

Engineering, Architecture, Surveying, D.P.C.

July 10, 2019

Mr. Doug Finch, Town Manager Town of Canandaigua 5440 Routes 5 & 20 West Canandaigua, New York 14424

RE: ROYAL CARWASH – 2586 STATE ROUTE 332

SITE PLAN REVIEW

TAX MAP NO. 70.16-4-6.100

CPN No. 19-017

MRB PROJECT No.: 0300.12001.000 Phase 154

Dear Mr. Finch:

MRB has completed a review of the submitted revised Site Plan regarding the above referenced project, dated March 2019 and submitted to the Town Development Office June 14, 2019. We have also completed a review of the SWPPP dated March 2019, both prepared by Passero Associates. We offer the following comments for the Planning Board's consideration. A brief written response to each comment should be provided by the design engineer.

SEQR

- 1. The Short EAF part 1 should identify that variances are required.
- As the project is located within an Archaeological Sensitive Area, a "No Impact" letter from the State Historic Preservation Office (SHPO) is required to be provided. All correspondences with SHPO should be forwarded to the Town Development office and MRB.
- 3. Question 13a should be answered as yes as there are waterbodies nearby which are identified in the National Wetlands Inventory.
- 4. The EAF Mapper identifies that question 20 should be answered as yes. As such, the design engineer is to provide additional information regarding environmental remediation actions on or adjacent to the site of the proposed action.

Site Plan and General Comments

- 5. Please note that a separate approval by the Planning Board will be required for the proposed signs. A color detail including a depiction of the sign face(s) and total square footage should be provided.
- 6. It is our understanding that multiple variances are currently being sought for this project. All variances requested should be noted on the plans, and if approved, the date of approval should be noted.

Town of Canandaigua

RE: ROYAL CAR WASH – 2586 STATE ROUTE 332

July 10, 2019

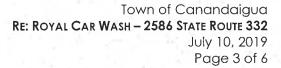
Page 2 of 6



- 7. It is our understanding that the current owner of the parcel is "Royal Wash Canandaigua, LLC." As such, the ownership information in the plans should be updated to reflect this.
- 8. The horizontal and vertical datums referenced, and all survey information, is to be noted on the plans.
- 9. The Zoning Table should be updated to include open/green space requirements as well as proposed and existing conditions. Existing conditions should be noted for all requirements.
- 10. As the proposed site plans show that the project does not meet the number of parking spaces required by the Town Code, and due to the nature of the proposed use, the applicant should provide written request that the Planning Board reduce the parking requirements in accordance with Section 220-73.1. Please note that this only allows for up to a 50% reduction.
- 11. Coordinate with the Town Code Enforcement Officer to determine the need for "NO PARKING FIRE LANE" signs and pavement markings. Provide a copy of all correspondence to the Town of Canandaigua Development Office and MRB.
- 12. A vacuum station adjacent to the ADA accessible parking space should be considered.
- 13. Site plan note #11 states that sanitary sewer is provided by the Town of Canandaigua. It is our understanding that this site is actually located within an Ontario County sewer district. Also, site note #5 states that the existing use is "vacant," whereas a single family home currently exists on the site. Please revise as necessary.
- 14. Coordination with NYSDOT with regards to the proposed curb-cut onto NYS Route 332 is required.

Utility Plan

- 15. Please note that the sanitary sewer aspects of the project will require review and approval from the Canandaigua Lake County Sewer District. A copy of all correspondence with the County is to be provided to the Town Development Office and MRB Group.
- 16. The proposed water system, meter and RPZ location will require the approval of the Canandaigua-Farmington Water District Superintendent and NYSDOH. An access easement to its location may need to be provided to the Canandaigua-Farmington Water District. The plans should be updated to reflect this. Also the design engineer should forward copies of all correspondence from NYSDOH to the Town Development Office and MRB.
- 17. The location and/or distance to the nearest fire hydrant should be shown/noted on the plans.





- 18. Please note that a permanent drainage easement and/or agreement may need to be provided for the proposed stormwater discharges into the Tops Plaza for maintenance purposes.
- 19. Please provide the top of grate elevation and top of structure elevation for the proposed oil/water separator.
- 20. A proposed light fixture, sign, and stormwater practice are all shown in an existing easement to NYSEG. These items may need to be located outside of the easement. Additional coordination with the utility provider should be considered.
- 21. The inverts of all underdrains should be noted on the utility plans.
- 22. Multiple pipes labeled as proposed irrigation sleeves are shown crossing underneath pavement areas however these pipes do not appear to lead to any irrigation lines within the landscaping areas. Please clarify.

Grading and Erosion & Sediment Control Plan

- 23. A site specific construction sequence outlining the individual steps of construction including the construction of all temporary measures, the stormwater facility, and vegetated swale, etc... should be provided.
- 24. A construction staging area and stabilized construction entrance should be identified on the plans. If concrete is to be poured on site, a concrete washout area should also be shown and a detail included.
- 25. The start and end points of any transitions from flush curb and sidewalk to raised curb and sidewalk should be shown on the plans. A detail may need to be provided indicating maximum slopes.
- 26. Please review the proposed 780' contour along the western portion of the proposed pond. It seems that this contour should be looped as tying into existing doesn't appear to make sense from a surface perspective.

Lighting and Landscaping Plan, and Details

- 27. Full designer manufacturer cut sheets for all proposed lighting (building mounted and site) are to be provided, and the mounting height of all fixtures is to be noted. The lighting plan should clearly depict lighting intensity contours for 5 FC, 2 FC, 1 FC, and 0.5 FC.
- 28. A note should be added to the plans stating that all proposed lighting shall be Dark Sky Compliant.
- 29. The following notes regarding phosphorous use should be added to the plans:
 - No Phosphorous shall be used at planting time unless soil testing has been completed and tested by a Horticultural Testing Lab and the soil tests specifically indicate a phosphorous deficiency that is harmful, or will prevent new lawns and plantings from establishing properly.

Town of Canandaigua

RE: ROYAL CAR WASH – 2586 STATE ROUTE 332

July 10, 2019

Page 4 of 6



- If soil tests indicate a phosphorous deficiency that will impact plant and lawn establishment, phosphorous shall be applied at the minimum recommended level prescribed in the soil test following all NYS DEC requirements.
- 30. The Design Engineer shall verify that all notes included on the plans do not conflict with Town requirements as per the latest Town of Canandaigua Site Design and Development Criteria Manual amended last May 2019.
- 31. A curb detail should be provided, or utilize the Town of Canandaigua curb detail.
- 32. The attached Town of Farmington (Canandaigua-Farmington Water District) Standard Details should be added to the plans:
 - a. Typical Water Service
 - b. Watermain Pressure Test
 - c. Thrust Block Detail
 - d. Pipe Bedding / Trench Detail
 - e. Watermain / Sewer Crossing

SWPPP and Drainage Comments

- 33. The SWPPP cover states that the project is in the City of Canandaigua, whereas the project is actually located in the Town. Please revise accordingly.
- 34. Has any soil testing occurred for this project? If so, please provide copies of the results.
- 35. Please note that as this project is located within the Canandaigua Lake Watershed. Per the Town of Canandaigua Town Code, Enhanced Phosphorus Removal standards shall apply in accordance with the NYS Stormwater Management Design Manual (SWMDM). The 1-year 24-hour design storm should be used to calculate the required WQv and Minimum RRv.
- 36. Based on our correspondence with the design engineer, it is our understanding that prewashing of vehicles is to occur outside of the building. As such, any stormwater management practices downstream of the vehicle prewashing area should be approved for use with stormwater hotspots in accordance with the SWMDM. As the prewashing activity may affect the quality of water discharged offsite, the design engineer should provide a written response indicating what prewashing of vehicles involves, if any soaps or detergents are typically used, and an approximation of how much water is used in prewashing on a typical day of operation.
- 37. The proposed emergency spillway for the SWMF should be extended further down both sides of the slope. On the west side of the berm, riprap should terminate just past the end section.

Town of Canandaigua

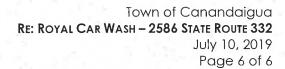
RE: ROYAL CAR WASH – 2586 STATE ROUTE 332

July 10, 2019

Page 5 of 6



- 38. Please note that the SWMF will require a separate forebay in accordance with the SWMDM. Any inlet which contributes 10% or more of the total inflow must discharge into a forebay. Also, as the proposed embankment slopes are steeper than 4:1 h:v, the SWMF will require a 15' safety bench which extends outward from the permanent pool elevation, or fencing should be provided around the SWMF. Please note that an aquatic bench, which extends inward 10-15' from the permanent pool elevation, is also required and should be provided with suitable plantings in accordance with the SWMDM.
- 39. The outlet control structure label on the grading plan and the utility plan should clearly indicate the WQv elevation, permanent pool elevation, and the 10-year and 100-year design storm elevations.
- 40. Please note that a 12' wide maintenance access drive is to be provided in accordance with the SWMDM. Said drive shall extend to the forebay, outlet control structure, and emergency spillway, and should terminate at or near a vehicle turnaround spot.
- 41. Regarding the provided surface sand filter detail, the underdrain should be at the bottom of the stone drainage layer. Per the SWMDM, the top layer should be topsoil and plantings rather than river rock. Specifications should also be provided for the concrete sand. Also, a form of pretreatment should be provided.
- 42. While vegetated swales do provide some RRv, the amount provided is very minimal. The vegetated swale as shown also does not appear to meet the required criteria for vegetated swales, for example, the allowable bottom width is exceeded, and the minimum length and detention time is not met. As such, the swale should be replaced with bioretention or another suitable practice which provides RRv. Also, the majority of the new impervious surfaces do not appear to be treated by a practice which provides RRv. In accordance with the SWMDM, where it is possible to do so, all new impervious areas should be directed to a practice which provides RRv. Based on the proposed site layout, it appears that many of the landscaping areas could become bioretention areas and still provide aesthetic value. With minor adjustments to the layout, stormwater planters may also be possible to use for roof runoff from the proposed building. Also, the design engineer should determine if it would be feasible to supplement vehicle washing with treated/filtered stormwater. If it is not feasible to do so, the design engineer should provide a written response with detailed justification for not utilizing captured stormwater. If proposed landscaping areas are kept as is, these areas could also benefit from using captured stormwater for irrigation purposes.
- 43. Regarding the pond report in the provided Hydraflow report, the top grate of the outlet control structure appears to be missing as an inlet. The outlet pipe as shown on the plans is 24' at 0.21% slope, whereas the report shows 30' at 0.4%. Please resolve this discrepancy. Also, an exfiltration rate of 0.5 inches per an





hour by contour is shown in the report. Exfiltration should not be utilized in the modeling without providing sufficient evidence to support this claim.

- 44. Documentation should be provided demonstrating the amount of WQv being provided by the proposed SWMF. This should include stage storage data for the forebay, deep pool, and any extended detention volumes. Each of these volumes should be reported separately. Also, calculations should be provided to justify the sizing of the 3" OCS orifice.
- 45. Please provide a subcatchment map for all WQv/RRv practices. Said map should indicate the total drainage area to each practice and the impervious area draining to each practice.
- 46. The WQv worksheet shows bioretention is being utilized, whereas no bioretation is shown on the plans or in the rest of the worksheet. Please clarify and revise the worksheet to accurately reflect what is shown on the plans.
- 47. Please note that the owner will be required to enter into a stormwater maintenance agreement with the Town of Canandaigua. The attached maintenance agreement should be filled out and provided to the Town Development Office for review and approval. Also, a stormwater maintenance access easement to the Town of Canandaigua should be provided around the proposed SWMF and should include a suitable means of access from a public right of way.

If you have any questions, comments or concerns regarding any of the above comments please call me at our office.

Sincerely,

Lance S. Brabant, CPESC

Director of Planning & Environmental Services

TOWN OF

FARMINGTON

1000 County Road #8 Farmington, NY 14425 (315) 986-8100 APPENDIX: W - 4.0

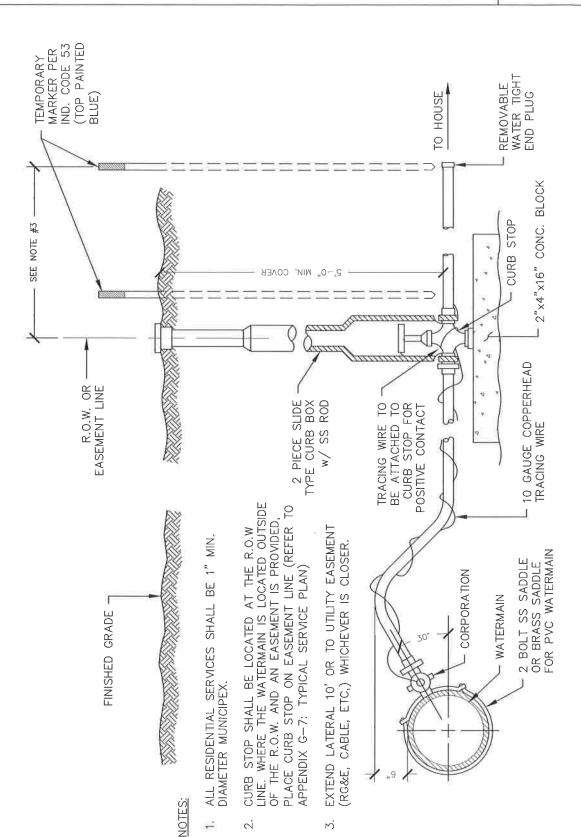
DATE:

2018

SCALE:

N.T.S.

MRB group



TYPICAL WATER SERVICE

1000 County Road #8 Farmington, NY 14425 (315) 986-8100 APPENDIX: W - 10.0

DATE:

2018

SCALE:

N.T.S.

MRB group

		TEST PRESSURE (P.S.I.)				
		200	225	250	275	300
	PIPE DIA. (INCHES)		ALLOWABL	E LEAKAG	E (G.P.H.)	
	6	0.64	0.68	0.71	0.75	0.78
D.I.P.	8	0.85	0.90	0.95	1.00	1.04
PER 1,000 L.F. OF LINE	10	1.06	1.13	1.19	1.24	1.30
	12	1.28	1.35	1.42	1.49	1.56
	6	0.57	0.61	0.64	0.67	0.70
P.V.C.	8	0.76	0.81	0.85	0.90	0.94
PER 1,000 L.F. OF LINE	10	0.96	1.02	1.07	1.12	1.17
	12	1.15	1.22	1.28	1.34	1.40

NOTES:

- 1. TEST PRESSURE TO BE 200 P.S.I. OR 1.5 x WORKING PRESSURE, WHICHEVER IS GREATER.
- 2. PRESSURE TESTS SHALL BE CONDUCTED SO THE PIPE SECTIONS ARE WITHIN 10 PSI OF THE TEST PRESSURE LOCATION.
- 3. PRESSURE TESTS SHALL BE CONDUCTED FOR A MINIMUM OF 2 HOURS.
- 4. LEAKAGE TESTS AT LINE PRESSURE SHALL BE CONDUCTED OVER A 24 HOUR PERIOD.

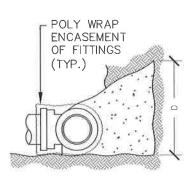
WATERMAIN PRESSURE TEST

1000 County Road #8 Farmington, NY 14425 (315) 986-8100 APPENDIX: W - 11.0

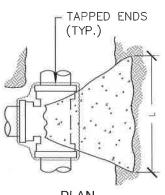
DATE: 2018

SCALE: N.T.S.

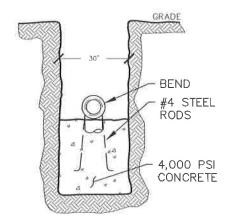
MRB group

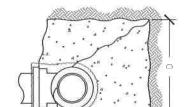




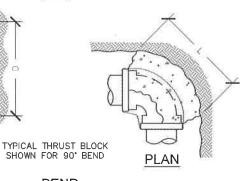


PLAN



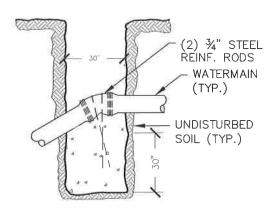


SECTION



BEND

TEE



VERTICAL

WATERMAIN THRUST BLOCK DETAIL

PIPE SIZE WORKING (INCHES) PRESSURE		TEE OF PLUG		BEND 90.		45° BEND		22-1/2" BEND	
	(PSIG)	L	D	L	D	L	D	L	D
4	150	2,00	1,25	2.75	1.25	2.00	1.00	1,25	75
7	250	2.75	1.50	3.00	2.00	2.50	1.25	1,50	1,00
6	150	2.75	2,00	4.00	2.00	2.75	1.50	2.25	1,00
	250	4.00	2,25	5.25	2,50	3,50	2.00	2.75	1.25
8	150	4.50	2.25	5.25	2.75	3.75	2.00	3.75	2.00
0	250	5.50	3.00	6.75	3.50	5.25	2,50	3.75	1,75
10	150	5,25	3.00	6.75	3.25	4.75	2.50	3,50	1.75
9	250	7.50	3.50	8.75	4.25	6.25	3.25	4.50	2.25
12	150	6,50	3,50	8.00	4.00	5.75	3.00	4.50	2.00
12	250	8,75	4,25	10.25	5.25	7-75	3.75	5.25	2.75
14	150	7.75	4.00	9.00	4.75	6.75	3.50	5.00	2.40
14	250	10,25	5,00	12.00	6.00	8.75	4.50	6,25	3.25
16	150	9.00	4.50	10.75	5:25	7.75	4-00	5.75	2.75
10	250	11_50	5.75	14.00	6.75	10.25	5.00	7,00	3.75

NOTES:

- 1. ALL DIMENSIONS ARE IN FEET
- 2. BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
- 3. HEIGHT OF THRUST BLOCK SHOULD BE EQUAL TO OR LESS THAN ½ THE DEPTH FROM THE GROUND SURFACE TO THE BASE OF THE BLOCK.
- 4. ALL THRUST BLOCKS SHALL CURE A MINIMUM OF SEVEN (7) DAYS BEFORE ANY PRESSURE TESTS ARE CONDUCTED.
- 5. CONCRETE SHALL BE MINIMUM 3000 PSI.
- RESTRAINING RODS MAY BE USED IN LEIU OF THRUST BLOCKS. METHOD TO USED SHALL BE APPROVED BY ENGINEER PRIOR TO PLACEMENT.

WATERMAIN THRUST BLOCK SCHEDULE

1000 County Road #8 Farmington, NY 14425 (315) 986-8100

APPENDIX:	W - '	11.1	
-----------	-------	------	--

DATE:

2018

SCALE:

N.T.S.

MRB group

PIPE SIZE (INCHES)	90.	45° BEND	22.5° BEND	11,25° BEND	SIZE ON SIZE TEE	DEAD END
4	13 FT.		122	= = :	-	29 FT
6	17 FT,	8 FT,	4 FT,	3 FT.	BR.	36 FT
8	22 FT	10 FT	5 FT	3 FT	3 FT.	48 FT.
12	33 F I	14 FT.	7 F T .	4 FT.	23 FT.	76 FT,
14	38 FT _s	16 FT,	7 FT.	4 FT,	32 FT,	97 FT.
16	44 FT.	18 FT.	9 FT.	4 FT.	46 FT.	110 FT

NOTES:

- RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 10' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN. BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY.
 ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS HORIZONTAL. DEAD—END SERVICE CONSTITUTES CAPS, PLUGS, VALVES AND HYDRANTS.

HORIZONTAL BEND RESTRAINT

PIPE SIZE (INCHES)	90° BEND	45° BEND	22.5° BEND	11.25* BEND
6	35/10	14/6	7/3	4/2
8	45/13	22/10	11/5	5/2
12	65/19	31/14	16/7	7/3
14		40/16	19/8	10/4
16		45/18	22/9	11/4

NOTES:

1. ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS VERTICAL. THE FIRST RESTRAINED LENGTH (FEET) IS FOR THE HIGH-SIDE BEND(S) AND THE SECOND RESTRAINED LENGTH (FEET) INDICATES THE LOW-SIDE BEND(S). LENGTHS WERE CALCULATED USING A CONSISTENT 5 FOOT DEPTH OF COVER FOR THE WATERMAIN.

VERTICAL BEND RESTRAINT

PIPE SIZE (INCHES)	TEE (REDUC.)	STRAIGHT REDUCER
8 X 4	BR.	55/29
8 X 6	BR.	22/17
12 X 6	BR.	81/42
12 X 8	BR.	54/36
12 X 10	BR.	20/17
16X 10	BR.	48/30
16 X 12	BR.	29/32

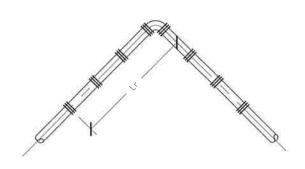
RESTRAINED		
LENGTHS FOR		
REDUCING FITTINGS		

PIPE SIZE (INCHES)	VALVE LR
6	40'
8	40'
12	76'
14	97'
16	110

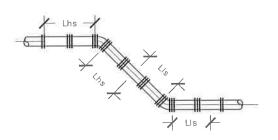
RESTRAINED LENGTHS FOR VALVES

NOTES:

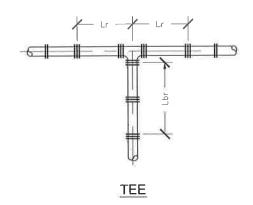
- RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 10' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN. BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY. STRAIGHT REDUCER UNOBSTRUCTED RESTRAINED LENGTHS OFFER THE OPTION OF
- RESTRAINING RECOMMENDED DISTANCES ON THE SMALL-END SIDE (FIRST RESTRAINED LENGTH PROVIDED) OR THE LARGE-END SIDE (SECOND RESTRAINED LENGTH PROVIDED).

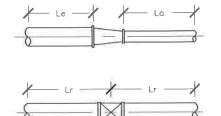


HORIZONTAL BEND



VERTICAL DOWN BEND AND OFFSET





MECHANICAL JOINT PIPE RESTRAINTS

1000 County Road #8 Farmington, NY 14425 (315) 986-8100 APPENDIX: W - 12.0

DATE:

2018

SCALE:

N.T.S.

MRB group

<u>;</u>		
CONDITION	SCHEMATIC	REQUIREMENTS
I WATER LINE ABOVE SEWER LINE	MORE THAN 18"	A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) BACKFILL WITH COMPACTED CRUSHER RUN STONE.
II WATER LINE ABOVE SEWER LINE	18" (MIN.)	A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) WHEN BOTH WATER LINE AND SEWER LINE ARE NEW, SLEEVE SEWER LINE WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. C) WHEN ONE LINE IS EXISTING, SLEEVE PIPE BEING INSTALLED WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. D) BACKFILL WITH COMPACTED CRUSHER RUN STONE.
III SEWER LINE ABOVE WATER LINE	SL 18" (MIN.)	A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) SLEEVE SEWER LINE WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. C) PROVIDE CRADLE OF CONCRETE OR CRUSHER RUN STONE (SEE TRENCH
NOTES WL (WATER LINE) SL (SEWER LINE) D (OUTSIDE DIAMETER OF PIPE) IN NO CASE SHALL PIPES BE CLOSER THAN 18" APART. DISTANCES ARE MEASURED BETWEEN OUTSIDES OF PIPE.		DETAIL BELOW) FOR WATER LINE AND SEWER LINE FOR 10 FT. EACH SIDE OF CROSSING. CAREFULLY TAMPED BACKFILL CRADLE OF CONC. OR CRUSHER RUN STONE D + 8" D + 8"

WATERMAIN / SEWER CROSSING DETAIL

1000 County Road #8 Farmington, NY 14425 (315) 986-8100 APPENDIX: W - 13.0

DATE:

2018

SCALE:

N.T.S.

MRB group

