MRB Group

Elevating Communities

APPENDIX B

B Soil Resource Report and Map

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MRB Project No. 0120.24001.000
Comprehensive Sewer Study
Allegany County, New York
July 2026

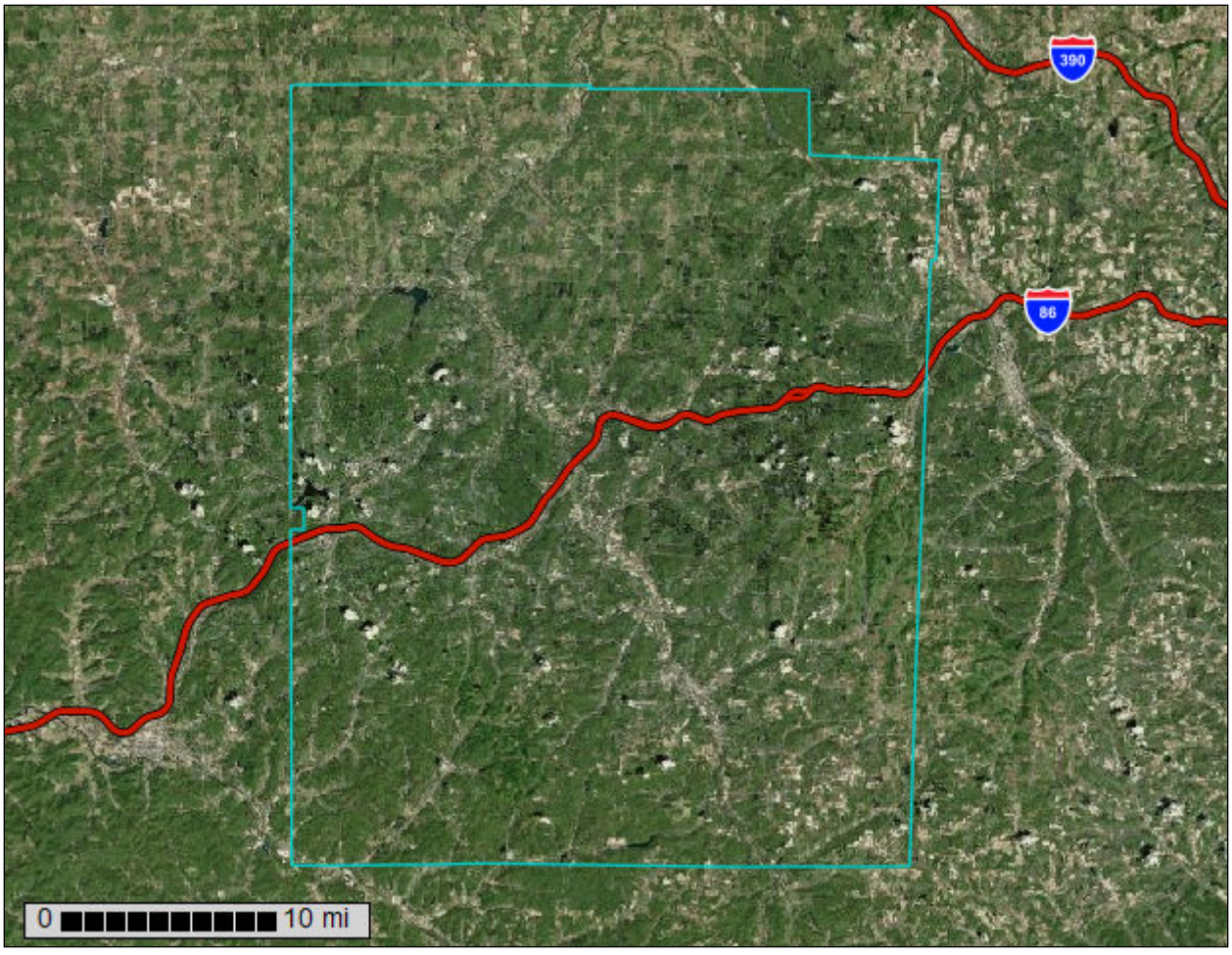
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Allegany County Area, New York



January 13, 2026

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....11
Soil Map.....14
Soil Map.....15
Legend.....16
Map Unit Legend.....17
Map Unit Descriptions.....30
Allegany County Area, New York.....32
1A—Udifluvents and Fluvaquents, frequently flooded, 0 to 3 percent slopes.....32
3A—Tioga loam, occasionally flooded, 0 to 3 percent slopes.....34
5A—Wayland soils complex, 0 to 3 percent slopes, frequently flooded.....35
6A—Wyalusing silt loam, 0 to 3 percent slopes.....37
8A—Middlebury silt loam, 0 to 3 percent slopes.....38
9A—Pawling silt loam, 0 to 3 percent slopes.....40
11B—Ischua channery silt loam, 3 to 8 percent slopes.....41
11C—Ischua channery silt loam, 8 to 15 percent slopes.....43
11D—Ischua channery silt loam, 15 to 25 percent slopes.....44
11E—Ischua channery silt loam, 25 to 35 percent slopes.....46
11F—Ischua channery silt loam, 35 to 50 percent slopes.....47
12C—Franklinville channery silt loam, 8 to 15 percent slopes.....49
12D—Franklinville channery silt loam, 15 to 25 percent slopes.....50
12E—Franklinville channery silt loam, 25 to 35 percent slopes.....52
12F—Franklinville channery silt loam, 35 to 50 percent slopes.....53
14A—Hornellsville silt loam, 0 to 3 percent slopes.....55
14B—Hornellsville silt loam, 3 to 8 percent slopes.....56
14C—Hornellsville silt loam, 8 to 15 percent slopes.....58
14D—Hornellsville silt loam, 15 to 25 percent slopes.....59
14E—Hornellsville silt loam, 25 to 35 percent slopes.....61
15A—Willdin channery silt loam, 0 to 3 percent slopes.....62
15B—Willdin channery silt loam, 3 to 8 percent slopes.....63
15C—Willdin channery silt loam, 8 to 15 percent slopes.....65
15D—Willdin channery silt loam, 15 to 25 percent slopes.....66
16A—Almond silt loam, 0 to 3 percent slopes.....68
16B—Almond silt loam, 3 to 8 percent slopes.....69
16C—Almond silt loam, 8 to 15 percent slopes.....71
17B—Salamanca silt loam, 3 to 8 percent slopes.....73
17C—Salamanca silt loam, 8 to 15 percent slopes.....74
17D—Salamanca silt loam, 15 to 25 percent slopes.....76
17E—Salamanca silt loam, 25 to 35 percent slopes.....77
18F—Rock outcrop-Arnot complex, 25 to 70 percent slopes.....79
19A—Olean silt loam, 0 to 3 percent slopes.....80
19B—Olean silt loam, 3 to 8 percent slopes.....81
20A—Unadilla silt loam, 0 to 3 percent slopes.....83

20B—Unadilla silt loam, 3 to 8 percent slopes....84
20C—Unadilla silt loam, 8 to 15 percent slopes....86
20D—Unadilla silt loam, 15 to 25 percent slopes....87
20E—Unadilla silt loam, 25 to 35 percent slopes....89
21A—Oramel gravelly loam, 0 to 3 percent slopes....90
21B—Oramel gravelly loam, 3 to 8 percent slopes....92
21C—Oramel gravelly loam, 8 to 15 percent slopes....93
22A—Allard silt loam, 0 to 3 percent slopes....95
22B—Allard silt loam, 3 to 8 percent slopes....96
22C—Allard silt loam, 8 to 15 percent slopes....97
25A—Chenango gravelly silt loam, 0 to 3 percent slopes....99
25B—Chenango gravelly silt loam, 3 to 8 percent slopes....100
25C—Chenango gravelly silt loam, 8 to 15 percent slopes....101
25D—Chenango gravelly silt loam, 15 to 25 percent slopes....103
25E—Chenango gravelly silt loam, 25 to 35 percent slopes....104
25F—Chenango gravelly silt loam, 35 to 50 percent slopes....105
26A—Chenango channery silt loam, fan, 0 to 3 percent slopes....107
26B—Chenango channery silt loam, fan, 3 to 8 percent slopes....108
27A—Castile gravelly silt loam, 0 to 3 percent slopes....109
27B—Castile gravelly silt loam, 3 to 8 percent slopes....111
28A—Scio silt loam, 0 to 3 percent slopes....112
29B—Arkport sandy loam, 3 to 8 percent slopes....113
29C—Arkport sandy loam, 8 to 15 percent slopes....115
29D—Arkport sandy loam, 15 to 25 percent slopes....116
29E—Arkport sandy loam, 25 to 35 percent slopes....118
29F—Arkport sandy loam, 35 to 50 percent slopes....119
31A—Collamer silt loam, 0 to 3 percent slopes....121
31B—Collamer silt loam, 3 to 8 percent slopes....122
31C—Collamer silt loam, 8 to 15 percent slopes....123
31D—Collamer silt loam, 15 to 25 percent slopes....125
32A—Churchville silt loam, 0 to 3 percent slopes....126
32B—Churchville silt loam, 3 to 8 percent slopes....127
33A—Wallington silt loam, 0 to 3 percent slopes....128
34A—Atherton silt loam, 0 to 3 percent slopes....130
35A—Rhinebeck silt loam, 0 to 3 percent slopes....131
35B—Rhinebeck silt loam, 3 to 8 percent slopes....132
35C—Rhinebeck silt loam, 8 to 15 percent slopes....134
36A—Canadice silty clay loam, 0 to 3 percent slopes....135
37A—Tonawanda silt loam, 0 to 3 percent slopes....136
37B—Tonawanda silt loam, 3 to 8 percent slopes....138
38A—Niagara silt loam, 0 to 3 percent slopes....139
38B—Niagara silt loam, 3 to 8 percent slopes....140
38C—Niagara silt loam, 8 to 15 percent slopes....142
39A—Atherton mucky silt loam, 0 to 3 percent slopes....143
43A—Canandaigua silt loam, 0 to 3 percent slopes....145
44A—Canandaigua mucky silt loam, 0 to 3 percent slopes....146
46A—Red Hook silt loam, 0 to 3 percent slopes....147
46B—Red Hook silt loam, 3 to 8 percent slopes....148
49A—Red Hook gravelly silt loam, 0 to 3 percent slopes....150
50A—Canaseraga silt loam, 0 to 3 percent slopes....151
50B—Canaseraga silt loam, 3 to 8 percent slopes....152
50C—Canaseraga silt loam, 8 to 15 percent slopes....153
51C—Chadakoin channery silt loam, 8 to 15 percent slopes....155
51D—Chadakoin channery silt loam, 15 to 25 percent slopes....156

51E—Chadakoin channery silt loam, 25 to 35 percent slopes.....157
51F—Chadakoin channery silt loam, 35 to 50 percent slopes.....159
52A—Valois gravelly silt loam, 0 to 3 percent slopes.....160
52B—Valois gravelly silt loam, 3 to 8 percent slopes.....162
52C—Valois gravelly silt loam, 8 to 15 percent slopes.....163
52D—Valois gravelly silt loam, 15 to 25 percent slopes.....165
52E—Valois gravelly silt loam, 25 to 35 percent slopes.....166
52F—Valois gravelly silt loam, 35 to 50 percent slopes.....168
53C—Valois-Volusia-Mardin complex, 3 to 15 percent slopes.....169
58A—Rushford channery silt loam, 0 to 3 percent slopes..... 172
58B—Rushford channery silt loam, 3 to 8 percent slopes..... 173
58C—Rushford channery silt loam, 8 to 15 percent slopes..... 175
58D—Rushford channery silt loam, 15 to 25 percent slopes..... 176
58E—Rushford channery silt loam, 25 to 35 percent slopes..... 178
59B—Yorkshire channery silt loam, 3 to 8 percent slopes..... 179
59C—Yorkshire channery silt loam, 8 to 15 percent slopes.....180
59D—Yorkshire channery silt loam, 15 to 25 percent slopes.....182
60A—Napoli silt loam, 0 to 3 percent slopes.....183
60B—Napoli silt loam, 3 to 8 percent slopes.....184
60C—Napoli silt loam, 8 to 15 percent slopes..... 185
60D—Napoli silt loam, 15 to 25 percent slopes..... 187
61B—Schuyler silt loam, 3 to 8 percent slopes.....188
61C—Schuyler silt loam, 8 to 15 percent slopes.....190
61D—Schuyler silt loam, 15 to 25 percent slopes.....191
61E—Schuyler silt loam, 25 to 35 percent slopes.....193
61F—Schuyler silt loam, 35 to 50 percent slopes..... 194
62B—Mardin channery silt loam, 3 to 8 percent slopes.....195
62C—Mardin channery silt loam, 8 to 15 percent slopes.....197
62D—Mardin channery silt loam, 15 to 25 percent slopes.....198
62E—Mardin channery silt loam, 25 to 35 percent slopes.....200
64C—Mardin channery silt loam, 8 to 15 percent slopes, very stony..... 201
64D—Mardin channery silt loam, 15 to 25 percent slopes, very stony..... 203
66B—Volusia channery silt loam, 3 to 8 percent slopes, very stony.....205
66C—Volusia channery silt loam, 8 to 15 percent slopes, very stony.....206
67A—Dalton silt loam, 0 to 3 percent slopes..... 207
67B—Dalton silt loam, 3 to 8 percent slopes..... 208
67C—Dalton silt loam, 8 to 15 percent slopes..... 210
68A—Volusia channery silt loam, 0 to 3 percent slopes.....211
68B—Volusia channery silt loam, 3 to 8 percent slopes..... 212
68C—Volusia channery silt loam, 8 to 15 percent slopes..... 214
68D—Volusia channery silt loam, 15 to 25 percent slopes..... 215
69A—Erie channery silt loam, 0 to 3 percent slopes.....216
69B—Erie channery silt loam, 3 to 8 percent slopes.....218
69C—Erie channery silt loam, 8 to 15 percent slopes..... 220
71B—Mongaup channery silt loam, 3 to 8 percent slopes, very stony.....221
71C—Mongaup channery silt loam, 8 to 15 percent slopes, very stony... 223
71D—Mongaup and Ischua channery silt loams, 15 to 25 percent slopes, extremely stony..... 224
71E—Mongaup and Ischua channery silt loams, 25 to 35 percent slopes, extremely stony..... 226
71F—Mongaup and Ischua channery silt loams, 35 to 65 percent slopes, extremely stony..... 228
72B—Towerville silt loam, 3 to 8 percent slopes.....230
72C—Towerville silt loam, 8 to 15 percent slopes.....231

72D—Towerville silt loam, 15 to 25 percent slopes....233
72E—Towerville silt loam, 25 to 35 percent slopes....234
72F—Towerville silt loam, 35 to 50 percent slopes....236
73A—Gretor channery silt loam, 0 to 3 percent slopes....237
73B—Gretor channery silt loam, 3 to 8 percent slopes....239
73C—Gretor channery silt loam, 8 to 15 percent slopes....240
75A—Alden mucky silt loam, cool, 0 to 3 percent slopes....241
76A—Orpark silt loam, 0 to 3 percent slopes....243
76B—Orpark silt loam, 3 to 8 percent slopes....244
76C—Orpark silt loam, 8 to 15 percent slopes....245
77A—Chippewa silt loam, 0 to 3 percent slopes....247
77B—Chippewa silt loam, 3 to 8 percent slopes....248
78A—Hornell silt loam, 0 to 3 percent slopes....249
78B—Hornell silt loam, 3 to 8 percent slopes....251
78C—Hornell silt loam, 8 to 15 percent slopes....252
78D—Hornell silt loam, 15 to 25 percent slopes....253
78E—Hornell silt loam, 25 to 35 percent slopes....255
79B—Mongaup channery silt loam, 3 to 8 percent slopes....256
79C—Mongaup channery silt loam, 8 to 15 percent slopes....258
79D—Mongaup channery silt loam, 15 to 25 percent slopes....259
79E—Mongaup channery silt loam, 25 to 35 percent slopes....261
79F—Mongaup channery silt loam, 35 to 70 percent slopes....262
80A—Fremont silt loam, 0 to 3 percent slopes....264
80B—Fremont silt loam, 3 to 8 percent slopes....265
80C—Fremont silt loam, 8 to 15 percent slopes....267
80D—Fremont silt loam, 15 to 25 percent slopes....269
81A—Varysburg gravelly loam, 0 to 3 percent slopes....270
81B—Varysburg gravelly loam, 3 to 8 percent slopes....272
81C—Varysburg gravelly loam, 8 to 15 percent slopes....273
81D—Varysburg gravelly loam, 15 to 25 percent slopes....274
81E—Varysburg gravelly loam, 25 to 35 percent slopes....276
81F—Varysburg gravelly loam, 35 to 50 percent slopes....277
84B—Elko silt loam, 3 to 8 percent slopes....279
85B—Onoville silt loam, 3 to 8 percent slopes....280
85C—Onoville silt loam, 8 to 15 percent slopes....282
85D—Onoville silt loam, 15 to 25 percent slopes....283
86C—Eldred silt loam, 8 to 15 percent slopes....284
86D—Eldred silt loam, 15 to 25 percent slopes....286
87A—Shongo silt loam, 0 to 3 percent slopes....287
87B—Shongo silt loam, 3 to 8 percent slopes....288
87C—Shongo silt loam, 8 to 15 percent slopes....290
88A—Ivory silt loam, 0 to 3 percent slopes....291
88B—Ivory silt loam, 3 to 8 percent slopes....292
88C—Ivory silt loam, 8 to 15 percent slopes....294
89B—Portville silt loam, 3 to 8 percent slopes....296
89C—Portville silt loam, 8 to 15 percent slopes....297
91A—Natchaug muck, 0 to 2 percent slopes....298
92A—Catden muck, 0 to 2 percent slopes....299
93A—Aquepts, Aquents, and Saprists, inundated, 0 to 3 percent slopes.301
95B—Mandy channery silt loam, 3 to 8 percent slopes....303
95C—Mandy channery silt loam, 8 to 15 percent slopes....304
95D—Mandy channery silt loam, 15 to 25 percent slopes....306
95E—Mandy channery silt loam, 25 to 35 percent slopes....307
95F—Mandy channery silt loam, 35 to 70 percent slopes....309

96B—Carrollton channery silt loam, 3 to 8 percent slopes..... 310
96C—Carrollton channery silt loam, 8 to 15 percent slopes..... 312
96D—Carrollton channery silt loam, 15 to 25 percent slopes..... 313
96E—Carrollton channery silt loam, 25 to 35 percent slopes..... 315
96F—Carrollton channery silt loam, 35 to 50 percent slopes.....316
97D—Kinzua channery silt loam, 15 to 25 percent slopes.....318
97E—Kinzua channery silt loam, 25 to 35 percent slopes.....319
97F—Kinzua channery silt loam, 35 to 60 percent slopes..... 321
98D—Kinzua channery silt loam, 15 to 25 percent slopes, extremely bouldery..... 322
98E—Kinzua channery silt loam, 25 to 35 percent slopes, extremely bouldery..... 324
98F—Kinzua channery silt loam, 35 to 60 percent slopes, extremely bouldery..... 326
99B—Buchanan silt loam, 3 to 8 percent slopes.....327
99C—Buchanan silt loam, 8 to 15 percent slopes..... 329
99D—Buchanan silt loam, 15 to 25 percent slopes..... 331
100D—Udorthents, loamy-skeletal, 0 to 25 percent slopes..... 332
101D—Udorthents, refuse substratum, 0 to 25 percent slopes..... 334
103C—Knapp Creek-Rock outcrop complex, 3 to 15 percent slopes.....335
111A—Middlebrook channery silt loam, 0 to 3 percent slopes.....336
111B—Middlebrook channery silt loam, 3 to 8 percent slopes.....338
111C—Middlebrook channery silt loam, 8 to 15 percent slopes.....339
114B—Lewbeach channery silt loam, 3 to 8 percent slopes.....340
114C—Lewbeach channery silt loam, 8 to 15 percent slopes.....342
114D—Lewbeach channery silt loam, 15 to 25 percent slopes.....344
114E—Lewbeach channery silt loam, 25 to 35 percent slopes.....345
115B—Willowemoc channery silt loam, 3 to 8 percent slopes.....347
115C—Willowemoc channery silt loam, 8 to 15 percent slopes.....348
115D—Willowemoc channery silt loam, 15 to 25 percent slopes.....350
116A—Onteora channery silt loam, 0 to 3 percent slopes..... 351
116B—Onteora channery silt loam, 3 to 8 percent slopes..... 353
116C—Onteora channery silt loam, 8 to 15 percent slopes..... 354
117C—Willdin channery silt loam, 8 to 15 percent slopes, very stony..... 356
117D—Willdin channery silt loam, 15 to 25 percent slopes, very stony.... 357
118B—Ontusia channery silt loam, 3 to 8 percent slopes, very stony..... 359
118C—Ontusia channery silt loam, 8 to 15 percent slopes, very stony.... 360
120A—Hawksnest channery silt loam, 0 to 3 percent slopes..... 362
120B—Hawksnest channery silt loam, 3 to 8 percent slopes..... 363
120C—Hawksnest channery silt loam, 8 to 15 percent slopes..... 364
122B—Vly channery silt loam, 3 to 8 percent slopes.....366
122C—Vly channery silt loam, 8 to 15 percent slopes.....367
122D—Vly channery silt loam, 15 to 25 percent slopes.....369
122E—Vly channery silt loam, 25 to 35 percent slopes.....370
122F—Vly channery silt loam, 35 to 55 percent slopes..... 371
124B—Lewbath channery silt loam, 3 to 8 percent slopes..... 373
124C—Lewbath channery silt loam, 8 to 15 percent slopes..... 374
124D—Lewbath channery silt loam, 15 to 25 percent slopes..... 375
124E—Lewbath channery silt loam, 25 to 35 percent slopes..... 377
125A—Howard gravelly loam, 0 to 3 percent slopes..... 378
125B—Howard gravelly loam, 3 to 8 percent slopes..... 380
125C—Howard gravelly loam, 8 to 15 percent slopes..... 381
125D—Howard gravelly loam, 15 to 25 percent slopes..... 383
125E—Howard gravelly loam, 25 to 35 percent slopes..... 384

125F—Howard gravelly loam, 35 to 60 percent slopes.....385
126A—Ontusia channery silt loam, 0 to 3 percent slopes.....387
126B—Ontusia channery silt loam, 3 to 8 percent slopes.....388
126C—Ontusia channery silt loam, 8 to 15 percent slopes..... 390
126D—Ontusia channery silt loam, 15 to 25 percent slopes..... 391
132A—Wiscoy-Volusia complex, 0 to 3 percent slopes..... 393
132B—Wiscoy-Volusia complex, 3 to 8 percent slopes..... 395
132C—Wiscoy-Volusia complex, 8 to 15 percent slopes.....397
134C—Bath channery silt loam, 8 to 15 percent slopes..... 399
134D—Bath channery silt loam, 15 to 25 percent slopes..... 400
134E—Bath channery silt loam, 25 to 35 percent slopes.....402
135B—Hudson silt loam, 3 to 8 percent slopes..... 403
135C—Hudson silt loam, 8 to 15 percent slopes.....405
135D—Hudson silt loam, 15 to 25 percent slopes.....406
135E—Hudson silt loam, 25 to 35 percent slope.....407
135F—Hudson silt loam, 35 to 60 percent slopes.....409
140E—Dunkirk silt loam, 25 to 35 percent slopes.....410
150B—Canaseraga silt loam, 3 to 8 percent slopes cool phase.....411
167A—Dalton silt loam, 0 to 3 percent slopes, cool phase.....413
167B—Dalton silt loam, 3 to 8 percent slopes, cool phase.....414
171C—Lordstown channery silt loam, 8 to 15 percent slopes, very stony415
171D—Lordstown and Towerville soils, 15 to 25 percent slopes, extremely stony.....417
171E—Lordstown and Towerville soils, 25 to 35 percent slopes, extremely stony.....419
171F—Lordstown and Towerville soils, 35 to 60 percent slopes, extremely stony.....421
177A—Norchip silt loam, 0 to 3 percent slopes..... 423
177B—Norchip silt loam, 3 to 8 percent slopes..... 424
179B—Lordstown channery silt loam, 3 to 8 percent slopes..... 426
179C—Lordstown channery silt loam, 8 to 15 percent slopes..... 427
179D—Lordstown channery silt loam, 15 to 25 percent slopes..... 429
179E—Lordstown channery silt loam, 25 to 35 percent slopes..... 430
179F—Lordstown channery silt loam, 35 to 60 percent slopes.....432
185B—Onoville channery silt loam, 3 to 8 percent slopes, extremely bouldery..... 433
185C—Onoville channery silt loam, 8 to 15 percent slopes, extremely bouldery..... 435
185D—Onoville channery silt loam, 15 to 25 percent slopes, extremely bouldery..... 436
187B—Shongo silt loam, 3 to 8 percent slopes, extremely bouldery.....437
187C—Shongo silt loam, 8 to 15 percent slopes, extremely bouldery.....439
188B—Kanona silty clay loam, 3 to 8 percent slopes..... 440
188C—Kanona silty clay loam, 8 to 15 percent slopes.....441
195C—Mandy channery silt loam, 8 to 15 percent slopes, extremely bouldery..... 443
195D—Mandy channery silt loam, 15 to 25 percent slopes, extremely bouldery..... 444
195E—Mandy channery silt loam, 25 to 35 percent slopes, extremely bouldery..... 446
195F—Mandy channery silt loam, 35 to 70 percent slopes, extremely bouldery..... 447
200D—Udorthents, loamy, 0 to 25 percent slopes.....449
216B—Morris silt loam, 3 to 8 percent slopes.....451

216C—Morris silt loam, 8 to 15 percent slopes....452
289B—Ceres channery silt loam, 3 to 8 percent slopes....454
289C—Ceres channery silt loam, 8 to 15 percent slopes....455
289D—Ceres channery silt loam, 15 to 25 percent slopes....456
289E—Ceres channery silt loam, 25 to 35 percent slopes....458
289F—Ceres channery silt loam, 35 to 70 percent slopes....459
292A—Pope fine sandy loam, 0 to 3 percent slopes....460
293A—Philo silt loam, 0 to 3 percent slopes....462
300A—Tioga loam, rarely flooded, 0 to 3 percent slopes....463
496C—Gilpin channery silt loam, 8 to 15 percent slopes....465
496D—Gilpin channery silt loam, 15 to 25 percent slopes....466
496E—Gilpin channery silt loam, 25 to 35 percent slopes....467
497D—Rayne channery silt loam, 15 to 25 percent slopes....469
497E—Rayne channery silt loam, 25 to 35 percent slopes....471
800A—Holderton silt loam, 0 to 3 percent slopes, occasionally flooded 140....472
PG—Pits, gravel....473
PQ—Pits, quarry....474
Ur—Urban land....475
W—Water....476
Soil Information for All Uses....477
Suitabilities and Limitations for Use....477
Sanitary Facilities....477
Septic Tank Absorption Fields (NY) (Allegany County Study)....477
Septic Tank Absorption Fields (Allegany County Study)....609
Sewage Lagoons (Allegany County Study)....733
References....851
Glossary....853

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:374,000 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 5000 10000 20000 30000

Feet
0 15000 30000 60000 90000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Allegany County Area, New York
Survey Area Data: Version 31, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 1, 1999—Dec 31, 2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1A	Udifluvents and Fluvaquents, frequently flooded, 0 to 3 percent slopes	5,246.7	0.8%
3A	Tioga loam, occasionally flooded, 0 to 3 percent slopes	2,154.8	0.3%
5A	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	4,420.6	0.7%
6A	Wyalusing silt loam, 0 to 3 percent slopes	1,477.6	0.2%
8A	Middlebury silt loam, 0 to 3 percent slopes	4,739.3	0.7%
9A	Pawling silt loam, 0 to 3 percent slopes	4,312.0	0.7%
11B	Ischua channery silt loam, 3 to 8 percent slopes	4,600.1	0.7%
11C	Ischua channery silt loam, 8 to 15 percent slopes	7,661.9	1.2%
11D	Ischua channery silt loam, 15 to 25 percent slopes	14,303.3	2.2%
11E	Ischua channery silt loam, 25 to 35 percent slopes	10,622.3	1.6%
11F	Ischua channery silt loam, 35 to 50 percent slopes	3,170.8	0.5%
12C	Franklinville channery silt loam, 8 to 15 percent slopes	39.3	0.0%
12D	Franklinville channery silt loam, 15 to 25 percent slopes	306.2	0.0%
12E	Franklinville channery silt loam, 25 to 35 percent slopes	1,573.3	0.2%
12F	Franklinville channery silt loam, 35 to 50 percent slopes	727.0	0.1%
14A	Hornellsville silt loam, 0 to 3 percent slopes	1,401.4	0.2%
14B	Hornellsville silt loam, 3 to 8 percent slopes	3,326.5	0.5%
14C	Hornellsville silt loam, 8 to 15 percent slopes	2,584.5	0.4%
14D	Hornellsville silt loam, 15 to 25 percent slopes	1,282.0	0.2%
14E	Hornellsville silt loam, 25 to 35 percent slopes	164.5	0.0%
15A	Willdin channery silt loam, 0 to 3 percent slopes	126.1	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
15B	Willdin channery silt loam, 3 to 8 percent slopes	5,570.8	0.8%
15C	Willdin channery silt loam, 8 to 15 percent slopes	11,012.5	1.7%
15D	Willdin channery silt loam, 15 to 25 percent slopes	9,745.5	1.5%
16A	Almond silt loam, 0 to 3 percent slopes	11,777.9	1.8%
16B	Almond silt loam, 3 to 8 percent slopes	15,428.0	2.3%
16C	Almond silt loam, 8 to 15 percent slopes	6,532.8	1.0%
17B	Salamanca silt loam, 3 to 8 percent slopes	856.9	0.1%
17C	Salamanca silt loam, 8 to 15 percent slopes	1,830.5	0.3%
17D	Salamanca silt loam, 15 to 25 percent slopes	2,037.0	0.3%
17E	Salamanca silt loam, 25 to 35 percent slopes	817.5	0.1%
18F	Rock outcrop-Arnot complex, 25 to 70 percent slopes	332.0	0.1%
19A	Olean silt loam, 0 to 3 percent slopes	3,888.1	0.6%
19B	Olean silt loam, 3 to 8 percent slopes	671.4	0.1%
20A	Unadilla silt loam, 0 to 3 percent slopes	252.2	0.0%
20B	Unadilla silt loam, 3 to 8 percent slopes	56.8	0.0%
20C	Unadilla silt loam, 8 to 15 percent slopes	33.7	0.0%
20D	Unadilla silt loam, 15 to 25 percent slopes	52.4	0.0%
20E	Unadilla silt loam, 25 to 35 percent slopes	45.8	0.0%
21A	Oramel gravelly loam, 0 to 3 percent slopes	635.2	0.1%
21B	Oramel gravelly loam, 3 to 8 percent slopes	1,085.2	0.2%
21C	Oramel gravelly loam, 8 to 15 percent slopes	119.3	0.0%
22A	Allard silt loam, 0 to 3 percent slopes	3,043.4	0.5%
22B	Allard silt loam, 3 to 8 percent slopes	686.5	0.1%
22C	Allard silt loam, 8 to 15 percent slopes	192.3	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
25A	Chenango gravelly silt loam, 0 to 3 percent slopes	4,686.7	0.7%
25B	Chenango gravelly silt loam, 3 to 8 percent slopes	2,419.0	0.4%
25C	Chenango gravelly silt loam, 8 to 15 percent slopes	1,578.1	0.2%
25D	Chenango gravelly silt loam, 15 to 25 percent slopes	752.0	0.1%
25E	Chenango gravelly silt loam, 25 to 35 percent slopes	390.8	0.1%
25F	Chenango gravelly silt loam, 35 to 50 percent slopes	499.5	0.1%
26A	Chenango channery silt loam, fan, 0 to 3 percent slopes	3,398.8	0.5%
26B	Chenango channery silt loam, fan, 3 to 8 percent slopes	4,908.9	0.7%
27A	Castile gravelly silt loam, 0 to 3 percent slopes	1,340.7	0.2%
27B	Castile gravelly silt loam, 3 to 8 percent slopes	514.1	0.1%
28A	Scio silt loam, 0 to 3 percent slopes	249.9	0.0%
29B	Arkport sandy loam, 3 to 8 percent slopes	141.9	0.0%
29C	Arkport sandy loam, 8 to 15 percent slopes	460.4	0.1%
29D	Arkport sandy loam, 15 to 25 percent slopes	54.7	0.0%
29E	Arkport sandy loam, 25 to 35 percent slopes	109.0	0.0%
29F	Arkport sandy loam, 35 to 50 percent slopes	93.4	0.0%
31A	Collamer silt loam, 0 to 3 percent slopes	63.9	0.0%
31B	Collamer silt loam, 3 to 8 percent slopes	330.6	0.0%
31C	Collamer silt loam, 8 to 15 percent slopes	497.8	0.1%
31D	Collamer silt loam, 15 to 25 percent slopes	386.7	0.1%
32A	Churchville silt loam, 0 to 3 percent slopes	4.1	0.0%
32B	Churchville silt loam, 3 to 8 percent slopes	10.1	0.0%
33A	Wallington silt loam, 0 to 3 percent slopes	33.4	0.0%
34A	Atherton silt loam, 0 to 3 percent slopes	1,900.7	0.3%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
35A	Rhinebeck silt loam, 0 to 3 percent slopes	1,288.6	0.2%
35B	Rhinebeck silt loam, 3 to 8 percent slopes	4,559.7	0.7%
35C	Rhinebeck silt loam, 8 to 15 percent slopes	1,356.8	0.2%
36A	Canadice silty clay loam, 0 to 3 percent slopes	994.2	0.2%
37A	Tonawanda silt loam, 0 to 3 percent slopes	256.1	0.0%
37B	Tonawanda silt loam, 3 to 8 percent slopes	69.1	0.0%
38A	Niagara silt loam, 0 to 3 percent slopes	1,442.8	0.2%
38B	Niagara silt loam, 3 to 8 percent slopes	2,360.6	0.4%
38C	Niagara silt loam, 8 to 15 percent slopes	285.9	0.0%
39A	Atherton mucky silt loam, 0 to 3 percent slopes	565.7	0.1%
43A	Canandaigua silt loam, 0 to 3 percent slopes	1,225.8	0.2%
44A	Canandaigua mucky silt loam, 0 to 3 percent slopes	835.2	0.1%
46A	Red Hook silt loam, 0 to 3 percent slopes	1,192.5	0.2%
46B	Red Hook silt loam, 3 to 8 percent slopes	215.9	0.0%
49A	Red Hook gravelly silt loam, 0 to 3 percent slopes	483.0	0.1%
50A	Canaseraga silt loam, 0 to 3 percent slopes	96.1	0.0%
50B	Canaseraga silt loam, 3 to 8 percent slopes	600.0	0.1%
50C	Canaseraga silt loam, 8 to 15 percent slopes	194.3	0.0%
51C	Chadakoin channery silt loam, 8 to 15 percent slopes	47.2	0.0%
51D	Chadakoin channery silt loam, 15 to 25 percent slopes	50.3	0.0%
51E	Chadakoin channery silt loam, 25 to 35 percent slopes	293.8	0.0%
51F	Chadakoin channery silt loam, 35 to 50 percent slopes	641.6	0.1%
52A	Valois gravelly silt loam, 0 to 3 percent slopes	226.8	0.0%
52B	Valois gravelly silt loam, 3 to 8 percent slopes	2,454.2	0.4%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
52C	Valois gravelly silt loam, 8 to 15 percent slopes	2,066.9	0.3%
52D	Valois gravelly silt loam, 15 to 25 percent slopes	2,023.5	0.3%
52E	Valois gravelly silt loam, 25 to 35 percent slopes	1,835.1	0.3%
52F	Valois gravelly silt loam, 35 to 50 percent slopes	867.5	0.1%
53C	Valois-Volusia-Mardin complex, 3 to 15 percent slopes	8,484.4	1.3%
58A	Rushford channery silt loam, 0 to 3 percent slopes	107.7	0.0%
58B	Rushford channery silt loam, 3 to 8 percent slopes	3,022.7	0.5%
58C	Rushford channery silt loam, 8 to 15 percent slopes	4,938.0	0.7%
58D	Rushford channery silt loam, 15 to 25 percent slopes	4,056.8	0.6%
58E	Rushford channery silt loam, 25 to 35 percent slopes	1,663.6	0.3%
59B	Yorkshire channery silt loam, 3 to 8 percent slopes	1,528.8	0.2%
59C	Yorkshire channery silt loam, 8 to 15 percent slopes	3,630.5	0.5%
59D	Yorkshire channery silt loam, 15 to 25 percent slopes	3,156.0	0.5%
60A	Napoli silt loam, 0 to 3 percent slopes	1,456.1	0.2%
60B	Napoli silt loam, 3 to 8 percent slopes	17,822.5	2.7%
60C	Napoli silt loam, 8 to 15 percent slopes	25,387.0	3.8%
60D	Napoli silt loam, 15 to 25 percent slopes	1,124.6	0.2%
61B	Schuyler silt loam, 3 to 8 percent slopes	127.2	0.0%
61C	Schuyler silt loam, 8 to 15 percent slopes	1,413.9	0.2%
61D	Schuyler silt loam, 15 to 25 percent slopes	2,825.0	0.4%
61E	Schuyler silt loam, 25 to 35 percent slopes	1,446.9	0.2%
61F	Schuyler silt loam, 35 to 50 percent slopes	607.4	0.1%
62B	Mardin channery silt loam, 3 to 8 percent slopes	1,315.6	0.2%
62C	Mardin channery silt loam, 8 to 15 percent slopes	4,236.7	0.6%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
62D	Mardin channery silt loam, 15 to 25 percent slopes	8,739.5	1.3%
62E	Mardin channery silt loam, 25 to 35 percent slopes	168.8	0.0%
64C	Mardin channery silt loam, 8 to 15 percent slopes, very stony	281.1	0.0%
64D	Mardin channery silt loam, 15 to 25 percent slopes, very stony	742.9	0.1%
66B	Volusia channery silt loam, 3 to 8 percent slopes, very stony	245.8	0.0%
66C	Volusia channery silt loam, 8 to 15 percent slopes, very stony	761.9	0.1%
67A	Dalton silt loam, 0 to 3 percent slopes	318.2	0.0%
67B	Dalton silt loam, 3 to 8 percent slopes	984.0	0.1%
67C	Dalton silt loam, 8 to 15 percent slopes	127.2	0.0%
68A	Volusia channery silt loam, 0 to 3 percent slopes	818.0	0.1%
68B	Volusia channery silt loam, 3 to 8 percent slopes	9,702.4	1.5%
68C	Volusia channery silt loam, 8 to 15 percent slopes	24,314.7	3.7%
68D	Volusia channery silt loam, 15 to 25 percent slopes	2,319.7	0.4%
69A	Erie channery silt loam, 0 to 3 percent slopes	136.0	0.0%
69B	Erie channery silt loam, 3 to 8 percent slopes	1,701.1	0.3%
69C	Erie channery silt loam, 8 to 15 percent slopes	2,008.3	0.3%
71B	Mongaup channery silt loam, 3 to 8 percent slopes, very stony	61.3	0.0%
71C	Mongaup channery silt loam, 8 to 15 percent slopes, very stony	60.2	0.0%
71D	Mongaup and Ischua channery silt loams, 15 to 25 percent slopes, extremely stony	802.7	0.1%
71E	Mongaup and Ischua channery silt loams, 25 to 35 percent slopes, extremely stony	2,132.9	0.3%
71F	Mongaup and Ischua channery silt loams, 35 to 65 percent slopes, extremely stony	3,938.3	0.6%
72B	Towerville silt loam, 3 to 8 percent slopes	298.3	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
72C	Towerville silt loam, 8 to 15 percent slopes	1,101.1	0.2%
72D	Towerville silt loam, 15 to 25 percent slopes	3,024.4	0.5%
72E	Towerville silt loam, 25 to 35 percent slopes	3,262.2	0.5%
72F	Towerville silt loam, 35 to 50 percent slopes	1,449.3	0.2%
73A	Gretor channery silt loam, 0 to 3 percent slopes	4,551.2	0.7%
73B	Gretor channery silt loam, 3 to 8 percent slopes	9,793.2	1.5%
73C	Gretor channery silt loam, 8 to 15 percent slopes	5,465.3	0.8%
75A	Alden mucky silt loam, cool, 0 to 3 percent slopes	12.9	0.0%
76A	Orpark silt loam, 0 to 3 percent slopes	126.1	0.0%
76B	Orpark silt loam, 3 to 8 percent slopes	471.5	0.1%
76C	Orpark silt loam, 8 to 15 percent slopes	571.0	0.1%
77A	Chippewa silt loam, 0 to 3 percent slopes	1,805.3	0.3%
77B	Chippewa silt loam, 3 to 8 percent slopes	1,757.4	0.3%
78A	Hornell silt loam, 0 to 3 percent slopes	175.7	0.0%
78B	Hornell silt loam, 3 to 8 percent slopes	519.5	0.1%
78C	Hornell silt loam, 8 to 15 percent slopes	1,289.6	0.2%
78D	Hornell silt loam, 15 to 25 percent slopes	1,440.1	0.2%
78E	Hornell silt loam, 25 to 35 percent slopes	401.8	0.1%
79B	Mongaup channery silt loam, 3 to 8 percent slopes	9,861.2	1.5%
79C	Mongaup channery silt loam, 8 to 15 percent slopes	7,627.0	1.2%
79D	Mongaup channery silt loam, 15 to 25 percent slopes	7,767.0	1.2%
79E	Mongaup channery silt loam, 25 to 35 percent slopes	7,670.6	1.2%
79F	Mongaup channery silt loam, 35 to 70 percent slopes	4,112.9	0.6%
80A	Fremont silt loam, 0 to 3 percent slopes	688.1	0.1%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
80B	Fremont silt loam, 3 to 8 percent slopes	2,280.6	0.3%
80C	Fremont silt loam, 8 to 15 percent slopes	3,652.6	0.6%
80D	Fremont silt loam, 15 to 25 percent slopes	363.5	0.1%
81A	Varysburg gravelly loam, 0 to 3 percent slopes	213.7	0.0%
81B	Varysburg gravelly loam, 3 to 8 percent slopes	1,760.8	0.3%
81C	Varysburg gravelly loam, 8 to 15 percent slopes	925.3	0.1%
81D	Varysburg gravelly loam, 15 to 25 percent slopes	881.7	0.1%
81E	Varysburg gravelly loam, 25 to 35 percent slopes	2,473.5	0.4%
81F	Varysburg gravelly loam, 35 to 50 percent slopes	1,703.7	0.3%
84B	Elko silt loam, 3 to 8 percent slopes	888.1	0.1%
85B	Onoville silt loam, 3 to 8 percent slopes	89.8	0.0%
85C	Onoville silt loam, 8 to 15 percent slopes	285.8	0.0%
85D	Onoville silt loam, 15 to 25 percent slopes	455.2	0.1%
86C	Eldred silt loam, 8 to 15 percent slopes	9.0	0.0%
86D	Eldred silt loam, 15 to 25 percent slopes	71.4	0.0%
87A	Shongo silt loam, 0 to 3 percent slopes	10.5	0.0%
87B	Shongo silt loam, 3 to 8 percent slopes	75.4	0.0%
87C	Shongo silt loam, 8 to 15 percent slopes	12.8	0.0%
88A	Ivory silt loam, 0 to 3 percent slopes	7.6	0.0%
88B	Ivory silt loam, 3 to 8 percent slopes	15.6	0.0%
88C	Ivory silt loam, 8 to 15 percent slopes	29.3	0.0%
89B	Portville silt loam, 3 to 8 percent slopes	60.0	0.0%
89C	Portville silt loam, 8 to 15 percent slopes	766.2	0.1%
91A	Natchaug muck, 0 to 2 percent slopes	175.1	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
92A	Catden muck, 0 to 2 percent slopes	550.9	0.1%
93A	Aquepts, Aquents, and Saprists, inundated, 0 to 3 percent slopes	1,666.9	0.3%
95B	Mandy channery silt loam, 3 to 8 percent slopes	816.7	0.1%
95C	Mandy channery silt loam, 8 to 15 percent slopes	1,356.1	0.2%
95D	Mandy channery silt loam, 15 to 25 percent slopes	506.6	0.1%
95E	Mandy channery silt loam, 25 to 35 percent slopes	1,583.4	0.2%
95F	Mandy channery silt loam, 35 to 70 percent slopes	1,419.5	0.2%
96B	Carrollton channery silt loam, 3 to 8 percent slopes	123.9	0.0%
96C	Carrollton channery silt loam, 8 to 15 percent slopes	169.0	0.0%
96D	Carrollton channery silt loam, 15 to 25 percent slopes	129.9	0.0%
96E	Carrollton channery silt loam, 25 to 35 percent slopes	420.1	0.1%
96F	Carrollton channery silt loam, 35 to 50 percent slopes	29.8	0.0%
97D	Kinzua channery silt loam, 15 to 25 percent slopes	128.0	0.0%
97E	Kinzua channery silt loam, 25 to 35 percent slopes	830.8	0.1%
97F	Kinzua channery silt loam, 35 to 60 percent slopes	27.2	0.0%
98D	Kinzua channery silt loam, 15 to 25 percent slopes, extremely bouldery	46.1	0.0%
98E	Kinzua channery silt loam, 25 to 35 percent slopes, extremely bouldery	163.3	0.0%
98F	Kinzua channery silt loam, 35 to 60 percent slopes, extremely bouldery	32.4	0.0%
99B	Buchanan silt loam, 3 to 8 percent slopes	1.4	0.0%
99C	Buchanan silt loam, 8 to 15 percent slopes	4.4	0.0%
99D	Buchanan silt loam, 15 to 25 percent slopes	687.4	0.1%
100D	Udorthents, loamy-skeletal, 0 to 25 percent slopes	1,349.1	0.2%
101D	Udorthents, refuse substratum, 0 to 25 percent slopes	293.1	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
103C	Knapp Creek-Rock outcrop complex, 3 to 15 percent slopes	166.7	0.0%
111A	Middlebrook channery silt loam, 0 to 3 percent slopes	336.4	0.1%
111B	Middlebrook channery silt loam, 3 to 8 percent slopes	2,305.4	0.3%
111C	Middlebrook channery silt loam, 8 to 15 percent slopes	502.4	0.1%
114B	Lewbeach channery silt loam, 3 to 8 percent slopes	0.6	0.0%
114C	Lewbeach channery silt loam, 8 to 15 percent slopes	298.3	0.0%
114D	Lewbeach channery silt loam, 15 to 25 percent slopes	1,356.9	0.2%
114E	Lewbeach channery silt loam, 25 to 35 percent slopes	1,652.6	0.2%
115B	Willowemoc channery silt loam, 3 to 8 percent slopes	737.9	0.1%
115C	Willowemoc channery silt loam, 8 to 15 percent slopes	4,640.6	0.7%
115D	Willowemoc channery silt loam, 15 to 25 percent slopes	5,156.1	0.8%
116A	Onteora channery silt loam, 0 to 3 percent slopes	140.6	0.0%
116B	Onteora channery silt loam, 3 to 8 percent slopes	2,067.5	0.3%
116C	Onteora channery silt loam, 8 to 15 percent slopes	3,282.9	0.5%
117C	Willdin channery silt loam, 8 to 15 percent slopes, very stony	462.2	0.1%
117D	Willdin channery silt loam, 15 to 25 percent slopes, very stony	991.2	0.1%
118B	Ontusia channery silt loam, 3 to 8 percent slopes, very stony	226.4	0.0%
118C	Ontusia channery silt loam, 8 to 15 percent slopes, very stony	1,260.7	0.2%
120A	Hawksnest channery silt loam, 0 to 3 percent slopes	17.6	0.0%
120B	Hawksnest channery silt loam, 3 to 8 percent slopes	541.2	0.1%
120C	Hawksnest channery silt loam, 8 to 15 percent slopes	155.5	0.0%
122B	Vly channery silt loam, 3 to 8 percent slopes	1,774.1	0.3%
122C	Vly channery silt loam, 8 to 15 percent slopes	2,750.9	0.4%
122D	Vly channery silt loam, 15 to 25 percent slopes	3,791.6	0.6%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
122E	Vly channery silt loam, 25 to 35 percent slopes	4,224.3	0.6%
122F	Vly channery silt loam, 35 to 55 percent slopes	2,014.4	0.3%
124B	Lewbath channery silt loam, 3 to 8 percent slopes	821.1	0.1%
124C	Lewbath channery silt loam, 8 to 15 percent slopes	731.0	0.1%
124D	Lewbath channery silt loam, 15 to 25 percent slopes	677.9	0.1%
124E	Lewbath channery silt loam, 25 to 35 percent slopes	2,183.9	0.3%
125A	Howard gravelly loam, 0 to 3 percent slopes	1,360.4	0.2%
125B	Howard gravelly loam, 3 to 8 percent slopes	1,396.4	0.2%
125C	Howard gravelly loam, 8 to 15 percent slopes	1,357.2	0.2%
125D	Howard gravelly loam, 15 to 25 percent slopes	826.6	0.1%
125E	Howard gravelly loam, 25 to 35 percent slopes	603.9	0.1%
125F	Howard gravelly loam, 35 to 60 percent slopes	1,051.0	0.2%
126A	Ontusia channery silt loam, 0 to 3 percent slopes	5,093.6	0.8%
126B	Ontusia channery silt loam, 3 to 8 percent slopes	22,138.5	3.3%
126C	Ontusia channery silt loam, 8 to 15 percent slopes	29,150.2	4.4%
126D	Ontusia channery silt loam, 15 to 25 percent slopes	1,828.0	0.3%
132A	Wiscoy-Volusia complex, 0 to 3 percent slopes	2,367.6	0.4%
132B	Wiscoy-Volusia complex, 3 to 8 percent slopes	22,410.6	3.4%
132C	Wiscoy-Volusia complex, 8 to 15 percent slopes	22,683.0	3.4%
134C	Bath channery silt loam, 8 to 15 percent slopes	146.6	0.0%
134D	Bath channery silt loam, 15 to 25 percent slopes	467.5	0.1%
134E	Bath channery silt loam, 25 to 35 percent slopes	746.8	0.1%
135B	Hudson silt loam, 3 to 8 percent slopes	190.1	0.0%
135C	Hudson silt loam, 8 to 15 percent slopes	309.4	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
135D	Hudson silt loam, 15 to 25 percent slopes	839.7	0.1%
135E	Hudson silt loam, 25 to 35 percent slope	2,078.0	0.3%
135F	Hudson silt loam, 35 to 60 percent slopes	1,271.5	0.2%
140E	Dunkirk silt loam, 25 to 35 percent slopes	94.8	0.0%
150B	Canaseraga silt loam, 3 to 8 percent slopes cool phase	334.2	0.1%
167A	Dalton silt loam, 0 to 3 percent slopes, cool phase	493.3	0.1%
167B	Dalton silt loam, 3 to 8 percent slopes, cool phase	839.0	0.1%
171C	Lordstown channery silt loam, 8 to 15 percent slopes, very stony	43.3	0.0%
171D	Lordstown and Towerville soils, 15 to 25 percent slopes, extremely stony	356.1	0.1%
171E	Lordstown and Towerville soils, 25 to 35 percent slopes, extremely stony	266.2	0.0%
171F	Lordstown and Towerville soils, 35 to 60 percent slopes, extremely stony	2,665.8	0.4%
177A	Norchip silt loam, 0 to 3 percent slopes	3,025.9	0.5%
177B	Norchip silt loam, 3 to 8 percent slopes	2,210.8	0.3%
179B	Lordstown channery silt loam, 3 to 8 percent slopes	240.7	0.0%
179C	Lordstown channery silt loam, 8 to 15 percent slopes	475.4	0.1%
179D	Lordstown channery silt loam, 15 to 25 percent slopes	620.2	0.1%
179E	Lordstown channery silt loam, 25 to 35 percent slopes	1,599.4	0.2%
179F	Lordstown channery silt loam, 35 to 60 percent slopes	1,532.5	0.2%
185B	Onoville channery silt loam, 3 to 8 percent slopes, extremely bouldery	128.2	0.0%
185C	Onoville channery silt loam, 8 to 15 percent slopes, extremely bouldery	736.3	0.1%
185D	Onoville channery silt loam, 15 to 25 percent slopes, extremely bouldery	394.2	0.1%
187B	Shongo silt loam, 3 to 8 percent slopes, extremely bouldery	50.2	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
187C	Shongo silt loam, 8 to 15 percent slopes, extremely bouldery	13.6	0.0%
188B	Kanona silty clay loam, 3 to 8 percent slopes	1,266.5	0.2%
188C	Kanona silty clay loam, 8 to 15 percent slopes	2,359.2	0.4%
195C	Mandy channery silt loam, 8 to 15 percent slopes, extremely bouldery	22.2	0.0%
195D	Mandy channery silt loam, 15 to 25 percent slopes, extremely bouldery	39.1	0.0%
195E	Mandy channery silt loam, 25 to 35 percent slopes, extremely bouldery	55.7	0.0%
195F	Mandy channery silt loam, 35 to 70 percent slopes, extremely bouldery	13.7	0.0%
200D	Udorthents, loamy, 0 to 25 percent slopes	899.1	0.1%
216B	Morris silt loam, 3 to 8 percent slopes	53.3	0.0%
216C	Morris silt loam, 8 to 15 percent slopes	807.9	0.1%
289B	Ceres channery silt loam, 3 to 8 percent slopes	439.3	0.1%
289C	Ceres channery silt loam, 8 to 15 percent slopes	1,054.3	0.2%
289D	Ceres channery silt loam, 15 to 25 percent slopes	1,065.8	0.2%
289E	Ceres channery silt loam, 25 to 35 percent slopes	2,041.5	0.3%
289F	Ceres channery silt loam, 35 to 70 percent slopes	720.8	0.1%
292A	Pope fine sandy loam, 0 to 3 percent slopes	60.2	0.0%
293A	Philo silt loam, 0 to 3 percent slopes	33.7	0.0%
300A	Tioga loam, rarely flooded, 0 to 3 percent slopes	1,605.6	0.2%
496C	Gilpin channery silt loam, 8 to 15 percent slopes	58.5	0.0%
496D	Gilpin channery silt loam, 15 to 25 percent slopes	59.5	0.0%
496E	Gilpin channery silt loam, 25 to 35 percent slopes	458.2	0.1%
497D	Rayne channery silt loam, 15 to 25 percent slopes	81.4	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
497E	Rayne channery silt loam, 25 to 35 percent slopes	302.3	0.0%
800A	Holderton silt loam, 0 to 3 percent slopes, occasionally flooded 140	5,912.3	0.9%
PG	Pits, gravel	885.5	0.1%
PQ	Pits, quarry	25.7	0.0%
Ur	Urban land	411.7	0.1%
W	Water	3,513.8	0.5%
Totals for Area of Interest		**661,753.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

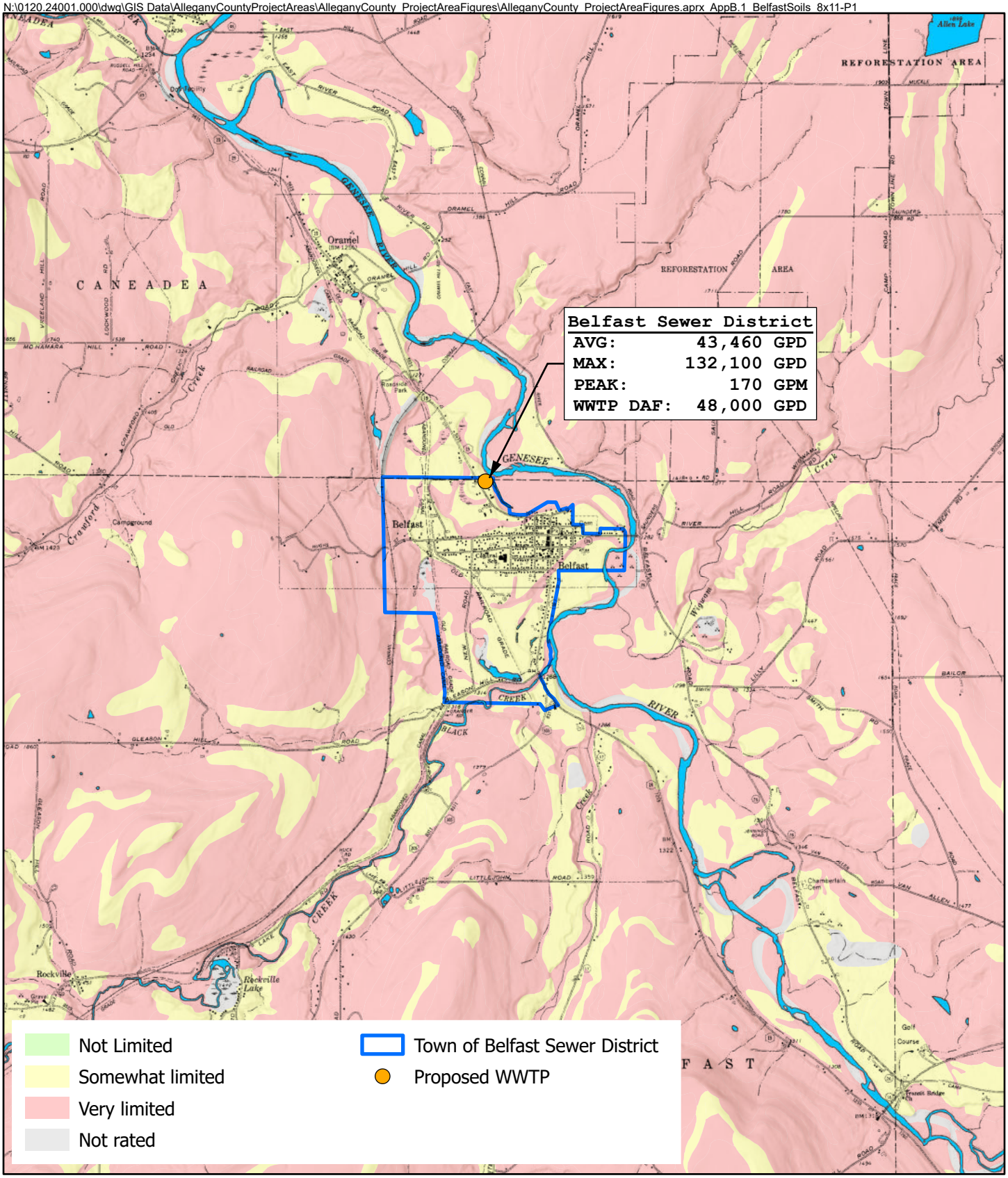
A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

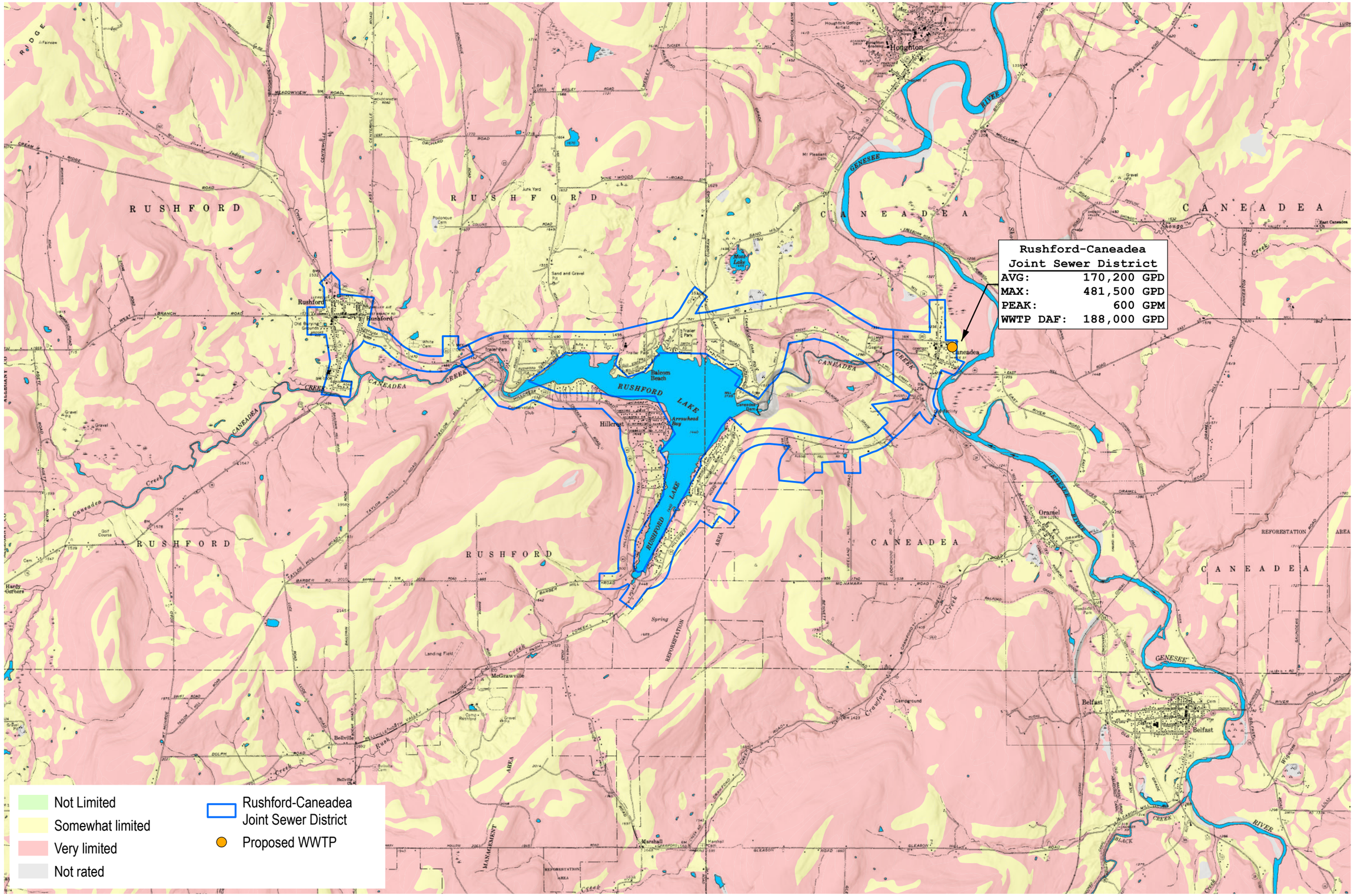
An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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	MAY 2026	ALLEGANY COUNTY, NEW YORK	B.1
		BELFAST SEWER DISTRICT - SOILS MAP	PROJECT NO.
			0120.24001



COUNTYWIDE COMPREHENSIVE SEWER STUDY

ALLEGANY COUNTY, NEW YORK

RUSHFORD-CANEADEA JOINT SEWER DISTRICT - SOILS MAP

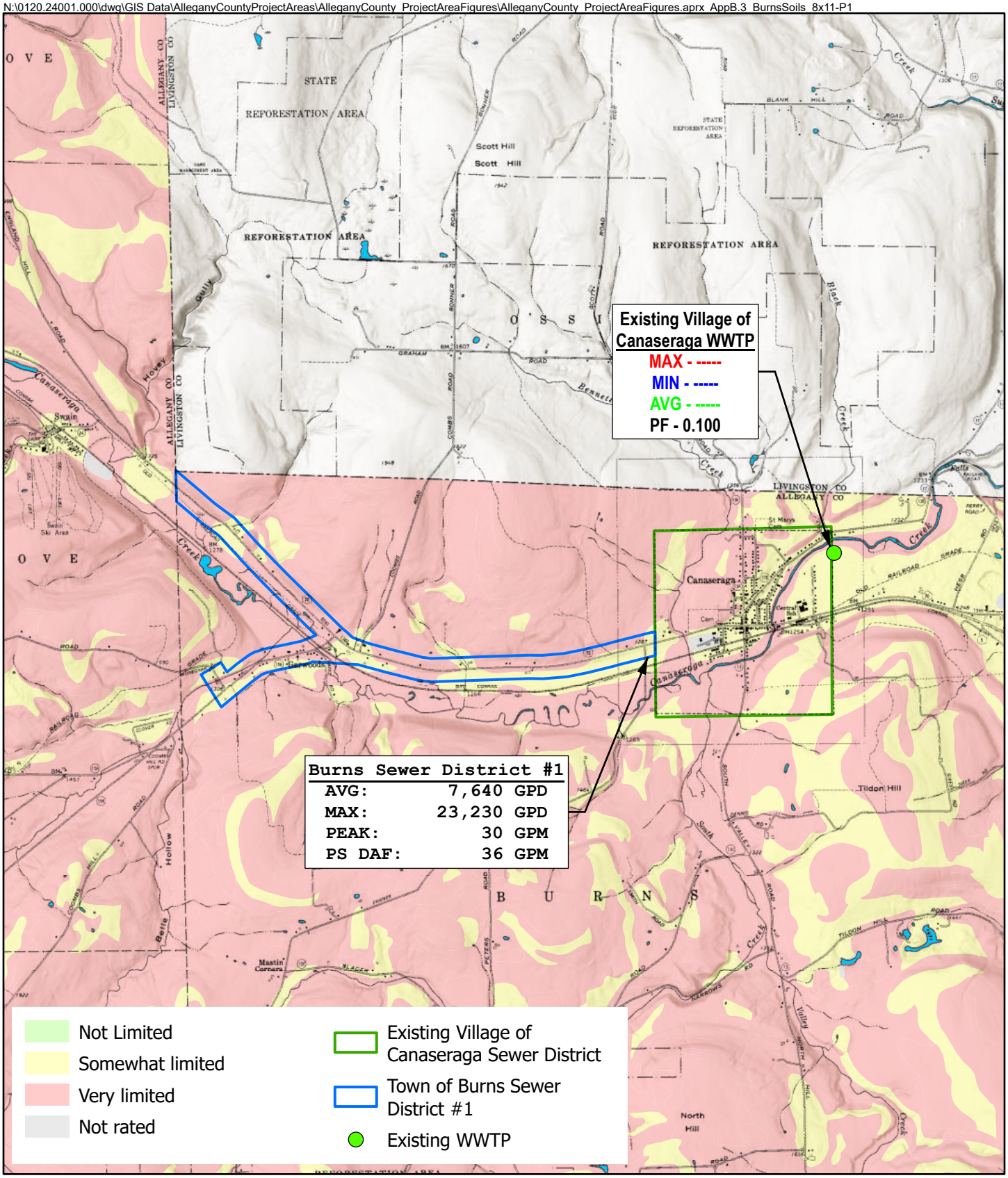
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MRB Group

SEHEET NO.
B.2
PROJECT NO.
0120.24001

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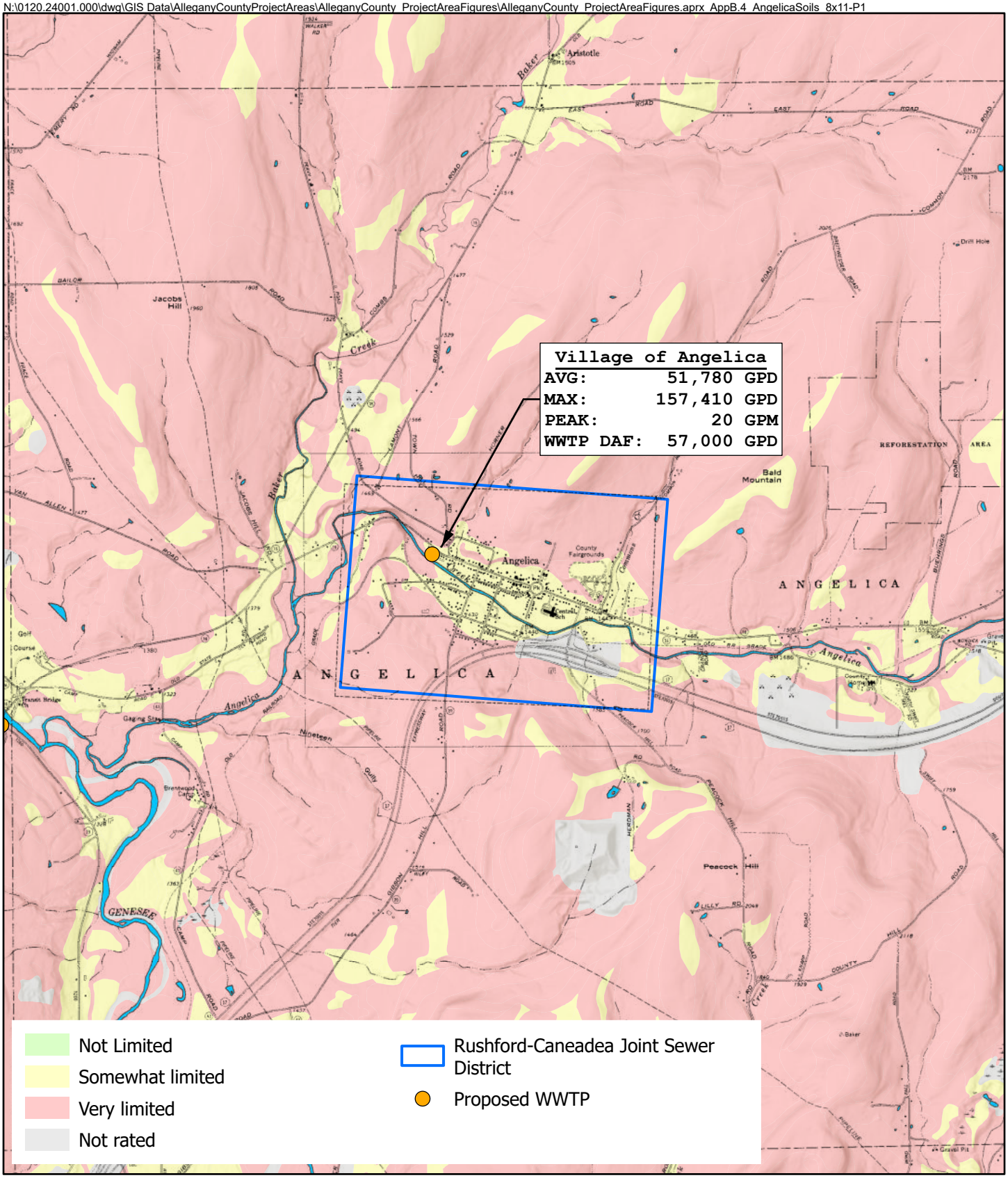
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MRB Group

1" = 4,000'	COUNTYWIDE COMPREHENSIVE SEWER STUDY	SHEET NO.
MAY 2026	ALLEGANY COUNTY, NEW YORK	B.3
	TOWN OF BURNS SEWER DISTRICT #1 - SOILS MAP	PROJECT NO.
		0120.24001

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MRB Group	1" = 4,000'	COUNTYWIDE COMPREHENSIVE SEWER STUDY	SHEET NO.
	MAY 2026	ALLEGANY COUNTY, NEW YORK	B.4
		VILLAGE OF ANGELICA SEWER DISTRICT - SOILS MAP	PROJECT NO.
			0120.24001

Study Area V Pump Station

Study Area V Pump Station or WWTP

Alfred-Almond Joint Sewer District	
AVG:	76,930 GPD
MAX:	233,870 GPD
PEAK:	300 GPM
PS DAF:	360 GPM

Existing Village of Alfred WWTP
MAX - 0.613
MIN - 0.167
AVG - 0.373
PF - 0.980

- Not Limited
- Somewhat limited
- Very limited
- Not rated
- Village of Alfred Sewer District
- Alfred-Almond Joint Sewer District
- Existing WWTP
- Proposed WWTP

COUNTYWIDE COMPREHENSIVE SEWER STUDY

ALLEGANY COUNTY, NEW YORK

ALFRED-ALMOND EXPANDED JOINT SEWER DISTRICT - SOILS MAP

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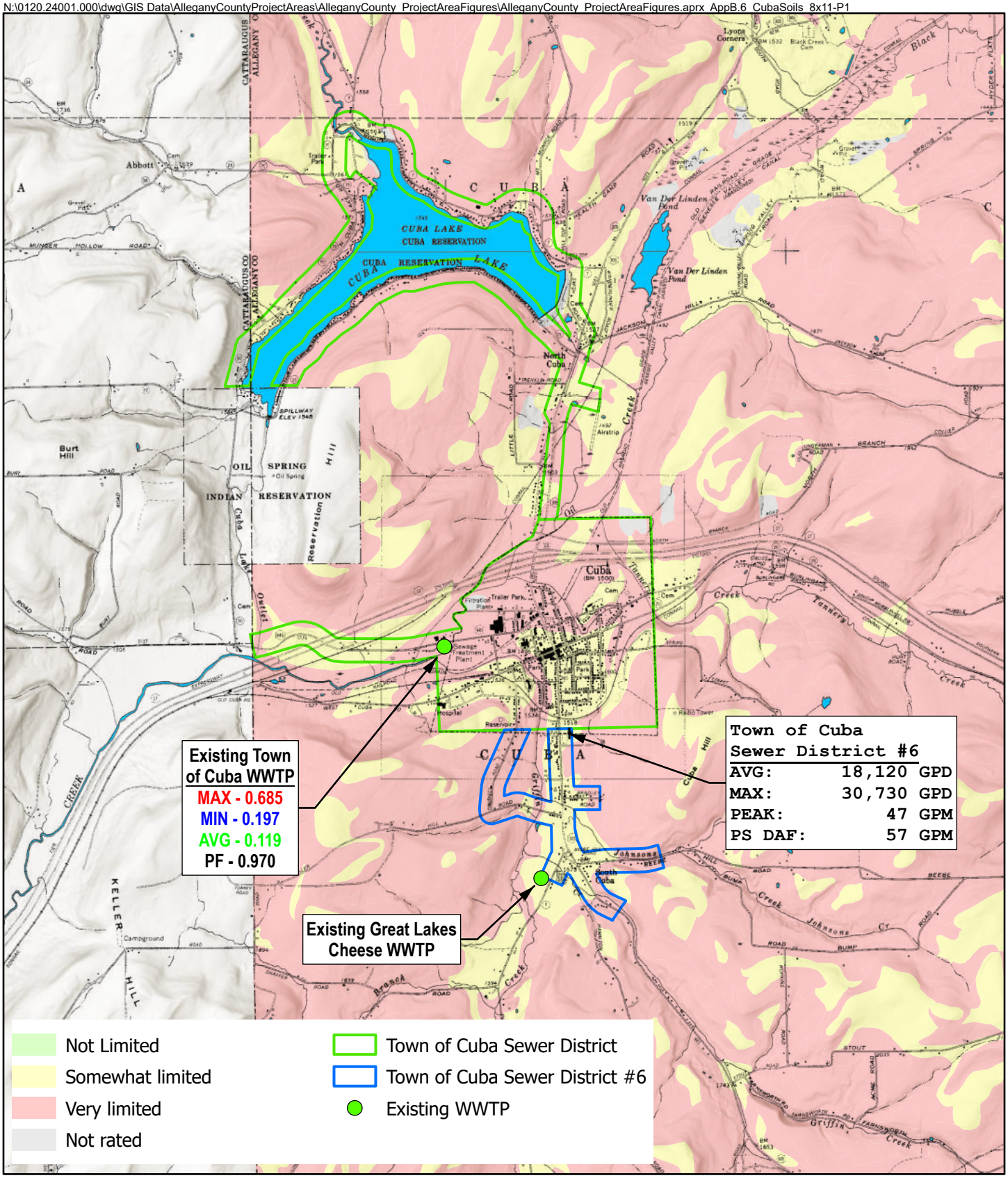
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MRB Group

SHEET NO.
B.5
PROJECT NO.
0120.24001

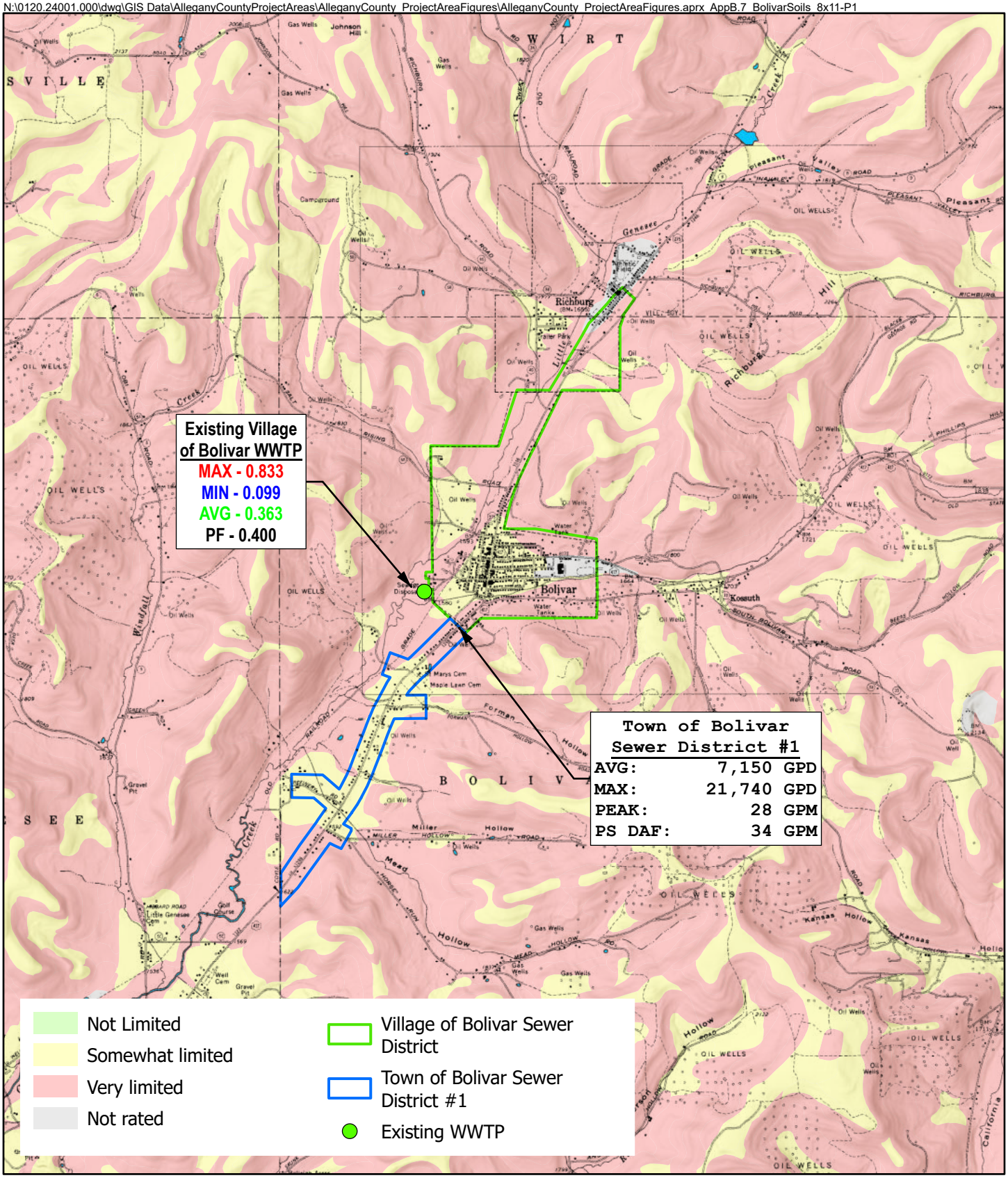
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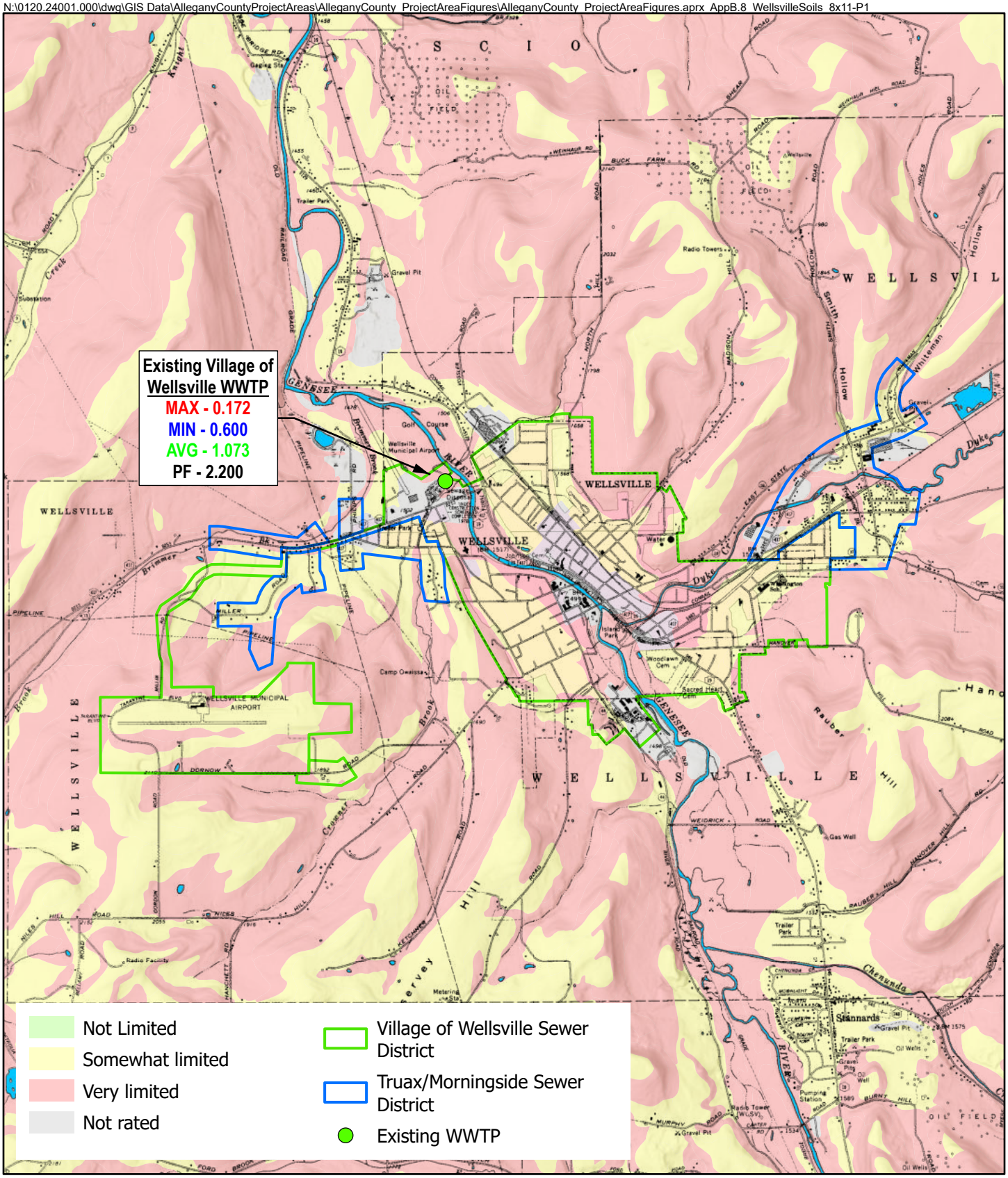
MRB Group	1" = 4,000'	COUNTYWIDE COMPREHENSIVE SEWER STUDY	SHEET NO.
	MAY 2026	ALLEGANY COUNTY, NEW YORK	B.6
		TOWN OF CUBA SEWER DISTRICT #6 - SOILS MAP	PROJECT NO.
			0120.24001

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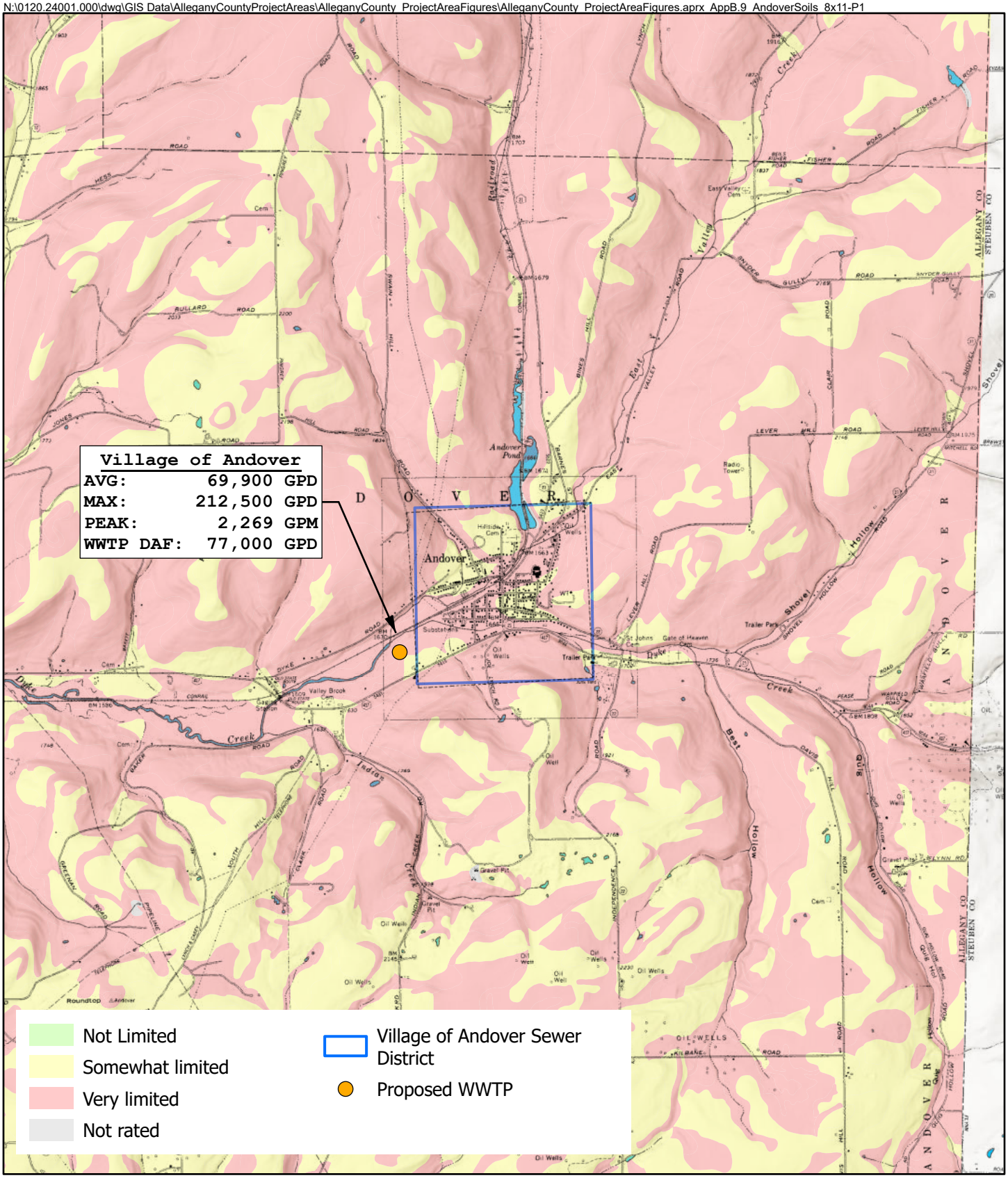
MRB Group	1" = 4,000'	COUNTYWIDE COMPREHENSIVE SEWER STUDY	SHEET NO.
	MAY 2026	ALLEGANY COUNTY, NEW YORK	B.7
		TOWN OF BOLIVAR SEWER DISTRICT #1 - SOILS MAP	PROJECT NO.
			0120.24001

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MRB Group	1" = 4,000'	COUNTYWIDE COMPREHENSIVE SEWER STUDY	SHEET NO.
	MAY 2026	ALLEGANY COUNTY, NEW YORK	B.8
		TRUAX/MORINGSIDE SEWER DISTRICT - SOILS MAP	PROJECT NO.
			0120.24001

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MRB Group	1" = 4,000'	COUNTYWIDE COMPREHENSIVE SEWER STUDY	SHEET NO.
	MAY 2026	ALLEGANY COUNTY, NEW YORK	B.9
		VILLAGE OF ANDOVER SEWER DISTRICT - SOILS MAP	PROJECT NO.
			0120.24001