPEDITIOUS BACKFILLING OR GRADING OF LOW-LYING AREAS WILL ALSO HELP MINIMIZE THE POTENTIAL DEVELOPMENT OF SINKHOLES.
2. THE EXTENT OF EXCAVATIONS SHOULD BE KEPT TO A MINIMUM AND THE INFLUX OF SURFACE WATER INTO EXCAVATIONS SHOULD BE MINIMIZED. THE POTENTIAL FOR SINKHOLE DEVELOPMENT GENERALLY INCREASES AS THE BEDROCK SURFACE IS ENCOUNTERED. THEREFORE, THE PROLONGED EXPOSURE OF THE BEDROCK SURFACE SHOULD ALSO BE MINIMIZED.
3. STORM SEWER CONVEYANCE LINES SHOULD BE CONSTRUCTED AS "WATER-TIGHT" JOINTS.
4. POSITIVE DRAINAGE AWAY FROM STRUCTURES SHOULD ALWAYS BE MAINTAINED. ROOF DRAINS SHOULD ALSO BE DIRECTED AWAY FROM STRUCTURES AND INTO DESIGNATED STORMWATER CHANNELS.
5. UNPAVED AREAS, SWALES OR SURFACE BASINS SHOULD BE MINIMIZED ADJACENT TO BUILDING/FOUNDATION AREAS. DESIGNING/INSTALLING SUBSURFACE STORMWATER INFILTRATION FACILITIES IN PROPOSED PARKING AREAS IS CONSIDERED A RISK IN AREAS UNDERLAIN BY CARBONATE GEOLOGY.

THE ABOVE RECOMMENDATIONS CONSTITUTE BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND DEVELOPMENT IN KARST SETTINGS. CONTINGENCIES SHOULD BE MADE IN THE CONSTRUCTION SCHEDULE AND BUDGET FOR THE REPAIR OF SINKHOLES AND UNSTABLE SOIL CONDITIONS ENCOUNTERED DURING DEVELOPMENT OF THE SITE.
SINKHOLES MAY OCCUR DURING CONSTRUCTION, AND SPECIFICALLY DURING AND SHORTLY FOLLOWING MASS GRADING OF THE PROJECT SITE. ALL SINKHOLES AND UNSTABLE SOIL CONDITIONS SHOULD BE REVIEWED BY THE GEOTECHNICAL ENGINEER OF RECORD. FOLLOWING REVIEW OF THE SPECIFIC CHARACTERISTICS AND LOCATIONS OF A GIVEN SINKHOLE FEATURE, A DETAILED REPAIR PROCEDURE SHOULD BE DEVELOPED AND IMPLEMENTED.

STRUCTURAL AREAS (AREAS ADJACENT TO STRUCTURES/BENEATH PAVEMENT)

1. ANY AND ALL LOOSE AND/OR EXCESSIVELY MOIST SOILS WITHIN THE SINKHOLE SHOULD BE EXCAVATED AND CONTINUE UNTIL STABLE SOILS, A "THROAT" IS IDENTIFIED, OR UNTIL THE EXTENT OF THE EXCAVATION EQUIPMENT IS REACHED.
2. UPON REMOVAL OF THE UNSTABLE SOILS, THE EXCAVATION SHOULD BE BACKFILLED USING HIGH MOBILITY, LOW STRENGTH FLOWABLE FILL (500 PSI) TO FINAL SUBGRADE ELEVATION; HOWEVER, UTILITIES SHOULD NOT BE ENCASED WITH FLOWABLE FILL.
3. DEPENDENT ON SPECIFIC CONDITIONS, SPECIALTY MITIGATIONS MAY BE WARRANTED, SUCH AS GROUND MODIFICATION (I.E., KARST GROUTING).

NON-STRUCTURAL AREAS (NON-PAVEMENT/LANDSCAPED AREAS)

1. ANY AND ALL LOOSE AND/OR EXCESSIVELY MOIST SOILS SHOULD BE EXCAVATED FROM THE SINKHOLE. EXCAVATION SHOULD CONTINUE UNTIL STABLE SOILS, A "THROAT" IS IDENTIFIED, OR UNTIL THE EXTENT OF THE EXCAVATION EQUIPMENT IS REACHED.
2. THE EXCAVATION SHOULD BE BACKFILLED WITH AGGREGATE OF DECREASING SIZE, COMMONLY REFERRED TO AS AN INVERTED FILTER.

THE REPAIRS OUTLINED ABOVE ARE GENERAL GUIDELINES AND EACH SINKHOLE OCCURRENCE SHOULD BE THOROUGHLY REVIEWED BY THE GEOTECHNICAL ENGINEER OF RECORD FOR AN APPROPRIATE MITIGATION PLAN.

SANITARY SEWER NOTES:

1. THE SANITARY SEWER CONNECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES, REGULATIONS, AND SPECIFICATIONS OF MOUNT JOY BOROUGH AUTHORITY.
2. SEWER CLEANOUTS MAY BE REQUIRED BY THE AUTHORITY AT HORIZONTAL BENDS DEPENDING ON THE FIELD LOCATION OF THE INSPECTION TEE AT THE RIGHT-OF-WAY. ANY CLEANOUTS AND THE TRAP SHOULD BE LOCATED IN GRASS AREAS OR APPROPRIATE PROTECTION SHALL BE PROVIDED FOR EXPOSED PVC FITTINGS.
3. A 48 HOUR NOTICE SHALL BE PROVIDED TO THE AUTHORITY PRIOR TO CONSTRUCTION OF THE SEWER LATERAL.
4. A HORIZONTAL SEPARATION OF 10 FEET AND A VERTICAL SEPARATION OF AT LEAST 18 INCHES WILL BE MAINTAINED BETWEEN SANITARY SEWER FACILITIES AND OTHER UTILITIES. THE SANITARY SEWER FACILITIES SHALL BE BENEATH WATER FACILITIES AT CROSSINGS.
5. CLEANOUTS ARE REQUIRED ALONG THE SANITARY SEWER SERVICE AT ALL CHANGES OF DIRECTION AND AT A MAXIMUM SPACING OF 50 FEET.
6. IF SINKHOLES ARE ENCOUNTERED DURING THE INSTALLATION OF SANITARY SEWER OR WATER UTILITIES, THE AUTHORITY NEEDS TO BE NOTIFIED AND MITIGATION HAS TO BE PERFORMED UNDER THE DIRECTION OF A GEOLOGIST REGISTERED IN THE STATE OF PENNSYLVANIA.
7. IF ANY UNUSED SERVICE LATERALS ARE LOCATED DURING CONSTRUCTION THE OWNER IS RESPONSIBLE TO DISCONNECT THAT LATERAL AT THE MAIN.
8. HEAVY DUTY FRAMES AND COVERS ARE REQUIRED ON TYPICAL TRAPS AND CLEANOUTS PROPOSED WITHIN PAVED AREAS.
9. THE NEED FOR A "PRE-CONSTRUCTION" MEETING THAT MUST BE CONDUCTED PRIOR TO THE START OF CONSTRUCTION.
10. THE NEED FOR THE CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION.
11. "AS-CONSTRUCTED" DOCUMENTS FOR BOTH THE SANITARY SEWER AND WATER SYSTEM IMPROVEMENTS ARE REQUIRED PRIOR TO THE RELEASE OF FINANCIAL SECURITY.

WATER SERVICE NOTES:

1. ALL WATER LINE CROSSINGS SHALL HAVE 18" MINIMUM VERTICAL CLEARANCE BETWEEN PIPES. ALL CROSSINGS WHICH HAVE LESS THAN 18" CLEARANCE SHALL BE CONCRETE ENCASED. A 10' HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY UTILITY LINE AND THE OUTSIDE WALL OF ALL MANHOLES AND INLETS. WHEN WATER LINE CROSSES SANITARY SEWER, ENCASE THE SANITARY SEWER. WHEN WATER LINE CROSSES STORM SEWER, ENCASE THE WATER LINE.
2. A MINIMUM OF 4' OF COVER IS REQUIRED OVER ALL WATER LINES.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TESTING AND "RECORD DRAWINGS" PER MOUNT JOY BOROUGH AUTHORITY REQUIREMENTS.
4. 95% FILL COMPACTION IS REQUIRED FOR ALL WATER DISTRIBUTION FACILITIES LOCATED IN FILL MATERIAL.
5. WATER SERVICE LATERALS SHALL BE INSTALLED A MINIMUM OF 5 FEET OUTSIDE OF RIGHT-OF-WAY LINE. IF OTHER UTILITIES EXIST OR ARE TO BE PLACED ALONG THE RIGHT-OF-WAY, INSTALL WATER SERVICE LATERAL A MINIMUM OF 5 FEET FROM THESE UTILITIES.
6. CONTRACTOR TO CONTACT MOUNT JOY BOROUGH AUTHORITY (717)-653-5938, THREE (3) DAYS PRIOR TO INSTALLING THE WATER SERVICE.
7. CORPORATION – COMPRESSION TYPE BY MUELLER OR FORD (SEE DETAIL)
8. SERVICE CONNECTION – TYPE CU OR PE LINES FOR DOMESTIC WATER SERVICE
9. CURB STOP (MUELLER OR FORD – SEE DETAIL)
10. CURB BOX BY B & T
11. GATE VALVES – AMERICAN FLOW CONTROL
12. ALL WATER SERVICE MATERIALS TO MEET THE CURRENT MOUNT JOY BOROUGH AUTHORITY SPECIFICATIONS FOR MATERIALS.
13. PROVIDE MECHANICAL JOINTS AS REQUIRED ACCORDING TO MOUNT JOY BOROUGH AUTHORITY STANDARD SPECIFICATIONS.
14. IF SINKHOLES ARE ENCOUNTERED DURING THE INSTALLATION OF SANITARY SEWER OR WATER UTILITIES, THE AUTHORITY NEEDS TO BE NOTIFIED AND MITIGATION HAS TO BE PERFORMED UNDER THE DIRECTION OF A GEOLOGIST REGISTERED IN THE STATE OF PENNSYLVANIA.
15. THE NEED FOR A "PRE-CONSTRUCTION" MEETING MUST BE CONDUCTED PRIOR TO THE START OF CONSTRUCTION.
16. THE NEED FOR THE CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION.
17. "AS-CONSTRUCTED" DOCUMENTS FOR BOTH THE SANITARY SEWER AND WATER SYSTEM IMPROVEMENTS ARE REQUIRED PRIOR TO THE RELEASE OF FINANCIAL SECURITY.
18. THE AUTHORITY APPROVES A ONE (1) DAY SHUTDOWN TO REMOVE THE EXISTING 2" SERVICE SADDLE AND CORPORATION STOP AND INSTALLING THE NEW 8" x 8" TEE FOR THE NEW WATER SERVICE LATERAL ALONG WITH CUTTING OUT THE EXISTING 8" TEE AND SLEEVING A NEW PIECE OF 8" PIPE IN ITS PLACE.

SCHEDULE OF INSPECTIONS:

THE ENFORCEMENT OFFICER SHALL INSPECT ALL PHASES OF THE REGULATED ACTIVITY, INCLUDING BUT NOT LIMITED TO THE FOLLOWING PHASES:

1. THE COMPLETION OF PRELIMINARY SITE PREPARATION, INCLUDING STRIPPING OF VEGETATION, STOCKPILING OF TOPSOIL AND CONSTRUCTION OF TEMPORARY STORMWATER MANAGEMENT FACILITIES.
2. THE COMPLETION OF ROUGH GRADING, BUT PRIOR TO PLACEMENT OF TOPSOIL, PERMANENT DRAINAGE OR OTHER SITE DEVELOPMENT IMPROVEMENTS AND GROUND COVERS.
3. DURING THE CONSTRUCTION OF THE PERMANENT STORMWATER MANAGEMENT FACILITIES AT SUCH TIMES AS SPECIFIED BY THE ENFORCEMENT OFFICER. THIS INCLUDES INSPECTION FOR SUBGRADE PRIOR TO STONE AND PIPE PLACEMENT.
4. THE COMPLETION OF PERMANENT STORMWATER MANAGEMENT FACILITIES, INCLUDING ESTABLISHMENT OF GROUND COVERS AND PLANTINGS.
5. THE COMPLETION OF ANY FINAL GRADING, VEGETATIVE CONTROL MEASURES OR OTHER SITE RESTORATION WORK DONE IN ACCORDANCE WITH THE PERMIT.
6. DESCRIPTION OF MAINTENANCE REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
   a. REGULAR INSPECTION OF THE SWM FACILITIES, TO ASSURE PROPER IMPLEMENTATION OF BMPS, MAINTENANCE AND CARE SWM BMPS SHOULD BE INSPECTED BY A QUALIFIED PERSON WHICH MAY INCLUDE THE LANDOWNER, OR THE OWNER'S DESIGNEE (INCLUDING WEST DONEGAL BOROUGH FOR DEDICATED AND OWNED FACILITIES), ACCORDING TO THE FOLLOWING MINIMUM FREQUENCIES:
   i. ANNUALLY FOR THE FIRST 5 YEARS
   ii. ONCE EVERY 3 YEARS THEREAFTER.
   iii. DURING OR IMMEDIATELY AFTER THE CESSATION OF A 10-YEAR OR GREATER STORM.
   iv. AS SPECIFIED IN THE OPERATION AND MAINTENANCE AGREEMENT.
   b. ALL PIPES, SWALES AND DETENTION FACILITIES SHALL BE KEPT FREE OF ANY DEBRIS OR OTHER OBSTRUCTION AND IN ORIGINAL DESIGN CONDITION.
   c. REMOVAL OF SILT FROM ALL PERMANENT STRUCTURES WHICH TRAP SILT OR SEDIMENT IN ORDER TO KEEP THE MATERIAL FROM BUILDING UP IN GRASS WATERWAYS, PIPES, DETENTION OR RETENTION BASINS, INFILTRATION STRUCTURES, OR BMPS, AND THUS REDUCING THEIR CAPACITY TO CONVEY OR STORE WATER.
   d. RE-ESTABLISHMENT OF VEGETATION OF SCOURED AREAS OR AREAS WHERE VEGETATION HAS NOT BEEN SUCCESSFULLY ESTABLISHED. SELECTION OF SEED MIXTURES SHALL BE SUBJECT TO APPROVAL OF THE BOROUGH.

NO WORK SHALL BEGIN ON A SUBSEQUENT PHASE (AS IDENTIFIED IN SUBSECTION A) UNTIL THE PRECEDING PHASE HAS BEEN INSPECTED AND APPROVAL HAS BEEN NOTED ON THE PERMIT.

IN ORDER TO AVOID DELAYS FOR INSPECTIONS, IT IS THE RESPONSIBILITY OF THE DEVELOPER TO NOTIFY THE ENFORCEMENT OFFICER 48 HOURS IN ADVANCE OF THE COMPLETION OF EACH IDENTIFIED PHASE OF DEVELOPMENT

ANY PORTION OF THE WORK WHICH DOES NOT COMPLY WITH THE APPROVED PLAN MUST BE CORRECTED BY THE DEVELOPER. NO WORK MAY PROCEED ON ANY SUBSEQUENT PHASE UNTIL THE REQUIRED CORRECTIONS HAVE BEEN MADE.

AS BUILT RECORDS:

A. UPON COMPLETION OF THE PLAN IMPROVEMENTS AND PRIOR TO THE RELEASE OF FINANCIAL SECURITY, THE APPLICANT SHALL SUBMIT AS-BUILT PLAN TO THE BOROUGH. THE AS-BUILT PLAN MUST SHOW THE FINAL DESIGN SPECIFICATIONS FOR ALL STORMWATER MANAGEMENT FACILITIES AND BE SEALED BE A REGISTERED PROFESSIONAL ENGINEER.

B. REVIEW BY BOROUGH ENGINEER.

(1) THE AS-BUILT PLAN SHALL BE REVIEWED BY THE BOROUGH ENGINEER TO VERIFY THE PLAN INCLUDES ALL OF THE STORMWATER MANAGEMENT FACILITIES ON THE SUBJECT PROPERTY AND THE FACILITIES ARE SHOWN AT THE CORRECT LOCATION.

(2) THE BOROUGH ENGINEER SHALL EITHER APPROVE THE AS-BUILT PLAN OR IDENTIFY CORRECTIONS REQUIRED.

(3) IF THE BOROUGH ENGINEER IDENTIFIES CORRECTIONS REQUIRED TO THE AS-BUILT PLAN, THE APPLICANT SHALL SUBMIT A REVISED AS-BUILT PLAN TO THE BOROUGH ADDRESSING THE CORRECTIONS.

C. FOLLOWING APPROVAL OF THE AS-BUILT PLAN BY THE BOROUGH ENGINEER, THE APPLICANT SHALL SUBMIT THE SWM SITE PLAN FOR RECORDATION IN THE OFFICE OF THE RECORDER OF DEEDS.

D. DIGITAL INVENTORY.

(1) WHEN REQUIRED, A DIGITAL INVENTORY SHALL BE SUBMITTED FOLLOWING APPROVAL OF THE AS-BUILT PLAN BY THE BOROUGH ENGINEER IF THE PROJECT INCLUDES ANY OF THE FOLLOWING:
(a) SWM FACILITIES WHICH ARE OFFERED FOR DEDICATION TO THE BOROUGH.
(b) SWM FACILITIES WHICH CONNECT TO OR ALTER ANY PORTION OF THE BOROUGH'S MS4.
(c) BMPS INCLUDED ON A NPDES PERMIT FOR WHICH THE BOROUGH IS REQUIRED TO KEEP AN INVENTORY UNDER THE BOROUGH'S MS4 PERMIT.
(2) DIGITAL INVENTORY REQUIREMENTS.
(a) THE DIGITAL INVENTORY SHALL BE IN AN ELECTRONIC FORMAT ACCEPTABLE TO THE BOROUGH ENGINEER.
(b) THE DIGITAL INVENTORY SHALL INCLUDE ALL INFORMATION INCLUDED AND SHOWN ON THE APPROVED AS-BUILT PLAN.
(c) ALL COORDINATES AS DEPICTED ON THE PLAN SHALL BE BASED ON THE PA SOUTH ZONE STATE PLAN COORDINATE SYSTEM (NAD83 FRO HORIZONTAL AND NAVD88 FOR VERTICAL).

L.C.P.C. #: 75-212-2

OWNER	
NAME:	MOUNT JOY SENIOR HOUSING LP C/O GATESBURG ROAD DEVELOPMENT
ADDRESS:	2121 OLD GATESBURG ROAD SUITE 200 STATE COLLEGE, PA 16803
TELEPHONE:	814-272-4945
DEED REFERENCE:	6574192
TAX ACCOUNT NO.:	450-34356-0-0000

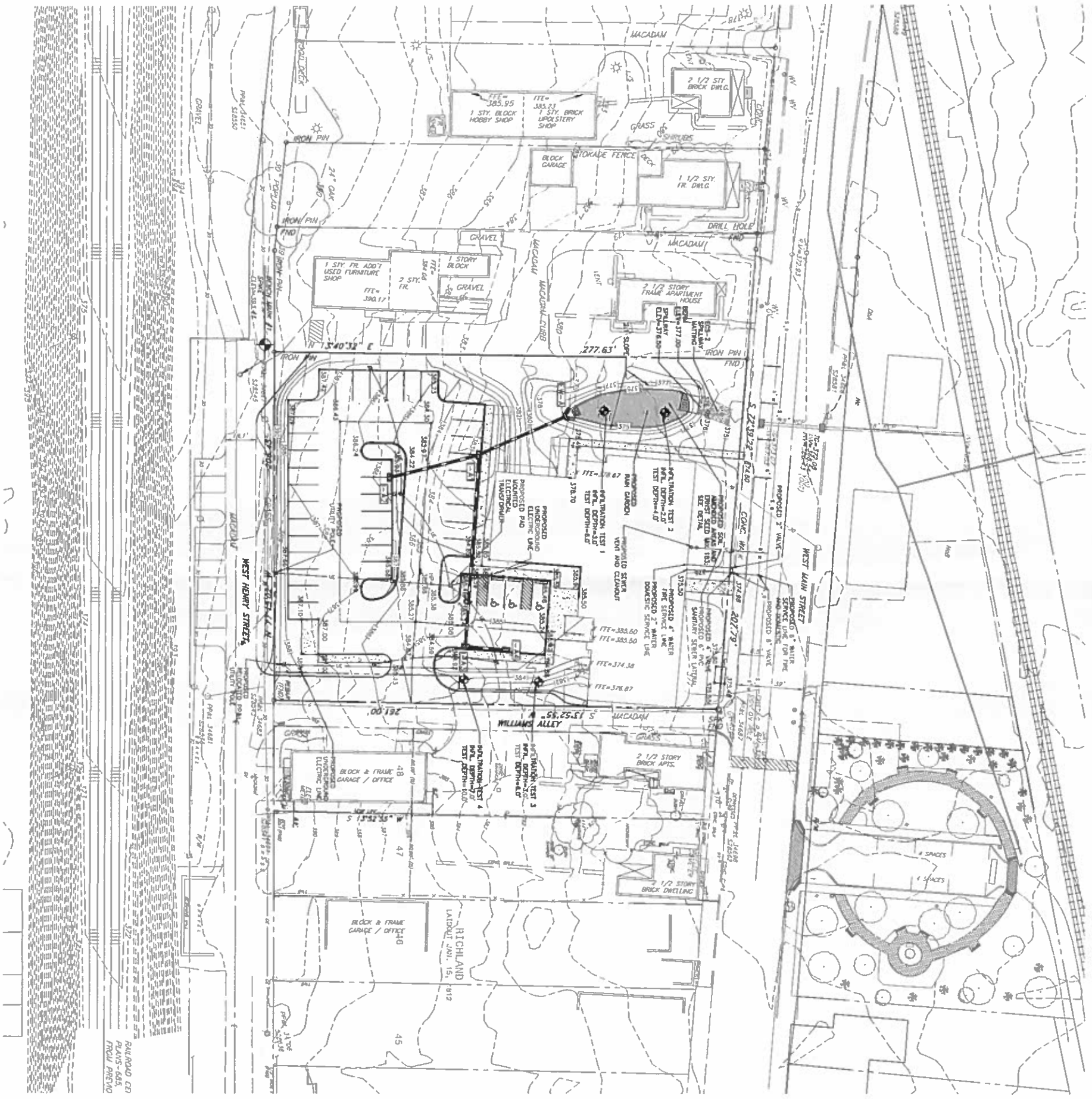
REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

dc gohn Associates, Inc.
32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552
Ph- (717) 653-5308
www.dcgohn.com
Surveyors - Engineers - Landscape Architects

PROJECT NO.: 1378-20
DATE: MARCH 22, 2021
DRAWN BY: GRN
CHECKED BY: BRC
SCALE: 1"=30'
30 0 15 30
SCALE IN FEET

FINAL GRADING / PCSM PLAN
FOR
GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

DRAWING #: CG-3049
SHEET #: 4 OF 12



FINAL GRADING / PCSM PLAN

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.:	1378-20
DATE:	MARCH 22, 2021
DRAWN BY:	GRH
CHECKED BY:	BRC
SCALE:	1"=30'

30 0 15 30
SCALE IN FEET

SHEET #: 5 OF 12

DRAWING #: CS-3049

dc gohn Associates, Inc.
Surveyors - Engineers - Landscape Architects

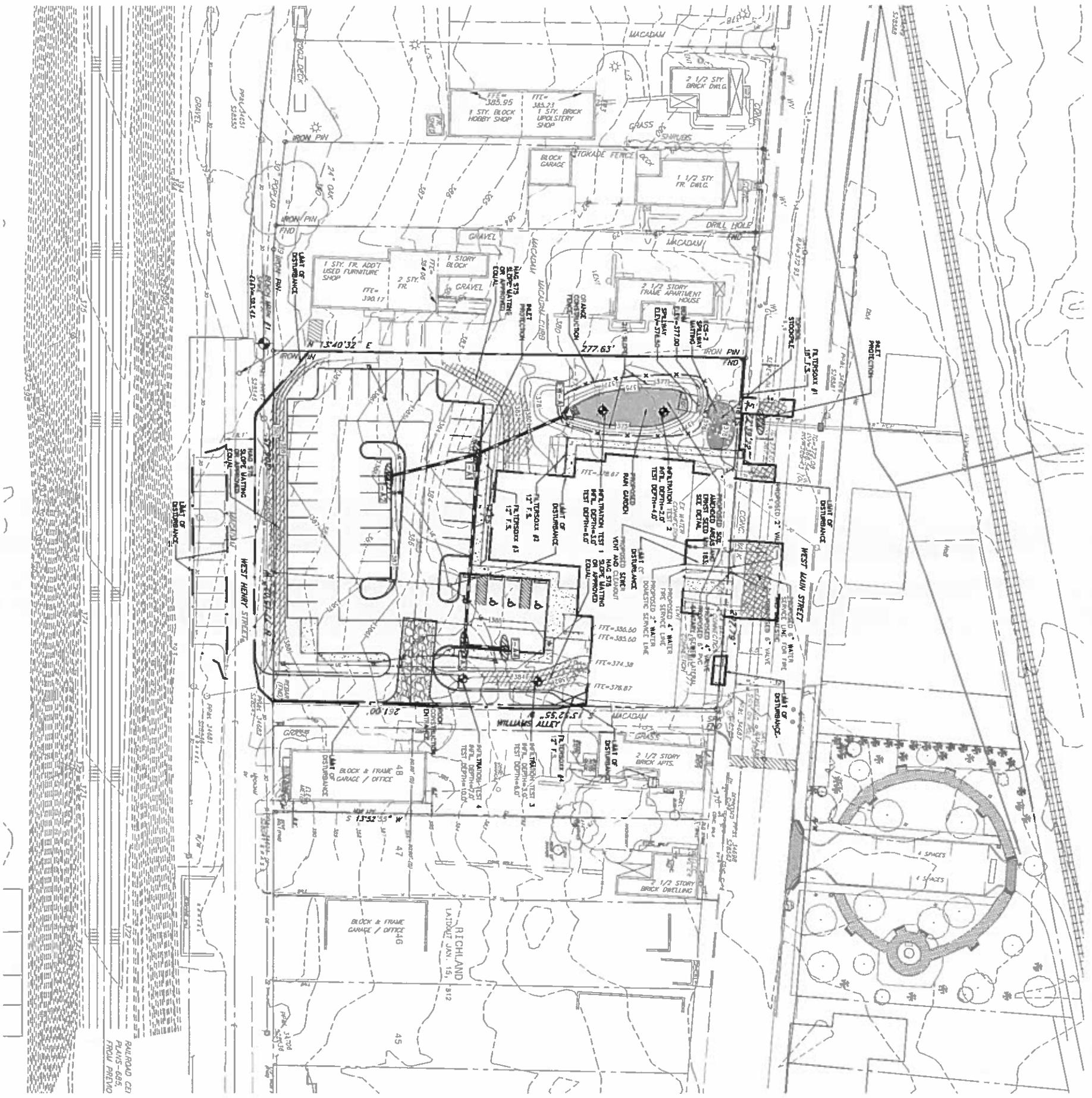
32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552

Ph- (717) 653-5308
www.dcgohn.com

OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2121 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-8945

DEED REFERENCE: 6574192
TAX ACCOUNT NO.: 450-34256-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21



L.C.P.C. #: 75-212-2

EROSION AND SEDIMENT CONTROL PLAN

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.:	1378-20
DATE:	MARCH 22, 2021
DRAWN BY:	GRN
CHECKED BY:	BRC

SCALE: 1"=30'

30 0 15 30
SCALE IN FEET

DRAWING #: CD-3049
SHEET #: 6 OF 12

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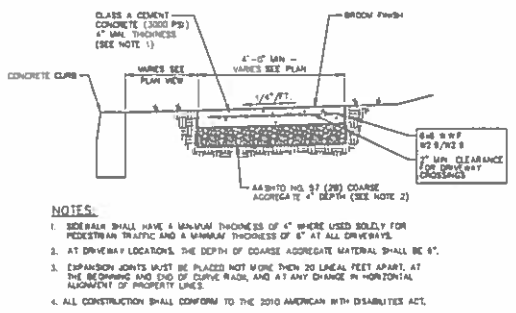
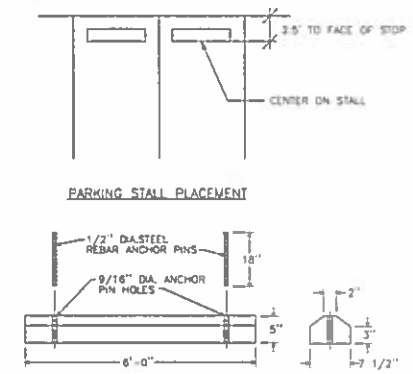


NOTES:

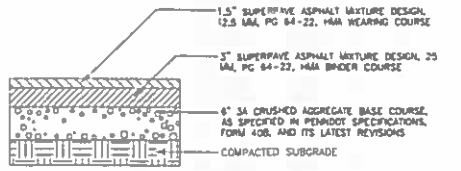
1. SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4" WHERE USED SOLELY FOR PEDESTRIAN TRAFFIC AND A MINIMUM THICKNESS OF 6" AT ALL DRIVEWAYS.
2. AT DRIVEWAY LOCATIONS, THE DEPTH OF COARSE AGGREGATE MATERIAL SHALL BE 6".
3. EXPANSION JOINTS MUST BE PLACED NOT MORE THEN 20 LINEAL FEET APART, AT THE BEGINNING AND END OF CURVE RADII, AND AT ANY CHANGE IN HORIZONTAL ALIGNMENT OF PROPERTY LINES.
4. ALL CONSTRUCTION SHALL CONFORM TO THE 2010 AMERICAN WITH DISABILITIES ACT.

CONCRETE SIDEWALK
NOT TO SCALE

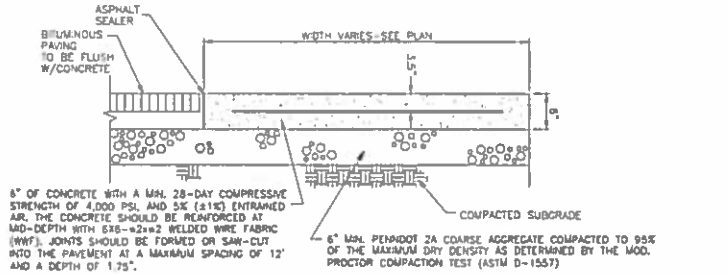


PARKING STALL PLACEMENT

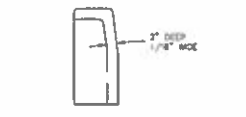
PRECAST CONCRETE CURB STOP
NOT TO SCALE



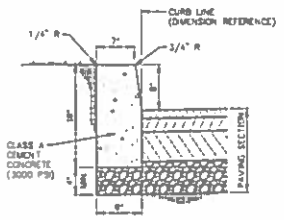
ASPHALT PAVING DETAIL
NOT TO SCALE



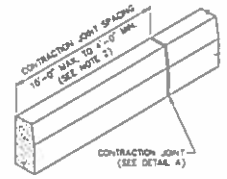
REINFORCED CONCRETE PAVEMENT – DUMPSTER PAD AND BUS STOP PAD
NOT TO SCALE

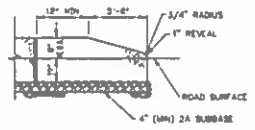


DETAIL A
CONTRACTION JOINT



TYPICAL CROSS SECTION

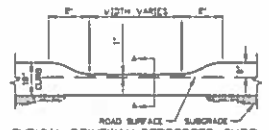




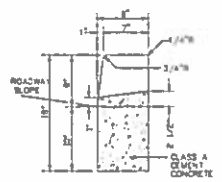
END TRANSITION

NOTES:

1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PUBLICATION 408/2003, SECTION 630
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4" PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB

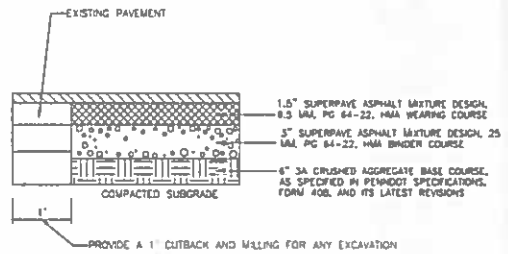


TYPICAL DRIVEWAY DEPRESSED CURB



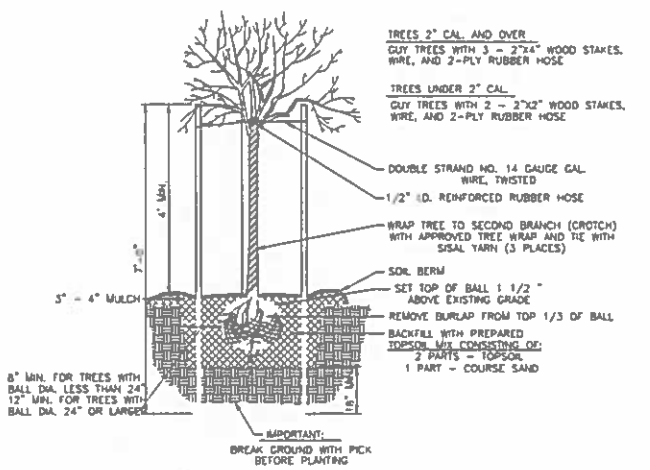
SECTION A-A

CONCRETE CURB
NOT TO SCALE



NOTE:
1. THE STREET SHALL BE RESTORED TO THE SATISFACTION OF THE BOROUGH.
2. PAVEMENT JOINTS TO BE SEALED WITH AC-20.

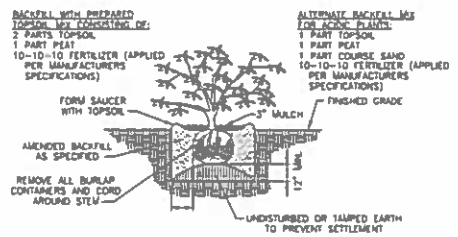
FUTURE WEST HENRY STREET WIDENING PAVING DETAIL
NOT TO SCALE



PLANT SPECIFICATIONS:

1. THE TREES SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE PROJECT
2. ALL TREES SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY AND VIGOROUS. THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
3. ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
4. REQUIREMENTS FOR THE MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND THE BURLAPPING OF TREES SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED.

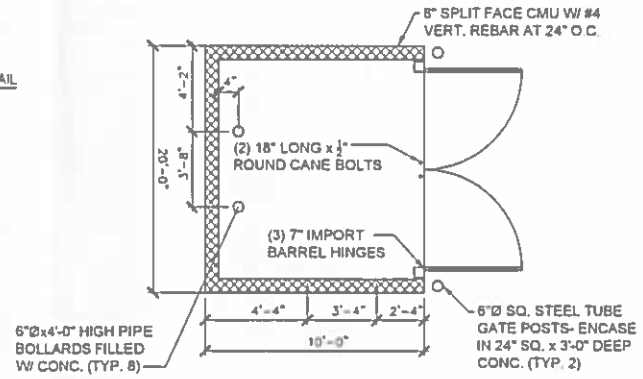
TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

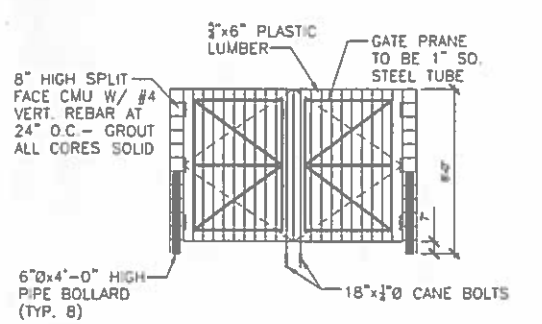


PLANT SPECIFICATIONS:

1. SET PLANTS AT SAME FINISHED GRADE AS GROWN IN THE NURSERY.
2. THE SHRUBS SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE PROJECT.
3. ALL SHRUBS SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY AND VIGOROUS. THEY SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
4. ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
5. REQUIREMENTS FOR THE MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND THE BURLAPPING OF SHRUBS SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED.

TYPICAL SHRUB PLANTING
NOT TO SCALE





DUMPSTER SCREEN DETAIL
NOT TO SCALE

L.C.P.C. #: 75-212-2

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER HDBA	4/30/21
REVISIONS PER LCCD	4/28/21

OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 711 EAST COLLEGE AVENUE SUITE 200 STATE COLLEGE, PA 16801
TELEPHONE: 814-272-9945
DEED REFERENCE: 6574192
TAX ACCOUNT NO. 450-34256-0-0000

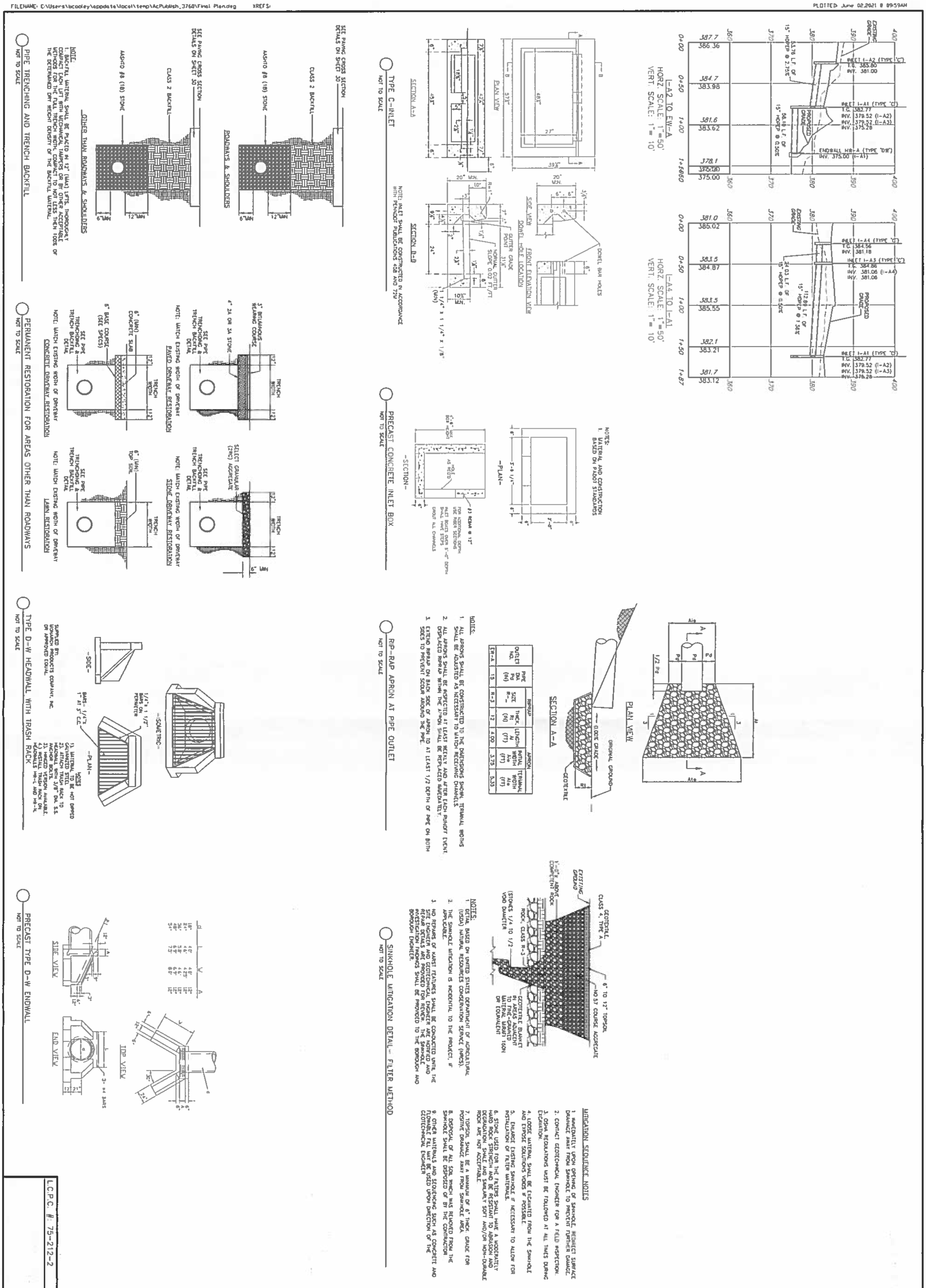
dc gohn Associates, Inc.
Surveyors - Engineers - Landscape Architects
32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552
Ph- (717) 653-5308
www.dcgohn.com

PROJECT NO.: L378-20
DATE: MARCH 27, 2021
DRAWN BY: GRN
CHECKED BY: BRL
SCALE: 1"=30'
30 0 15 30
SCALE IN FEET

SITE DETAILS
FOR
GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

DRAWING #: CG-3049
SHEET #: 7 OF 12

FILENAME: C:\Users\bcooley\appdata\local\temp\AcPublish_3760\Final Plan.dwg XREFS: PLOTTED: June 02,2021 @ 09:59AM



PROJECT NO.:	1378-20
DATE:	MARCH 22, 2021
DRAWN BY:	GRH
CHECKED BY:	BRC
SCALE:	AS NOTED

SHEET #: 8 OF 12

DRAWING #: CG-3049

PROFILES AND PCSM DETAULS

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

dc gohn Associates, Inc.
32 Mount Joy Street
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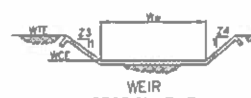
OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2121 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-8945

DEED REFERENCE: 6574192
TAX ACCOUNT NO.: 450-34256-0-0000

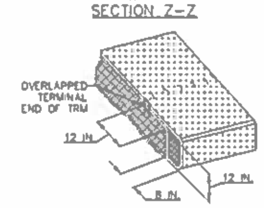
REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

BMP ID.	INSPECTION FREQUENCY	OPERATION AND MAINTENANCE PROCEDURE
RAIN GARDEN	BI-ANNUALLY	• TO ASSURE PROPER OPERATION AND STRUCTURAL STABILITY, THE OWNER SHALL INSPECT THE RAIN GARDENS AT LEAST ONCE EACH APRIL, AT LEAST ONCE EACH OCTOBER, AND WITHIN 48 HOURS AFTER EVERY RAINFALL EVENT EXCEEDING 1 INCH OF PRECIPITATION IN 24 HOURS. • INSPECT FOR EROSION PROBLEMS, VEGETATION DAMAGE, SEDIMENT AND DEBRIS ACCUMULATION, AND LITTER. • REMOVE ACCUMULATIONS OF SEDIMENT >3 INCHES IN DEPTH AND IMMEDIATELY STABILIZE DISTURBED AREAS. • REMOVE SEDIMENT DURING PERIODS WHEN RUTTING WILL BE MINIMAL. • PRUNE VEGETATION AND WEED GARDENS TO ENSURE SAFETY, AESTHETICS, PROPER OPERATION, WEED AND INVASIVE/NOXIOUS VEGETATION SUPPRESSION. • REMOVE INVASIVE/NOXIOUS PLANTS AND IMMEDIATELY STABILIZE DISTURBED AREAS. • REMOVE LITTER, DEBRIS, AND DETRITUS.
ENDWALL	BI-ANNUALLY (TWICE A YEAR; ONCE IN APRIL AND ONCE IN OCTOBER)	• ENDWALL SHALL BE INSPECTED AND CLEANED AT LEAST TWO TIMES A YEAR OR AS CONDITIONS WARRANT. THE VEGETATION AROUND THE FLARED END SECTION SHALL BE MAINTAINED IN A GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
RIP-RAP APRON	BI-ANNUALLY (TWICE A YEAR; ONCE IN APRIL AND ONCE IN OCTOBER)	• RIP-RAP APRONS SHALL BE INSPECTED AND CLEANED AT LEAST TWO TIMES A YEAR OR AS CONDITIONS WARRANT. THE VEGETATION AROUND THE RIP-RAP APRONS SHALL BE MAINTAINED IN A GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

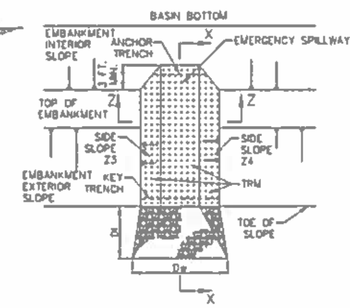
PCSM OPERATION AND MAINTENANCE NOTES
NOT TO SCALE



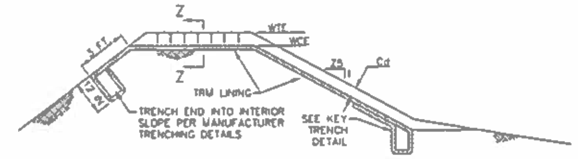
WEIR
SECTION Z–Z



KEY TRENCH AT TOE
OF SLOPE OF SPILLWAY



PLAN VIEW
RIPRAP OUTLET DISSIPATOR



EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY
SECTION X–X

BASIN NO.	WEIR: Z3 (FT)	WEIR: Z4 (FT)	WEIR: TOP ELEV WTE (FT)	WEIR: CREST ELEV WCE (FT)	WEIR: WIDTH Ww (FT)	LINING: TRM TYPE	CHANNEL: Z5 (FT)	CHANNEL: DEPTH Cd (FT)
RAIN GARDEN	3	3	377.00	376.50	10	ECS-2	4	1.0

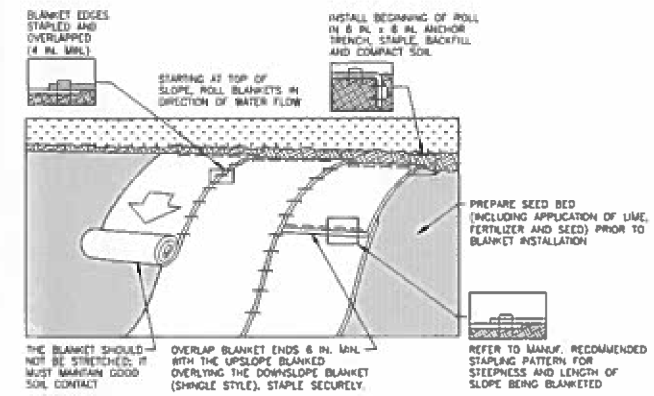
NOTES:

HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.

DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

EMERGENCY SPILLWAY DETAIL
NOT TO SCALE



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

SLOPE MATTING INSTALLATION DETAIL
NOT TO SCALE

STORM WATER MANAGEMENT FACILITIES (ERNST 181 SEED MIX)

SITE PREPARATION NOTES:

1. INVASIVE SPECIES, PARTICULARLY THOSE THAT WILL ADAPT TO WET CONDITIONS, SHOULD BE REMOVED OR SPRAYED BEFORE THEY BECOME INCORPORATED INTO THE SITE. NORMAL VEGETATION CAN BE WORKED INTO THE TOPSOIL, WHICH SHOULD BE STOCKPILED UNTIL THE FINAL GRADE HAS BEEN ESTABLISHED.
2. WITH THE ENGINEER'S SPECIFICATIONS AND DIMENSIONS IN HAND, ON-SITE CONSTRUCTION OF THE BERM AND OUTLETS MUST BE EXECUTED CAREFULLY IN ORDER TO MAINTAIN STRUCTURAL INTEGRITY. THE PLANT GROWTH AREAS SHOULD BE LOOSE AND FRIABLE, HIGH IN ORGANIC MATTER, AND COMPLETED WITHOUT COMPACTIONS FROM HEAVY EQUIPMENT. BY USING THE "DIG AND DROP" METHOD, ONE CAN USE AN EXCAVATOR TO DIG AND FROM EACH AREA OF THE BOTTOM SOIL IN A LOOSE MANNER. AT THIS POINT, ONE CAN INCORPORATE LIME, COMPOSTED LEAVES, AND/OR GRASS CLIPPINGS. THE EXCAVATION MACHINE DOES NOT MOVE OVER THE FINISHED SURFACE, THUS AVOIDING UNNECESSARY COMPACTION. NATIVE VEGETATION CAN BE PLANTED OR SEEDED OVER THIS UNEVEN, ABSORBENT SURFACE.

SEEDING AND PLANTING METHODS NOTES:

1. SEEDING AND PLANTING SHOULD BEGIN IMMEDIATELY UPON COMPLETION OF THE STRUCTURE WHEN THE SOIL IS STILL FRIABLE AND BEFORE INVASIVE WEEDS EMERGE. PLAN SEEDING AND PLANTING BEFORE THE BASIN IS FLOODED, OR ALLOW THE BASIN TO DRAIN TO A FEW INCHES BEFORE SEEDING. BROADCAST SEED EVENLY OVER EACH UNIT BY HAND SEEDING OR HYDROSEEDING. SEEDING RATES ARE GENERALLY LOW (1/2 LB PER 1,000 SQ FT). THE USE OF A SEED FILLER; I.E. PAM-12, CAN BE USED TO CREATE A MIX OF 10 LB PER 1,000 SQ FT (I.E. 9-1/2 LB OF PAM-12 MIXED WITH ½ LB OF SEED), WHICH CAN BE BROADCAST EVENLY OVER THE AREA. BARLEY, OATS, OR RYE CAN PROVIDE TEMPORARY VEGETATION TO PROTECT THE SOIL IN STORM WATER MANAGEMENT FACILITIES UNTIL PERMANENT VEGETATION CAN BE ESTABLISHED. THE USE OF NATIVE SPECIES; I. E. VIRGINIA WILD RYE, CAN CREATE AN INTERMEDIATE VEGETATIVE COVE THAT SUCCEEDS TO NATIVE LONG-TERM VEGETATION. STRAW MULCH OR STRAW COCONUT MATS ARE FREQUENTLY USED TO CONTROL EROSION AND PROTECT EMERGING SEEDLINGS FROM EXTREME TEMPERATURES AND DRYING OUT. MULCH SHOULD BE SPARSE TO ALLOW SUNLIGHT TO REACH THE GROUND.
2. TRANSPLANTED SEEDLINGS AND SHRUBS NEED TEMPORARY WATER UNTIL THEY BECOME WELL ROOTED. IRRIGATION OF SEEDED AREAS IS OF VALUE UNTIL SEEDLINGS BECOME ESTABLISHED.

GENERAL MAINTENANCE NOTES:

1. IN ADDITION TO STRUCTURAL MAINTENANCE, SILTATION NEEDS TO BE REMOVED AS NEEDED. PLANTS NEED TO BE TRIMMED BACK TO MAINTAIN AESTHETIC VALUE AND INVASIVE SPECIES NEED TO BE CONTROLLED. CLOSE MOWING OR EXTENSIVE CHEMICAL USE IS NOT CONDUCIVE TO WATER QUALITY IMPROVEMENT OR WILDLIFE HABITAT.

ERNST CONSERVATION SEEDS

RAIN GARDEN GRASS MIX

ERNMIX # ERNMIX-181

SEEDING RATE 20 lbs per acre, or 1/2 lb per 1,000 sq ft

MIX TYPE Storm Water Management Facility Sites

25.0% Schizachyrium Scoparium, Fort Indiantown Gap-PA ecotype (Little Bluestem, Fort Indiantown Gap-PA ecotype)
24.0% Panicum Clandestinum, 'Tioga' (Deertongue, Tioga)
20.0% Elymus Virginicus, PA ecotype (Virginia Wildrye, PA ecotype)
14.0% Carex Vulpinoidea, PA ecotype (Fox Sedge, PA ecotype)
10.0% Panicum Rigidulum, PA ecotype (Redtop Panicgrass, PA ecotype)
5.0% Carex Scoparia, PA ecotype (Blunt Broom Sedge, PA ecotype)
1.0% Juncus Effusus (soft rush)
1.0% Juncus Tenuis, PA ecotype (Path Rush, PA ecotype)

Total 100%

ERNST SEED MIX NOTES
NOT TO SCALE

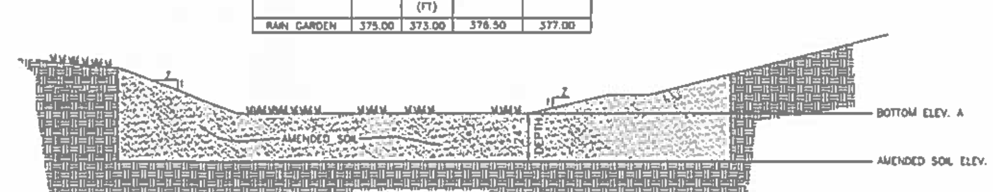
RAIN GARDEN CONSTRUCTION NOTES:

1. LIMIT COMPACTION OVER THE RAIN GARDEN AREA.
2. EXCAVATE THE RAIN GARDEN TO THE SUBGRADE ELEVATION OF 373.00. EXCAVATION OF THE RAIN GARDEN SHALL BE DONE WITH EQUIPMENT OUTSIDE OF THE RAIN GARDEN TO THE EXTENT PRACTICAL.
3. IF A LIMITING ZONE OF ROCK OR FILL MATERIAL IS ENCOUNTERED WITHIN THE 24" DEPTH, REFER TO THE NOTES AS FOLLOWS:
   - IN THE EVENT THAT ROCK OR FILL MATERIAL ARE ENCOUNTERED DURING CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES, THEY SHOULD BE OVER-EXCAVATED TO A DEPTH OF 2 FEET BELOW THE PROPOSED BOTTOM ELEVATION AND THE RESULTING EXCAVATION SHOULD BE BROUGHT BACK UP TO PROPOSED GRADES WITH AN AMENDED SOIL MIXTURE.
   - CONTRACTOR TO EXCAVATE THE ROCK OR FILL MATERIAL TO A MAXIMUM DEPTH OF 24" BELOW THE EXPOSED SUBGRADE. EXCAVATION OF THE ROCK OR FILL SHALL BE FROM OUTSIDE OF THE RAIN GARDEN TO THE EXTENT PRACTICAL.
   - CARE SHALL BE TAKEN TO MINIMIZE EXCESSIVE ROCK DISTURBANCE OR FILL MATERIAL TO THE EXTENT PRACTICAL. ALL LOOSE ROCK SHALL BE REMOVED FROM AREAS PRIOR TO BACKFILLING. IF THERE ARE AREAS OF VOIDS, FRACTURES, SOFT OR WET SOILS, POTENTIAL SINKHOLE AREAS OR OTHER CONDITIONS OF CONCERN, THE AREAS SHALL BE PROPERLY MITIGATED BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. NO BLASTING IS PERMITTED.
4. UPON PERMANENT CONVERSION OF THE RAIN GARDEN, SCARIFY BOTTOM OF RAIN GARDEN IN THE AREA OF THE AMENDED SOILS A MINIMUM 12" BELOW PROPOSED SUBGRADE ELEVATION OF 373.00. SCARIFICATION OF THE RAIN GARDEN SHOULD BE DONE WITH EQUIPMENT OUTSIDE OF THE RAIN GARDEN TO THE EXTENT PRACTICAL.
5. INSTALL AMENDED SOIL IN 6-INCH MAXIMUM LIFTS AND LIGHTLY COMPACT (TAMP WITH BACKHOE BUCKET OR BY HAND). KEEP EQUIPMENT MOVEMENT OVER AMENDED SOIL TO A MINIMUM AND DO NOT OVERCOMPACT. PLANT ERNST SEED MIX AS NOTED ON THE PLANS PER MANUFACTURER'S SPECIFICATIONS. REFER TO THE FINAL GRADING / PCSM PLAN FOR THE LOCATION AND EXTENT OF THE AMENDED SOIL AREA AND SEED MIX.

GENERAL RAIN GARDEN NOTES:

1. THE AMENDED SOIL SHALL BE A UNIFORM MIXTURE CONSISTING OF 20% SAND, 60% TOPSOIL, AND 20% COMPOST. THE COMPOST SHALL BE APPROVED LANDSCAPING COMPOST COMPRISED OF NATURAL MATERIALS AND WITH AN ORGANIC MATTER CONTENT OF 35% TO 65% AS DETERMINED BY THE LOSS ON IGNITION METHOD. THE TOPSOIL SHALL BE FRIABLE LOAMY SOIL AS CLASSIFIED BY THE USDA, FREE OF WEEDS, HERBICIDES, PETROLEUM-BASED MATERIALS, ANY OTHER DELETERIOUS MATERIALS, ROCKS, AND DEBRIS. THE TOPSOIL SHALL HAVE A PH OF BETWEEN 5.5 AND 8.0. 100% OF THE TOPSOIL SHALL PASS THROUGH A 3/4" SCREEN.
2. IN THE EVENT THAT GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR TO CONTACT GEOTECHNICAL ENGINEER AND DC GOHN PRIOR TO PROCEEDING WITH CONSTRUCTION. A REVISED BMP DESIGN WILL NEED TO BE REVIEWED BY THE TOWNSHIP PRIOR TO COMPLETING CONSTRUCTION OF THE BMP.

RAIN GARDEN	BOTTOM ELEV. A (FT)	BOTTOM AMENDED SOIL ELEV. B (FT)	SPILLWAY ELEV (FT)	BERM ELEV (FT)
RAIN GARDEN	375.00	373.00	376.50	377.00



RAIN GARDEN DETAIL
NOT TO SCALE

L.C.P.C. #: 75-212-2

	REVISIONS PER BOROUGH ENGINEER	6/1/21
	REVISIONS PER BOROUGH ENGINEER	5/17/21
	REVISIONS PER MJBA	4/30/21
	REVISIONS PER LCCD	4/28/21
	REVISIONS	DATE

OWNER
NAME: MOUNT JOY SENIOR HOUSING LP, C/O GATESBURG ROAD DEVELOPMENT
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Surveyors - Engineers - Landscape Architects

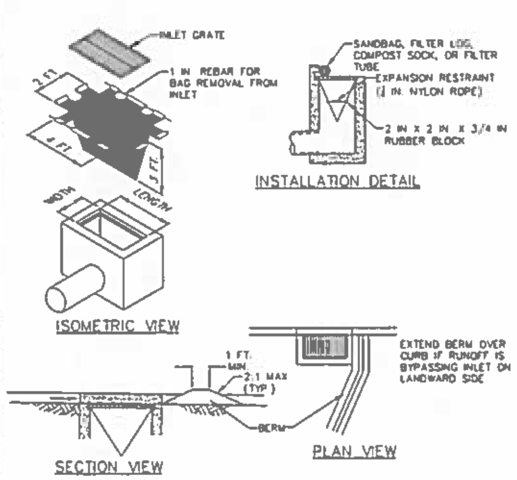
PROJECT NO.: 1378-20
DATE: MARCH 22, 2021
DRAWN BY: GRN
CHECKED BY: BRC
SCALE: 1"=30'
30 0 15 30
SCALE IN FEET

PCSM DETAILS
FOR
GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

DRAWING #: CG-3049
SHEET #: 9 OF 12

CONSTRUCTION SEQUENCE

1. The Contractor shall contact and invite the Owner, Borough Officials, the Erosion and Sediment Control Plan Preparer, and the Lancaster County Conservation District at least seven days prior to any earth disturbance activity to set an on site pre-construction meeting.
2. The Contractor shall call the PA One Call System Incorporated at least seven days prior to the start of construction. PA One Call System Incorporated #1-800-242-1776.
3. The Contractor is responsible for the construction and implementation of an Erosion and Sediment Control Plan for the site, as well as areas associated with materials removed from this project.
4. The Contractor shall assure that an Erosion and Sediment Control Plan has been prepared and approved by the Lancaster County Conservation District.
5. Before initiating any revisions to the approved Erosion and Sediment Control Plan or revisions to other plans, which may affect the effectiveness of the approved Plan, the Contractor must receive approval of the revisions from the Lancaster County Conservation District.
6. All earth disturbance activities shall proceed in accordance with the following sequence. Each stage shall be completed before any following stage is initiated. Clearing and grubbing shall be limited to only those areas described in each stage.
7. Erosion and sediment control devices/BMPs must be constructed, stabilized, and functional before site disturbance begins within the tributary areas of the devices. Only limited disturbance shall be permitted to provide access to install those devices.
8. Clearly mark all limits of disturbance using white flags or another appropriate method in the grass areas and white spray paint or another appropriate method for the areas of the existing impervious areas.
9. Install orange construction fence.
10. Install filtersoxx.
11. Install rock construction entrance.
12. Strip topsoil.
13. Remove existing pavement and gravel to be removed.
14. Grade the site with the exception of the proposed rain garden. Install erosion control blankets on all slopes 3:1 or greater.
15. Install site utilities and storm sewer and inlet protection. Contractor to repair, reset, or replace Filtersoxx 1 during water/sewer utility line installations.
16. Install stone base course for access drives and parking lots.
17. Install wearing course for access drives and parking lots.
18. Upon final site stabilization, minimum uniform 70% perennial vegetative ground cover, contact the Lancaster County Conservation District, and remove the temporary erosion and sediment control devices/BMP's with their approval. Permanent erosion and sediment control devices/BMP's shall be thoroughly cleaned of latent sediment, including the storm sewer system. Any areas disturbed during the removal and/or cleaning of the devices/BMP's shall be redressed and stabilized immediately. Install the rain garden, amended soils, and low maintenance grass seed mix. Minimize compaction in the area of the rain garden.
19. Upon conservation district approval and only during dry periods, cut open filter socks and distribute material.
20. Contact the Lancaster County Conservation District for a final site inspection.



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION – TYPE C INLET
NOT TO SCALE

EROSION AND SEDIMENT CONTROL PLANS

1. The Contractor shall assure that the approved Erosion and Sediment Control Plan is properly and completely implemented.
2. A copy of the approved Erosion and Sediment Control Plan must be made available at the site of the construction activity at all times.
3. The staging of earth disturbance activities and maintenance requirements obtained in the Erosion and Sediment Control Plan must be followed at all times.
4. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the Contractor shall implement appropriate erosion and sediment control devices or BMPs to eliminate the potential for accelerated erosion and/or sediment pollution.
5. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 PA Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. No building material or wastes or unused building materials shall be buried, dumped, or discharged at the site.
6. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.

PREPAREDNESS, PREVENTION, AND CONTINGENCY PLANS

If the potential exists for causing accidental pollution of air, land, or water, or for causing endangerment of public health and safety through accidental release of toxic, hazardous, or other polluting materials, the permittee or co-permittee must develop a Preparedness, Prevention, and Contingency (PPC) Plan. The PPC Plan shall be developed in accordance with Department regulations. The PPC Plan shall identify areas which may include, but are not limited to, waste management areas, raw material storage areas, temporary and permanent spoils storage areas, maintenance areas, and any other areas that my have the potential to cause non-compliance with the terms and conditions of this permit due to the storage, handling, or disposal of any toxic or hazardous substances such as oil, gasoline, pesticides, herbicides, solvents, etc. BMPs shall be developed and implemented for each identified area. The PPC Plan shall be maintained on site at all times and shall be made available for review at the Department's or County Conservation District's request.

PRE-CONSTRUCTION CONFERENCES

The permittee or co-permittee shall contact the reviewing entity at least seven days before construction is to begin to determine if a pre-construction conference is required. The permittee, co-permittee and others undertaking the earth disturbance activity must attend a pre-construction conference if requested by the reviewing entity.

SPOIL OR BORROW AREA

An Erosion and Sediment Control Plan, shall be prepared, developed, and implemented for all spoil and borrow areas, regardless of their location. The Plan must be developed when locations are known.

WETLAND PROTECTION

There are no wetlands on-site.

STABILIZATION OF STEEP SLOPES

All slopes greater than 3:1 are to be stabilized as:

Perennial Rye @ 25 lbs. per acre
Note: Lbs. per acre given is the pure live seed count.

Mulch shall be installed with mulch control netting or erosion control blankets on all slopes greater than 3:1.

MAINTENANCE PROGRAM

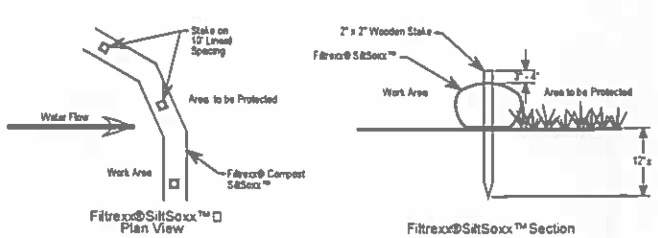
1. Until the site is stabilized, all erosion and sediment control BMP's must be maintained properly. Maintenance must include inspections of all erosion and sediment control BMP's after each runoff event and on a weekly basis. All preventive and remedial maintenance work, including cleaning out, repair, replacement, regrading, reseeding, remulching and renetting must be performed immediately. If erosion and sediment control BMP's fail to perform as expected, replacement BMP's, or modifications to those installed will be required.
2. The permittee and co-permittee must ensure that visual site inspections are conducted weekly., and after each measurable precipitation event by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that the erosion and sediment control BMP's are operational and effective in preventing pollution to the Waters of the Commonwealth. A written report of each of the inspections shall be kept and include:
   - a summary of site conditions, E&S BMP's, and compliance, and;
   - the date, time, and the name of the person conduction the inspection.
3. Any sediment removed from BMP's during construction will be returned to upland areas on site and incorporated into the site grading.

STABILIZATION SPECIFICATIONS

1. Permanent stabilization is defined as "a minimum 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements."
2. Erosion control blankets should be used on all slopes 3:1 or steeper and where potential exists for sediment pollution to receiving surface waters. Erosion control blankets should be used for all seeded areas within 50 feet of a surface water – 100 feet of a special protection watershed – regardless of slope.
3. Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specific rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary vegetative stabilization specifications. Disturbed areas where earth disturbance activity has ceased for 4 or more days shall be temporarily stabilized. Disturbed areas which are at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent vegetative stabilization specifications.
4. Straw and hay mulch should be anchored immediately after application to prevent being windblown. A tractor-drawn implement may be used to "crimp" the straw or hay into the soil. This method is limited to slopes no steeper than 3:1. the machinery should be operated on the contour. (Note: Crimping of hay or straw by running over it with tracked machinery is not recommended). A wood cellulose fiber may be spread over the straw mulch at a rate of 1,500 lb./acre.
5. Tracking slopes is required by running tracked machinery up and down the slope, leaving tread marks parallel to the contour. (Note: If a bulldozer is used, the blade shall be up.) Care should be exercised on soils having a high clay content to avoid over compaction.
6. Topsoil must be placed a minimum of 6" on all disturbed areas to be re-vegetated.
7. If groundwater is encountered during construction, the contractor shall notify the conservation district and the site engineer.

ENVIRONMENTAL DUE DILIGENCE AND CLEAN FILL MATERIAL

1. Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.)
2. Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance. If the fill may have been affected by a spill or release of a regulated substance, it must be tested to determine if it qualifies as clean fill. Testing should be performed in accordance with Appendix A of the department's policy "Management of Fill."
3. Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the department's municipal or residual waste regulations based on 25 Pa. Code Chapters 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable.
4. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's solid waste management regulations at 25 PA. code 260.1 ET Seq. 271.1., AND 287.1 et Seq. NO building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site. It is anticipated that the project site will contain building waste such as excess building materials, concrete, cardboard, and other materials.



NOTES
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTHE ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

FILTREXX ® SILTSOXX DETAIL
NOT TO SCALE

SITE PREPARATION

ALL UNCOVERED AREAS OF GROUND SHALL BE STABILIZED IMMEDIATELY WITH SEED AND ADEQUATE MULCH (SALT HAY DURING THE GROWING SEASON, WOOD CHIPS DURING THE WINTER) IF THEY REMAIN OPEN MORE THAN TWENTY DAYS. THE FOLLOWING SEEDING SPECIFICATIONS SHALL BE USED:

APPLY 1-TON AGRICULTURAL GRADE LIMESTONE PER ACRE PLUS FERTILIZER AT A RATE OF 40 – 40 – 40 PER ACRE AND INCORPORATE INTO GROUND. SECURE A SOIL TEST BEFORE MAKING A PERMANENT SEEDING. AFTER SEEDING, MULCH WITH HAY OR STRAW AT A RATE OF 3.0 TONS PER ACRE.

PERMANENT SEEDING AND FERTILIZER SPECIFICATIONS

DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

THE FOLLOWING INFORMATION FOR THE FERTILIZER AND SEED MIXTURE WAS TAKEN FROM SITE ONE LANDSCAPE SUPPLY, LESCO PRODUCTS, 130 SOUTH TREE DRIVE, LANCASTER, PA 17603.

MATERIAL

LIMESTONE – RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90% CARBONATES.

LESCO 14-20-4 PROFESSIONAL TURF FERTILIZER – 50 POUNDS OF FERTILIZER COVERS APPROXIMATELY 10,000 SQUARE FEET AT THE APPLICATION RATE OF ONE POUND OF PHOSPHATE (5.00 POUNDS OF FERTILIZER) PER 1,000 SQUARE FEET. CONTRACTOR MAY SUBSTITUTE PRODUCT WITH AN APPROVED EQUAL.

MULCH – CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OF ROOTS OR PROHIBITED OF NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE OF 3.0 TONS PER ACRE. THE MULCH SHOULD BE STABILIZED & MECHANICALLY HELD DOWN BY NETTING, TACIFIER, OR LANCASTER COUNTY CONSERVATION DISTRICT APPROVED EQUAL UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS NOT CHOPPED OR FINELY BROKEN.

SEED MIXTURE – SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS: PERMANENT SEED PROPORTION MIXTURE. PERMANENT SEED IS TO BE PLANTED FROM LATE MARCH TO EARLY OCTOBER OR AS PRESCRIBED BY PERMANENT SEED MANUFACTURE.

ALL DISTURBED AREAS ARE TO BE HYDRO-SEEDED WITH 100% WITH THE LESCO ALL PRO TEAM MATES MIX OR APPROVED EQUAL. THE MIX FOR NEW ESTABLISHMENT CONSISTS OF 6-8 POUNDS PER 1,000 SQUARE FEET. THE PURE LIVE SEED (PLS) IS 88.26% BASED ON AN APPLICATION RATE OF 7 POUNDS PER 1,000 SQUARE FEET.

PREPARATION OF SEED BED

GRADE AS NECESSARY TO BRING THE SUBGRADE TO A TRUE SMOOTH SLOPE PARALLEL TO AND SIX (6) INCHES BELOW FINISH GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENT TO OBTAIN SIX (6) INCHES AFTER SETTLEMENT AND LIGHT ROLLING. THE COMPLETED WORK WILL CONFORM TO LINES, GRADES, AND ELEVATIONS SHOWN OR SPECIFIED.

FERTILIZER AND LIME SHALL BE THOROUGHLY INCORPORATED INTO SOIL BY ROTATILLING OR OTHER METHODS TO MINIMUM DEPTH OF FOUR (4) INCHES. THE ENTIRE SURFACE SHALL BE SEEDED IN TWO (2) SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING AND LIGHTLY RAKED INTO THE SOIL. MULCH ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

TEMPORARY OUT OF SEASON STABILIZATION MEASURES

SEEDING SHALL OPTIMALLY BE UNDERTAKEN IN THE SPRING FROM APRIL 1 THROUGH JUNE 15, AND IN LATE SUMMER FROM AUGUST 1 TO OCTOBER 15. DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15 WHEN SEEDING IS FOUND TO BE IMPRACTICABLE, APPROPRIATE CLEAN OAT MULCH, WHEAT STRAW MULCH AND/OR WOOD CHIPS SHALL BE APPLIED.

TEMPORARY SEEDING SPECIFICATIONS

DISTURBED AREAS WHICH ARE NOT AT FINAL GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATIONS.

LESCO 14-20-4 PROFESSIONAL TURF FERTILIZER – 50 POUNDS OF FERTILIZER COVERS APPROXIMATELY 10,000 SQUARE FEET AT THE APPLICATION RATE OF ONE POUND OF PHOSPHATE (5.00 POUNDS OF FERTILIZER) PER 1,000 SQUARE FEET. CONTRACTOR MAY SUBSTITUTE PRODUCT WITH AN APPROVED EQUAL.

ALL DISTURBED AREAS ARE TO BE HYDRO-SEEDED WITH 100% WITH THE LESCO ANNUAL RYEGRASS OR APPROVED EQUAL. THE MIX FOR NEW ESTABLISHMENT CONSISTS OF 4-6 POUNDS PER 1,000 SQUARE FEET. THE PURE LIVE SEED (PLS) IS 88.19% BASED ON AN APPLICATION RATE OF 5 POUNDS PER 1,000 SQUARE FEET.

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

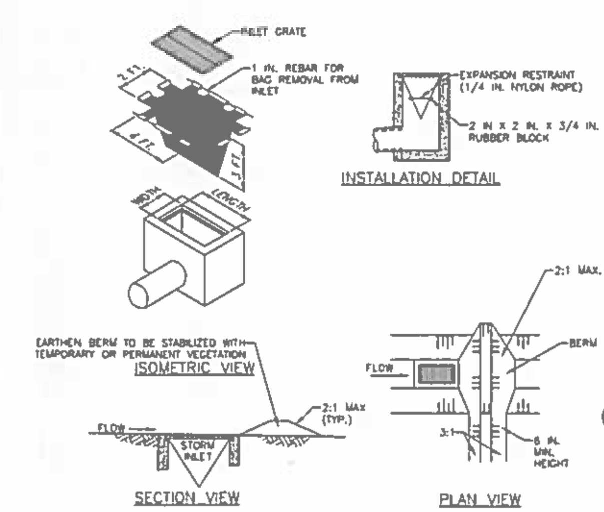
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



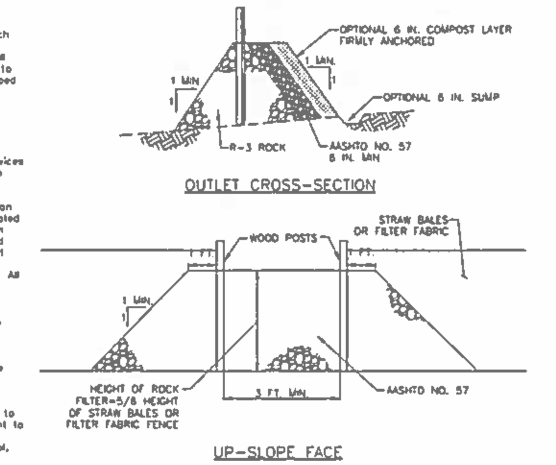
INLET PROTECTION DETAIL
NOT TO SCALE

MAINTENANCE

1. Maintenance of the storm water/erosion and sediment control/BMP devices will consist of weekly inspections of each device to determine how well the site stabilization measures used are working. All facilities will be inspected after rainfall events of 0.25 inches or more to determine their durability to driving rain and erosion. Any areas that may become stripped of vegetation shall be re-established with appropriate stabilization material immediately. If erosion and sediment control devices and BMPs fail to perform as expected, replacement devices/BMPs and/or modifications of those installed will be required.
2. Sediment cleaned from the erosion and sediment control devices shall be graded on site and stabilized. Trash removed from the site shall be taken to an approved disposal area. All seeded or sodded areas that have become stripped of vegetation shall be re-established with appropriate stabilization materials in a timely fashion. This procedure shall be repeated after every measurable storm event until no signs of erosion are evident. At monthly intervals, thereafter, inspections and necessary cleaning will be done. The area around the outlet structure must remain clear of brush and other vegetative debris due to the existing flat slope and brushy conditions. All local regulations shall be complied with. Maintenance of all storm water/erosion control/BMP facilities shall be the responsibility of the General Contractor until the soil for the entire project has been properly stabilized, minimum uniform 70% perennial vegetative ground cover.
3. Maintenance of permanent storm water management, BMP, erosion and sediment control, and drainage facilities shall be the responsibility of the Owner after soil stabilization has occurred. The Municipality shall not be responsible for any permanent storm water management, BMP, erosion and sediment control, and drainage facility that is not dedicated to the Municipality. However, The Municipality will have the right to access the property at any time to inspect the permanent storm water management, BMP, erosion and sediment control, and drainage facilities.

GENERAL NOTES

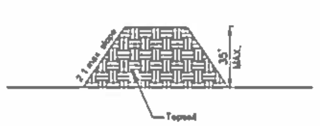
1. All underground utilities are shown according to the best available information. The locations are approximate and must be verified prior to construction, excavation, or blasting. D. C. GOHN ASSOCIATES, INC. assumes no responsibility for any damages incurred as a result of utilities omitted or inaccurately shown.
2. All construction operations shall be carried out in a manner such that soil erosion and air/water pollution is minimized. State and local laws concerning pollution abatement shall be followed.
3. Should unforeseen erosive conditions develop during construction, the contractor shall take action to remedy such conditions and to prevent damage to any adjacent properties as a result of increased runoff and/or sediment displacement. Special attention should be given to frozen slopes. Stockpiles of wood chips, crushed stone and other mulches shall be in readiness to deal immediately with the emergency erosion problems.
4. The contractor shall be thoroughly familiar with the provisions of appendix 64 "Erosion Control Rules and Regulations", Title 25, Part 1, Subpart C, "Protection of Natural Resources", and Article III "Water Resources", Chapter 102 Erosion Control. All are published by the Pennsylvania Department of Environmental Resources. A copy of these plans and report must be posted at the construction site in accordance with state law.
5. Any reference to stabilization refers to a minimum uniform 70% vegetative ground cover (perennial for permanent and annual for temporary) being achieved. Upon completion of any stage or phase of an earth disturbance activity, the site shall be immediately seeded, mulched, or otherwise protected from accelerated erosion and sedimentation.
6. The past land uses (at least 50 years, if known) consists of agriculture.



NOTES:
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

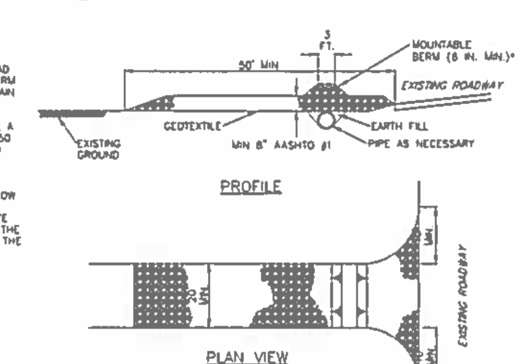
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

ROCK FILTER OUTLETS
NOT TO SCALE



NOTES:
1. STOCKPILES SHALL BE PLACED IN AREAS SHOWN ON THE PLAN.
2. STOCKPILES SHALL BE STABILIZED WITH A TEMPORARY COVER CROP OF ANNUAL RYE GRASS (1 LB./1,000 S.F.) OR WINTER RYE (3 TO 5 LBS./1,000 S.F.).
3. ANY EXCESS TOPSOIL SHALL BE RETAINED ON SITE AND SPREAD AS ADDITIONAL LAYER OR FOR CONSTRUCTING BERMS.
4. ANY SEDIMENT CONTROL BMP'S DOWN SLOPE OF THESE PILES THAT ARE UNDERMINED SHALL BE REPLACED.
5. ANY DISPLACED SEED OR MULCH SHALL BE REPLACED.

TOPSOIL STOCKPILE
NOT TO SCALE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE

L.C.P.C. #: 75-212-2

OWNER	
NAME:	MOUNT JOY SENIOR HOUSING LP C/O GATESBURG ROAD DEVELOPMENT
ADDRESS:	2121 OLD GATESBURG ROAD SUITE 200 STATE COLLEGE, PA 16803
TELEPHONE:	814-272-8945
DEED REFERENCE:	6574192
TAX ACCOUNT NO.:	450-34156-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

dc gohn Associates, Inc.
32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552
Ph- (717) 653-5308
www.dcgohn.com
Surveyors - Engineers - Landscape Architects

PROJECT NO.:	1378-20
DATE:	MARCH 22, 2021
DRAWN BY:	GRN
CHECKED BY:	BRC
SCALE:	1"=30'

30 0 15 30
SCALE IN FEET

EROSION AND SEDIMENT CONTROL DETAILS
FOR
GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

DRAWING #: CG-3049
SHEET #: 10 OF 12

PLOTTED June 02,2021 @ 09:59AM
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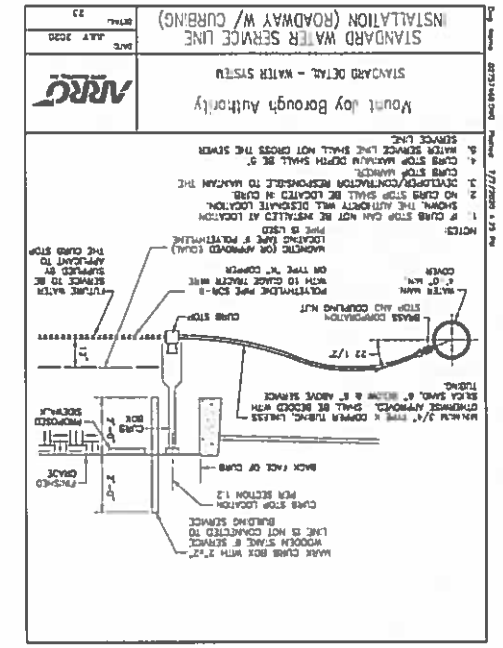

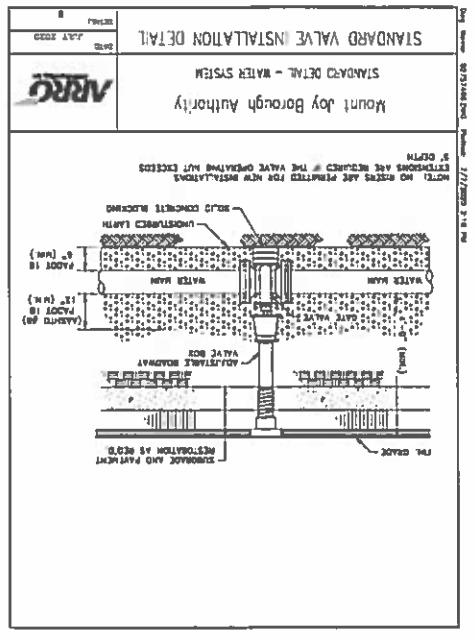

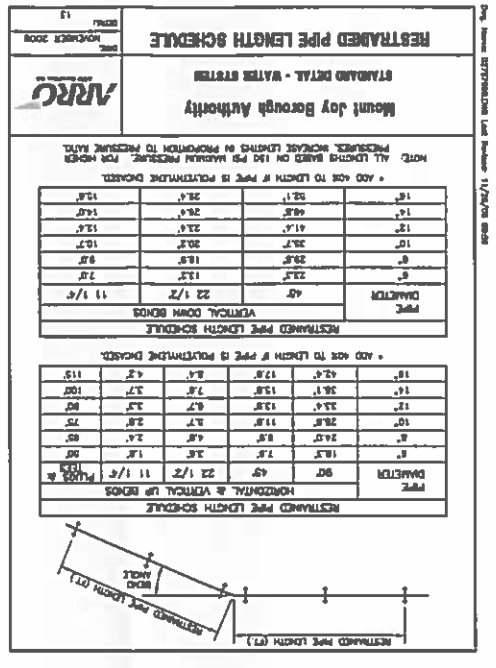

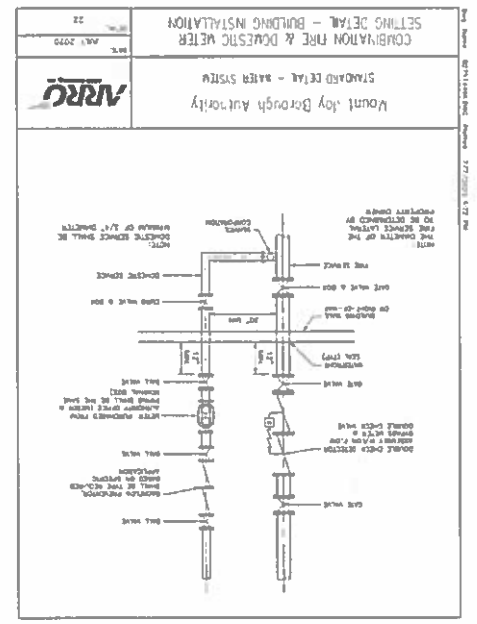

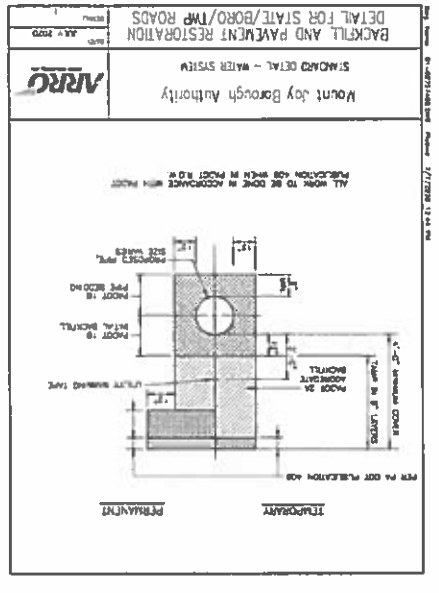

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PLOTTED: June 02,2021 @ 09:59AM

Mount Joy Borough Authority

STANDARD DETAIL – WATER SYSTEM

COMBINATION FIRE & DOMESTIC METER SETTING DETAIL – BUILDING INSTALLATION

DATE: JULY 2020

DETAIL: 22

ALL WORK TO BE DONE IN ACCORDANCE WITH PADOT PUBLICATION 408 WHEN IN PADOT R.O.W.

Mount Joy Borough Authority

STANDARD DETAIL – WATER SYSTEM

BACKFILL AND PAVEMENT RESTORATION DETAIL FOR STATE/BORO/TWP ROADS

DATE: JULY 2020

DETAIL: 1

Mount Joy Borough Authority

STANDARD DETAIL - WATER SYSTEM

TRENCH RESTORATION LAWN/AGRICULTURAL AREAS

DATE: FEBRUARY 2010

DETAIL: 3

NOTES:

1. IF CURB STOP CAN NOT BE INSTALLED AT LOCATION SHOWN, THE AUTHORITY WILL DESIGNATE LOCATION.
2. NO CURB STOP SHALL BE LOCATED IN CURB.
3. DEVELOPER/CONTRACTOR RESPONSIBLE TO MAINTAIN THE CURB STOP MARKER.
4. CURB STOP MAXIMUM DEPTH SHALL BE 5'
5. WATER SERVICE LINE SHALL NOT CROSS THE SEWER SERVICE LINE.

Mount Joy Borough Authority

STANDARD DETAIL – WATER SYSTEM

STANDARD WATER SERVICE LINE INSTALLATION (ROADWAY W/ CURBING)

DATE: JULY 2020

DETAIL: 23

NOTE: NO RISERS ARE PERMITTED FOR NEW INSTALLATIONS. EXTENSIONS ARE REQUIRED IF THE VALVE OPERATING NUT EXCEEDS 5' DEPTH

Mount Joy Borough Authority

STANDARD DETAIL – WATER SYSTEM

STANDARD VALVE INSTALLATION DETAIL

DATE: JULY 2020

DETAIL: 8

RESTRAINED PIPE LENGTH SCHEDULE					
PIPE DIAMETER	HORIZONTAL & VERTICAL UP BENDS				
	90°	45°	22 1/2°	11 1/4°	PLUGS & TEES
6"	18.3'	7.6'	3.6'	1.8'	50'
8"	24.0'	9.9'	4.8'	2.4'	65'
10"	28.8'	11.9'	5.7'	2.8'	75'
12"	33.4'	13.8'	6.7'	3.3'	80'
14"	38.1'	15.8'	7.6'	3.7'	100'
16"	42.4'	17.6'	8.4'	4.2'	115'

* ADD 40% TO LENGTH IF PIPE IS POLYETHYLENE ENCASED.

RESTRAINED PIPE LENGTH SCHEDULE			
PIPE DIAMETER	VERTICAL DOWN BENDS		
	45°	22 1/2°	11 1/4°
6"	23.3'	13.2'	7.0'
8"	29.6'	16.9'	9.0'
10"	35.7'	20.2'	10.7'
12"	41.4'	23.4'	12.4'
14"	46.8'	26.4'	14.0'
16"	52.1'	29.4'	15.6'

* ADD 40% TO LENGTH IF PIPE IS POLYETHYLENE ENCASED.

NOTE: ALL LENGTHS BASED ON 150 PSI MAXIMUM PRESSURE. FOR HIGHER PRESSURES, INCREASE LENGTHS IN PROPORTION TO PRESSURE RATIO.

Mount Joy Borough Authority

STANDARD DETAIL - WATER SYSTEM

RESTRAINED PIPE LENGTH SCHEDULE

DATE: NOVEMBER 2008

DETAIL: 13

L.C.P.C. #: 75-212-2

WATER DETAILS

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.: 1378-20
DATE: MARCH 22, 2021
DRAWN BY: GRN
CHECKED BY: BRC
SCALE: 1"=30'

30 0 15 30
SCALE IN FEET

DRAWING #: CG-3049
SHEET #: 11 OF 12

dc gohn Associates, Inc.

32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552

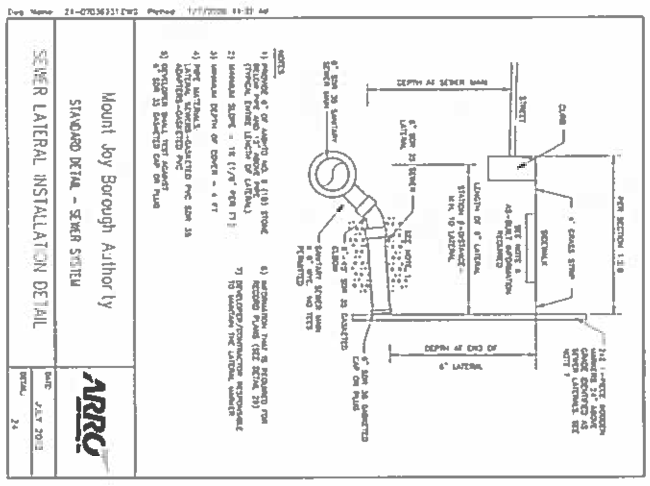
Ph- (717) 653-5308
www.dcgohn.com

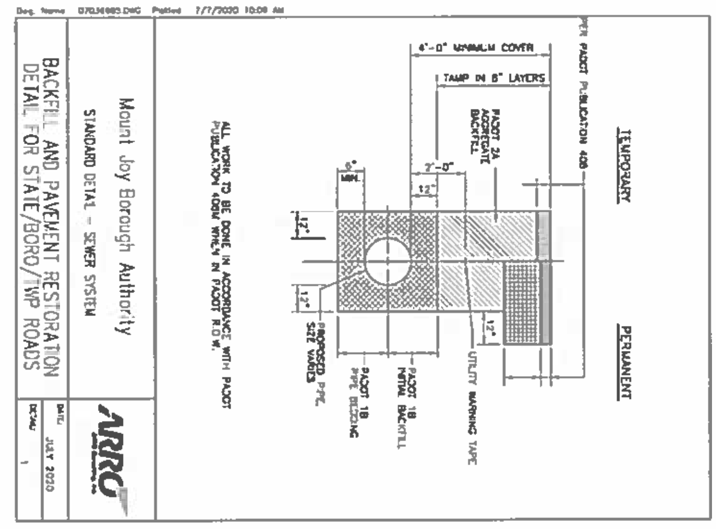
Surveyors - Engineers - Landscape Architects

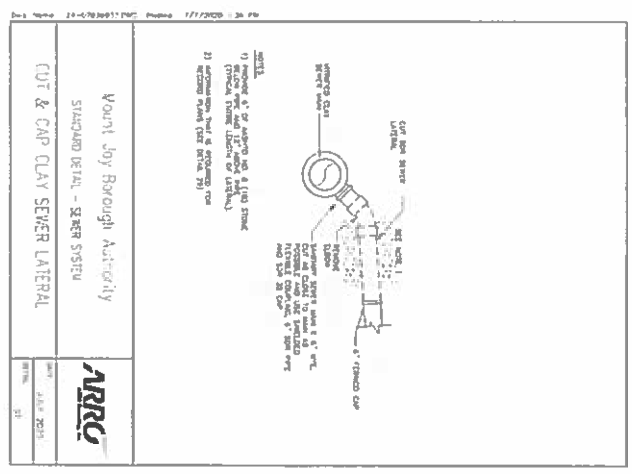
OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2121 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-8945
DEED REFERENCE: 6574192
TAX ACCOUNT NO.: 450-34256-0-0000

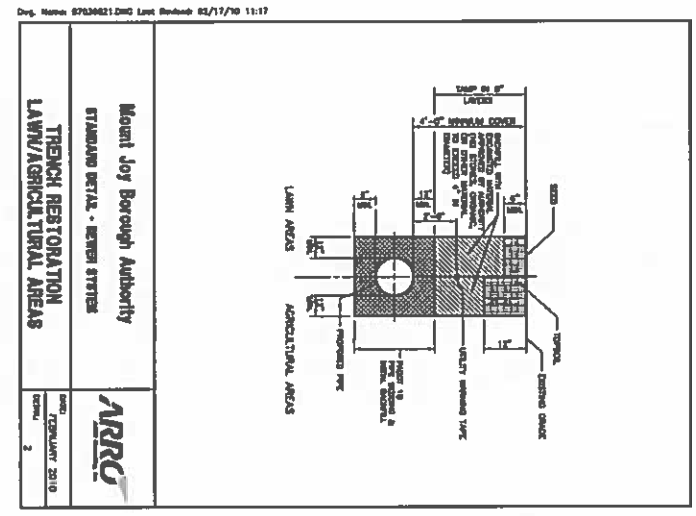
REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

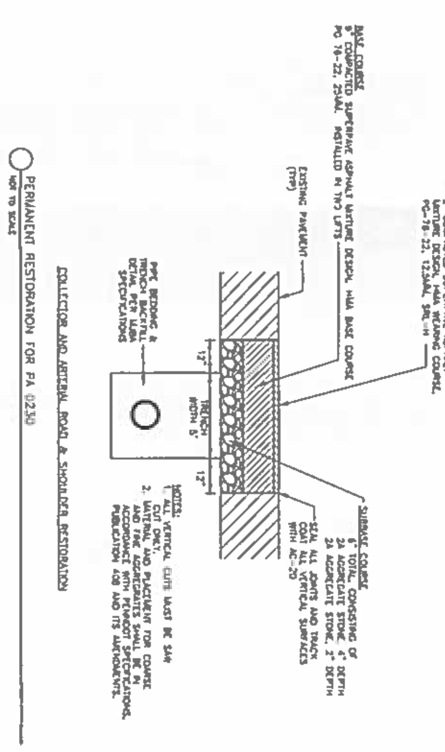
FILENAME: C:\Users\bcooley\appdata\local\temp\AcPublish_3760\Final Plan.dwg XREFS: PLOTTED: June 02,2021 @ 09:59AM

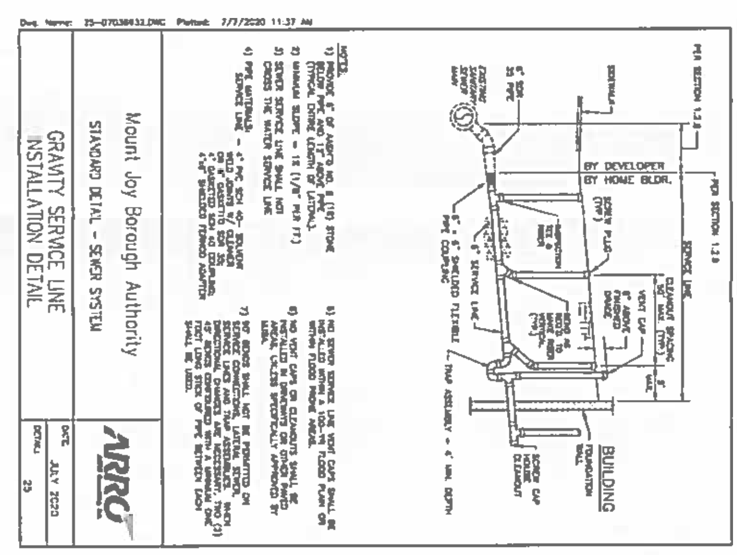


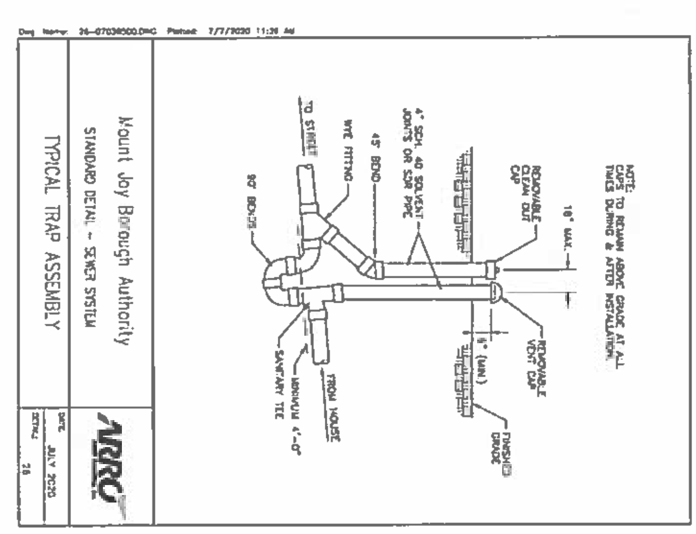












L.C.P.C. #: 75-212-2

SHEET #: 12 OF 12	DRAWING #: CG-3049

SEWER DETAILS

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

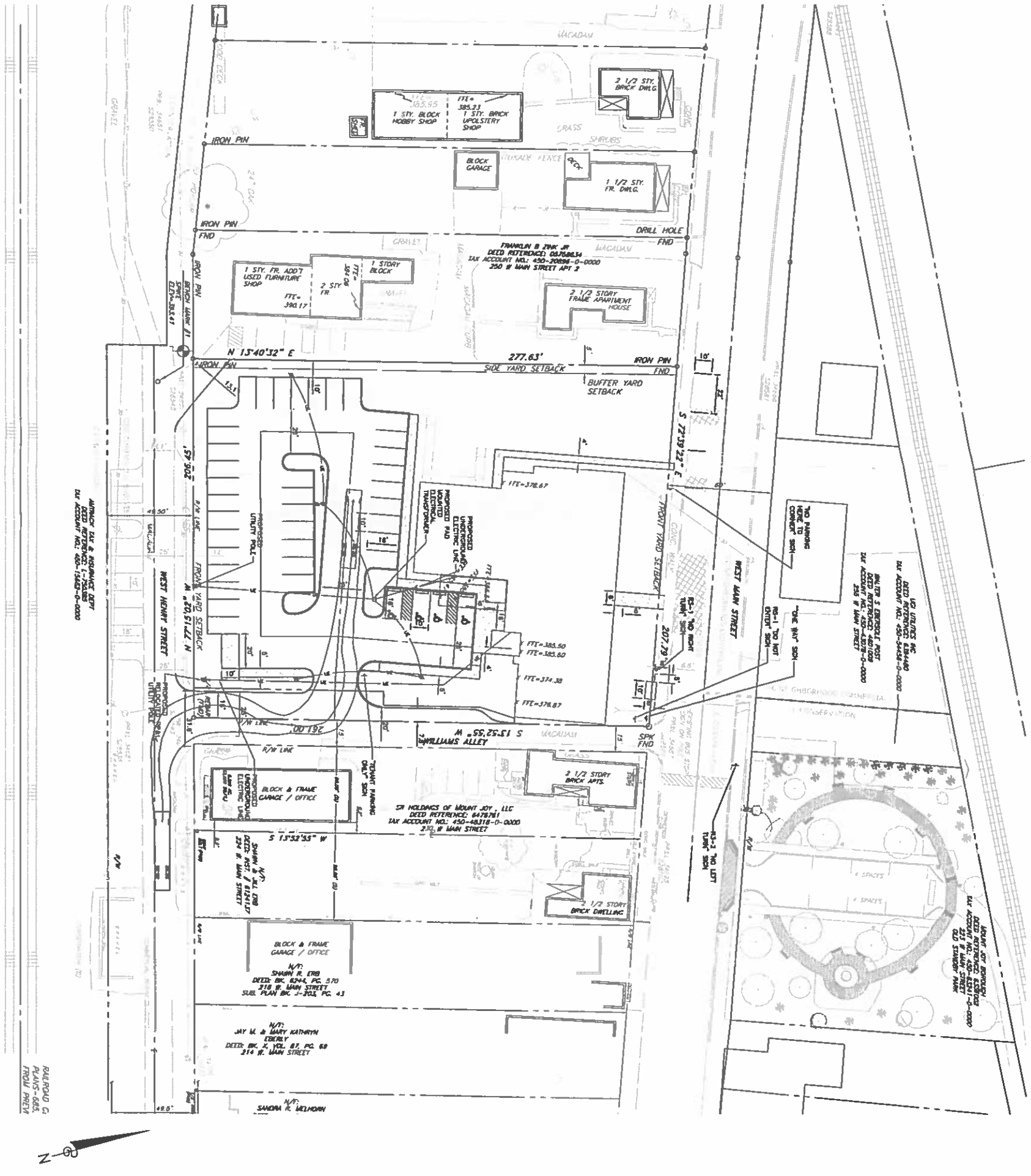
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.: 1378-20
DATE: MARCH 22, 2021
DRAWN BY: GRN
CHECKED BY: BRC
SCALE: 1"=30'
30 0 15 30
SCALE IN FEET

dc gohn Associates, Inc.
32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552
Ph- (717) 653-5308
www.dcgohn.com
Surveyors - Engineers - Landscape Architects

OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2121 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-8945
DEED REFERENCE: 6574192
TAX ACCOUNT NO.: 450-34256-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21



TRUCK TURNING EXHIBIT

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.:	1378-20
DATE:	JUNE 7, 2021
DRAWN BY:	GRN
CHECKED BY:	BRC
SCALE:	1"=30'

30 0 15 30
SCALE IN FEET

SHEET #: 3 OF 12

DRAWING #: CG-3049

dc gohn Associates, Inc.
Surveyors - Engineers - Landscape Architects

32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552

Ph- (717) 653-5308
www.dcgohn.com

OWNER

NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2121 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-0945

DEED REFERENCE: 6574192
TAX ACCOUNT NO.: 450-34256-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

06/16/2021

Brian R. Cooley, ASLA

D.C. Gohn Associates, Inc.

Staci Gibbs, Codes and Zoning Officer

Mount Joy Borough

Brian and Staci,

I have reviewed your latest send, "Truck Turning Radius" concerning the Mount Joy Senior Housing project (Old Shoe Factory), dated 06/07/21.

Fire Department Mount Joy has noted the following and taken the following position statement which follows the individual bullets;

- It appears you have made all feasable efforts to improve fire vehicle access on Williams Alley. While we still feel alley access is not desirable, it appears there are no other reasonable alternatives.

- We believe the situation has improved, with relocating a pole and widening of Williams Alley as shown in this plan.

- The FDC location is acceptible (our concerns were presented in correspondence 01/14/21).

Fire Department Mount Joy feels you have met our concerns to the best outcome able to be achieved. <u>We approve of what was presented.</u> This plan was reviewed by both Deputy Chief Johns and Planning Chief Clark, as appointed by Fire Chief Matt S. Gohn.

Should you or the Borough have any further concerns with FD input, please reach out.

Respectfully,

Samuel W. Clark, Planning Chief of Fire Department Mount Joy

717-598-5014

June 17, 2021

Corporate Headquarters
108 West Airport Road
Lititz, PA 17543
T 717.569.7021
www.arroconsulting.com

Stacie Gibbs, BCO
Planning, Zoning, & Code Administrator
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: Gatesburg Road Development
Gerberich Payne Shoe Company Land Development
ARRO #10863.39

Dear Stacie:

ARRO Consulting, Inc. ("ARRO") reviewed the following information in accordance with the Mount Joy Borough Subdivision and Land Development, Zoning, and Stormwater Management Ordinances and ARRO's May 25, 2021 Review Letter:

1. Comment Response Letter for Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc. dated June 1, 2021.
2. Preliminary/Final Land Development Plan for Gerberich Payne Shoe Company prepared by D.C. Gohn Associates, Inc. with Drawing # CG-3049 dated March 22, 2021; last revised June 1, 2021.
3. Post-Construction Stormwater Management Report for Preliminary/Final Land Development Plan: Gerberich Payne Shoe Company – 240 West Main Street prepared by D.C. Gohn Associates, Inc. with DCG Project No. 1378-20 dated March 22, 2021; last revised June 1, 2021.

We offer the following comments:

Subdivision and Land Development

1. The plans shall be signed and sealed by a registered engineer, surveyor, or landscape architect [§240-61.A.5].

   The applicant indicated that the plans will be signed and sealed prior to plan recording.

Stormwater Management

2. An Operation and Maintenance Agreement shall be prepared, signed, and provided to the Borough [§226-62].

   The applicant indicated that an O&M Agreement is being drafted by the Solicitor.

Zoning

3. The previous zoning comment has been addressed.

Traffic

4. The previous traffic comments have been addressed.

Waivers – Subdivision and Land Development

1. The applicant is requesting to waive the requirement to improve streets in which a subdivision or land development abuts an existing Borough and/or state street (§240-43.H.1). Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

2. The applicant is requesting to waive the requirement for street intersections with a local street to be a minimum radius of 20' [§240-43.I.4]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

3. The applicant is requesting to waive the requirement that curbing shall be provided along the edge of any landscaped portion of a parking facility [§240-46.C.1]. Based on the justification provided in the applicant's modification request letter, **ARRO recommends granting this waiver request.**

4. The applicant is requesting to waive the requirement to dedicate recreation land to the Borough [§240-57.D]. Because there is limited area on the site for this purpose and, as an alternative, the applicant is proposing to pay a fee in lieu of dedication of recreation land, **ARRO recommends granting this waiver request.**

5. The applicant is requesting to waive the requirement to provide a fee in lieu of dedication of recreation [§240-57.G]. The applicant proposes paying a fee of $2,000.00 per unit for a total fee of $72,000.00. However, because land is not being provided on the subject property, the fair market value cannot be determined. Therefore, Borough Council must decide if $72,000.00 is an acceptable fee in lieu of land dedication.

6. The applicant is requesting to waive the requirement that applications for all residential developments with 20 or more dwelling units and buildings containing 1,000 square feet of usable space provide a traffic study and report [§240-62.B]. Because a traffic assessment was prepared which provides adequate information to evaluate the traffic impacts on the adjacent roadway system, **ARRO recommends granting this waiver request.**

7. The applicant is requesting to waive the requirement that the applicant shall make an estimated contribution of the sum necessary to defray the costs of improvements recommended by the Traffic Impact Study [§240-62.B.5]. **After discussion with Borough**

Corporate Headquarters
108 West Airport Road
Lititz, PA 17543
T 717.569.7021
F 717.560.2778
www.arroconsulting.com

July 7, 2021

Stacie Gibbs, BCO
Planning, Zoning, & Code Administrator
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: Gatesburg Road Development
Gerberich Payne Shoe Company Land Development
ARRO #10863.39

Dear Stacie:

ARRO Consulting, Inc. (ARRO) reviewed the re-design of the Rain Garden as a condition of waiver approval by the Administration and Finance Committee (Committee), submitted via emails on June 30 and July 2, 2021, by Brian Cooley, ASLA of D.C. Gohn Associates, Inc. The Committee required the 100-year post development discharge flow rate to not exceed the 2-year pre-development discharge flow rate. This condition of waiver approval is more restrictive than the ordinance requirement which is to reduce the 100-year post-development discharge flow rate to the 100-year pre-development discharge flow rate. This change requires the Rain Garden to be larger to provide additional volume to hold the 100-year storm inflow before releasing it at a much slower rate. This design change is not significant on this project because of the small drainage area. However, it will have a significant impact on a project with a very large drainage area because of the increased basin size to accommodate the additional storage volume of the 100-year inflow.

Two designs were submitted to address the re-design. One design used a 3' wide spillway and reduced the 100-year post development discharge flow rate (3.09 cfs) below the 2-year pre-development discharge flow rate (3.10 cfs). The other design used a 10' wide spillway with the 100-year post development discharge flow rate (3.13 cfs) slightly greater than the 2-year pre-development discharge flow rate (3.10 cfs).

It is ARRO's recommendation to accept the re-design of the Rain Garden using the 10' wide spillway even though the 100-year post development storm discharge flow (3.13 cfs) slightly exceeds the 2-year pre-development storm discharge flow. A wider spillway allows the flow to be spread over a larger area and simulate sheet flow rather than a point discharge.

Please call me at 717-560-6065 if you have questions.

Sincerely,

Darrell L. Becker, P.E.
Vice President

DLB:acb

c: Mark G. Pugliese, Manager – Borough of Mount Joy
Brian R. Cooley, ASLA – D.C. Gohn Associates, Inc.
Josele Cleary, Esq. – Morgan, Hallgren, Crosswell, & Kane, PC

\\LANCFILE3\Lancaster-Technical\Active Projects\Mount Joy Borough\Gerberich Payne Shoe Co 10863.39\Correspondence\10863.39.08_Gerberich Payne Shoe Co.docx

From: Brian Cooley
Sent: Wednesday, June 30, 2021 9:00 AM
To: Becker, Darrell <Darrell.Becker@arroconsulting.com>; Stacie Gibbs <Staci@mountjoypa.org>
Cc: Todd Smeigh <tsmeigh@dcgohn.com>
Subject: RE: Gerberich Payne Dumpster Enclosure, Admin Meeting Update

Darrell – I have revised the rain garden discharge to satisfy the condition of the waiver request for the spillway. Attached is the revised grading plan and below is a summary of the plan revisions:

1. Increased basin storage area
2. Decreased spillway width from 10 feet to 3 feet
3. Increased spillway elevation from 376.50 to 376.95
4. Increased berm elevation from 377.00 to 377.50
5. The undetained area has increased as a result of the larger rain garden area but there is a decrease in the area based on additional grading so the undetained area remains the same.

The revised rain garden discharge, in combination with the undetained areas, meets the condition of the waiver request that the total post development peak flow rate for the 100 year storm (3.99) is less than the total pre development peak flow rate for the 2 year storm (3.10 cfs). **The 100 year combined total post development flow is 3.09 cfs.**

Can you review and let me know if the approach is acceptable? I want to avoid a facility depth over two feet which then involves additional ordinance requirements related to construction and infrastructure.

Thanks,

Brian R. Cooley, ASLA
D.C. Gohn Associates, Inc.
32 Mount Joy Street
P.O. Box 128
Mount Joy, PA 17552-0128
Phone: 717.653.5308 Ext. 222

From: Brian Cooley <bcooley@dcgohn.com>
Sent: Friday, July 2, 2021 8:17 AM
To: Manager <Manager@mountjoypa.org>; Todd Smeigh <tsmeigh@dcgohn.com>; Stacie Gibbs <Staci@mountjoypa.org>; 'Becker, Darrell' <Darrell.Becker@TheARROGroup.Com>
Subject: RE: Gerberich Payne Dumpster Enclosure, Admin Meeting Update

All – I recalculated the rain garden spillway for a width of 10 feet rather than the 3 feet. The first chart below is the 3 foot wide spillway routing and the second chart is the 10 foot wide spillway. There is a slight increase in the discharge from the 10 wide spillway. **The total 100 year flow for the 3 foot wide spillway is 3.09 cfs and the total 100 year flow for the 10 foot wide spillway is 3.13 cfs.** This difference in flow is nominal. It is our opinion that the wider spillway will sheet flow stormwater from the rain garden, similar to the pre development condition.

These routings take into account the larger footprint and the raised spillway and berm elevation as previously noted.

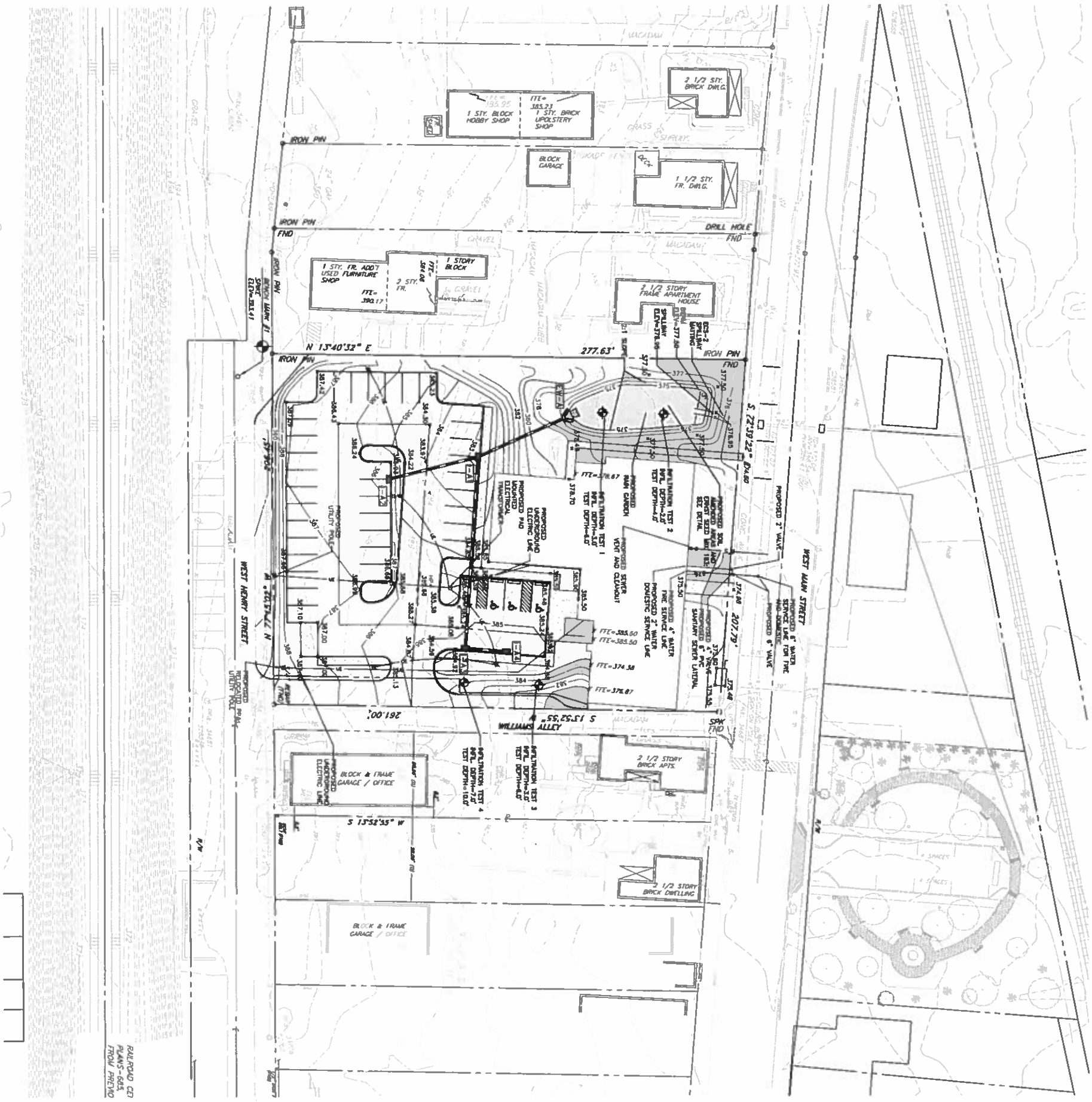
Pre Area A / Post Area A Undetained / Rain Garden

	Pre-Development	*Post-Development*			
Storm Event	Pre Area A Peak Flow, cfs	Rain Garden Discharge, cfs	Post Area A Undetained Peak Flow, cfs	Total Post Development Flow, cfs	Total Allowable Post Peak Flow, cfs
2 year	3.10	0.00	1.57	1.57	3.10
10 year	4.06	0.04	2.02	2.06	4.06
25 Year	4.50	0.12	2.24	2.36	4.50
50 Year	4.95	0.25	2.47	2.72	4.95
100 Year	5.48	0.35	2.74	3.09	5.48

Pre Area A / Post Area A Undetained / Rain Garden

	Pre-Development	*Post-Development*			
Storm Event	Pre Area A Peak Flow, cfs	Rain Garden Discharge, cfs	Post Area A Undetained Peak Flow, cfs	Total Post Developme nt Flow, cfs	Total Allowable Post Peak Flow, cfs
2 year	3.10	0.00	1.57	1.57	3.10
10 year	4.06	0.07	2.02	2.09	4.06
25 Year	4.50	0.17	2.24	2.41	4.50
50 Year	4.95	0.27	2.47	2.74	4.95
100 Year	5.48	0.39	2.74	3.13	5.48

Brian R. Cooley, ASLA
D.C. Gohn Associates, Inc.



L.C.P.C. #: 75-212-2

FINAL GRADING / PCSM PLAN

FOR

GATESBURG ROAD DEVELOPMENT
GERBERICH PAYNE SHOE COMPANY

MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.:	1378-20
DATE:	MARCH 22, 2021
DRAWN BY:	GRN
CHECKED BY:	BRC
SCALE:	1"=30'

30 0 15 30
SCALE IN FEET

SHEET #: 5 OF 12

DRAWING #: CG-3049

dc gohn Associates, Inc.
Surveyors - Engineers - Landscape Architects

32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552

Ph- (717) 653-5308
www.dcgohn.com

OWNER
NAME: MOUNT JOY SENIOR HOUSING LP
C/O GATESBURG ROAD DEVELOPMENT
ADDRESS: 2123 OLD GATESBURG ROAD
SUITE 200
STATE COLLEGE, PA 16803
TELEPHONE: 814-272-8945

DEED REFERENCE: 6174192
TAX ACCOUNT NO.: 450-34256-0-0000

REVISIONS	DATE
REVISIONS PER BOROUGH ENGINEER	6/1/21
REVISIONS PER BOROUGH ENGINEER	5/17/21
REVISIONS PER MJBA	4/30/21
REVISIONS PER LCCD	4/28/21

10-b

LAW OFFICES
MORGAN, HALLGREN, CROSSWELL & KANE, P.C.
P.O. BOX 4686
LANCASTER, PENNSYLVANIA 17604-4686
WWW.MHCK.COM

GEORGE J. MORGAN
WILLIAM C. CROSSWELL
ANTHONY P. SCHIMANECK
JOSELE CLEARY
ROBERT E. SISKO
JASON M. HESS

RETIRED
CARL R. HALLGREN
MICHAEL P. KANE

700 NORTH DUKE STREET
TELEPHONE 299-5251
AREA CODE 717

FAX (717) 299-6170
E-MAIL: attorneys@mhck.com

May 6, 2021

Stacie M. Gibbs, Planning, Zoning and Code Administrator
Mount Joy Borough
21 East Main Street
Mount Joy, PA 17552

Re: Proposed Ordinance to Amend Zoning Ordinance
Our File No. 16724-3

Dear Stacie:

In accordance Council's authorization at its meeting on May 3, 2021, I forwarded the proposed ordinance to amend the Zoning Ordinance to regulate personal expression signs to the Lancaster County Planning Commision for review and recommendation as required by the Pennsylvania Municipalities Planning Code ("MPC"). The first meeting of Council after the expiration of the 45 day review period is the meeting on July 12, 2021. I have advertised the public hearing on and consideration for enactment of the proposed ordinance for that meeting. Attached please find a copy of the summary legal advertisement together with a copy of our letter to LNP Media Group, Inc., requesting that the advertisement be published in accordance with the requirements of the MPC.

Enclosed please find the original and two (2) copies of the proposed ordinance. If the ordinance is enacted by Borough Council, please ensure that the ordinance number is inserted on page 1 of the original and both copies. Please also ensure that the ordinance is properly signed by the President or Vice President of Borough Council and the Mayor. You should ensure that the Borough Secretary attests to these signatures and affixes the Borough Seal on the last page of the ordinance. Please have her complete the certification pages for both copies and return them to me. Because only a summary of the ordinance was advertised, the MPC requires that a certified copy be filed at the Lancaster County Courthouse, and we will file one of the certified copies following receipt thereof from the Borough. We will then retain this copy for our files. In accordance with the requirements of Section 609(g) of the MPC, a copy of all amendments to zoning ordinances must be forwarded to the Lancaster County Planning Commission, and we will send one certified copy to them.

If you have any questions, please contact me.

Very truly yours,

Josele Cleary

JC:sle
MUNI\16724-3(2)\210505\71
Enclosures

LAW OFFICES
MORGAN, HALLGREN, CROSSWELL & KANE, P.C.
P.O. BOX 4686
LANCASTER, PENNSYLVANIA 17604-4686
WWW.MHCK.COM

GEORGE J. MORGAN
WILLIAM C. CROSSWELL
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JOSELE CLEARY
ROBERT E. SISKO
JASON M. HESS

RETIRED
CARL R. HALLGREN
MICHAEL P. KANE

700 NORTH DUKE STREET
TELEPHONE 299-5251
AREA CODE 717

FAX (717) 299-6170
E-MAIL: attorneys@mhck.com

May 6, 2021

VIA E-MAIL

LNP Media Group, Inc.
8 West King Street
P. O. Box 1328
Lancaster, PA 17608-1328

Re: Zoning Ordinance Amendment/Mount Joy Borough
Our File No. 16724-3

Dear Sir or Madam:

Please publish the following legal notice in the Wednesday, June 23, 2021, and the Wednesday, June 30, 2021, editions of ***LNP***. Thereafter, please send the proof of publication for the advertisement and your invoice directly to the following person:

Jill M. Frey, Interim Borough Manager
Mount Joy Borough
21 East Main Street
Mount Joy, PA 17552
717-653-2300

I am also attaching a pdf version of the full text of the proposed Ordinance to which the enclosed legal notice relates as required by the Pennsylvania Municipalities Planning Code. The full text of the proposed Ordinance should be available for public inspection by anyone who cares to do so. If you have any questions, please contact me.

Very truly yours,

Josele Cleary

JC:sle
MUNI\16724-3(2)\210505\71

Attachments

cc: Mount Joy Borough (w/enclosures)

Notice is hereby given that Mount Joy Borough Council at its meeting on Monday, July 12, 2021, at 7:00 p.m., at the Mount Joy Borough Municipal Building, 21 East Main Street, Mount Joy, Pennsylvania, shall conduct a public hearing on and, at the conclusion of the public hearing or a subsequent meeting held within 60 days of the date of second publication of this advertisement, if appropriate, shall enact an ordinance, the caption of which is as follows:

AN ORDINANCE TO AMEND THE MOUNT JOY BOROUGH CODE OF ORDINANCES, CHAPTER 270, ZONING, TO REVISE SIGN REGULATIONS AND CLARIFY REGULATIONS CONCERNING SPECIAL EXCEPTIONS.

The proposed ordinance may be summarized as follows. Section 1 amends Chapter 270, Zoning, of the Code of Ordinances ("Chapter 270") to revise general regulations governing special exception uses. Sections 2 – 5 revise provisions of Chapter 270 governing signs, including signs exempt from permit requirements and personal expression signs. Sections 6 – 8 reaffirm all other parts and provisions of the Code of Ordinances, provide for severability of any invalid provisions, and set forth the effective date. A copy may be examined without charge at the offices of this newspaper and at the Mount Joy Borough Municipal Building, 21 East Main Street, Mount Joy, Pennsylvania, Mondays through Fridays from 7:00 a.m. until 4:00 p.m. A copy of the proposed ordinance may be obtained for the cost of reproduction at the Mount Joy Borough Municipal Building during the above hours.

MORGAN, HALLGREN, CROSSWELL &
KANE, P.C.
Mount Joy Borough Solicitor

County of Lancaster

Planning Commission
150 North Queen Street
Suite #320
Lancaster, PA 17603
Phone: 717-299-8333
Fax: 717-295-3699
www.lancastercountyplanning.org

County Commissioners
Joshua G. Parsons, Chairman
Ray D'Agostino, Vice-Chairman
Craig E. Lehman, Commissioner

Executive Director
Scott W. Standish

MEMORANDUM 21LU

To: Mark Pugliese, Manager
Mount Joy Borough

From: Brad L Stewart BLS
Senior Planner

Thru: Dean S. Severson, AICP
Director for Planning Services

Date: June 3, 2021

Re: **CPF #: 45-100: Zoning ordinance amendment – Personal Expression Signs**
Mount Joy Borough

Due to the minor nature of this **zoning ordinance amendment**, the final review has been delegated to Lancaster County Planning Department (LCPD) staff. Staff has reviewed the above-referenced **zoning ordinance amendment** and has **no comment**.

PROPOSAL

Mount Joy Borough proposes to amend its zoning ordinance by revising sign regulations and clarifying regulations concerning special exceptions.

CONSISTENCY WITH COMPREHENSIVE PLANS

places2040 - Lancaster County Comprehensive Plan

The proposed text amendment is not addressed in *places2040*.

Donegal Region Comprehensive Plan (2011)

The Plan does not address the proposed text amendment.

DSS/BLS

S:\COMMUNPL\LCPC\2021\6-14-21\FINAL\CPF45-100 BLS - Staff Review.docx

BOROUGH OF MOUNT JOY

Lancaster County, Pennsylvania

ORDINANCE NO. 8-21

AN ORDINANCE TO AMEND THE MOUNT JOY BOROUGH CODE OF ORDINANCES, CHAPTER 270, ZONING, TO REVISE SIGN REGULATIONS AND CLARIFY REGULATIONS CONCERNING SPECIAL EXCEPTIONS.

BE AND IT IS HEREBY ORDAINED AND ENACTED by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, as follows:

Section 1. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article I, Administration and Enforcement, §270-16, Special Exceptions, shall be amended by adding a new Subsection E which shall provide as follows:

E. Expansion of preexisting uses authorized by special exception. When a use which was established prior to the enactment of this chapter or any amendment thereto is located in a zoning district where such use is permitted by special exception, such preexisting use shall be permitted to continue as of right. Any expansion or alteration of such preexisting use shall require the granting of a special exception by the Zoning Hearing Board, and the applicant for such special exception shall demonstrate compliance with all of the standards set forth in this chapter for the granting of a special exception for such use, if any, and with all of the general standards set forth in this chapter for all special exceptions.

Section 2. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, §270-91, Purpose; permit requirements; changes on signs, Subsection B, Paragraph (1), Subparagraph (a) shall be amended to provide as follows:

(a) Signs meeting the requirements of §270-93 and §270-103.

Section 3. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, §270-93, Miscellaneous Signs Not Requiring Permits, Subsection A, 270 Attachment 6 table entitled Miscellaneous Signs Not Requiring Permits, shall be amended as follows:

ZONING

270 Attachment 6

Borough of Mount Joy

Miscellaneous Signs Not Requiring Permits

Type and Definition of Signs Not Requiring Permits	Maximum Number of Signs Per Lot	Maximum Sign Area Per Sign on Residential Lots (square feet)	Maximum Sign Area Per Sign on Nonresidential Lots (square feet)	Other Requirements
		* * *		
Flag A banner or pennant made of fabric or materials with a similar appearance that is hung in such a way to flow in the wind and that includes some type of message	2	See §270-103	50	Government flags and flags without messages are not regulated by this chapter

* * *

Section 4. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, §270-93, Miscellaneous Signs Not Requiring Permits, Subsection A, 270 Attachment 6 table entitled Miscellaneous Signs Not Requiring Permits, shall be amended to delete the entry for "Political Sign" in its entirety.

Section 5. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, shall be amended by adding a new §270-103, Personal Expression Signs, which shall provide as follows:

§270-103. Personal Expression Signs.

A. As used in this section, the following term shall have the meaning indicated:

SIGN, PERSONAL EXPRESSION — A sign expressing or communicating a noncommercial message, opinion, feeling, interest, or point of view, including, but not limited to, ideological, religious, political, or social messages. A personal expression sign may convey such message through text, symbols and/or logos (such as for a sporting team or club). A flag governed by the American, Commonwealth, and Military Flag Act, Act of July 7, 2006, P.L. 609, No. 93, 44 P.S. §50.1 et seq., or Section 1202(3) of the Borough Code shall not be considered a personal expression sign and shall not be subject to limitations concerning personal expression signs. Holiday or seasonal decorations shall not be considered personal expression signs.

B. Within all zoning districts the occupant of any lot containing a dwelling unit shall be permitted to erect personal expression signs in accordance with the following requirements:

(1) All personal expression signs shall comply with §270-100 and §270-101.

(2) The total square footage of personal expression signs on the lot shall not exceed 36 square feet.

(3) No personal expression sign other than a personal expression sign made of fabric (i.e. flag) displayed on a flag pole may exceed 5 feet in height.

(4) No single personal expression sign may exceed 12 square feet.

(5) No personal expression sign may be located within a required side yard or rear yard setback.

(6) No permanent structure may be installed to serve as a base or mount for a personal expression sign other than a flagpole meeting all setback requirements.

(7) All personal expression signs shall be set back at least 5 feet from the public street right-of-way.

(8) No personal expression sign may be located within the clear sight triangle for any driveway serving an adjoining lot.

Section 6. All other sections, parts and provisions of the Mount Joy Borough Code of Ordinances shall remain in full force and effect as previously enacted and amended.

Section 7. In the event any provision, section, sentence, clause or part of this Ordinance shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses or parts of this Ordinance, it being the intent of Borough Council that the remainder of the Ordinance shall be and shall remain in full force and effect.

Section 8. This Ordinance shall take effect and be in force from and after its enactment as provided by law.

DULY ORDAINED AND ENACTED this _____ day of _____, 2021, by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF MOUNT JOY
Lancaster County, Pennsylvania

Attest:_____
(Assistant) Secretary

By:_____
(Vice) President
Borough Council

[BOROUGH SEAL]

Examined and approved as an Ordinance this _____ day of _____, 2021.

By:_____
Mayor

CERTIFICATE

I, the undersigned, (Assistant) Secretary of the Borough of Mount Joy, Lancaster County, Pennsylvania ("Borough") certify that: The foregoing is a true and correct copy of an Ordinance of Borough Council of the Borough which duly was enacted by affirmative vote of a majority of the members of Borough Council of the Borough of Mount Joy at a meeting duly held on the _____ day of _____, _____; and was examined and approved by the Mayor; such Ordinance has been duly recorded in the Ordinance Book of the Borough; such Ordinance has been duly published as required by law; and such Ordinance remains in effect, unaltered and unamended, as of the date of this Certificate.

I further certify that Borough Council of the Borough of Mount Joy met the advance notice and public comment requirements of the Sunshine Act, 65 Pa. C.S.§701 et seq., as amended, by advertising the date of said meeting, by posting prominently a notice of said meeting at the principal office of the Borough of Mount Joy or at the public building in which said meeting was held, and by providing a reasonable opportunity for public comment at said meeting prior to enacting such Ordinance.

IN WITNESS WHEREOF, I set my hand and affix the official seal of the Borough of Mount Joy, this _____ day of _____, _____.

_____
(Assistant) Secretary

[BOROUGH SEAL]

10-e

Stacie Gibbs

From: Juli Wolfe <juli.wolfe@rettew.com>
Sent: Wednesday, June 16, 2021 11:47 AM
To: Stacie Gibbs
Cc: David Salley; Dennis Nissley; Jill Frey; Singer, Benjamin; Castro, Nexa
Subject: RE: Lancaster County Agreement - Mount Joy Borough - Complete Streets Implementation Guide Book (MPMS 110553) -Letter of Amendment
Attachments: Letter of Amendment 2021-06-15.pdf

Hi Stacie,

Attached is the Letter of Amendment for the Complete Streets Implementation Guide Book. **Please have the appropriate Borough officials sign and date two copies of Exhibit B Page 1 of 2.** The signatures must be **original** and in **blue** ink. Stamped signatures are not acceptable.

A resolution authorizing the Borough official to sign the Letter of Amendment on behalf of the Borough is also required. **Please provide two (2) original copies of the resolution, containing the impressed seal of the Borough.**

The Letter of Amendment provides for 81.4% reimbursement of the Borough's costs up to a maximum of $89,000.00. Any additional costs are 100% the responsibility of the Borough.

Please return two (2) copies of the Letter of Amendment and the two (2) copies of the Resolution to Nexa Castro's attention.

Nexa M. Castro | Senior Project Manager
PA Department of Transportation | District 8-0
Highway Design Unit
2140 Herr Street | Harrisburg PA 17103

She will return one (1) fully executed copy of the Letter of Amendment once it has been signed by PennDOT.

Please return the Letter of Amendment as soon as possible as PennDOT requires that agreements be fully executed within 60 days of the first signature.

If you have any questions, please contact me.

Thanks,

Juli Wolfe, PE, MBA
Sr. Project Manager
Direct: 484.654.2003
Cell: 610.529.8923
juli.wolfe@rettew.com

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Borough of Mount Joy

Lancaster County, Pennsylvania

Resolution No. 7-21

Be it RESOLVED, by the authority of the Borough of Mount Joy (Name of Political Subdivision) Lancaster County, Pennsylvania (Name of County) was awarded a Pennsylvania Department of Transportation of $ 72-450.00 from the Smart Growth Transportation Fund to be used for Complete Streets Implementation Guidebook

Be it FURTHER RESOLVED. that the Applicant does hereby designate Samuel Sulkosky, Borough Manager (Name and Title) and/or William A. Hall, Council President (Name and Title) as the official(s) to execute all documents and agreements between the Borough of Mount Joy (Name of Applicant) and the Pennsylvania Department of Community and Economic Development to facilitate and assist in obtaining the requested grant.

I, Mark G. Pugliese I qualified Borough Secretary of the Borough of Mount Joy (Name of Applicant), Lancaster County, PA (Name of County) hereby certify that the forgoing is a true and correct copy of a Resolution duly adopted by a majority vote of the Mount Joy Borough Council (Governing Body) at a regular meeting held July 12, 2021 (Date) and said Resolution has been recorded in the Minutes of the Borough of Mount Joy (Applicant) and remains in effect as of this date.

IN WITNESS THEREOF, I affix my hand and attach the seal of the Borough of Mount Joy, PA, this 12th day of July, 2021.

ATTEST

Attest: _____
Borough Secretary

_____
Council President

(Borough Seal)

PROJECT ESTIMATED COSTS

Reimbursement Agreement No: 08A849A

County: Lancaster

Municipality: Mount Joy Borough

Project Name: Complete Streets Implementation Guidebook

MPMS No: 110553

Engineering Agreement No:

	Municipality Incurred Costs	Commonwealth Incurred Costs	Phase Totals
Preliminary Engineering			$ 0.00
Final Design			$ 0.00
Utilities			$ 0.00
Right of Way			$ 0.00
Construction	$ 89,000.00	$ 0.00	$ 89,000.00
SUBTOTALS	$ 89,000.00	$ 0.00	$ 89,000.00

COST SHARING (Municipality Incurred Costs)

	Federal	%	State	%	Municipality	%	Phase Totals
Preliminary Engineering	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Final Design	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Utilities	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Right of Way	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Construction	$ 72,450.00	(18.6)	$ 0.00	( )	$ 16,550.00	(81.4)	$ 89,000.00
TOTALS	$ 72,450.00		$ 0.00		$ 16,550.00		$ 89,000.00

COST SHARING (Commonwealth Incurred Costs)

	Federal	%	State	%	Municipality	%	Phase Totals
Preliminary Engineering	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Final Design	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Utilities	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Right of Way	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
Construction	$ 0.00	( )	$ 0.00	( )	$ 0.00	( )	$ 0.00
TOTALS	$ 0.00		$ 0.00		$ 0.00		$ 0.00

TOTAL COST

Federal	%	State	%	Municipality	%	Total
$ 72,450.00	(18.6)	$ 0.00	( )	$ 16,550.00	(81.4)	$ 89,000.00

Amount Eligible to be Reimbursed to Municipality $ 72,450.00

Exhibit AA

LETTER OF AMENDMENT

Mount Joy Borough
21 East Main Street

Mount Joy PA 17552

Re: Complete Street Implementation Guidebook
Click or tap here to enter text.

Dear Local Project Sponsor(s):

Per the terms of the subject agreement, the Department is willing to amend the terms by increasing the total project costs from $ 82,750.00 to $ 89,000.00 , as shown in the attached Exhibit "AA This amendment will become effective once all required signatures are affixed to this document.

We are requesting your concurrence as to the amendment of the above-referenced agreement. If you agree to the amendment, please indicate below by signing and noting your title where indicated. Please attach a resolution verifying your authorization to sign this letter of amendment.

IF APPLICABLE: Since the date of the Original Agreement, some standard provisions and accompanying exhibits have been updated; copies of these updated Exhibits are attached hereto and hereby supersede and replace the corresponding exhibit attached to the Original Agreement.

Your response is required no later than August 1, 2021 .

On behalf of the above-named Local Project Sponsor, I agree to the amendment of the above- referenced agreement. I agree to all terms and conditions included in the subject agreement and all previous amendments thereto, if any.

Signature: _____ Date: _____

Title: _____

All terms and conditions of the agreement and its amendments (if any) not affected by this letter of amendment remain in full force and effect.

This letter of amendment is not effective until the Office of Comptroller Operations signs and dates this letter of amendment. The Department will forward a copy of the fully executed letter of amendment for your files.

Sincerely,

Juli Wolfe, PE, MBA
Project Manager

Approved for Form and Legality:

_____ _____

(Asst.) District Executive Date

_____ _____

for Chief Counsel Date

_____ _____

Comptroller Signature Date

Reimbursement Amendment No. 08A846A is split 100%
, expenditure amount of $ 72,450.00 for federal funds and 0%
, expenditure amount of $ 0 for state funds. The related
federal assistance program name and number is Highway Planning and Construction (Highway Bill); 20.205
. The state assistance program name and number is N/A ; N/A
.

MOUNT JOY BOROUGH
JOB DESCRIPTION

TITLE: Receptionist / Secretary (Part-Time)

DEPARTMENT: Administration

GENERAL SUMMARY: Under direction, perform a variety of administrative office tasks to ensure smooth and efficient processing of information and delivery of services to the public; manage incoming calls, greet visitors; provide information, process payments; provide administrative support in related areas.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Manage incoming calls to borough and greet visitors, direct inquiries or complaints, provide routine information or direct inquiry to appropriate staff person; take messages for staff; announce calls or visitors; assist with directing calls for employees, vendors and other people who do business with the Borough; help locate staff or provide general information.

2. Provide general information regarding refuse, water and sewer bills; building, zoning, storm water and general permits; distribute approved permits, receive fees for permits, publications, and maps; provide general clerical assistance to zoning and codes. Receive general code, zoning, and storm water complaints and pass along to appropriate department head.

3. Perform general office duties; assist Borough Manager and other departments with administrative tasks as needed; sort and distribute mail, prepare outgoing mail, assist with office projects and bulk mailings, operate office equipment, e.g. computer, copier, fax and mail machine; order office supplies when needed; maintain bulletin board and publications rack, maintain spreadsheets for trash tags, key fobs, recycling bins and park reservations

4. Collect payments for bills; accept payments for water, sewer, and refuse bills, permit fees, extra trash refuse tags,; mark as paid and distribute; balance and reconcile cash drawer/box.

5. Perform related duties:
    a. Coordinate, maintain and manage occupancy schedule for meetings in Borough council chambers and Borough Office conference room.
    b. Perform general filing.
    c. Be familiar with radio interface.
    d. Monitor and record PA One Calls.
    e. Update and provide weekly parks reservation lists.
    f. Assist in the preparation of meeting minutes as needed.
    g. Perform other related duties as assigned.

JOB SPECIFICATIONS:
*Indicates developed after employment.

Education/Employment: Any combination of education and experience which indicates possession of the skills, knowledge and abilities listed below. An example of acceptable qualifications for this position is completion of high school degree, or the equivalent and additional course work in office technology, or three to five years of administrative office experience.

Knowledge:

- Advanced knowledge of administrative office practices and procedures.
- Advanced knowledge of the Borough Code, policies, and procedures. *
- Advanced knowledge of scope and purpose of Borough programs and services. *
- Advanced knowledge of bookkeeping practices and procedures.
- Advanced knowledge of government process. *
- Thorough knowledge of computer software applications including database, spreadsheet, publishing, and word processing.

Skill:

- Computer operation including the full range of office applications.

Abilities:

- Ability to organize work and successfully manage multiple priorities.
- Ability to demonstrate a strong internal and external customer service orientation.
- Ability to greet the public, speak clearly and plainly, and listen effectively.
- Ability to guard confidential or sensitive information and discern appropriate information to disclose when responding to requests and in a manner consistent with policy and procedure.
- Ability to demonstrate effective listening, inquiry, and feedback skills.
- Ability to respond tactfully to complaints, concerns and questions, and appropriately direct response or take appropriate action to resolve situation or inquiry.
- Ability to work effectively as a member of a team.
- Ability to proofread documents, identify errors and make corrections.
- Ability to develop effective relationships with department heads, residents, and employees.
- Ability to work as member of a team.
- Ability to perform basic mathematical calculations to process payments.
- Ability to post information accurately to written record.
- Ability to sit and operate a keyboard for extended periods of time.
- Ability to sort items in alphabetical, numerical, or subject order.

Working Conditions:

Work is performed in close office environment with others and involves frequent interruptions. Work frequently involves responding to angry or upset individuals.

DISCLAIMER:

The above statements are intended to describe the general nature and level of work being performed by a person assigned to this position. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required to perform the job.

REPORTS TO: Borough Manager
FLSA STATUS: Non-exempt
DATE:

ADMINISTRATION
MOUNT JOY BOROUGH
JOB DESCRIPTION

TITLE: Administrative Assistant

DEPARTMENT: Administration

GENERAL SUMMARY: Perform routine administrative support tasks and work on assigned projects to assist department heads. Serve as backup for receptionist and front office. Perform office opening and closing routines daily for regular business hours. Serve as recording secretary for Borough Council meetings. Serve as Recycling Coordinator

ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Perform related duties:
   a. Assist with responding to customer inquiries, requests for assistance and complaints by phone or in person.
   b. Receive and process billing payments.
   c. Prepare and make deposits into appropriate funds for payments of various bills and fees.
   d. Cross train in other administrative areas to fill in during staff absences.
   e. Prepare and send letters as needed.
   f. Prepare and/or forward legal and other advertisements to appropriate media outlets.
   g. Create and maintain building security system access cards.
   h. Troubleshoot office equipment problems and arrange repair as needed.
   i. Operate SwiftReach system to broadcast important/emergency announcements to citizens.

2. Perform duties of website communication; develop content for website updates; meet with various department managers as requested and submit prepared updates for website to Borough Manager; provide recommendations to optimize communication and information resources for customers.

3. Serve as Refuse and Recycling Coordinator; assist with customers communications and develop information resources to assist customers; serve as Borough liaison for Lancaster County Solid Waste Management Authority;; generate monthly reports and perform month end close out of accounts; create bills and prepare for mailing; create late notices; sort and process bulk mailings; monitor and enforce delinquent accounts; set up payment arrangements, initiate liens, calculate lien payoffs; post account payments; deposit monies; calculate and distribute refuse finals; reconcile monthly trash report and replenish tags; process annual recycling reports.

4. Serve as recording secretary for Borough Council; assist in preparation of packets for meetings, copy and distribute to Council members, set up meeting room, and transcribe minutes; update meeting, resolution and ordinance book; copy and distribute Administration and Finance Committee packets.

5. Other duties as directed by Borough Manager.

Education/Employment: Any combination of education and experience which indicates possession of the skills, knowledge and abilities listed below. An example of acceptable qualifications for this position is completion of college degree in human resources, or the equivalent in education and certification by SHRM (Society for Human Resource Management) and one (1) to three (3) years of experience in an administrative office setting.

Knowledge:

- Thorough knowledge of information management principles and practices.
- Thorough knowledge of communication principles and practices.
- Thorough knowledge of administrative office practices and procedures.
- Advanced knowledge of the Borough Code, policies and procedures. *
- Advanced knowledge of scope and purpose of Borough programs and services. *
- *
- Thorough knowledge of computer software applications including database, spreadsheet, publishing and word processing.
- Thorough knowledge of website management and maintenance practices.

Skill:

- Computer operation including the full range of office and website applications.

Abilities:

- Ability to communicate clearly and effectively about Borough personnel policies and programs.
- Ability to organize work and successfully manage multiple priorities without close supervision.
- Ability to develop effective relationships with department heads, vendors, consultants, residents and employees.
- Ability to demonstrate a strong internal and external customer service orientation.
- Ability to greet the public, speak clearly and plainly, and listen effectively.
- Ability to guard confidential or sensitive information and discern appropriate information to disclose when responding to requests and in a manner consistent with policy and procedure.
- Ability to demonstrate effective listening, inquiry and feedback skills.
- Ability to respond tactfully to complaints, concerns and questions, and appropriately direct response or take appropriate action to resolve situation or inquiry.
- Ability to work effectively as a member of a team.
- Ability to sit and operate a keyboard for extended periods of time.

Working Conditions:

Work is performed in close office environment with others and involves frequent interruptions.

DISCLAIMER:

The above statements are intended to describe the general nature and level of work being performed by a person assigned to this position. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required to perform the job.

JOB SPECIFICATIONS:

*indicates developed after employment

REPORTS TO:	Borough Manager
FLSA STATUS:	Non-exempt
DATE:	April 2021

MUNI 16724 20031871
03/19/20

BOROUGH OF MOUNT JOY

Lancaster County, Pennsylvania

RESOLUTION NO. 10-20

A RESOLUTION OF MOUNT JOY BOROUGH COUNCIL PURSUANT TO ARTICLE 10A OF THE BOROUGH CODE TO EXTEND THE STATE OF EMERGENCY PROCLAMATION OF THE BOROUGH ISSUED MARCH 17, 2020, AND TO FURTHER DECLARE A DISASTER EMERGENCY UNDER THE PENNSYLVANIA EMERGENCY MANAGEMENT CODE.

WHEREAS, in addition to all powers granted to mayors by the Pennsylvania Emergency Management Code and in order to enable the Mayor to effectively preserve public peace, health, safety and welfare, Mayor Timothy D. Bradley, Jr., issued a State of Emergency Proclamation on March 17, 2020; and

WHEREAS, pursuant to Section 10A06(b)(4) of the Borough Code, such state of emergency shall not exceed seven (7) days unless sooner rescinded, modified, ratified or extended by resolution of Council; and

WHEREAS, Council desires to extend the State of Emergency Proclamation of the Mayor issued March 17, 2020; and

WHEREAS, Council further desires to exercise the authorization of Section 7501 of the Pennsylvania Emergency Management Code to declare a disaster emergency as a result of the COVID-19 virus.

NOW, THEREFORE, BE AND IT IS HEREBY RESOLVED by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, as follows:

Section 1. The State of Emergency Proclamation issued by Mayor Timothy D. Bradley. Jr., on March 17, 2020, attached hereto and incorporated herein as Exhibit A is hereby extended indefinitely. Recognizing the uncertainties caused by the presence and spread of the COVID-19 virus, Council has determined that the State of Emergency Proclamation should remain in effect until Council takes further action to rescind the State of Emergency Proclamation.

Section 2. Council hereby declares a disaster emergency pursuant to Section 7501 of the Pennsylvania Emergency Management Code, 35 Pa. C.S. §7501, and authorizes the President of Council to sign the Borough of Mount Joy Declaration of Disaster Emergency attached hereto as Exhibit B and incorporated herein. Council authorizes the Council President and the Borough

Manager to provide the Declaration of Emergency to the news media and to post the Declaration of Emergency on the Borough's web site.

Section 3. BE IT FURTHER RESOLVED, that we authorize the Borough Manager to further act as necessary to protect the health of the Borough employees by implementing measures including, but not limited to, reducing hours the Borough offices are open to the public, installing facilities so that persons may deposit payments, applications, and similar items without interacting with Borough staff, and taking similar matters; and

Section 4.BE IT FURTHER RESOLVED, the we authorize the Borough Police Chief to further act as necessary to protect the health of Borough Police Officers by implementing measures including, but not limited to, implementing policies limiting or suspending walk-in services.

DULY ADOPTED this 23 day of March, 2020, by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF MOUNT JOY
Lancaster County, Pennsylvania

Attest: _____
(Assistant) Secretary

By: _____
(Vice) President
Borough Council

[BOROUGH SEAL]

Part-Time Officers

326.1 PURPOSE AND SCOPE

This policy establishes the guidelines for Mount Joy Borough Police Department part-time officers to supplement and assist regular full-time police officers in their duties. These officers provide professional and special functions and part-time services that can augment regular staffing levels.

326.1.1 DEFINITIONS

Definitions related to this policy include:

Part-time officer- A person who is a certified police officer and anticipated to work less than 1,000 hours in a 12-month period and the same for the subsequent 12-month period.

326.2 POLICY

The Mount Joy Borough Police Department shall ensure that part-time officers are properly appointed, trained and supervised and that they maintain the appropriate certifications and readiness to carry out their assigned duties.

326.3 RECRUITMENT AND SELECTION

The Mount Joy Borough Police Department shall endeavor to recruit and appoint only those applicants who meet the high ethical, moral and professional standards set forth by this department.

All applicants shall be required to meet and pass the same pre-employment procedures as regular full-time police officers before appointment.

326.3.1 APPOINTMENT

Applicants who are selected for appointment as part-time officers shall, on the recommendation of the Chief of Police, be sworn in and take the Oath of Office in accordance with the Oath of Office Policy and as required for the position.

Part-time officers are considered at-will employees and may be dismissed at the discretion of the Chief of Police, with or without cause. Part-time officers shall have no property interest in continued appointment. However, if a part-time officer is removed for alleged misconduct, the part-time officer will be afforded an opportunity solely to clear his/her name through a liberty interest hearing, which shall be limited to a single appearance before the Chief of Police or the authorized designee.

326.4 IDENTIFICATION AND UNIFORMS

Part-time officers will be issued Mount Joy Borough Police Department uniforms, badges and identification cards. The uniforms and badges shall be the same as those worn by regular full-time police officers. The identification cards will be the standard Mount Joy Borough Police Department identification cards, with the exception that "Part-time" will be indicated on the cards.

326.5 AUTHORITY

Part-time officers shall perform peace officer duties within the scope of their approved training (53 Pa.C.S. § 2167). Part-time officers:

(a) Perform law enforcement functions and have the authority to arrest on behalf of this department (42 Pa.C.S. § 8952).

(b) Shall not exercise peace officer duties when off-duty.

326.6 COMPENSATION

Compensation for part-time officers is provided as follows:

(a) Part-time officers shall work as specified in the collective bargaining agreement or as contracted with the Mount Joy Borough Police Department.

(b) Part-time officers are issued two sets of uniforms and all designated attire and safety equipment, as applicable to their positions. All property issued to part-time officers shall be returned to this department upon termination or resignation.

(c) Part-time officers that separate from the agency for any reason within one year of their employment shall be responsible for compensating the Borough the full replacement cost of their ballistic vest, if so provided.

326.7 COMPLIANCE

Part-time officers shall be required to adhere to all department policies and procedures. A copy of the policies and procedures will be made available to each part-time officer upon appointment. The officers shall become thoroughly familiar with these policies.

Whenever a rule, regulation or guideline in this Policy Manual refers to a regular full-time police officer, it shall also apply to a part-time officer, unless by its nature it is inapplicable.

Part-time officers are required by this department to meet department-approved training requirements.

All part-time officers are required to attend Court hearings and other scheduled meetings. Any absences must be satisfactorily explained to the part-time officer coordinator.

326.8 FIREARMS

Part-time officers shall successfully complete department-authorized training in the use of firearms. Their appointments must be approved by the Borough prior to being issued firearms by this department or otherwise acting as part-time officers on behalf of the Mount Joy Borough Police Department.

Part-time officers will be issued duty firearms as specified in the Firearms Policy. Any part-time officer who is permitted to carry a firearm other than the assigned duty weapon or any optional firearm may do so only in compliance with the Firearms Policy.

Part-time officers are required to maintain proficiency with firearms used in the course of their assignments. Part-time officers shall comply with all training and qualification requirements set forth in the Firearms Policy and the Use of Force Policy.

326.8.1 CONCEALED FIREARMS

A part-time officer may carry a concealed firearm while in an off-duty capacity provided:

(a) He/she is exempt pursuant to 18 Pa.C.S. § 6106(b)(1).

(b) The State Police Lethal Weapons Unit has granted authorization. Authorization is obtained by completion of a Lethal Weapons Act application including:

1. Eight hours firearms training, if required.
2. An Act 120 Academy Graduate Waiver, if required.
3. A Physical Examination Lethal Weapons Training Act Form - determination as fit, if required.
4. A Psychological Examination Lethal Weapons Training Act Form - determination as fit, if required.
5. A Police Officer Exemption Application signed by the Chief of Police.

Any part-time officer who is permitted to carry a firearm other than the assigned duty weapon may do so only after verifying that the weapon conforms to department standards. The weapon must be inspected and certified as fit for service by the department Firearms Instructor. The weapon shall comply with all the requirements set forth in the Firearms Policy.

Before being allowed to carry any optional firearm during an assigned tour of duty, the part-time officer shall demonstrate his/her proficiency with the weapon.

326.9 PART-TIME OFFICER COORDINATOR

The Chief of Police shall delegate certain responsibilities to a part-time officer coordinator. The coordinator shall be appointed by and directly responsible to the Uniform Patrol Sergeant or the authorized designee.

The responsibilities of the coordinator or the authorized designee include, but are not limited to:

(a) Assigning part-time officers.

(b) Conducting part-time officer meetings.

(c) Establishing and maintaining a part-time officer callout roster.

(d) Maintaining and ensuring performance evaluations are completed.

(e) Monitoring the field training progress of part-time officers.

(f) Monitoring individual part-time officer performance.

(g) Monitoring overall part-time officer activities.

(h) Maintaining a liaison with other agency part-time officer coordinators.

326.10 FIELD TRAINING

All part-time officers shall complete the same department-specified field training as regular full-time police officers, as described in the Field Training Policy.

326.11 SUPERVISION

Part-time officers may perform the same duties as regular full-time officers of this department provided they are under the direct or indirect supervision of a supervisor or officer in charge. Part-time officers should not supervise a regular full-time officer.

326.11.1 EVALUATIONS

While in training, part-time officers should be continuously evaluated using standardized daily and weekly observation reports. The part-time officer will be considered a trainee until he/she has satisfactorily completed training. Part-time officers who have completed their field training should be evaluated annually using performance dimensions applicable to the duties and authorities granted to that part-time officer.

326.11.2 INVESTIGATIONS AND COMPLAINTS

If a part-time officer has a personnel complaint made against him/her or becomes involved in an internal investigation, the matter shall be investigated in compliance with the Personnel Complaints Policy.

Payroll Records

1019.1 PURPOSE AND SCOPE

This policy provides the guidelines for completing and submitting payroll records of department members who are eligible for the payment of wages.

1019.2 POLICY

The Mount Joy Borough Police Department maintains timely and accurate payroll records.

1019.3 RESPONSIBILITIES

Members are responsible for the accurate completion and timely submission of their payroll records for the payment of wages.

The Chief of Police or designee is responsible for approving the payroll records for those under their commands.

1019.4 TIME REQUIREMENTS

Members who are eligible for the payment of wages are paid on a scheduled, periodic basis, generally on the same day or date each period, with certain exceptions, such as holidays. Payroll records shall be completed and submitted to Administration as established by the Borough payroll procedures.

1019.5 RECORDS

The Borough accountant shall ensure that accurate and timely payroll records are maintained as required by 29 CFR 516.2 for a minimum of three years (29 CFR 516.5).

Overtime Compensation

1020.1 PURPOSE AND SCOPE

This policy establishes guidelines and procedures regarding overtime for employees, in conformance with the Fair Labor Standards Act (FLSA) (29 USC § 201 et seq.).

1020.2 POLICY

The Mount Joy Borough Police Department will compensate nonexempt employees who work authorized overtime either by payment of wages or by the accrual of compensatory time (29 CFR 553.22). Employees who are salary exempt from FLSA are not compensated for overtime worked.

1020.3 COMPENSATION

Payment of wages to nonexempt employees for overtime, or accrual of compensatory time in lieu of compensation for overtime worked, shall be at the rate of not less than one and one-half hours for each hour of employment for which overtime compensation is required (29 USC § 207(k)(2); 29 USC § 207(o)(1)).

Short periods of overtime worked at the end of the normal duty day (e.g., less than one hour in duration) may be handled informally by an agreement between the supervisor and the employee. In such cases, the supervisor shall document the overtime worked and schedule a subsequent shift adjustment within the same work period that the overtime was worked, rather than submit a request for overtime compensation (29 USC § 207(k)).

Salary exempt employees may be eligible for administrative leave, which may be granted at the discretion of the exempt employee's immediate supervisor.

1020.4 REQUESTS FOR OVERTIME COMPENSATION

1020.4.1 EMPLOYEE RESPONSIBILITIES

Generally, no employee is authorized to work overtime without the prior approval of a supervisor. If circumstances do not permit prior approval, approval shall be sought as soon as practicable during the overtime shift and in no case later than the end of the shift in which the overtime is worked.

Nonexempt employees shall:

(a) Obtain supervisory approval, verbal or written.

(b) Not work in excess of 18 hours, including regularly scheduled work time, overtime and extra-duty time, in any consecutive 24-hour period without supervisory approval.

(c) Record the time worked in an overtime status using the department-approved form or method. Reported hours may be rounded up to the nearest half-hour. Informal notations on reports, logs or other forms not approved for overtime recording are not acceptable.

(d) Submit the request for overtime compensation via the approved method by the end of shift or no later than the next calendar day.

1020.4.2 SUPERVISOR RESPONSIBILITIES

Supervisors shall:

(a) Prior to authorizing an employee to work overtime, evaluate the need for the overtime.

1. Supervisors should not authorize any request to work overtime if the overtime would not be an appropriate use of department resources.

(b) Upon receipt of a request for overtime compensation, confirm that the overtime was authorized and then verify the actual time worked.

1. Supervisors identifying any unauthorized overtime or discrepancy shall initiate an investigation consistent with the Personnel Complaints Policy.

Supervisors may not authorize or approve their own overtime.

1020.5 ACCOUNTING FOR PORTIONS OF AN HOUR

Authorized overtime work shall be accounted in the increments as listed:

TIME WORKED	INDICATE ON CARD
Up to 30 minutes	.50 hour
31 to 60 minutes	1 hour

1020.5.1 VARIATION IN TIME REPORTED

When two or more employees are assigned to the same activity, case or court trial, and the amount of time for which overtime compensation is requested varies among the officers, the Shift Sergeant or other approving supervisor may require each employee to include the reason for the variation on the overtime compensation request.

1020.6 REQUESTING USE OF COMPENSATORY TIME

Employees who have accrued compensatory time shall be allowed to use that time for time off within a reasonable period after making a request, if the request does not unduly disrupt department operations.

Compensatory time shall only be used with prior approval in accordance with the current Collective Bargaining Agreement.

Compensatory time may not be used for time off for a date and time when the employee is required to appear in court on department-related matters. Supervisors shall not unreasonably deny employee requests to use compensatory time (29 CFR 553.25).

Work-Related Injury and Occupational Disease Reporting

1022.1 PURPOSE AND SCOPE

The purpose of this policy is to provide guidance regarding timely reporting of work-related injuries, mental health issues and occupational diseases.

1022.1.1 DEFINITIONS

Definitions related to this policy include:

Work-related injury or occupational disease - Any injury arising in the course of the member's employment. The term includes any occupational disease (as defined in 77 P.S. § 27.1) that occurs within the preceding 300 weeks of the member's employment with the Mount Joy Borough Police Department. The term work-related injury does not include an injury caused by the act of a third person intending to injure the member because of personal reasons or reasons unrelated to the member's employment with the Mount Joy Borough Police Department or an injury sustained while the member was operating a vehicle while not otherwise in the course of employment at the time of the injury (77 P.S. § 411).

1022.2 POLICY

The Mount Joy Borough Police Department will address work-related injuries, mental health issues and occupational diseases appropriately, and will comply with applicable state workers' compensation requirements (77 P.S. § 1 et seq.).

1022.3 RESPONSIBILITIES

1022.3.1 MEMBER RESPONSIBILITIES

Any member sustaining any occupational disease or work-related injury shall report such event as soon as practicable, but within 24 hours to a supervisor, and shall seek medical care when appropriate.

1022.3.2 SERGEANT RESPONSIBILITIES

A supervisor learning of any work-related injury or occupational disease should ensure the member receives medical care as appropriate.

Supervisors shall ensure that required documents regarding workers' compensation are completed and forwarded promptly. Any related Borough-wide injury- or disease-reporting protocol shall also be followed.

Supervisors shall determine whether the Major Incident Notification and Illness and Injury Prevention policies apply and take additional action as required.

The Sergeant who receives a report of an occupational disease or work-related injury should review the report for accuracy and determine what additional action should be taken. The report

shall then be forwarded to the Chief of Police to ensure any required reporting is made as required in the disease and injury prevention plan identified in the Illness and Injury Prevention Policy.

1022.3.3 CHIEF OF POLICE RESPONSIBILITIES

The Chief of Police shall review and forward copies of the report to the Borough Administration. Copies of the report and related documents retained by the Department shall be filed in the member's confidential medical file.

1022.4 OTHER DISEASE OR INJURY

Diseases and injuries caused or occurring on-duty that do not qualify for workers' compensation reporting shall be documented on the designated report of injury form, which shall be signed by a supervisor. A copy of the completed form shall be forwarded to the Chief of Police.

Unless the injury is extremely minor, this report shall be signed by the affected member, indicating that he/she desired no medical attention at the time of the report. By signing, the member does not preclude his/her ability to later seek medical attention.

1022.5 SETTLEMENT OFFERS

When a member sustains an occupational disease or work-related injury that is caused by another person and is subsequently contacted by that person, his/her agent, insurance company or attorney and offered a settlement, the member shall take no action other than to submit a written report of this contact to his/her supervisor as soon as possible.

1022.5.1 NO SETTLEMENT WITHOUT PRIOR APPROVAL

No less than 10 days prior to accepting and finalizing the settlement of any third-party claim arising out of or related to an occupational disease or work-related injury, the member shall provide the Chief of Police with written notice of the proposed terms of such settlement. In no case shall the member accept a settlement without first providing written notice to the Chief of Police. The purpose of such notice is to permit the Borough to determine whether the offered settlement will affect any claim the Borough may have regarding payment for damage to equipment or reimbursement for wages against the person who caused the disease or injury, and to protect the Borough's right of subrogation, while ensuring that the member's right to receive compensation is not affected.

July 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4 	5 **OFFICE CLOSED** In observance of Independence Day	6 Authority 4 PM	7 Authority Finance Committee 5 PM	8	9	10
11	12 Council 7 PM	13 WOODY WASTE PICK-UP	14 Plan. Comm. 7 PM	15	16	17
18	19 Public Works 6:30 PM	20 Authority 4 PM	21	22 Admin / Finance 6:30 PM	23	24
25	26 Civil Service Com 5:30 PM (as needed) Public Safety 6:30 PM	27 WOODY WASTE PICK-UP	28 ZHB 7 PM	29	30	31