McGOEY, HAUSER and EDSALL
CONSULTING ENGINEERS D.P.C.

MARK J. EDSALL, P.E., P.P. (NY, NJ & PA)
MICHAEL W. WEEKS, P.E. (NY, NJ & PA)
MICHAEL J. LAMOREAUX, P.E. (NY, NJ, PA, VT, VA & CT)
PATRICK J. HINES
LYLE R. SHUTE, P.E. LEED-AP (NY, NJ, PA)

Main Office
33 Airport Center Drive
Suite 202
New Windsor, New York 12553

(845) 567-3100
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Principal Emeritus:
RICHARD D. McGOEY, P.E. (NY & PA)
WILLIAM J. HAUSER, P.E. (NY, NJ & PA)

TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS

PROJECT:	**RAM HOTEL, INC.**
PROJECT NO.:	**16-21**
PROJECT LOCATION:	**SECTION, 97, BLOCK 2, LOT 37**
REVIEW DATE:	**27 AUGUST 2018**
MEETING DATE:	**6 SEPTEMBER 2018**
PROJECT REPRESENTATIVE:	**MECURIO-NORTON-TAROLLI-MARSHALL**

1. US Army Corps of Engineers jurisdictional determination of the wetland boundary referred to on Sheet 1 Note 6 should be received.

2. Plans have been revised to limit any additional wetland encroachment on the mapped wetland area. Revised building square footage, building location and retaining walls have been added to the plans to reduce the footprint of the site. The southerly access road from Unity Place has been shifted to be more on the proposed adjoining lot.

3. Stormwater Management facilities on the site remain as previously approved. The slight decrease in disturbed footprint does not warrant a revision to the previously reviewed SWPPP.

4. Water and sewer utilities while relocated are depicted in a similar manner as the previous approval.

5. Ken Wersted's comments regarding the adequacy of the parking should be received.

6. Karen Arent's comments regarding modifications to the landscape plantings should be received.

7. Segmented block retaining wall approximately 10 ft. high have been proposed. These will require submission of stamped design drawings at Building Permit. Wooden guide rails have provided at all retaining walls and at the north end of the site in proximity to the bio retention area.

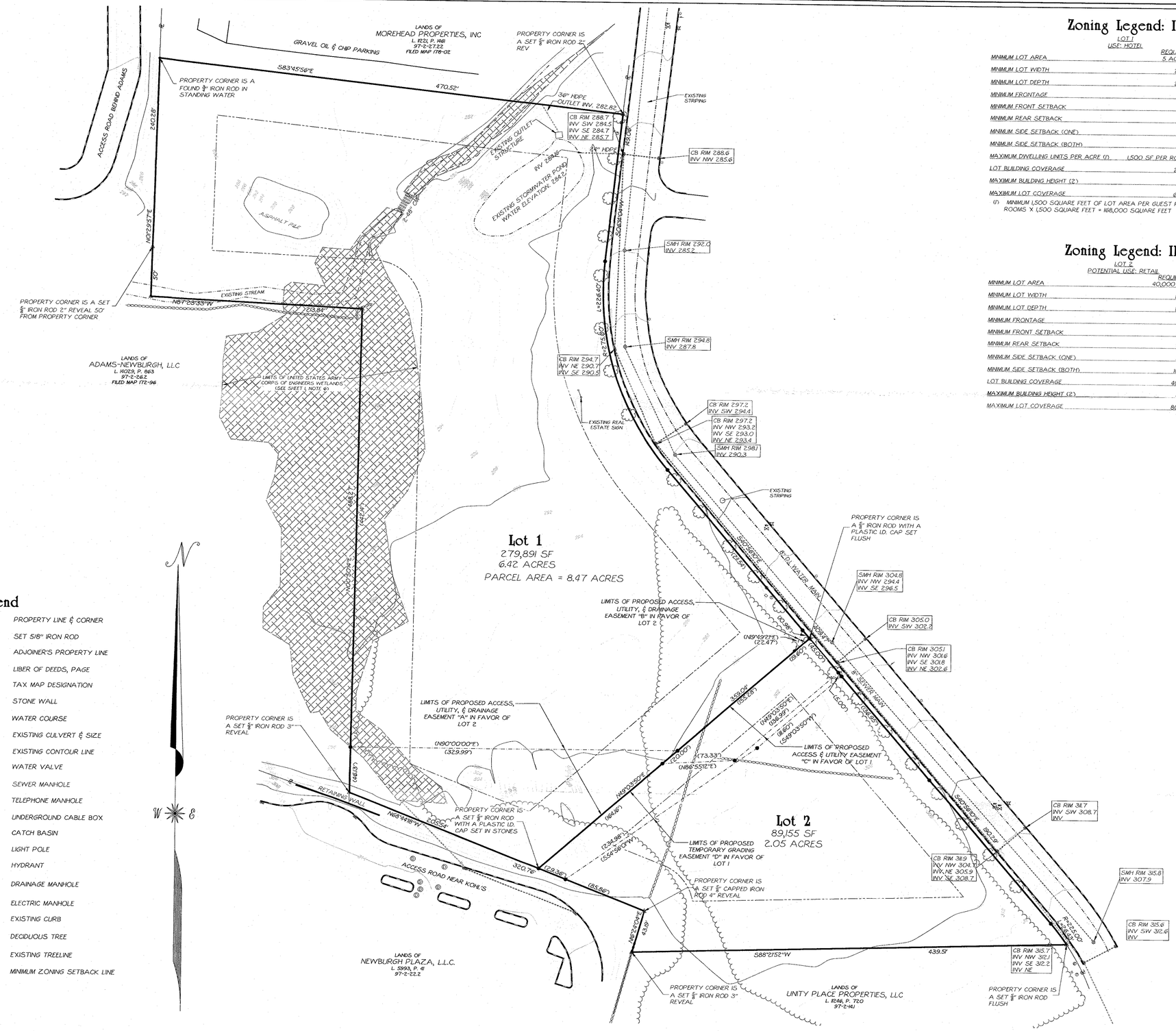
8. The Subdivision plan Sheet 1 or 1 has been revised depicting limits of access and utilities easement being located further onto proposed Lot #2. A concept plan depicting a 9,375 sq. ft. office building has been provided for Lot #2. Parking calculations should be provided supporting the 50 parking spaces serving the potential office building use. The Bulk Table for the potential development Lot #2 identifies maximum building height as 40%, this should be revised.

Respectfully submitted,

McGoey, Hauser and Edsall
Consulting Engineers, D.P.C.

_____
Patrick J. Hines
Principal

PJH/kbw



Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD
- ADJOINER'S PROPERTY LINE
- L. XXXX, P. XXX — LIBER OF DEEDS, PAGE
- XX-X-XX — TAX MAP DESIGNATION
- STONE WALL
- WATER COURSE
- XX" — EXISTING CULVERT & SIZE
- XXX — EXISTING CONTOUR LINE
- WV — WATER VALVE
- SEWER MANHOLE
- TELEPHONE MANHOLE
- UNDERGROUND CABLE BOX
- CATCH BASIN
- LIGHT POLE
- HYDRANT
- DRAINAGE MANHOLE
- ELECTRIC MANHOLE
- EXISTING CURB
- DECIDUOUS TREE
- EXISTING TREELINE
- MINIMUM ZONING SETBACK LINE

Zoning Legend: IB

LOT 1
USE: HOTEL

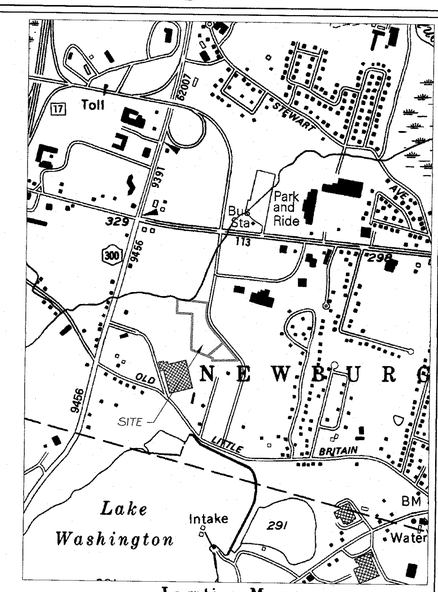
	REQUIRED	PROVIDED
MINIMUM LOT AREA	5 ACRES	6.43 AC
MINIMUM LOT WIDTH	200'	639.1'
MINIMUM LOT DEPTH	200'	416'
MINIMUM FRONTAGE	-	-
MINIMUM FRONT SETBACK	50'	-
MINIMUM REAR SETBACK	60'	-
MINIMUM SIDE SETBACK (ONE)	50'	-
MINIMUM SIDE SETBACK (BOTH)	100'	-
MAXIMUM DWELLING UNITS PER ACRE (1)	1,500 SF PER ROOM	-
LOT BUILDING COVERAGE	25%	-
MAXIMUM BUILDING HEIGHT (2)	50'	-
MAXIMUM LOT COVERAGE	60%	-

(1) MINIMUM 1,500 SQUARE FEET OF LOT AREA PER GUEST ROOM. 112 GUEST ROOMS X 1,500 SQUARE FEET = 168,000 SQUARE FEET

Zoning Legend: IB

LOT 2
POTENTIAL USE: RETAIL

	REQUIRED	PROVIDED
MINIMUM LOT AREA	40,000 SF	89,155 SF
MINIMUM LOT WIDTH	150'	364.0'
MINIMUM LOT DEPTH	150'	305'
MINIMUM FRONTAGE	-	-
MINIMUM FRONT SETBACK	50'	-
MINIMUM REAR SETBACK	60'	-
MINIMUM SIDE SETBACK (ONE)	50'	-
MINIMUM SIDE SETBACK (BOTH)	100'	-
LOT BUILDING COVERAGE	40%	-
MAXIMUM BUILDING HEIGHT (2)	35'	-
MAXIMUM LOT COVERAGE	80%	-



Location Map
SCALE: 1" = 1,000'

Notes:

1.) THE RECORD OWNER OF TAX MAP PARCEL 97-2-37 IS:
NEWBURGH AUTO PARK PLACE, LLC.
800 AUTO PARK PLACE
NEWBURGH, NY 12550

2.) SUBJECT TO ANY FACTS AN ACCURATE, UP TO DATE, TITLE ABSTRACT REPORT, MAY REVEAL.

3.) VERTICAL DATUM IS NAVD88.

4.) SUBJECT TO ALL NOTE AND DETAILS PERTAINING TO LOT A3 OF A MAP ENTITLED "SUBDIVISION AND LOT LINE CHANGE, PROPOSED LOTS FOR WEBB, YU, TIGHE" FILED NOV. 7, 2001 IN THE ORANGE COUNTY CLERK'S OFFICE AS FILED MAP NO. 2.36-01.

5.) SUBJECT TO ANY LANDS WITHIN THE BOUNDS OF UNITY PLACE FOR USE AS A PUBLIC HIGHWAY.

6.) LIMITS OF UNITED STATES ARMY CORPS OF ENGINEERS (FEDERAL) WETLANDS ARE SHOWN BASED UPON A FIELD DELINEATION COMPLETED BY JAMES BATES, CPESC, CPSWQ ON DECEMBER 15, 2016.

7.) THE TOTAL AREA OF THE SUBJECT PARCEL IS 8.47 ACRES OR 369,046 SQUARE FEET.

NO.	DATE	REVISION	BY
2	7-6-17	REVISED EASEMENT AREA	LJM
1	3-1-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK — WILLIAM G. NORTON — 049480 — LICENSED LAND SURVEYOR

WILLIAM G. NORTON, LS #49480

STATE OF NEW YORK — LAWRENCE JOHN MARSHALL — 087107 — LICENSED PROFESSIONAL ENGINEER

LAWRENCE MARSHALL, PE #087107

TOWN OF NEWBURGH PROJECT #2016-21

Survey & Subdivision for Lands of Newburgh Auto Park, LLC

Mercurio-Norton-Tarolli-Marshall
-ENGINEERING - LAND SURVEYING-
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER 11724, BLOCK 1610
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE:	2017 MAY 03
DRAFTED BY:	WGN
PROJECT:	9015
SHEET	1 / 1

EA = 8.47 ACRES

SEWER SERVICE
INVERT 294.86

)POSED 5-STORY HOTEL
112 ROOMS
ST FLOOR: 18,178 SQ. FT.
FFE: 299.36

8" DIP FIRE SERVICE
2" K-COPPER POTABLE WATER SERVICE

EXISTING WOODS - PREVIOUSLY REMOVED

±0.17 ACRES

8" DIP WATER SERVICE

BASIN "B"
95.75
SQ.FT.

PROPOSED SIGN LOCATION

EXISTING STREET TREE (PREVIOUSLY REMOVED MARCH 2017)

WATER MAIN

SMH RIM 304.8
INV NW 294.4
INV SE 296.5

(N/A) GATE

CB RIM 305.0
INV SW 302.2

CB RIM 305.1
INV NW 301.6
INV SE 301.8
INV NE 302.6

8" SEWER MAIN

126.9'

103.4'

50'

POTENTIAL OFFICE BUILDING
9,375 SQ. FT.

6 SPACES
10 SPACES
50 SPACES TOTAL
6 SPACES
5 SPACES
9 SPACES
5 SPACES
5 SPACES

CB RIM 311.9
INV NW 304.7
INV NE 305.9
INV SE 308.7

CB RIM 311.7
INV SW 308.7
INV

SMH RIM 315.8
INV 307.9

CB RIM 315.6
INV SW 312.6
INV

CB RIM 315.7
INV NW 312.1
INV SE 312.2
INV NE

LANDS OF
UNITY PLACE PROPERTIES, LLC
L. 11246, P. 720
97-2-14.1

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Zoning Legend: IB

LOT 2
USE: OFFICE

	REQUIRED	PROVIDED
MINIMUM LOT AREA	40,000 SQ.FT.	89,154 SQ.FT.
MINIMUM LOT WIDTH	150'	364.0'
MINIMUM LOT DEPTH	150'	305.3'
MINIMUM FRONT SETBACK	50'	126.9'
MINIMUM REAR SETBACK	60'	103.4'
MINIMUM SIDE SETBACK (ONE)	30'	50.0'
MINIMUM SIDE SETBACK (BOTH)	80'	100.0'
LOT BUILDING COVERAGE	40%	±10.5%
MAXIMUM BUILDING HEIGHT	40%	-
MAXIMUM LOT COVERAGE	80%	±33.7%

Legend

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- STONE WALL
- WATER COURSE
- XX" — EXISTING CULVERT & SIZE
- XXX — EXISTING CONTOUR LINE
- WV — WATER VALVE
- S — SEWER MANHOLE
- T — TELEPHONE MANHOLE
- UNDERGROUND CABLE BOX
- CATCH BASIN
- LIGHT POLE
- HYDRANT
- E — ELECTRIC MANHOLE
- EXISTING CURB
- DECIDUOUS TREE
- EXISTING TREELINE
- MINIMUM ZONING SETBACK LINE
- XXX — PROPOSED CONTOUR LINE
- PROPOSED DIP WATER SERVICE
- WV — PROPOSED WATER VALVE
- PROPOSED HYDRANT
- 18" — PROPOSED CATCH BASIN, HDPE PIPE, & SIZE
- PROPOSED SEWER CLEANOUT
- PROPOSED 8" SDR35 SEWER SERVICE
- PROPOSED CURBING
- PROPOSED SWALE
- TC: 299.11 / BC: 298.61 — PROPOSED SPOT ELEVATION TC = TOP OF CURB BC = BOTTOM OF CURB
- PROPOSED WOOD GUIDE RAIL

NO.	DATE	REVISION	BY
2.	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
1.	7-6-17	BULK TABLE REVISIONS	LJM

LAWRENCE JOHN MARSHALL
LICENSED PROFESSIONAL ENGINEER
STATE OF NEW YORK
087107

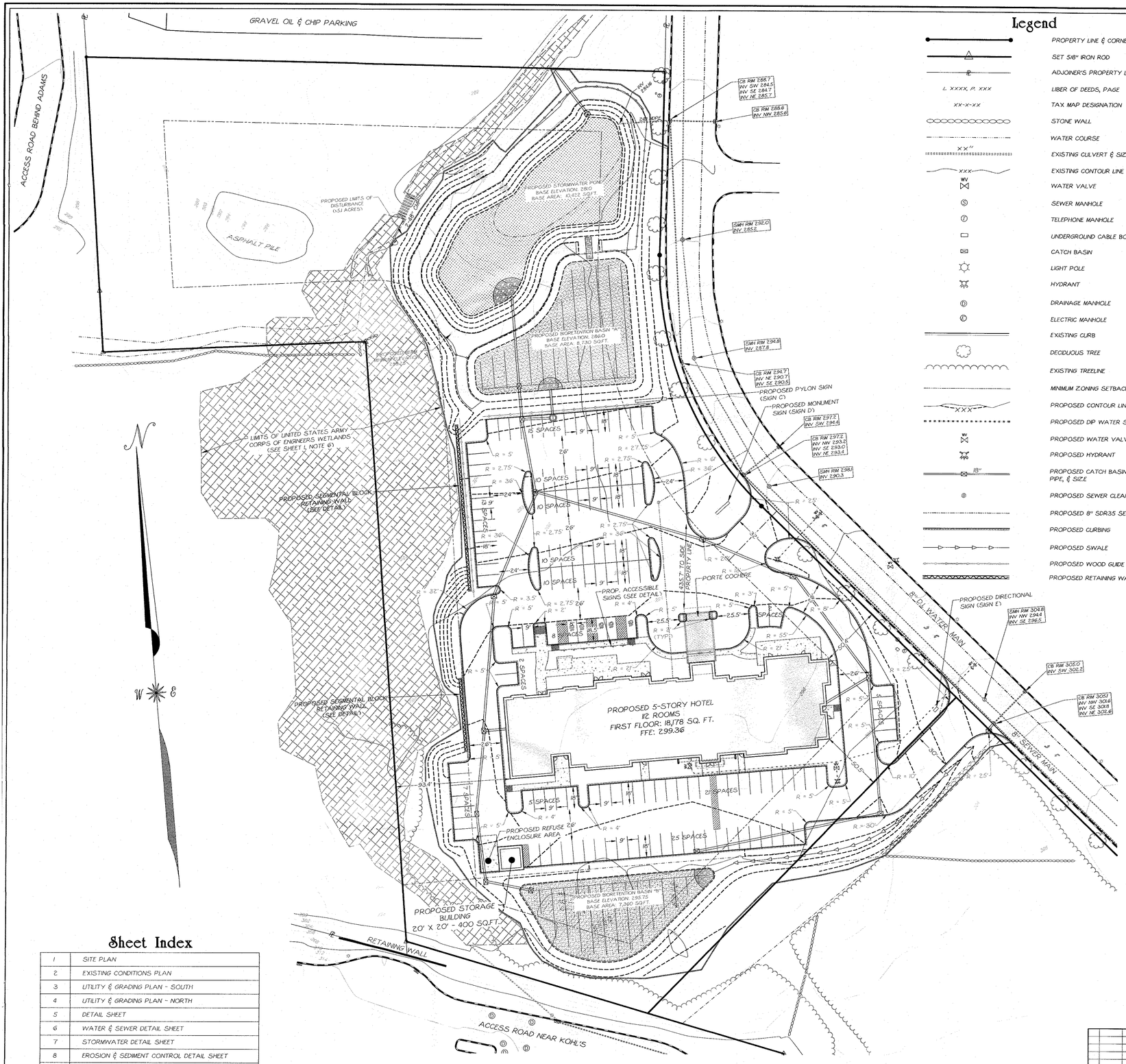
LAWRENCE MARSHALL, P.E. #087107

TOWN OF NEWBURGH PROJECT #2016-21

Potential Development Plan for Lot 2 of Subdivision of Lands of Newburgh Auto Park, LLC

Mercurio-Norton-Tarolli-Marshall
ENGINEERING · LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:
NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:
SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:
LIBER #724, BLOCK 1810
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DATE: 2017 MAY 5
DRAFTED BY: LJM
PROJECT: 4015
SHEET 1 / 1



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- PROPOSED WATER VALVE
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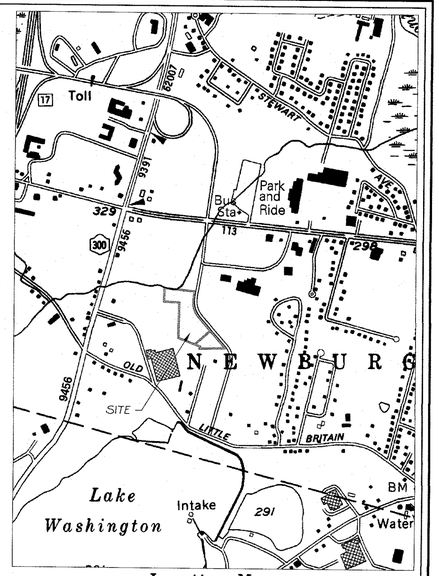
- 18" — PROPOSED CATCH BASIN, HDPE PIPE, & SIZE
- PROPOSED SEWER CLEANOUT
- PROPOSED 8" SDR35 SEWER SERVICE
- PROPOSED CURBING
- PROPOSED SWALE
- PROPOSED WOOD GUIDE RAIL
- PROPOSED RETAINING WALL

Zoning Legend: IB

LOT 1
USE: HOTEL

	REQUIRED	PROVIDED
MINIMUM LOT AREA	5 ACRES	6.43 AC
MINIMUM LOT WIDTH	200'	639.1'
MINIMUM LOT DEPTH	200'	416'
MINIMUM FRONTAGE	-	-
MINIMUM FRONT SETBACK	50'	50.4'
MINIMUM REAR SETBACK	60'	93.4'
MINIMUM SIDE SETBACK (ONE)	50'	50.5'
MINIMUM SIDE SETBACK (BOTH)	100'	486.2'
MAXIMUM DWELLING UNITS PER ACRE (1) (2)	168,000 SF	27,691 SF
LOT BUILDING COVERAGE	25%	16.5%
MAXIMUM BUILDING HEIGHT (3)	50'	69'-4"
MAXIMUM LOT COVERAGE	60%	43.6%

(1) MINIMUM 1,500 SQUARE FEET OF LOT AREA PER GUEST ROOM. 112 GUEST ROOMS X 1,500 SQUARE FEET = 168,000 SQUARE FEET.
(2) TOTAL SITE AREA IS EQUIVALENT TO TOTAL PARCEL AREA LESS RESTAURANT, CONFERENCE AND BANQUET FACILITIES (48,200 SQUARE FEET)
(3) THE TOWN OF NEWBURGH ZONING BOARD OF APPEALS ISSUED A MAXIMUM BUILDING HEIGHT VARIANCE FOR A TOTAL HEIGHT OF 69'-4", A VARIANCE OF 19'-4", ON OCTOBER 27, 2016



Location Map
SCALE: 1" = 1,000'

Survey Notes:

1.) THE RECORD OWNER OF TAX MAP PARCEL 97-2-37 IS:
NEWBURGH AUTO PARK PLACE, LLC.
800 AUTO PARK PLACE
NEWBURGH, NY 12550

2.) SUBJECT TO ANY FACTS AN ACCURATE, UP TO DATE, TITLE ABSTRACT REPORT, MAY REVEAL.

3.) VERTICAL DATUM IS NAVD88.

4.) SUBJECT TO ALL NOTE AND DETAILS PERTAINING TO LOT A-3 OF A MAP ENTITLED "SUBDIVISION AND LOT LINE CHANGE, PROPOSED LOTS FOR WEBB, YU, TIGHE" FILED NOV. 7, 2001 IN THE ORANGE COUNTY CLERK'S OFFICE AS FILED MAP NO. 236-01.

5.) SUBJECT TO ANY LANDS WITHIN THE BOUNDS OF UNITY PLACE FOR USE AS A PUBLIC HIGHWAY.

6.) LIMITS OF UNITED STATES ARMY CORPS OF ENGINEERS (FEDERAL) WETLANDS ARE SHOWN BASED UPON A FIELD DELINEATION COMPLETED BY JAMES BATES, CPESC, CPSWQ ON DECEMBER 15, 2016.

Site Plan Notes:

1.) THE RECORD OWNER OF TAX MAP PARCEL 97-2-37 (8.50 ACRES) IS:
NEWBURGH AUTO PARK PLACE, LLC.
800 AUTO PARK PLACE
NEWBURGH, NY 12550

2.) THE APPLICANT FOR THE SITE PLAN IS:
RAM HOTELS, INC.
1800 CENTRAL AVE.
ALBANY, NY 12205-2404

3.) THE CUSTOMER PARKING AND ACCESS AISLES ENCOMPASS APPROXIMATELY 67,662 SQUARE FEET OF THE PROJECT SITE. WITHIN THE PARKING AREA, THE LANDSCAPED AREAS WITHIN THE PARKING LOT ENCOMPASS A TOTAL AREA OF 3,421 SQUARE FEET. THE LANDSCAPED AREAS WITHIN THE PARKING LOT ENCOMPASSES 5.1% OF THE CUSTOMER PARKING AREA.

4.) THE TOTAL NUMBER OF PARKING SPACES PROPOSED ON THE SITE IS 143, INCLUDING 5 ACCESSIBLE PARKING SPACES.

Parking Requirements

USE:	TOWN PARKING REQUIREMENT:	PROPOSED CRITERIA:	SPACES REQUIRED:	SPACES PROVIDED:
HOTEL	1 SPACE PER HOTEL ROOM + 1 PER 2 EMPLOYEES	112 ROOMS 8 EMPLOYEES	116	116
CONFERENCE ROOM	1 SPACE PER 4 OCCUPANTS	96 OCCUPANTS	24	24
BOARD ROOM	1 SPACE PER 4 OCCUPANTS	12 OCCUPANTS	3	3
TOTAL PARKING REQUIRED				143
TOTAL PARKING PROVIDED				143

Sheet Index

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY
10	8-6-18	REVISED LIGHT LOCATIONS	LJM
9	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
8	6-18-18	BUILDING REDUCTION	LJM
7	1-15-18	ADDED PARKING SPACES	LJM
6	7-6-17	ADDED PARKING SPACES	LJM
5	6-23-17	ENGINEER COMMENTS	LJM
4	6-9-17	HYDRANT & SIGN LOCATIONS	LJM
3	5-23-17	BAZYDLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK
LAWRENCE JOHN MARSHALL
087107
LICENSED PROFESSIONAL ENGINEER
LAWRENCE MARSHALL, PE #087107

TOWN OF NEWBURGH PROJECT #2016-21

Site Plan for RAM Hotels, Inc.

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER #7724, BLOCK 1610
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE: 4 FEB 2017	SHEET 1 / 12
DRAFTED BY: LJM	
PROJECT: 4015	

Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD
- ADJOINER'S PROPERTY LINE
- L. XXXX, P. XXX — LIBER OF DEEDS, PAGE
- XX-X-XX — TAX MAP DESIGNATION
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- XXX — EXISTING CONTOUR LINE
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- TELEPHONE MANHOLE
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- CATCH BASIN
- LIGHT POLE
- HYDRANT
- ELECTRIC MANHOLE
- EXISTING CURB
- DECIDUOUS TREE
- EXISTING TREELINE
- TP C — TEST PIT LOCATION & LABEL

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

NO.	DATE	REVISION	BY
5	8-9-18	REVISED LIGHT LOCATIONS	LJM
4	7-3-18	BUILDING REDUCTION - FINAL DESIGN	LJM
3	5-2-17	BAZYDLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK · LAWRENCE JOHN MARSHALL · LICENSED PROFESSIONAL ENGINEER · 087107

LAWRENCE MARSHALL, PE #087107

TOWN OF NEWBURGH PROJECT #2016-21

Existing Conditions & Removal Plan for RAM Hotels, Inc.

Mercurio-Norton-Tarolli-Marshall
ENGINEERING · LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER 8724, BLOCK 1610
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE: 4 FEB 2017	SHEET 2 / 12
DRAFTED BY: LJM	
PROJECT: 4015	

PROPOSED 5-STORY HOTEL
112 ROOMS
FIRST FLOOR: 18,178 SQ. FT.
FFE: 299.36

PROPOSED STORAGE BUILDING
20' X 20' - 400 SQ.FT.

PROPOSED BIORETENTION BASIN "B"
BASE ELEVATION: 295.75
BASE AREA: 7,360 SQ.FT.

PROPOSED WOOD GUIDE RAIL (SEE DETAIL)

PROPOSED SEWER CLEANOUT (SEE DETAIL) INV. 291.53

PROPOSED SEWER CONNECTION INV. 289.60

PROPOSED SIGN LOCATION

PROPOSED SEGMENTAL BLOCK RETAINING WALL (SEE DETAIL)

RETAINING WALL

DIVERSION STRUCTURE A
FRAME: 294.84
36" SOUTH INV.: 286.43
15" EAST INV.: 286.43
INNER WIER INV.: 287.25
36" NORTH INV.: 283.50

CATCH BASIN A
FRAME: 294.03
30" SOUTH INV.: 288.89
24" EAST INV.: 287.03
36" NORTH INV.: 287.03

CATCH BASIN B
FRAME: 295.49
24" WEST INV.: 288.41
18" EAST INV.: 288.41

CATCH BASIN C
FRAME: 297.59
18" WEST INV.: 289.16
18" EAST INV.: 289.16

CATCH BASIN D
FRAME: 297.87
18" NORTH INV.: 290.16
18" SOUTH INV.: 290.16

CATCH BASIN E
FRAME: 297.82
15" WEST INV.: 291.48
18" NORTH INV.: 291.23

CATCH BASIN F
FRAME: 296.64
15" INV.: 292.97

CATCH BASIN H
FRAME: 297.81
30" NORTH INV.: 290.83
30" SOUTH INV.: 290.83

CATCH BASIN H
FRAME: 297.77
30" NORTH INV.: 289.77
30" SOUTH INV.: 289.77

CATCH BASIN J
FRAME: 296.86
30" NORTH INV.: 291.47
30" SOUTH INV.: 291.47

CATCH BASIN K
FRAME: 298.75
30" EAST INV.: 291.99
30" NORTH INV.: 291.99

CATCH BASIN L
FRAME: 298.23
4" EAST INV.: 292.93
30" WEST INV.: 292.38

CATCH BASIN M
FRAME: 304.73
24" NORTH INV.: 301.70

CB RIM 297.2
INV SW 294.4

CB RIM 297.2
INV NW 293.2
INV SE 293.0
INV NE 293.4

SMH RIM 298.1
INV 290.3

SMH RIM 304.8
INV NW 294.4
INV SE 296.5

CB RIM 305.0
INV SW 302.2

CB RIM 305.1
INV NW 301.6
INV SE 301.8
INV NE 302.6
EXISTING CURB INLET FRAME AND GRATE TO BE REPLACED WITH FLAT FRAME AND GRATE

8" D.I. WATER MAIN

8" SEWER MAIN

TAPPING SLEEVE & GATE VALVE (SEE DETAIL)

8" DIP FIRE SERVICE
2" K-COPPER POTABLE WATER SERVICE

8" DIP WATER SERVICE

6" SDR35 SEWER SERVICE
2.28 LF @ 2.3%

6" SDR35 INVERT: 292.00
18" HDPE TOP: 289.74

12" HDPE TO ROOF DRAINS

6" HDPE TO ROOF DRAINS

30" HDPE - 88 LF @ 10%

24" HDPE - 138 LF @ 10%

30" HDPE - 66 LF @ 10%

30" HDPE - 34 LF @ 10%

18" HDPE - 75 LF @ 10%

18" HDPE - 120 LF @ 10%

15" HDPE - 149 LF @ 10%

24" HDPE - 5 LF @ 2.0%

Legend

- PROPERTY LINE & CORNER
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- MINIMUM ZONING SETBACK LINE
- XXX — PROPOSED CONTOUR LINE
- PROPOSED DIP WATER SERVICE
- WV — PROPOSED WATER VALVE
- PROPOSED HYDRANT
- 18" — PROPOSED CATCH BASIN, HDPE PIPE, & SIZE
- PROPOSED SEWER CLEANOUT
- PROPOSED 6" SDR35 SEWER SERVICE
- PROPOSED CURBING
- PROPOSED SWALE
- TC: 299.11 BC: 298.61 — PROPOSED SPOT ELEVATION TC = TOP OF CURB BC = BOTTOM OF CURB
- PROPOSED WOOD GUIDE RAIL
- PROPOSED RETAINING WALL

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY
8	8-6-18	REVISED LIGHT LOCATIONS	LJM
7	7-3-18	BUILDING REDUCTION - FINAL DESIGN	LJM
6	1-15-18	ADDED PARKING SPACES	LJM
5	7-6-17	ADDED PARKING SPACES	LJM
4	6-9-17	HYDRANT & SIGN LOCATIONS	LJM
3	5-2-17	BAC-YOLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

LAWRENCE MARSHALL, PE #087107

Utility & Grading Plan - South for RAM Hotels

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

TOWN OF NEWBURGH PROJECT #2016-21

RECORD OWNER:	
NEWBURGH AUTO PARK, LLC	
TAX MAP REFERENCE:	
SECTION 97, BLOCK 2, LOT 37	
DEED REFERENCE:	
LIBER 8724, BLOCK 1610	
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE:	SHEET 3 / 12
DRAFTED BY:	
PROJECT:	

30" INV. 280.00

OUTLET STRUCTURE (SEE DETAIL)

INV 284.16

24" HDPE

CB RIM 288.7
INV SW 284.5
INV SE 284.7
INV NE 285.7

CB RIM 288.6
INV NW 285.6

PROPOSED LIMITS OF DISTURBANCE (±5.1 ACRES)

2-48" CMP

PROPOSED STORMWATER POND
BASE ELEVATION: 281.0
BASE AREA: 10,422 SQ.FT.

HALT PILE

SMH RIM 292.0
INV 285.2

36" INV.: 281.00

PROPOSED BIORETENTION BASIN "A"
BASE ELEVATION: 286.0
BASE AREA: 8,730 SQ.FT.

PROPOSED BERM
MINIMUM ELEVATION
288.25

SMH RIM 294.8
INV 287.8

CB RIM 294.7
INV NE 290.7
INV SE 290.5

CATCH BASIN I
FRAME: 288.50
36" SOUTH INV.: 281.72
4" UNDERDRAIN INV.: 283.00
36" NORTH INV.: 281.72

15" INV.: 284.00

PROPOSED GRAVEL DIAPHRAGM (SEE DETAIL)

HDS A
FRAME: 291.50
15" EAST INV.: 286.22
15" NORTH INV.: 286.22

TC: 292.04
BC: 291.54

15" HDPE - 21 LF @ 10%

TC: 293.04
BC: 292.54

PROPOSED SIGN LOCATION

TW: 292.00
BW: 284.00
TW: 288.00
BW: 286.08
TW: 290.00
BW: 288.00
TW: 292.00
BW: 284.00

TC: 292.96
BC: 292.46

TC: 292.56
BC: 292.06

PROPOSED WOOD GUIDE RAIL (SEE DETAIL)

DIVERSION STRUCTURE A
FRAME: 291.54
36" SOUTH INV.: 285.43
15" EAST INV.: 286.43
INNER WEIR INV.: 287.25
36" NORTH INV.: 283.50

TC: 294.01
BC: 293.51

TC: 294.54
BC: 294.04

TC: 293.79
BC: 293.25

TC: 293.82
BC: 293.32

CATCH BASIN A
FRAME: 294.03
30" SOUTH INV.: 288.89
24" EAST INV.: 287.03
36" NORTH INV.: 287.03

TC: 294.37
BC: 293.87

PROPOSED SEGMENTAL BLOCK RETAINING WALL (SEE DETAIL)

TW: 294.00
BW: 284.00

TC: 295.08
BC: 294.58

TC: 295.57
BC: 295.07

TC: 295.08
BC: 294.58

TC: 298.20
BC: 297.70

PROPOSED SIGN LOCATION

TC: 296.05
BC: 295.55

297.96

TC: 297.28
BC: 296.78

TC: 296.28
BC: 295.78

24" HDPE - 138 LF @ 10%

TC: 295.78
BC: 295.28

TC: 295.23
BC: 294.73

PROPOSED SEWER CLEANOUT (SEE DETAIL) INV. 291.53

TC: 295.49
BC: 294.99

TC: 296.30
BC: 295.80

6" SDR35 INVERT: 292.00
18" HDPE TOP: 289.74

30" HDPE - 88 LF @ 10%

6" SDR35 SEWER SERVICE - 228 LF @ 2.39%

TC: 296.85
BC: 296.35

TC: 297.56
BC: 297.06

TW: 296.00
BW: 284.00

TC: 297.29
BC: 296.79

TC: 297.43
BC: 296.93

TW: 296.00
BW: 296.00

CATCH BASIN B
FRAME: 295.48
24" WEST INV.: 288.41
18" EAST INV.: 288.41

TC: 297.95
BC: 297.45

297.01

TC: 298.09
BC: 297.59

TC: 296.51
BC: 296.01

18" HDPE - 75 LF @ 10%

TC: 300.03
BC: 299.53

CATCH BASIN H
FRAME: 297.21
30" NORTH INV.: 289.77
30" SOUTH INV.: 289.77

TC: 297.71
BC: 297.21

TC: 297.81
BC: 297.31

TC: 298.26
BC: 297.76

CATCH BASIN C
FRAME: 297.19
18" WEST INV.: 289.16
18" EAST INV.: 289.16

TC: 297.94
BC: 297.44

TC: 298.50
BC: 298.00
TC: 298.59
BC: 298.09
TC: 298.05
BC: 297.55

298.00

TC: 298.05
BC: 298.05
298.00

298.00

298.00

TC: 298.50
BC: 298.00

TC: 298.50
BC: 298.00

TC: 299.11
BC: 298.61

TC: 298.52
BC: 298.02

PROPOSED SEWER CONNECTION INV. 289.60

CB RIM 297.2
INV SW 294.4

CB RIM 297.2
INV NW 293.2
INV SE 293.0
INV NE 293.4

SMH RIM 298.1
INV 290.3

Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD
- ADJOINER'S PROPERTY LINE
- L. XXXX, P. XXX — LIBER OF DEEDS, PAGE
- XX-X-XX — TAX MAP DESIGNATION
- STONE WALL
- WATER COURSE
- XX" — EXISTING CULVERT & SIZE
- XXX — EXISTING CONTOUR LINE
- WV — WATER VALVE
- SEWER MANHOLE
- TELEPHONE MANHOLE
- UNDERGROUND CABLE BOX
- CATCH BASIN
- LIGHT POLE
- HYDRANT
- ELECTRIC MANHOLE
- EXISTING CURB
- DECIDUOUS TREE
- EXISTING TREELINE
- MINIMUM ZONING SETBACK LINE
- XXX — PROPOSED CONTOUR LINE
- PROPOSED DIP WATER SERVICE
- WV — PROPOSED WATER VALVE
- PROPOSED HYDRANT
- 18" — PROPOSED CATCH BASIN, HDPE PIPE, & SIZE
- PROPOSED SEWER CLEANOUT
- PROPOSED 8" SDR35 SEWER SERVICE
- PROPOSED CURBING
- PROPOSED SWALE
- TC: 299.11 BC: 298.61 — PROPOSED SPOT ELEVATION TC = TOP OF CURB BC = BOTTOM OF CURB
- PROPOSED WOOD GUIDE RAIL
- TP C — TEST PIT LOCATION & LABEL
- PROPOSED RETAINING WALL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY
8	8-6-18	REVISED LIGHT LOCATIONS	LJM
7	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
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4	6-7-17	HYDRANT & SIGN LOCATIONS	LJM
3	5-12-17	BACYCLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK
LAWRENCE JOHN MARSHALL
087107
LICENSED PROFESSIONAL ENGINEER

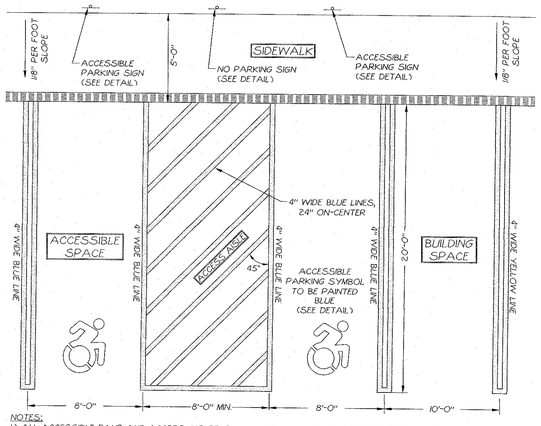
LAWRENCE MARSHALL, PE #087107

TOWN OF NEWBURGH PROJECT #2016-21

Utility & Grading Plan - North for RAM Hotels

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER 17724, BLOCK 1610
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE:	SHEET 4 / 12
DRAFTED BY:	
PROJECT:	



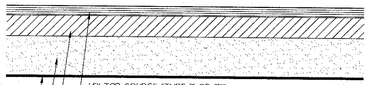
NOTES:
1.) ALL ACCESSIBLE RAMP AND ACCESS AISLES SHALL MEET ALL CURRENT CODES AND ADAAG REGULATIONS.

2.) PROPOSED ACCESS RAMP SHALL CONSIST OF COLORED TOOLED/SERRATE SLIP RESISTANT SURFACING AND/OR TACTILE WARNING DEVICE AS REQUIRED BY AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES AND CODE REGULATIONS.

3.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
CURBING & BOLLARDS: TWO (2) COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL, SAFETY YELLOW B55Y3000
PARKING LOT STRIPING & WHEELSTOPS: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, YELLOWTM5494
ACCESSIBLE STRIPING & DETAIL: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, "H.C." BLUE

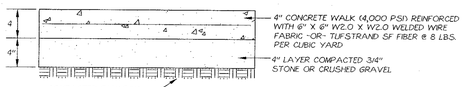
4.) STANDARD PARKING SPACES VARY IN SIZE. STANDARD SPACES ALONG FRONT OF BUILDING ARE 9' X 18.5' SPACES (EXCEPT ACCESSIBLE SPACES AND AISLE). ALL OTHER SPACES ARE 9' X 18' SPACES.

Accessible & Building Parking Space Striping Detail



GEOTEXTILE NOTE:
GEOTEXTILE IS ONLY REQUIRED IN AREAS WHERE SUBBASE IS NOT ACCEPTABLY STABLE. GEOTEXTILE SHALL BE APPROVED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER.

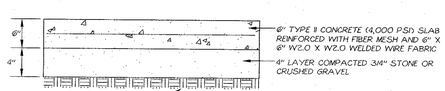
Standard Asphalt Pavement Section



NOTE:
1.) CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 15 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD. CONSTRUCTION JOINTS SHALL BE CUT OR FORMED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE STANDARDS AND JOINT SEALANT RECOMMENDATIONS.

2.) STANDARD CONCRETE SHALL BE UTILIZED ONLY FOR SIDEWALKS. ALL OTHER CONCRETE AREAS SHALL CONFORM TO HEAVY DUTY CONCRETE PAVEMENT SPECIFICATIONS.

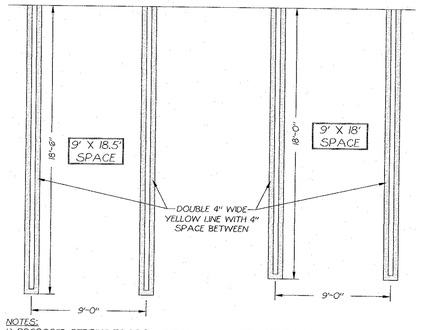
Standard Concrete Pavement Detail



NOTE:
1.) CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 12 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD. CONSTRUCTION JOINTS SHALL BE CUT OR FORMED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE STANDARDS AND JOINT SEALANT RECOMMENDATIONS.

2.) HEAVY DUTY CONCRETE PAVEMENT SHALL BE UTILIZED FOR THE AREA WITHIN THE REFUSE ENCLOSURE AND 10 FEET BEYOND THE ENCLOSURE GATE.

Heavy Duty Concrete Pavement Detail

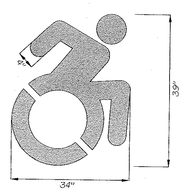


NOTES:
1.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
PARKING LOT STRIPING & WHEELSTOPS: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, YELLOW TM5494

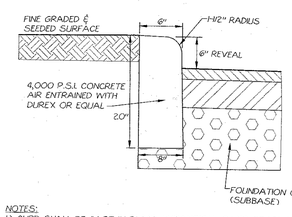
Parking Space Striping Detail

NOTES:
1.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
PARKING LOT STRIPING: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, YELLOWTM5494

Island Striping Detail



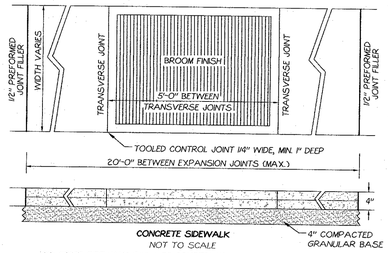
Accessibile Parking Symbol



NOTES:
1.) CURB SHALL BE CAST IN PLACE. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE INSTALLED WHERE REQUIRED (AT CURB BOXES, CATCH BASINS, BRIDGES, ETC.). CONTRACTION (CONTROL) JOINTS SHALL BE INSTALLED AT 20' INTERVALS.

2.) THIS DETAIL SHALL BE UTILIZED FOR INSTALLATION OF CURBING WITHIN PROJECT SITE (CURBED ISLANDS, ETC.).

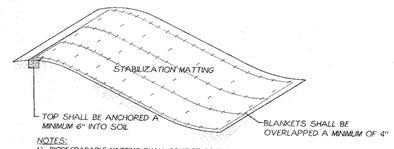
Standard Curb Detail



NOT TO SCALE

CONCRETE SIDEWALK SHALL BE CONSTRUCTED WITH 3,000 PSI CONCRETE, REINFORCED WITH 6" X 6" W2.9 X W2.9 WELDED WIRE FABRIC

Sidewalk Detail



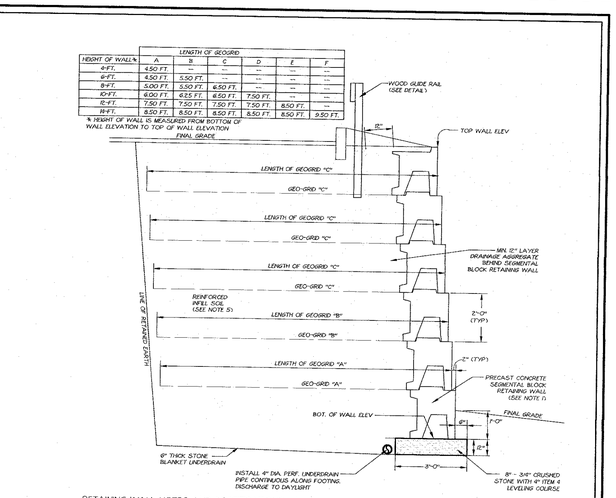
NOTES:
1.) BIODEGRADABLE MATTING SHALL CONSIST OF THE FOLLOWING:
"NORTH AMERICAN GREEN" - C350 COMPOSITE TURF REINFORCEMENT MAT
"VERTYCYL" - ERO-MAT V7SS (S.D.) SINGLE NET STRAW BLANKET

2.) MATTING SHALL BE STAPLED WITH 8" WIRE STAPLES ALONG ALL SEAMS (2" ON CENTER) AND EVERY 3' ON CENTER WITHIN THE BLANKET.

3.) ALL SLOPES SHALL BE SEEDED WITH WILDFLOWER MIXTURE PRIOR TO INSTALLATION OF BIODEGRADABLE MATTING.

4.) BIODEGRADABLE MATTING SHALL BE INSTALLED ON ALL DISTURBED SLOPES AT THE REAR OF THE BUILDING GREATER THAN 3 HORIZONTAL TO 1 VERTICAL.

Slope Stabilization Detail



HEIGHT OF WALL*	LENGTH OF GEOGRID					
	A	B	C	D	E	F
4'-0"	4.50 FT.	--	--	--	--	--
6'-0"	4.50 FT.	5.50 FT.	--	--	--	--
8'-0"	5.00 FT.	5.50 FT.	6.50 FT.	--	--	--
10'-0"	6.00 FT.	6.25 FT.	6.50 FT.	7.50 FT.	--	--
12'-0"	7.50 FT.	7.50 FT.	7.50 FT.	7.50 FT.	8.50 FT.	--
14'-0"	8.50 FT.	8.50 FT.	8.50 FT.	8.50 FT.	8.50 FT.	9.50 FT.

* HEIGHT OF WALL IS MEASURED FROM BOTTOM OF WALL ELEVATION TO TOP OF WALL ELEVATION
FINAL GRADE

RETAINING WALL NOTES AND SPECIFICATIONS:
1.) RETAINING WALL BLOCKS SHALL BE NOMINAL 2 FT X 2 FT X 4'-0" LONG PRECAST CONCRETE RETAINING WALL BLOCK AS MANUFACTURED BY WOODARDS CONCRETE PRODUCTS FOR SEGMENTAL RETAINING WALLS, OR APPROVED EQUAL.

2.) SOIL REINFORCEMENT GEO-GRID SHALL BE TENCATE MIRAFI "MIRAGRID 5XT" GEOSYNTHETIC FOR SEGMENTAL RETAINING WALLS. EMBEDMENT LENGTH VARIES WITH HEIGHT OF WALL. SEE CHART FOR EMBEDMENT LENGTH.

3.) ORIENTATION AND PROPER PLACEMENT OF GEO-GRID IS CRITICAL TO THE STABILITY OF THE STRUCTURE. INSTALL GEO-GRID SUCH THAT DIRECTION OF TENSILE STRENGTH IS PERPENDICULAR TO WALL FACE. FOLLOW MIRAFI GUIDELINES FOR PLACING GEO-GRID FLAT, FREE OF WRINKLES.

4.) DRAINAGE AGGREGATE TO BE CLEAN, CRUSHED STONE OR CRUSHED GRAVEL, 1" OR LESS MEETING THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT PASSING
1"	100
3/4"	75-100
#4	0-60
#40	0-50
#200	0-5

5.) REINFORCED BACKFILL SOIL SHALL BE A WELL GRADED BANK-RUN GRAVEL, SANDY GRAVEL OR GRAVELY SAND WITH A MAXIMUM STONE SIZE OF 3/4", MEETING THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT PASSING
3/4"	75-100
#4	20-100
#40	0-60
#200	0-35

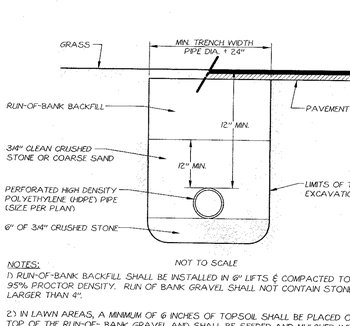
6.) UNDERDRAIN PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) PERFORATED, CORRUGATED PIPE AND FITTINGS EQUAL TO ADVANCED DRAINAGE SYSTEMS, INC (ADS.) OR HANCOR HEAVY DUTY TUBING.

7.) RETAINING WALL BACKFILL TO BE PLACED IN MAX. 8" LIFTS, COMPACTED TO 95% OF MAXIMUM PROCTOR DENSITY (ASTM D698).

8.) THE PROPOSED SAFETY FENCE SHALL BE INSTALLED WHEREVER THE PROPOSED RETAINING WALL IS GREATER THAN 30" IN HEIGHT.

9.) SEGMENTAL RETAINING WALL SHALL BE DESIGNED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER AND A DESIGN BEARING A VALID PROFESSIONAL ENGINEER STAMP SHALL BE FURNISHED TO THE TO TOWN OF NEWBURGH BUILDING DEPARTMENT PRIOR TO WORK COMMENCING ON THE CONSTRUCTION OF THE WALL.

Segmental Retaining Wall Section



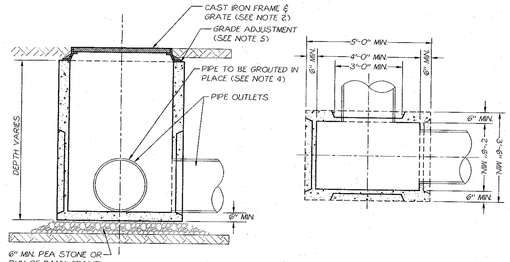
NOT TO SCALE

NOTES:
1.) RUN-OF-BANK BACKFILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY. RUN OF BANK GRAVEL SHALL NOT CONTAIN STONES LARGER THAN 4".

2.) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE RUN-OF- BANK GRAVEL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3.) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1-1/2" ASPHALT TOP COURSE.

Typical Storm Sewer Trench Detail



NOTES:
1.) BASINS SHALL HAVE A MINIMUM OF H20 LOADING STRENGTH.

2.) CAST IRON FRAME AND GRATE SHALL BE ABLE TO WITHSTAND H20 LOADING. GRATES SHALL BE BICYCLE GRATES. OPENINGS SHALL BE A MINIMUM OF 30" X 48" RECTANGULAR OPENING.

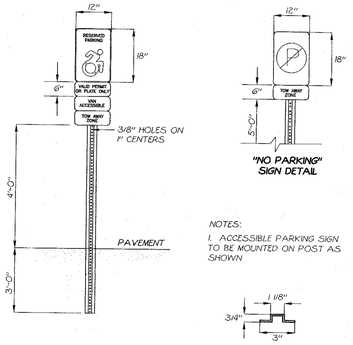
3.) STEPS SHALL BE PROVIDED 12" ON CENTER WHEN DEPTH OF BASIN EXCEEDS 4'-0".

4.) CONNECTIONS BETWEEN BASIN AND PIPE SHALL BE MADE BY FILLING THE SPACE AROUND EACH PIPE WITH MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIAL, OR CONCRETE REPAIR MATERIAL.

5.) GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 2.5" SHALL BE MADE WITH BEDDING MATERIAL MEETING THE REQUIREMENTS OF MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIALS OR CONCRETE REPAIR MATERIAL. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 6" SHALL BE MADE WITH COMBINATION OF PRECAST CONCRETE PAVERS AND BEDDING MATERIALS. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 12" SHALL BE MADE WITH CAST-IN-PLACE CONCRETE OR A COMBINATION OF PRECAST CONCRETE ADJUSTMENT ELEMENTS AND BEDDING MATERIALS.

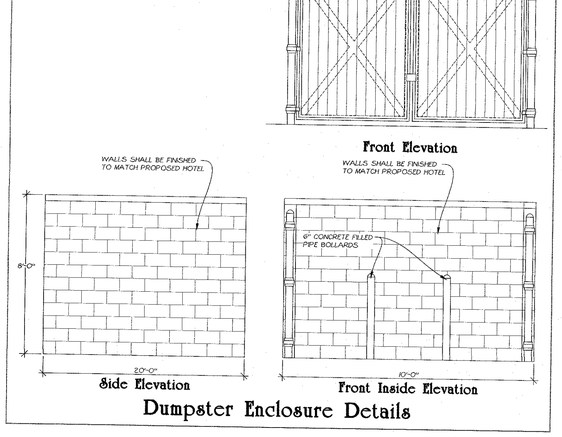
Typical Catch Basin Detail

NOT TO SCALE

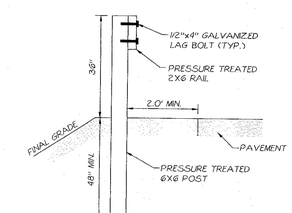


NOTES:
1. ACCESSIBLE PARKING SIGN TO BE MOUNTED ON POST AS SHOWN

Sign Details



Dumpster Enclosure Details



NOTES:
1.) PRESSURE TREATED 6x6 POSTS SHALL BE INSTALLED AT A MAXIMUM OF SIX (6) FEET ON CENTER.
2.) RAILS TO BE INSTALLED ON UPSLOPE SIDE.

Typical Wood Guide Rail Detail

NOT TO SCALE

NO.	DATE	REVISION	BY
4	7-3-18	RETAINING WALL DESIGN	LJM
3	5-21-17	BAZYLO COMMENTS	LJM
2	4-4-17	CONSULTANT COMMENTS	EAP
1	3-1-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK * LAWRENCE JOHN MARSHALL * LICENSED PROFESSIONAL ENGINEER 087107

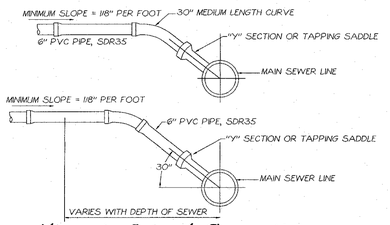
LAWRENCE MARSHALL, PE #087107

TOWN OF NEWBURGH PROJECT #2016-21

Detail Sheet for RAM Hotels, Inc.

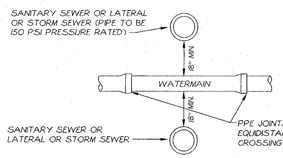
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:
NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:
SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:
LIBER #1724, BLOCK 1610
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DATE:
SHEET 5 / 12
DRAFTED BY:
PROJECT:



Alternate Lateral Connections

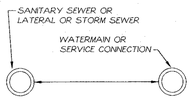
NTS



18" MINIMUM VERTICAL CLEARANCE. NO EXCEPTION WITHOUT WRITTEN PERMISSION OF COUNTY DEPARTMENT OF HEALTH

Storm / Sanitary Sewer-watermain Crossing

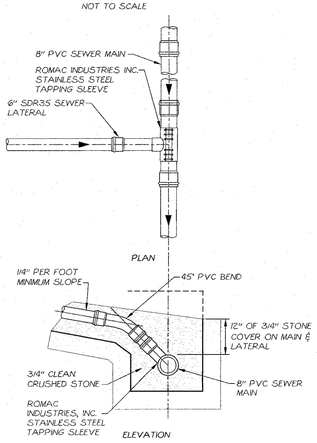
(NOT TO SCALE)



10' MINIMUM LATERAL SEPARATION. NO EXCEPTION WITHOUT WRITTEN PERMISSION OF COUNTY DEPARTMENT OF HEALTH

Parallel Sanitary Sewer / Storm Sewer Watermain Installation

NOT TO SCALE



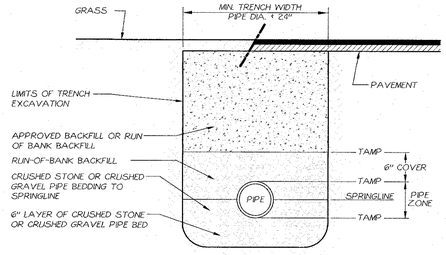
NOTES:
1.) FIELD LOCATION AND ALIGNMENT OF NEW SADDLE TO BE APPROVED BY THE TOWN OF NEWBURGH WATER/SEWER SUPERINTENDENT PRIOR TO INSTALLATION.

2.) NEW STAINLESS STEEL TAPPING SLEEVE ON EXISTING SANITARY SEWER MAIN IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, TOWN OF NEWBURGH CODE, AND TEN STATE STANDARDS.

Sanitary Sewer Lateral Tap Detail

NOT TO SCALE

THIS DETAIL NOT FOR ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW OR APPROVAL

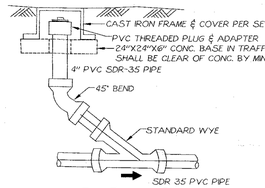


NOTES:
1) RUN-OF-BANK BACKFILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY. RUN OF BANK GRAVEL SHALL NOT CONTAIN STONES LARGER THAN 4".

2.) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE RUN-OF-BANK GRAVEL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3.) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1½" ASPHALT TOP COURSE.

Typical Sanitary Sewer Trench Detail



In Line Cleanout

Town of Newburgh Sewer System Notes:

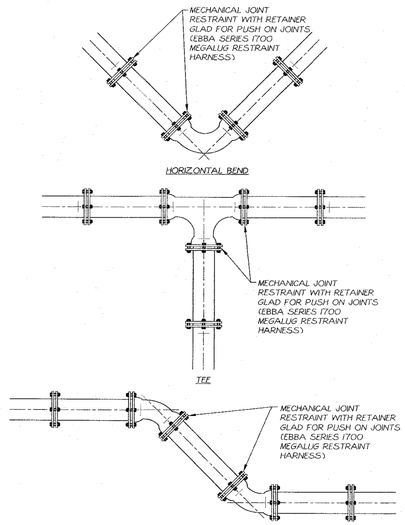
1) CONSTRUCTION OF SANITARY SEWER FACILITIES AND CONNECTION TO THE TOWN OF NEWBURGH SANITARY SEWER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDEC AND THE TOWN OF NEWBURGH.

2) ALL SEWER PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH SEWER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.

3) ALL GRAVITY SANITARY SEWER SERVICE LINES SHALL BE 4 INCHES IN DIAMETER OR LARGER AND SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034-89. JOINTS SHALL BE PUSH-ON WITH ELASTOMERIC RING GASKET CONFORMING ASTM D-3212. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A BELL AND SPIGOT CONFIGURATION COMPATIBLE WITH THE PIPE.

4) THE SEWER MAIN SHALL BE TESTED IN ACCORDANCE WITH TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.

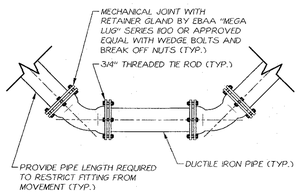
5) THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.



NOTE:
1) ALL RESTRAINING GLANDS TO BE IN ACCORDANCE WITH TOWN OF NEWBURGH STANDARDS.

2) ALL PIPES SHALL BE STANDARD PUSH ON BELL JOINTS.

Water Main Pipe Thrust Restraint Detail



NOTES:
1) THRUST BLOCKING IS NOT PERMITTED.

2) PIPE RESTRAINING TO BE USED FOR VERTICAL DEFLECTIONS ALSO.

3) SEE TABLES A & B FOR REQUIRED RESTRAINED LENGTH FOR DUCTILE IRON PIPE. ALL MINIMUM RESTRAINT LENGTHS BASED UPON A TESTING PRESSURE OF 100 PSI. MINIMUM LENGTHS ARE NOT VALID AT HIGHER TESTING PRESSURES.

4) PIPE BEDDING SHALL BE IN ACCORDANCE WITH WATER PIPE TRENCH DETAIL.

5) THE CONTRACTOR SHALL PERFORM SOIL TEST TO DETERMINE SOIL TYPE(S) INDICATED ON TABLE A.

TABLE A - REQUIRED RESTRAINED LENGTH FOR 8" DUCTILE IRON PIPE (ALL VALUES IN FEET UNLESS OTHERWISE NOTED

PIPE SIZE		8"										
BEND ANGLE		45 DEGREE			22.5 DEGREE			11.25 DEGREE			TEE (8X6)	DEAD END
TYPE OF TEE		H BEND	V BEND (UP)	V BEND (DN)	H BEND	V BEND (UP)	V BEND (DN)	H BEND	V BEND (UP)	V BEND (DN)		
UNIFIED SOIL CLASSIFICATION	CL	5	5	11	3	2	6	2	1	3	3	19
	ML	6	6	12	3	3	6	2	2	3	8	27
	SC, GC	5	5	10	2	2	5	1	1	3	2	19
	GM, SM	5	5	10	3	2	5	2	1	3	5	24
	SW, GW	4	4	8	2	2	4	1	1	2	1	19
	SP	5	5	10	3	2	5	2	1	3	4	23

Water Main Pipe Restraint Tables

Water System Notes:

1) CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDOH AND THE TOWN OF NEWBURGH.

2) ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIAMETER SHALL BE CEMENT LINED CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51 FOR DUCTILE IRON PIPE, LATEST REVISION. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.

3) THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THRUST BLOCKS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE EWWA IRON MEGALUG SERIES 100 OR APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER DEPARTMENT.

4) ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA C110/A21.10 FOR DUCTILE AND GRAY IRON FITTINGS OR ANSI/AWWA C153/A21.53 FOR DUCTILE IRON COMPACT FITTINGS, LATEST REVISION.

5) ALL VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509 SUCH AS MUELLER MODEL A-2360-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).

6) TAPPING SLEEVE SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-615 OR EQUAL. TAPPING VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509 SUCH AS MUELLER MODEL T-2360-19 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.

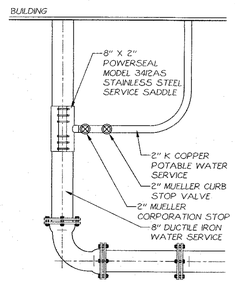
7) ALL HYDRANTS SHALL BE CLOW-EDDY F-2640 CONFORMING TO AWWA STANDARD C-502, LATEST REVISION. ALL HYDRANTS SHALL INCLUDE A 5-1/4 INCH MAIN VALVE OPENING, TWO 2-1/2 INCH DIAMETER NPT HOSE NOZZLES, ONE 4 INCH NPT STEAMER NOZZLE, A 6 INCH DIAMETER INLET CONNECTION AND A 1 1/2 INCH PENTAGON OPERATING NUT. ALL HYDRANTS SHALL OPEN LEFT (COUNTER-CLOCKWISE). HYDRANTS ON MAINS TO BE DEDICATED TO THE TOWN SHALL BE EQUIPMENT YELLOW. HYDRANTS LOCATED ON PRIVATE PROPERTY SHALL BE RED.

8) ALL WATER SERVICE LINES TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. CORPORATION STOPS SHALL BE MUELLER H-15020N FOR 3/4 AND 1 INCH, MUELLER H-15000N OR B-25000N FOR 1 1/2 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-15102-2N FOR 3/4 AND 1 INCH AND MUELLER B-25200N FOR 1 1/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-10314N FOR 3/4 AND 1 INCH AND MUELLER H-10310N FOR 1 1/2 AND 2 INCH SIZES.

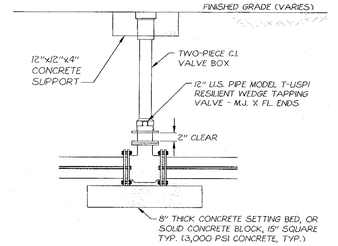
9) ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT.

10) THE WATER MAIN SHALL BE TESTED, DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING, DISINFECTION AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT. PRIOR TO PUTTING THE WATER MAIN IN SERVICE SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE WATER DEPARTMENT.

11) THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.



Potable Water Service Detail

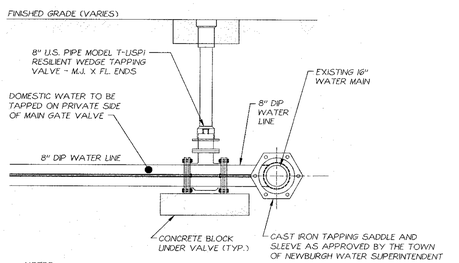


NOTES:
1) ALL VALVES TO INCLUDE MEGA-LUG RETAINED GLANDS AND BE RODDED BACK TO THE ADJACENT TEE IN THE WATER MAIN. INLINE VALVES NEED NOT BE RODDED. CONTRACTOR TO UTILIZE 3/4" DIA. GALVANIZED STEEL RODS WITH MALLEABLE IRON NUTS AT 180° SPACING.

2.) WATER MAIN VALVES FOR FOUR-INCH THROUGH FORTY-EIGHT-INCH SHALL BE RESILIENT WEDGE GATE VALVES AS MANUFACTURED BY MUELLER, MODEL "A-2360. VALVES SHALL BE PROVIDED WITH AN EXTENSION SERVICE BOX TO GRADE.

Typical Water Valve Detail

NOT TO SCALE



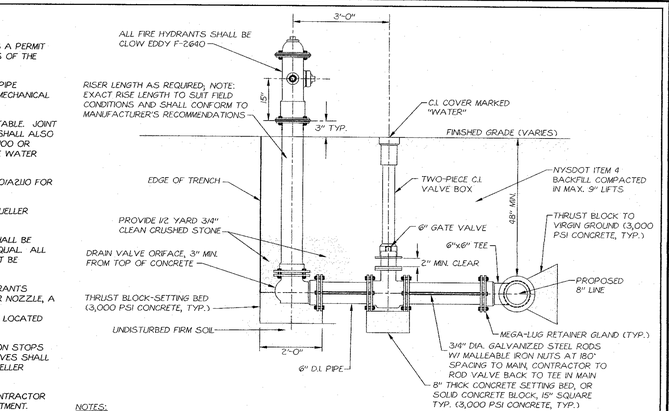
NOTES:
1.) WET TAP TO BE PERFORMED BY CONTRACTOR WITH TOWN ENGINEER ON SITE.

2.) CONTRACTOR TO CONTACT TOWN OF NEWBURGH WATER DEPARTMENT FOR ALL INSTALLATION REQUIREMENTS.

3.) TAPPING SLEEVE SHALL BE SELECTED TO FIT EXISTING PIPE MATERIAL (CAST IRON, DUCTILE IRON, A.C.) AND OUTSIDE DIAMETERS.

4.) MEGA LUGS TO BE USED ON ALL MECHANICAL JOINT FITTINGS.

Water Wet Tap Detail



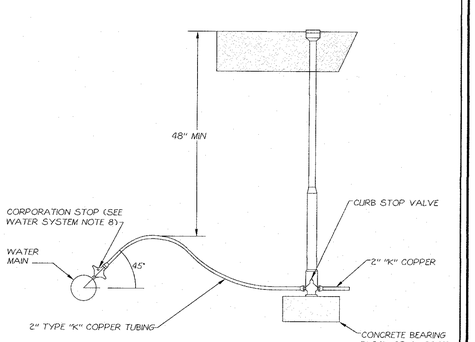
NOTES:
1) HYDRANTS SHALL BE DRY-BARREL HYDRANTS, TYPE MUELLER SUPER CENTURION, IN ACCORDANCE WITH AWWA C502. HYDRANTS SHALL HAVE A MAIN VALVE SIZE OPENING OF FIVE INCHES NOMINAL, ONE (1) FOUR-AND-A-HALF-INCH NST PUMPER NOZZLE, TWO (2) TWO-AND-A-HALF-INCH NST HOSE NOZZLES, A ONE-AND-ONE-HALF-INCH PENTAGON OPERATING NUT AND A SIX-INCH MECHANICAL JOINT INLET SHOW CONNECTION WITH ACCESSORIES. THE HYDRANT DIRECTION OF OPENING SHALL BE LEFT (COUNTERCLOCKWISE).

2.) ALL TEES, VALVES, AND FITTINGS TO INCLUDE RESTRAINT IN THE FORM OF MEGA-LUG RETAINER GLANDS AND RODS.

3.) IF HIGH GROUND WATER IS ENCOUNTERED, THE HYDRANT DRAIN HOLE SHOULD BE PLUMPED OUT AFTER USE TO PREVENT DAMAGE FROM FREEZING.

Typical Fire Hydrant Assembly Detail

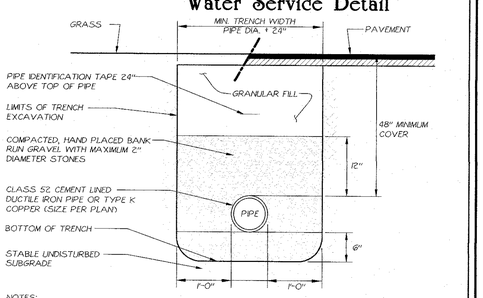
NOT TO SCALE



NOTES:
1.) ALL CORPORATION STOP, CURB STOP, CURB BOX, AND SERVICE LINES SHALL MEET TOWN OF NEWBURGH WATER DEPARTMENT REGULATIONS. SEE WATER SYSTEM NOTES.

2.) POTABLE WATER SERVICE TAP SHALL BE MADE ON PRIVATE SIDE OF MAIN SHUT-OFF.

Water Service Detail



NOTES:
1) GRANULAR FILL SHALL CONSIST OF SELECT GRANULAR FILL OR SUITABLE ON-SITE EXCAVATED SOIL (LARGEST STONE SHALL BE LESS THAN 3"). GRANULAR FILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY.

2.) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE RUN-OF-BANK GRAVEL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1½" ASPHALT TOP COURSE.

Typical Water Pipe Bedding Detail

TOWN OF NEWBURGH PROJECT #2016-21

NO.	DATE	REVISION	BY
3	5-21-17	PLANNING BOARD COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

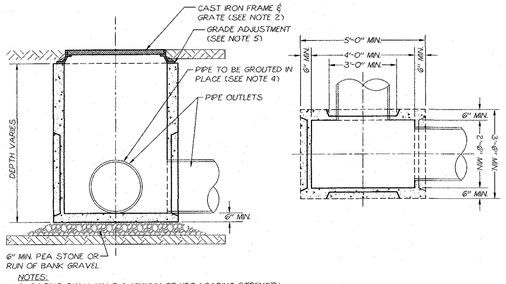
STATE OF NEW YORK * LAWRENCE JOHN MARSHALL * 087107 * LICENSED PROFESSIONAL ENGINEER

LAWRENCE MARSHALL, PE #087107

Water & Sewer Detail Sheet for RAM Hotels, Inc.

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER #724, BLOCK 1810
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE:	SHEET 6 / 12
DRAFTED BY:	
PROJECT:	



NOTES:

1) BASINS SHALL HAVE A MINIMUM OF H20 LOADING STRENGTH.

2) CAST IRON FRAME AND GRATE SHALL BE ABLE TO WITHSTAND H20 LOADING. GRATES SHALL BE BICYCLE GRATES. OPENINGS SHALL BE A MINIMUM OF 30" X 48" RECTANGULAR OPENING.

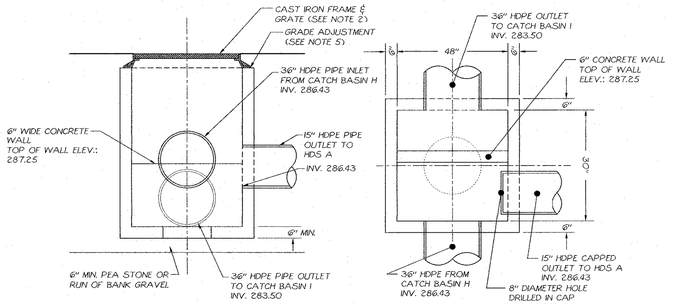
3) STEPS SHALL BE PROVIDED 12" ON CENTER WHEN DEPTH OF BASIN EXCEEDS 4'-0".

4) CONNECTIONS BETWEEN BASIN AND PIPE SHALL BE MADE BY FILLING THE SPACE AROUND EACH PIPE WITH MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIAL, OR CONCRETE REPAIR MATERIAL.

5) GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 2.5" SHALL BE MADE WITH BEDDING MATERIAL MEETING THE REQUIREMENTS OF MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIALS, OR CONCRETE REPAIR MATERIAL. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 6" SHALL BE MADE WITH COMBINATION OF PRECAST CONCRETE PAVERS AND BEDDING MATERIALS. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 12" SHALL BE MADE WITH CAST-IN-PLACE CONCRETE OR A COMBINATION OF PRECAST CONCRETE ADJUSTMENT ELEMENTS AND BEDDING MATERIALS.

Typical Catch Basin Detail

NOT TO SCALE



NOTES:

1) BASINS SHALL BE PRECAST CONCRETE CATCH BASIN, MODEL CB-30x48, AS MANUFACTURED BY WOODARDS CONCRETE PRODUCTS, BULLVILLE, NY, OR APPROVED EQUAL.

2) CATCH BASIN SHALL BE EQUIPPED WITH A FLAT TOP FRAME AND GRATE, MODEL GRATE-30x48. GRATES SHALL BE BICYCLE GRATES. FRAMES AND GRATES AS MANUFACTURED BY WOODARDS CONCRETE PRODUCTS, BULLVILLE, NY, OR APPROVED EQUAL.

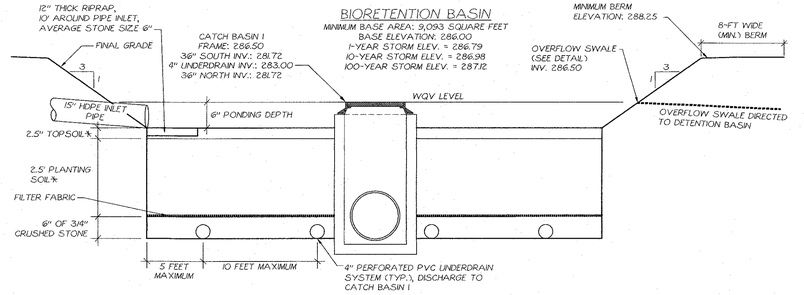
3) STEPS SHALL BE PROVIDED 12" ON CENTER WHEN DEPTH OF BASIN EXCEEDS 4'-0".

4) CONNECTIONS BETWEEN BASIN AND PIPE SHALL BE MADE BY FILLING THE SPACE AROUND EACH PIPE WITH MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIAL, OR CONCRETE REPAIR MATERIAL.

5) GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 2.5" SHALL BE MADE WITH BEDDING MATERIAL MEETING THE REQUIREMENTS OF MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIALS OR CONCRETE REPAIR MATERIAL. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 6" SHALL BE MADE WITH COMBINATION OF PRECAST CONCRETE PAVERS AND BEDDING MATERIALS. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 12" SHALL BE MADE WITH CAST-IN-PLACE CONCRETE OR A COMBINATION OF PRECAST CONCRETE ADJUSTMENT ELEMENTS AND BEDDING MATERIALS.

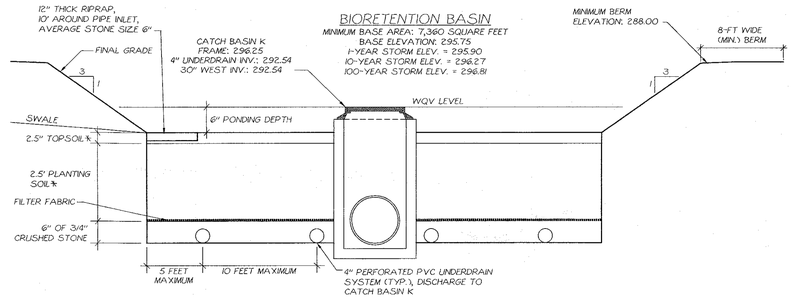
Diversion Structure Detail

NOT TO SCALE



Bioretention Area "A" Detail

NOT TO SCALE



Bioretention Area "B" Detail

NOT TO SCALE

Permeable Soil Notes

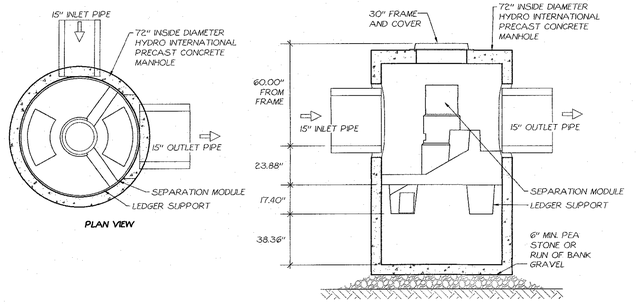
PERMEABLE SOIL NOTES:

*PLANTING SOIL SHALL BE A SANDY LOAM, LOAMY SAND, LOAM, OR A LOAM/SAND MIX (CONTAINING 35-60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHALL BE LESS THAN 25% BY VOLUME. SOILS SHALL FALL WITHIN THE SM, OR ML CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 10 FEET PER DAY (0.5"/HR) IS REQUIRED. THE SOIL SHALL BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER AND BRUSH OR SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHALL BE IN LIFTS OF 12 TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET).

THE SOIL SPECIFICATIONS ARE AS FOLLOWS:

PARAMETER	VALUE
PH RANGE	5.2 TO 7.0
ORGANIC MATTER	1.5 TO 4.0%
MAGNESIUM	35 LBS. PER ACRE, MIN.
PHOSPHORUS	75 LBS. PER ACRE, MIN.
POTASSIUM	85 LBS. PER ACRE, MIN.
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25%
SILT	30 TO 55%
SAND	35 TO 60%

TEST HOLE #	A		B		C	
TESTING DATE:	MAY 8, 2017		MAY 8, 2017		MAY 8, 2017	
TESTER:	R.SMITHEM		R.SMITHEM		R.SMITHEM	
DEEP TEST SOIL LOG (NO WATER OR ROCK UNLESS SO NOTED)	ELEV.	TEST PIT DEPTH	ELEV.	TEST PIT DEPTH	ELEV.	TEST PIT DEPTH
	290	0'	290	0'	285	0'
	289	1' TOPSOIL 12"	289	1' TOPSOIL 9"	284	1' TOPSOIL 12"
	288	2' LARGE BOULDERS 24"	288	2' MOTTLED SILT LOAM 30"	283	2' MOTTLED SILT LOAM
	287	3' SANDY SILT LOAM 42"	287	3' CLAY LOAM 48"	282	3' 36"
	286	4'	286	4'	281	4'
	285	5' CLAY LOAM	285	5'	280	5' CLAY LOAM
	284	6' 72"	284	6'	279	6' BASE OF BIORETENTION 90"
	283	7'	283	7' CLAY	278	7'
	282	8'	282	8'	277	8'
	281	9' CLAY BASE OF BIORETENTION	281	9' BASE OF BIORETENTION	276	9'
	280	10'	280	10'	275	10'
	279	11' WEEP @ 132" 132"	279	11' 132"	274	11'
TESTING ELEVATION:	290.0		290.0		285.0	



NOTES:

1) PROPOSED UNIT IS A HYDRO INTERNATIONAL FIRST DEFENSE HC STORMWATER TREATMENT DEVICE - MODEL: 6-FT.

2) DETAIL PROVIDED IS NOT INTENDED TO BE USED FOR CONSTRUCTION. CONSTRUCTION DRAWINGS TO BE PREPARED BY HYDRO INTERNATIONAL STORMWATER SOLUTIONS, 94 HUTCHINS DRIVE, PORTLAND, ME; (207) 756-6200)

3) CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.

4) CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIAMETER, AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRIATION.

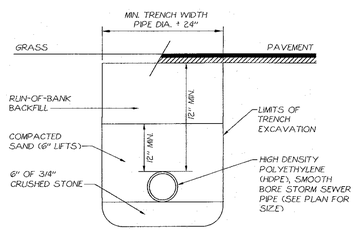
5) GENERAL ARRANGEMENT DRAWINGS ONLY. CONTACT HYDRO INTERNATIONAL FOR SITE SPECIFIC FABRICATION DRAWINGS.

6) PRODUCT SPECIFICATIONS:

A. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
B. THE TREATMENT SYSTEM SHALL FIT WITHIN THE LIMITS OF EXCAVATION (AREA AND DEPTH) AS SHOWN IN THE PROJECT PLANS AND WILL NOT EXCEED THE DIMENSIONS FOR THE DESIGN FLOW RATE OF 3.38 CFS.
C. THE TREATMENT SYSTEM SHALL REMOVE GREATER THAN OR EQUAL TO 90% OF TSS BASED ON THE TARGET PARTICLE SIZE (TPS) OF 106 MICRONS AND/OR 80% OF TSS BASED ON THE TPS OF 230 MICRONS AT 2.2 CFS AND 3.8 CFS, RESPECTIVELY.
D. THE TREATMENT SYSTEM SHALL CONVEY THE PEAK ON-LINE FLOW RATES OF UP TO 32 CFS WITHOUT CAUSING UPSTREAM SURCHARGE CONDITIONS.3 FULL-SCALE INDEPENDENT LABORATORY SCOUR TESTING SHALL DEMONSTRATE EFFLUENT CONTROL OF LESS THAN OR EQUAL TO 5 MG/L FOR ALL FLOWS UP TO 200% OF MTFR-106.
E. THE TREATMENT SYSTEM SHALL BE CAPABLE OF CAPTURING AND RETAINING FINE SILT AND SAND SIZE PARTICLES. ANALYSIS OF CAPTURED SEDIMENT FROM FULL-SCALE FIELD INSTALLATIONS SHALL DEMONSTRATE PARTICLE SIZES PREDOMINATELY IN THE 20-MICRON RANGE

Typical Hydrodynamic Separator Detail

NOT TO SCALE



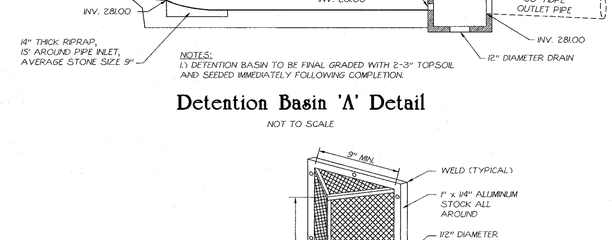
NOTES:

1) ALL STORM SEWER PIPING SHALL BE SMOOTH-BORE HIGH DENSITY POLYETHYLENE (HDP), UNLESS OTHERWISE NOTED.

2) STORM SEWER CULVERTS SHALL BE EQUIPPED WITH FLARED END SECTIONS AT ALL OPEN INLET/OULET LOCATIONS.

Typical Storm Sewer Trench Detail

NOT TO SCALE

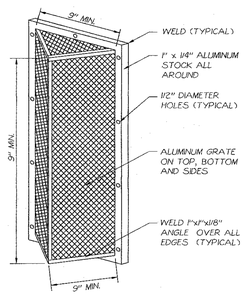


NOTES:

1) DETENTION BASIN TO BE FINAL GRADED WITH 2-3" TOPSOIL AND SEEDED IMMEDIATELY FOLLOWING COMPLETION.

Detention Basin 'A' Detail

NOT TO SCALE



NOTES:

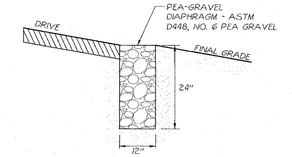
1) TRASH RACK TO BE CENTERED OVER OPENING.

2) TRASH RACK SHALL BE CONSTRUCTED FROM ALUMINUM.

3) TRASH RACK SHALL BE INSTALLED A MINIMUM OF 2" BELOW THE BOTTOM OF THE ORIFICE SO AS TO NOT BLOCK THE ORIFICE.

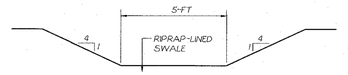
Trash Rack Detail

NOT TO SCALE



Gravel Diaphragm Detail

NOT TO SCALE

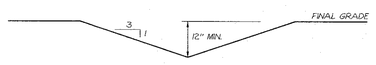


NOTES:

1) SWALE SHALL BE CONSTRUCTED WITH A SLOPE OF 1% TO THE OUTLET.
2) SWALE SHALL BE STABILIZED WITH 6" RIPRAP, A MINIMUM OF 15" DEEP.

Overflow Swale Detail

NOT TO SCALE



NOTES:

1) SWALE SHALL BE STABILIZED WITH TOPSOIL, SEED, & MULCH IMMEDIATELY FOLLOWING CONSTRUCTION.

Diversion Swale Detail

NOT TO SCALE

NO.	DATE	REVISION	BY
4	7-6-17	ADDED PARKING SPACES	LJM
3	5-23-17	BAZYKLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

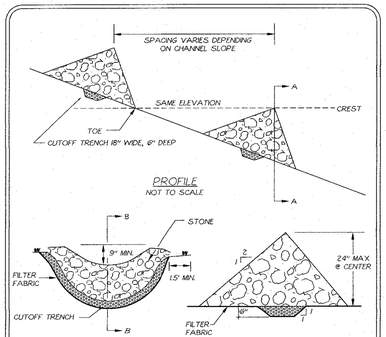
ZACHARY A. PETERS PE #093918

TOWN OF NEWBURGH PROJECT #2016-21

Stormwater Detail Sheet for RAM Hotels

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	
NEWBURGH ALTO PARK, LLC	
TAX MAP REFERENCE:	
SECTION 97, BLOCK 2, LOT 37	
DEED REFERENCE: LIBER 11724, BLOCK 1610	
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE: 4 FEB 2017	SHEET 7 / 12
DRAFTED BY: ZAP	
PROJECT: 4015	



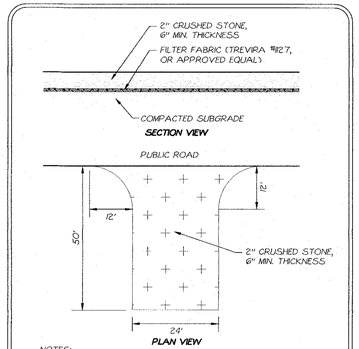
1. SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.

2. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.

3. INSTALL IN ROAD SWALES AFTER SWALE IS SHAPED. CHECK DAMS SHALL BE MAINTAINED UNTIL ROAD IS PAVED & SWALES ARE STABILIZED. REMOVE CHECK DAMS AFTER PAVEMENT & SWALE STABILIZATION IS COMPLETED.

4. EXACT LOCATION OF TEMPORARY CHECK DAMS TO BE DETERMINED IN THE FIELD BASED UPON SITE CONDITIONS.

Temporary Check Dam Detail



NOTES:
1.) ENTRANCE SHALL BE MAINTAINED AS CONDITIONS DEMAND TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY.

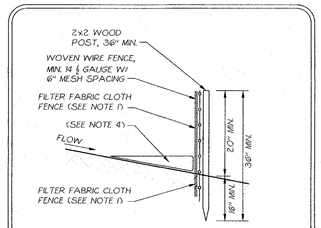
2.) ALL SEDIMENTATION WILL BE INSPECTED & MAINTAINED ON A REGULAR BASIS.

3.) PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.

4.) THE WIDTH OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE 12' MINIMUM, BUT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE INGRESS/EGRESS AREA BEING USED.

Stabilized Construction Entrance Detail

NOT TO SCALE



NOTES:
1.) FILTER CLOTH SHALL BE FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL.

2.) SILT FENCE SHALL BE EMBEDDED A MINIMUM OF 8" INTO EXISTING GRADE.

3.) ENDS SHALL BE OVERLAPPED BY A MINIMUM OF 6" AND FOLDED WHEREVER TWO SECTIONS OF SILT FENCE OVERLAP.

4.) SEDIMENT SHALL BE REMOVED WHENEVER A DEPTH OF 4" HAS ACCUMULATED OR WHEN BULGES DEVELOP IN THE FENCE. DAMAGED SECTIONS SHALL BE REMOVED AND REPLACED AS NEEDED.

Silt Fence Detail

NOT TO SCALE

Erosion & Sediment Control Notes:

1.) DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.

2.) THE PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY 5.05 ACRES.

SOIL DISTURBANCE SHALL BE COMPLETED SO THAT NO MORE THAN FIVE (5.0) ACRES SHALL BE DISTURBED AT ANY ONE TIME.

3.) ALL DISTURBED AREAS THAT WILL REMAIN TEMPORARILY UNDISTURBED (7+1 DAYS) SHALL BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION REQUIREMENTS IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, JULY 2016 EDITION. TEMPORARY STABILIZATION SPECIFICATIONS INCLUDE:

- ANNUAL RYEGRASS SEEDING WITH STRAW MULCHING AT A RATE OF 30 LBS PER ACRE.
- COARSE WOOD CHIPS AT A RATE OF 500 LBS PER ACRE.
- WOOD FIBER HYDROMULCH, AS PER MANUFACTURERS SPECIFICATIONS.

Soil Restoration Specifications

SOIL RESTORATION AS SPECIFIED IN THE CHART BELOW SHALL BE APPLIED TO ALL AREAS DISTURBED DURING THE CONSTRUCTION PROCESS.

TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT	COMMENTS/EXAMPLES
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED	PRESERVATION OF NATURAL FEATURES
MINIMAL SOIL DISTURBANCE	RESTORATION NOT REQUIRED	CLEARING AND GRUBBING
AREAS WHERE TOPSOIL IS STRIPPED ONLY-NO CHANGE IN GRADE	AERATE * AND APPLY 6 INCHES OF TOPSOIL	PROTECT AREA FROM ANY ON GOING CONSTRUCTION ACTIVITIES
AREAS OF CUT OR FILL	APPLY FULL SOIL RESTORATION	
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN A ZONE 5-25 FEET AROUND BUILDINGS BUT NOT WITHIN A 5 FOOT PERIMETER AROUND FOUNDATION WALLS)	APPLY FULL SOIL RESTORATION (RESTORATION/DECOMPACTION AND COMPOST ENHANCEMENT)	
AREAS WHERE RUNOFF REDUCTION AND/OR INFILTRATION PRACTICES ARE APPLIED	RESTORATION NOT REQUIRED, BUT MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR APPROPRIATE PRACTICES	KEEP CONSTRUCTION EQUIPMENT FROM CROSSING THESE AREAS. TO PROTECT NEWLY INSTALLED PRACTICE FROM ANY ONGOING CONSTRUCTION ACTIVITIES CONSTRUCT A SINGLE PHASE OPERATION FENCE AREA
REDEVELOPMENT PROJECTS	SOIL RESTORATION IS REQUIRED ON REDEVELOPMENT PROJECTS IN AREAS WHERE EXISTING IMPERVIOUS AREA WILL BE CONVERTED TO PREVIOUS AREA.	

*AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR-DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOIL, A ROLLER WITH MANY SPIKES MAKING INDENTATIONS IN THE SOIL, OR PRONGS WHICH FUNCTION LIKE A MINI-SUBSOILER.

FULL SOIL RESTORATION SPECIFICATIONS:

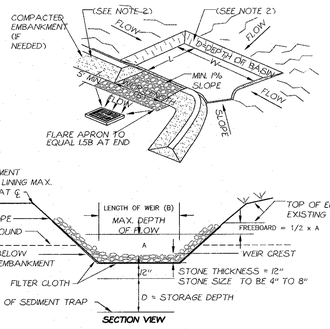
1.) SOIL RESTORATION SHALL BE PERFORMED DURING THE LANDSCAPING PHASE OF THE PROJECT. SOIL RESTORATION SHALL INCLUDE THE FOLLOWING STEPS:
- A. APPLY 3" OF COMPOST OVER SUBSOIL.
- B. TILL COMPOST INTO SUBSOIL TO A MINIMUM DEPTH OF 12".
- C. REMOVE ALL STONE/ROCK MATERIAL GREATER THAN 4" IN SIZE.
- D. APPLY 6" OF TOPSOIL.
- E. VEGETATE IN ACCORDANCE WITH THE LANDSCAPING PLAN.

2.) COMPOST SHALL BE AGED AND FROM PLANT DERIVED MATERIALS, FREE OF WEEDS, SEEDS, WATER, AND DUST. COMPOST SHOULD PASS THROUGH A HALF INCH SCREEN AND HAVE SUITABLE PH FOR PLANT GROWTH.

3.) MAINTENANCE SHALL INCLUDE THE FOLLOWING:
- A. INSPECTIONS AFTER EACH STORM EVENT GREATER THAN HALF-INCH FOR THE FIRST SIX MONTHS.
- B. RESEEDING OF BARE OR ERODING AREAS TO ESTABLISH A STABILIZED COVER.
- C. WATER ONCE EVERY THREE DAYS FOR THE FIRST MONTH, THEN PROVIDE A HALF INCH OF WATER PER WEEK.

4.) VEGETATED AREAS SHALL BE KEPT FREE OF VEHICULAR AND FOOT TRAFFIC.

5.) DOLLAR GENERAL LANDSCAPING NOTES SHALL APPLY IN CASES OF MORE STRINGENT REQUIREMENTS.



TRAP DESIGNATION	DEPTH OF CHANNEL (A') (FT)	LENGTH OF WEIR (B) (FT)	WIDTH (W) (FT)	LENGTH (L) (FT)	STORAGE DEPTH (D) (FT)	CONTRIBUTING AREA (AC)	STORAGE REQUIRED (CF)	STORAGE PROVIDED (CF)
A	1.5	6.0	6.0	10.0	3.0	5.0	18,000	18,000

NOTES:
1.) THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. TOP OF EMBANKMENT SHALL BE A MINIMUM OF FOUR (4) FEET WIDE.

2.) ALL FILL SLOPES SHALL BE 2:1 OR FLATTER. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER.

3.) ELEVATION OF THE TOP OF THE DIKE DIRECTING WATER INTO THE SEDIMENT TRAP MUST BE EQUAL TO OR EXCEED THE HEIGHT OF THE EMBANKMENT.

4.) VOLUME OF SEDIMENT STORAGE SHALL BE 3,600 CUBIC FEET PER ACRE OF CONTRIBUTING DRAINAGE AREA. STORAGE AREA PROVIDED SHALL BE COMPUTED USING THE VOLUME AVAILABLE BEHIND THE OUTLET CHANNEL, UP TO AN ELEVATION OF ONE (1) FOOT BELOW THE LEVEL OF THE WEIR CREST.

5.) FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO THE PLACEMENT OF STONE. SECTIONS OF FABRIC SHALL OVERLAP AT LEAST ONE (1) FOOT WITH UPHILL SECTION ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT THE ENTRANCE OF THE OUTLET CHANNEL.

6.) SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED MORE THAN HALF OF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED ON TOP OF OR NEXT TO PREVIOUSLY EXCAVATED MATERIAL AND STABILIZED IMMEDIATELY.

7.) THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRED AS NECESSARY.

8.) THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED ONCE THE TRIBUTARY DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

Temporary RipRap Outlet Sediment Trap Detail

NOT TO SCALE

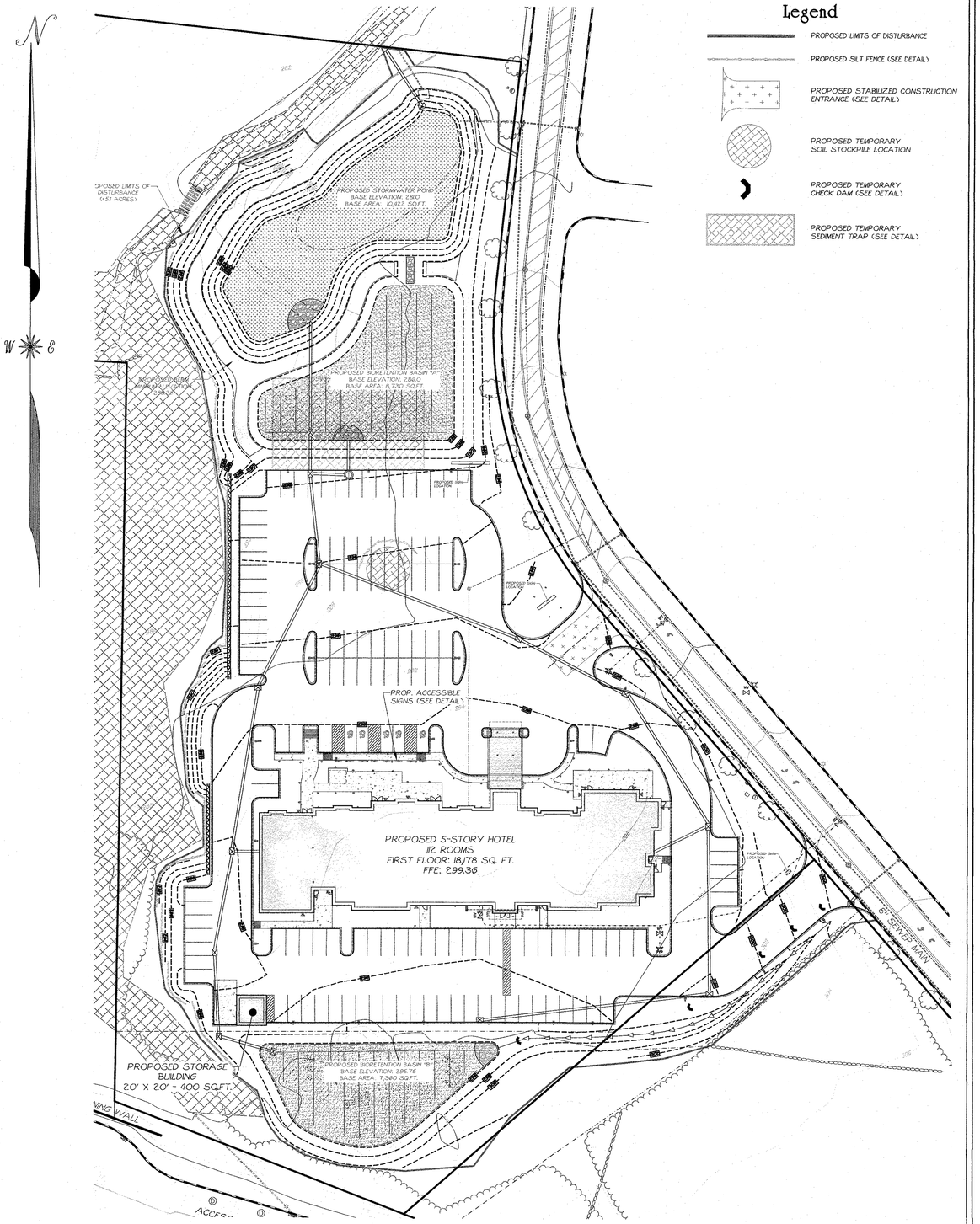
Construction Sequence:

THE DISTURBANCE ASSOCIATED WITH THE PROPOSED PROJECT IS APPROXIMATELY 5.05 ACRES. NO MORE THAN FIVE (5) ACRES SHALL BE DISTURBED AT ANY ONE TIME.

THE CONSTRUCTION OF THE PROPOSED PROJECT SHALL BE COMPLETED IN THE FOLLOWING SEQUENCE. ANY ALTERATION TO THE SEQUENCE SHALL BE REVIEWED AND APPROVED BY THE DESIGN ENGINEER OF THE SWPPP AND APPROPRIATE CHANGES TO THE SWPPP SHALL BE MADE AND IMPLEMENTED IN THE FIELD.

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES ASSOCIATED WITH THE PROPOSED DISTURBANCE (SILT FENCE, CONSTRUCTION ENTRANCE, CHECK DAMS).
2. EXCAVATE DETENTION BASIN TO SERVE AS TEMPORARY SEDIMENT TRAP DURING CONSTRUCTION. STABILIZE DETENTION BASIN IMMEDIATELY FOLLOWING CONSTRUCTION. DIRECT ALL RUNOFF FROM DISTURBED AREAS TO SEDIMENT TRAP.
3. COMPLETE SITE GRADING. STABILIZE SLOPES FROM FILL AREAS ONCE GRADING IS COMPLETE.
4. INSTALL CATCH BASINS AND STORMWATER PIPING.
5. INSTALL STONE BASE COURSE IN PARKING AREA.
6. BEGIN CONSTRUCTION OF PROPOSED BUILDING AND UTILITY CONNECTIONS.
7. WHEN ALL TRIBUTARY AREAS HAVE BEEN ADEQUATELY STABILIZED, INSTALL PROPOSED BIORETENTION BASIN IN ACCORDANCE WITH PLAN SPECIFICATIONS.
8. PERFORM SOIL RESTORATION IN THE AREA OF DISTURBANCE. ALL DISTURBED AREAS SHALL BE ADEQUATELY STABILIZED WITH SOD, SEED & HAY, OR LANDSCAPING MULCH.
9. AFTER ALL DISTURBED AREAS ARE STABILIZED, ALL SILT FENCING AND TEMPORARY EROSION CONTROL FEATURES SHALL BE REMOVED.
10. ONCE ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, CONSTRUCT PROPOSED STORMWATER FACILITIES IN ACCORDANCE WITH PLAN SPECIFICATIONS.

WHEN ALL DISTURBED AREAS REACH FINAL STABILIZATION STANDARDS, THE NOTICE OF TERMINATION (NOT) SHALL BE FILED IN ACCORDANCE WITH PERMIT SPECIFICATIONS.



TOWN OF NEWBURGH PROJECT #2016-21

NO.	DATE	REVISION	BY
8	8-6-18	REVISED LIGHT LOCATIONS	LJM
7	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
6	1-15-18	ADDED PARKING SPACES	LJM
5	7-6-17	ADDED PARKING SPACES	LJM
4	6-1-17	HYDRANT & SIGN LOCATIONS	LJM
3	5-12-17	BAZYDLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK · LAWRENCE JOHN MARSHALL · 087107 · LICENSED PROFESSIONAL ENGINEER

ZACHARY A. PETERS PE #093918

Erosion & Sediment Control Detail Sheet for RAM Hotels

Mercurio-Norton-Tarolli-Marshall
ENGINEERING · LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

RECORD OWNER:	NEWBURGH AUTO PARK, LLC
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER 11724, BLOCK 1810
	TOWN OF NEWBURGH
	COUNTY OF ORANGE
	STATE OF NEW YORK
DATE: 4 FEB 2017	SHEET 8 / 12
DRAFTED BY: ZAP	
PROJECT: 4015	

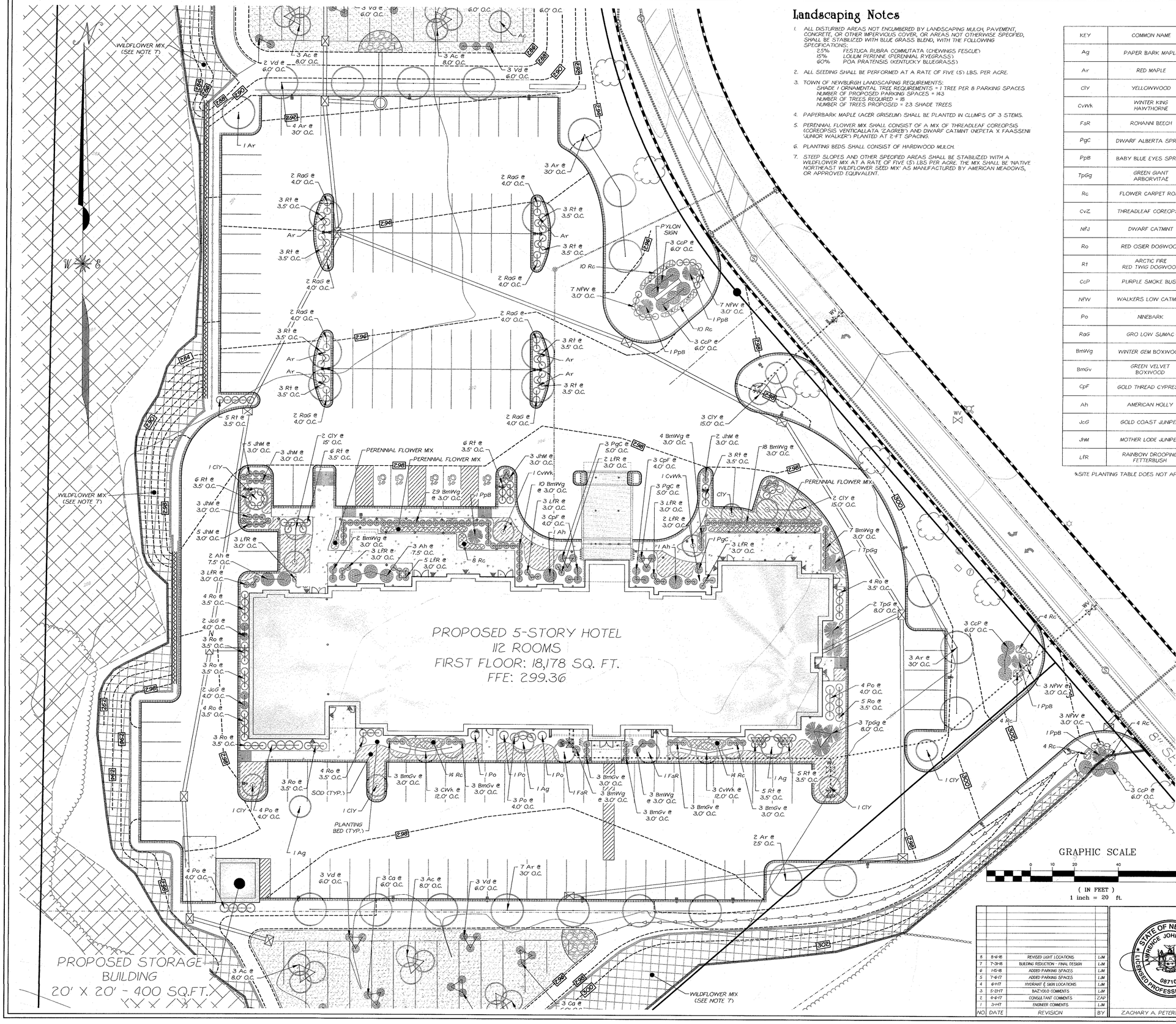
Landscaping Notes

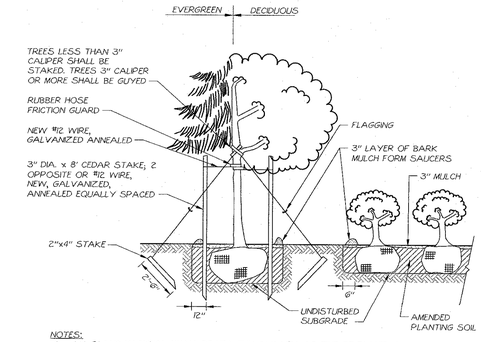
1. ALL DISTURBED AREAS NOT ENCUMBERED BY LANDSCAPING MULCH, PAVEMENT, CONCRETE, OR OTHER IMPERVIOUS COVER, OR AREAS NOT OTHERWISE SPECIFIED, SHALL BE STABILIZED WITH BLUE GRASS BLEND, WITH THE FOLLOWING SPECIFICATIONS:
   - 25% FESTUCA RUBRA COMMUTATA (CHEWINGS FESCUE)
   - 15% LOLIUM PERENNE (PERENNIAL RYEGRASS)
   - 60% POA PRATENSIS (KENTUCKY BLUEGRASS)
2. ALL SEEDING SHALL BE PERFORMED AT A RATE OF FIVE (5) LBS. PER ACRE.
3. TOWN OF NEWBURGH LANDSCAPING REQUIREMENTS:
   - SHADE / ORNAMENTAL TREE REQUIREMENTS = 1 TREE PER 8 PARKING SPACES
   - NUMBER OF PROPOSED PARKING SPACES = 143
   - NUMBER OF TREES REQUIRED = 18
   - NUMBER OF TREES PROPOSED = 23 SHADE TREES
4. PAPERBARK MAPLE (ACER GRISEUM) SHALL BE PLANTED IN CLUMPS OF 3 STEMS.
5. PERENNIAL FLOWER MIX SHALL CONSIST OF A MIX OF THREADLEAF COREOPSIS (COREOPSIS VENTICALLATA 'ZAGREB') AND DWARF CATMINT (NEPETA X FAASSENII 'JUNIOR WALKER') PLANTED AT 2-FT SPACING.
6. PLANTING BEDS SHALL CONSIST OF HARDWOOD MULCH.
7. STEEP SLOPES AND OTHER SPECIFIED AREAS SHALL BE STABILIZED WITH A WILDFLOWER MIX AT A RATE OF FIVE (5) LBS PER ACRE. THE MIX SHALL BE 'NATIVE NORTHEAST WILDFLOWER SEED MIX' AS MANUFACTURED BY AMERICAN MEADOWS, OR APPROVED EQUIVALENT.

Site Planting Table

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	TYPE	HARDINESS ZONE	PLANTING SIZE	MATURE SIZE
Ag	PAPER BARK MAPLE	ACER GRISEUM	2	DECIDUOUS TREES	4 - 8	3 STEM CLUMP (SEE NOTE 4)	15' - 30'
Ar	RED MAPLE	ACER RUBRUM	23	DECIDUOUS TREES	3 - 9	2.0" - 2.5" C.	40' - 60'
ClY	YELLOWWOOD	CLADRASTIS LUTEA	12	DECIDUOUS TREES	4 - 9	2.0" - 2.5" C.	30' - 40'
CvWk	WINTER KING HAWTHORNE	CRATAEGUS VIRDIS 'WINTER KING'	8	DECIDUOUS TREES	4 - 7	2.0" - 2.5" C.	25' - 30'
FsR	ROHANNI BEECH	FAGUS SLYVATICA 'ROHANI'	2	DECIDUOUS TREES	4 - 8	2.0" - 2.5" C.	30' - 50'
PgC	DWARF ALBERTA SPRUCE	PICEA GLAUCA 'CORNICA'	7	EVERGREEN TREES	3 - 6	24" - 30"	8' - 12'
PpB	BABY BLUE EYES SPRUCE	PICEA PUNGENS 'BABY BLUE EYES'	5	EVERGREEN TREES	2 - 8	24" - 30"	15' - 25'
TpGg	GREEN GIANT ARBORVITAE	THUJA PLICATA 'GREEN GIANT'	6	EVERGREEN TREES	5 - 7	8' - 10' HGT.	50' - 60'
Rc	FLOWER CARPET ROSE	ROSA 'NOA97400A' FLOWER CARPET	72	GROUNDCOVER	4 - 10	-	24" - 30"
CvZ	THREADLEAF COREOPSIS	COREOPSIS VERTICALLATA 'ZAGREB'	SEE NOTE 5	PERENNIALS	3 - 9	#2 CANS	12" - 18"
NFJ	DWARF CATMINT	NEPETA X FAASSENII 'JUNIOR WALKER'	SEE NOTE 5	PERENNIALS	5 - 9	#2 CANS	12" - 18"
Ro	RED OSIER DOGWOOD	CORNUS SERICEA 'CARDINAL'	41	DECIDUOUS SHRUBS	2 - 8	18" - 24"	6' - 8'
Rt	ARCTIC FIRE RED TWIG DOGWOOD	CORNUS STOLONIFERA 'ARCTIC FIRE'	62	DECIDUOUS SHRUBS	3 - 7	18" - 24"	4' - 6'
CcP	PURPLE SMOKE BUSH	COTINUS COGGYRIA 'ROYAL PURPLE'	12	DECIDUOUS SHRUBS	4 - 8	24" - 36"	10' - 15'
NFW	WALKERS LOW CATMINT	NEPETA X FAASSENII 'WALKERS LOW'	20	DECIDUOUS SHRUBS	4 - 9	#2 CANS	24" - 36"
Po	NINEBARK	PHYSOCARPUS OPULIFOLIUS	19	DECIDUOUS SHRUBS	3 - 7	18" - 24"	4' - 8'
RaG	GRO LOW SUMAC	RHUS AROMATICA 'GRO LOW'	16	DECIDUOUS SHRUBS	4 - 9	12" - 18"	6' - 8'
BmWg	WINTER GEM BOXWOOD	BUXUS MICROPHYLLA 'WINTER GEM'	76	EVERGREEN SHRUBS	5 - 9	24" - 30"	4' - 6'
BmGv	GREEN VELVET BOXWOOD	BUXUS MICROPHYLLA 'GREEN VELVET'	6	EVERGREEN SHRUBS	5 - 8	24" - 30"	2' - 4'
CpF	GOLD THREAD CYPRESS	CHAMAECYPARIS PISIFERA FILIFERA AUERA'	6	EVERGREEN SHRUBS	4 - 9	24" - 30"	6' - 18'
Ah	AMERICAN HOLLY	ILEX OPACA	7	EVERGREEN SHRUBS	5 - 9	24" - 30"	15' - 30'
JcG	GOLD COAST JUNIPER	JUNIPERUS CHINENSIS 'GOLD COAST'	4	EVERGREEN SHRUBS	4 - 9	18" - 24"	3' - 4'
JhM	MOTHER LODE JUNIPER	JUNIPERUS HORIZONTALIS 'MOTHER LODE'	26	EVERGREEN SHRUBS	3 - 9	#2 CANS	6" HGT.
LfR	RAINBOW DROOPING FETTERBUSH	LEUCOTHAE FONTANESIANA 'GIRARDS RAINBOW'	24	EVERGREEN SHRUBS	5 - 9	18" - 24"	3' - 5'

*SITE PLANTING TABLE DOES NOT APPLY TO PLANTINGS WITHIN BIORETENTION BASIN (SEE SHEET 10)





NOTES:
1. ALL PLANT MATERIAL SHALL BE HEALTHY AND FULL AT TIME OF PLANTING
2. ALL TREES SHALL BE WARRANTIED TO BE HEALTHY FOR 2-YEARS FROM TIME OF PLANTING.
3. ALL PROPOSED LANDSCAPE PLANTS SHALL CONFORM TO THE GUDELINES SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS FOR NURSERY STOCK.
4. TREE WRAPPING SHALL BE PROVIDED AROUND BASE OF TREE TO 8" ABOVE RUBBER HOSE (DECIDUOUS TREES ONLY).

Planting Detail

NOT TO SCALE

GRAPHIC SCALE

0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

TOWN OF NEWBURGH PROJECT #2016-21

NO.	DATE	REVISION	BY
8	8-6-18	REVISED LIGHT LOCATIONS	LJM
7	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
6	7-5-18	ADDED PARKING SPACES	LJM
5	7-6-17	ADDED PARKING SPACES	LJM
4	6-7-17	HYDRANT & SIGN LOCATIONS	LJM
3	5-22-17	BAZYDLO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-7-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK · LAWRENCE JOHN MARSHALL · 087107 · LICENSED PROFESSIONAL ENGINEER

ZACHARY A. PETERS PE #093918

Landscaping Detail Sheet I for RAM Hotels

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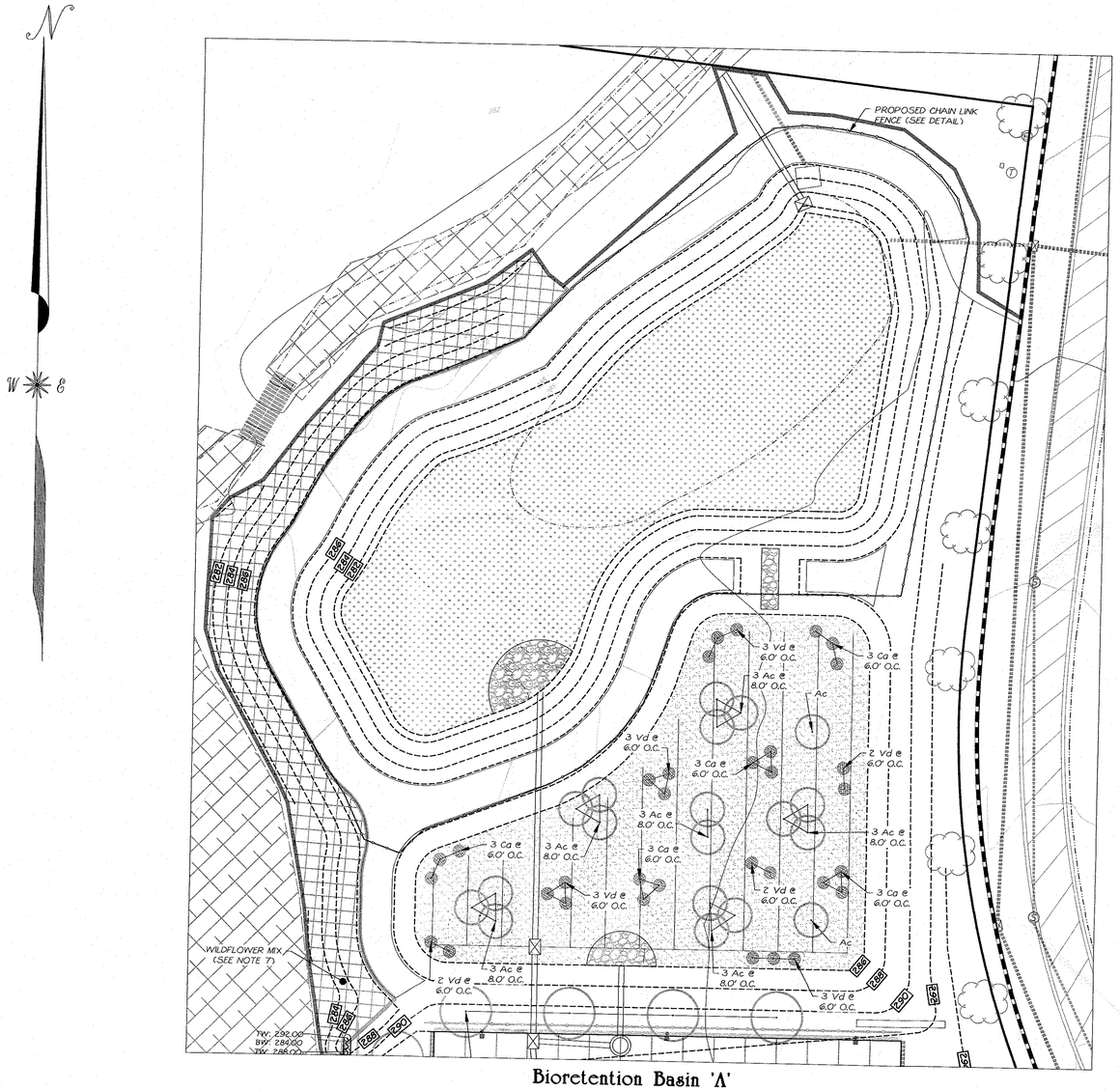
TAX MAP REFERENCE:	SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:	LIBER 11764, BLOCK 180
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE: 4 FEB 2017	SHEET 9 / 12
DRAFTED BY: ZAP	
PROJECT: 4015	

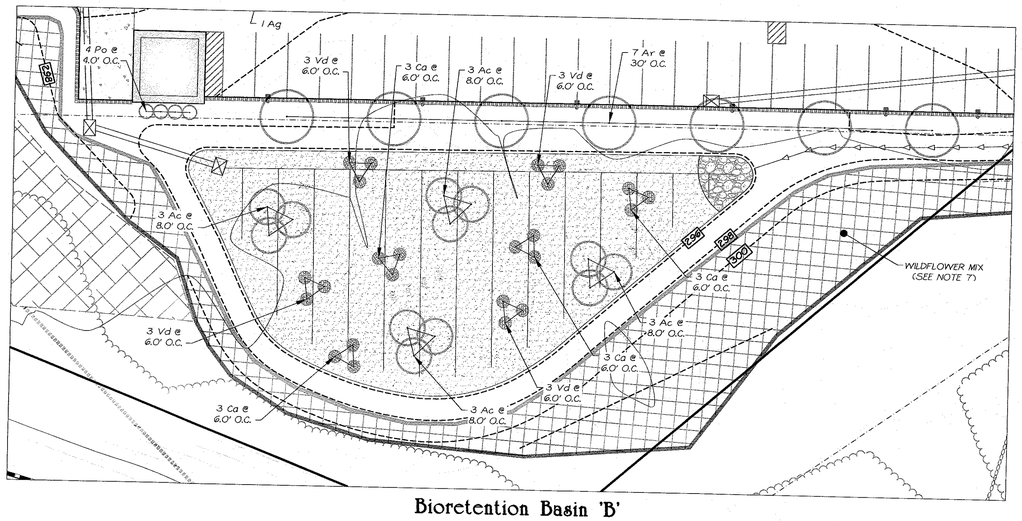


Bioretention Basin 'A'

Bioretention Basin 'A' - Stormwater Planting Table

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	TYPE	HARDNESS ZONE	PLANTING SIZE	MATURE SIZE
Ac	SHADBLOW SERVICEBERRY	AMELANCIER CANADENSIS	19	DECIDUOUS SHRUBS	3 - 7	8' - 10' HGT.	20' - 30'
Ca	SILKY DOGWOOD	CORNUS AMOMUM	15	DECIDUOUS SHRUBS	5 - 8	24" - 30"	6' - 10'
Vd	ARROWWOOD VIBURNUM	VIBURNUM DENTATUM	18	DECIDUOUS SHRUBS	3 - 8	24" - 30"	5' - 9'

*THIS TABLE APPLIES ONLY TO THE PLANTINGS WITHIN THE PROPOSED BIORETENTION BASIN



Bioretention Basin 'B'

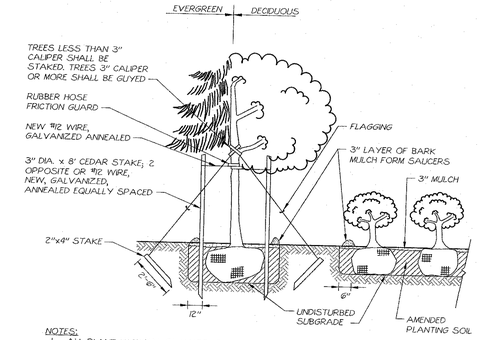
Bioretention Basin 'B' - Stormwater Planting Table

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	TYPE	HARDNESS ZONE	PLANTING SIZE	MATURE SIZE
Ac	SHADBLOW SERVICEBERRY	AMELANCIER CANADENSIS	12	DECIDUOUS SHRUBS	3 - 7	8' - 10' HGT.	20' - 30'
Ca	SILKY DOGWOOD	CORNUS AMOMUM	12	DECIDUOUS SHRUBS	5 - 8	24" - 30"	6' - 10'
Vd	ARROWWOOD VIBURNUM	VIBURNUM DENTATUM	12	DECIDUOUS SHRUBS	3 - 8	24" - 30"	5' - 9'

*THIS TABLE APPLIES ONLY TO THE PLANTINGS WITHIN THE PROPOSED BIORETENTION BASIN

Landscaping Notes

1. ALL DISTURBED AREAS NOT ENCUMBERED BY LANDSCAPING MULCH, PAVEMENT, CONCRETE, OR OTHER IMPERVIOUS COVER, OR AREAS NOT OTHERWISE SPECIFIED, SHALL BE STABILIZED WITH BLUE GRASS BLEND, WITH THE FOLLOWING SPECIFICATIONS:
   - 25% FESTUCA RUBRA COMMUTATA (CHEWINGS FESCUE)
   - 15% LOLIUM PERENNE (PERENNIAL RYEGRASS)
   - 60% POA PRATENSIS (KENTUCKY BLUEGRASS)
2. SEEDING SHALL BE PERFORMED AT A RATE OF FIVE (5) LBS. PER ACRE.



NOTES:
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2. ALL TREES SHALL BE WARRANTIED TO BE HEALTHY FOR 2-YEARS FROM TIME OF PLANTING.
3. ALL PROPOSED LANDSCAPE PLANTS SHALL CONFORM TO THE GUIDELINES SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS FOR NURSERY STOCK.
4. TREE WRAPPING SHALL BE PROVIDED AROUND BASE OF TREE TO 8" ABOVE RUBBER HOSE (DECIDUOUS TREES ONLY).

Planting Detail
NOT TO SCALE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY
6	8-6-18	REVISED LIGHT LOCATIONS	LJM
5	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
4	7-6-17	ADDED PARKING SPACES	LJM
3	5-12-17	PLANNING BOARD COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

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ZACHARY A. PETERS PE #093918

TOWN OF NEWBURGH PROJECT #2016-21

Landscaping Detail Sheet II for RAM Hotels

Mercurio-Norton-Tarolli-Marshall
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RECORD OWNER:
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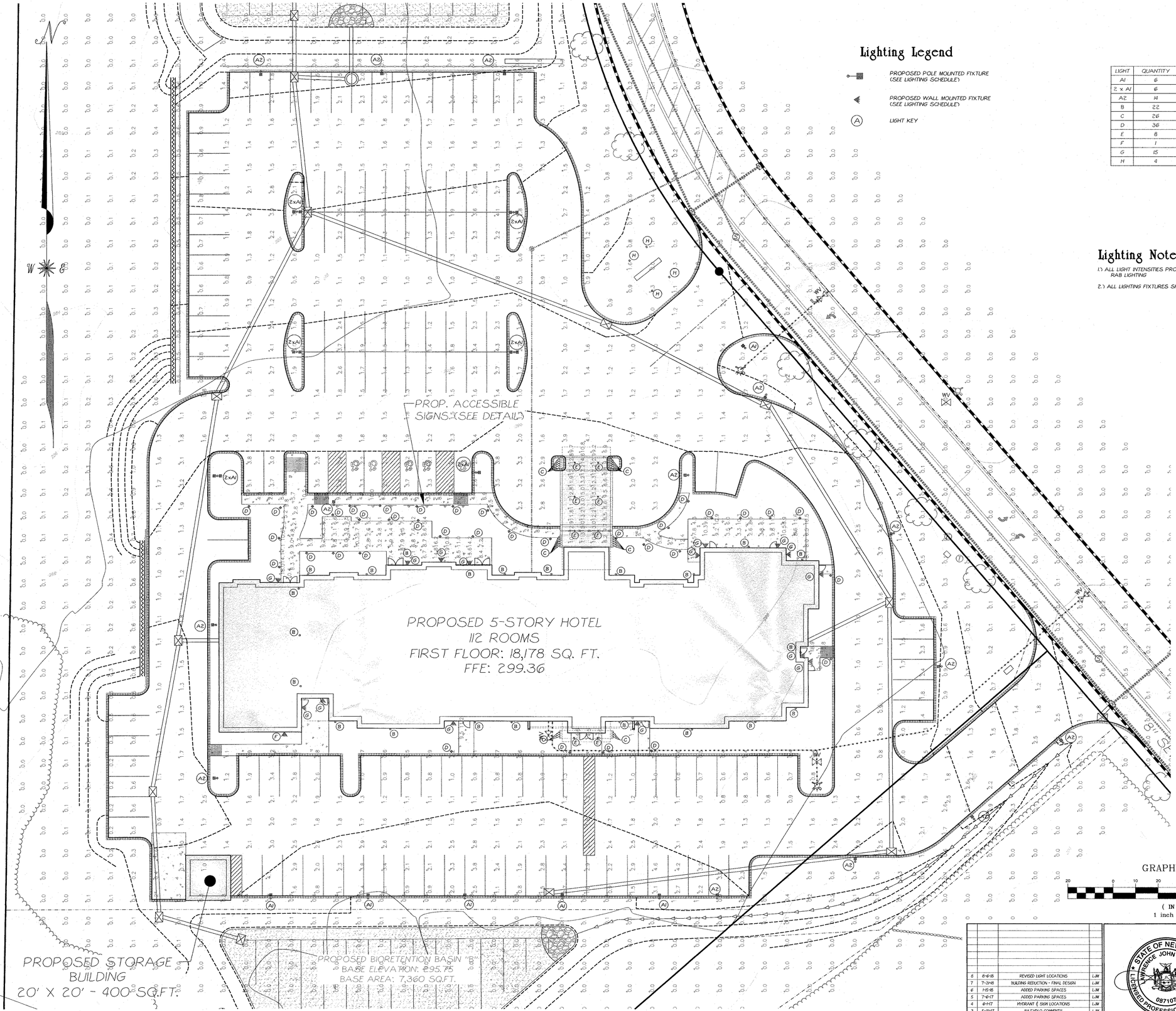
TAX MAP REFERENCE:
SECTION 97, BLOCK 2, LOT 37
DEED REFERENCE:
LIBER 5724, BLOCK 1910
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DATE: 4 FEB 2017
DRAFTED BY: ZAP
PROJECT: 4015
SHEET 10 / 12



Lighting Legend

- PROPOSED POLE MOUNTED FIXTURE (SEE LIGHTING SCHEDULE)
- PROPOSED WALL MOUNTED FIXTURE (SEE LIGHTING SCHEDULE)
- (A) LIGHT KEY

Lighting Schedule

LIGHT	QUANTITY	LABEL	MANUFACTURER	DESCRIPTION	BUG RATING
A1	6	ALED4T5ON	RAB LIGHTING	LED AREA LIGHT TYPE IV 50W NEUTRAL	B0-U0-G1
2 x A1	6	2 x ALED4T5ON	RAB LIGHTING	LED AREA LIGHT TYPE IV 50W NEUTRAL	B0-U0-G1
A2	14	ALED3T5ON	RAB LIGHTING	LED AREA LIGHT TYPE III 50W NEUTRAL	B0-U0-G1
B	22	HNLED18N	RAB LIGHTING	LED SPOT LIGHT 18W NEUTRAL	N.A.
C	26	LFLED8	RAB LIGHTING	LFLED8N + LSLFLED8 (SPOT BEAM)	N.A.
D	36	BLED12N	RAB LIGHTING	LED SQUARE BOLLARD 12W NEUTRAL	B0-U1-G0
E	8	ND7TRIMM + NDLED7R38NHC	RAB LIGHTING	LED 7-INCH DOWNLIGHT 38W NEUTRAL	B2-U0-G0
F	1	WPLED52N	RAB LIGHTING	LED WALL PACK 52W NEUTRAL	B4-U1-G3
G	15	SLIM8N-DIO	RAB LIGHTING	LED SLIM WALL PACK 8W NEUTRAL	B1-U0-G0
H	9	HBLED8N-DIO	RAB LIGHTING	LED SPOT LIGHT 8W NEUTRAL	N.A.

Lighting Notes:

1.) ALL LIGHT INTENSITIES PROVIDED BY: RAB LIGHTING

2.) ALL LIGHTING FIXTURES SHALL BE DOWNWARD FACING.

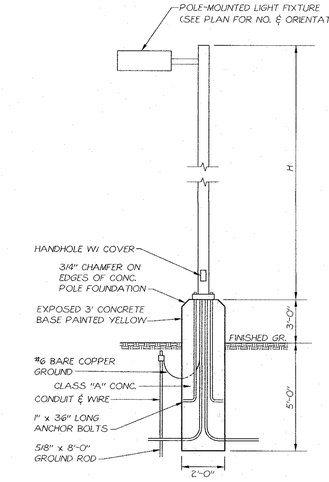
CALCULATION SUMMARY

LABEL	AVG	MAX	MIN
PARKING AND DRIVE SUMMARY	1.7 FC	6.6 FC	0.4 FC

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



Light Pole Detail

NO.	DATE	REVISION	BY
8	8-6-18	REVISED LIGHT LOCATIONS	LJM
7	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
6	115-18	ADDED PARKING SPACES	LJM
5	7-6-17	ADDED PARKING SPACES	LJM
4	6-1-17	HYDRANT & SIGN LOCATIONS	LJM
3	5-29-17	BAC/VELO COMMENTS	LJM
2	4-6-17	CONSULTANT COMMENTS	ZAP
1	3-1-17	ENGINEER COMMENTS	LJM

STATE OF NEW YORK · LAWRENCE JOHN MARSHALL · 087107 · LICENSED PROFESSIONAL ENGINEER

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TOWN OF NEWBURGH PROJECT #2016-21

Lighting Detail Sheet for RAM Hotels

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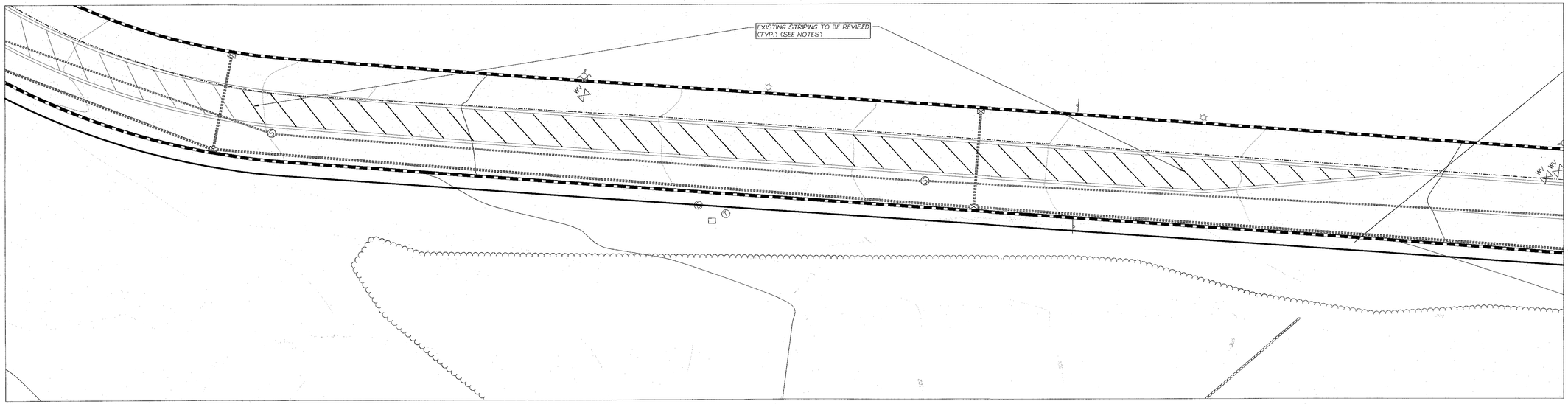
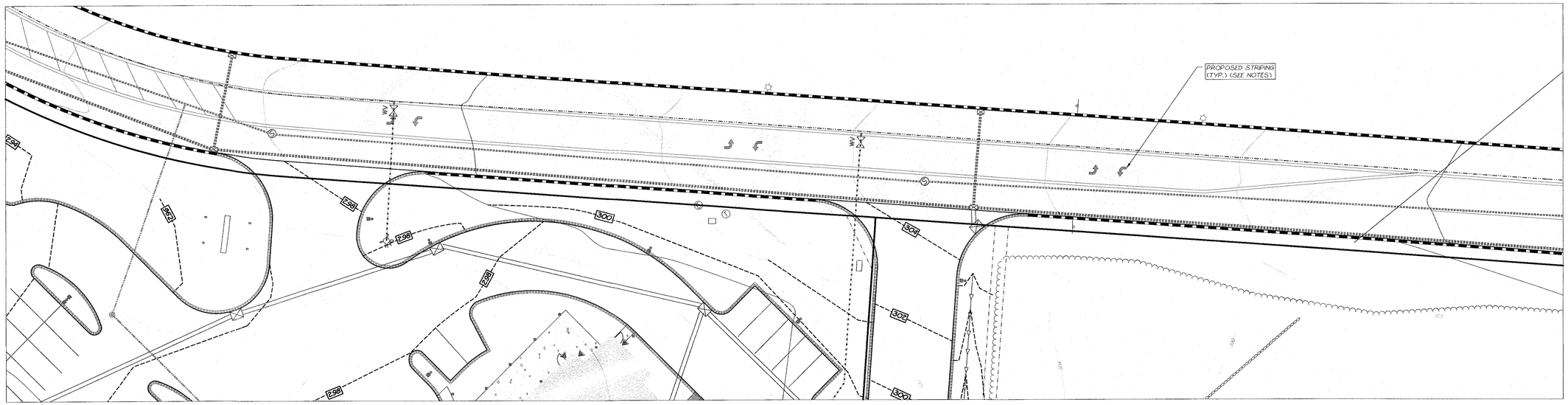
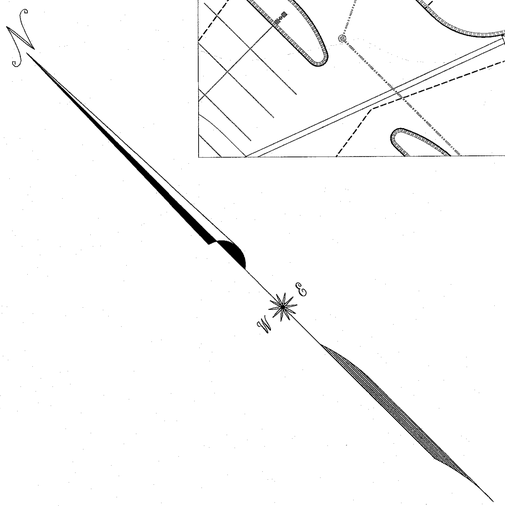
DEED REFERENCE: LIBER 11724, BLOCK 1610
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DATE: 4 FEB 2017
DRAFTED BY: ZAP
PROJECT: 4015
SHEET 11 / 12



Existing Conditions Detail



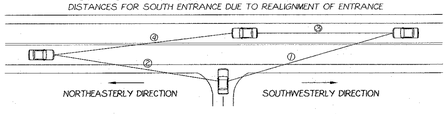
Proposed Conditions Detail



Sight Distance Table

MEASURED BY: RTS 3-29-17			UNITY PLACE POSTED SPEED LIMIT: 30 MPH
LOCATION	SIGHT LINE	DISTANCE	NOTES
NORTH ENTRANCE	1	±660'	SIGHT DISTANCE INTERMITTENT THRU TREES BEYOND
	2	±800'	SIGHT DISTANCE INTERMITTENT THRU TREES BEYOND
SOUTH ENTRANCE	1	±455'	SIGHT DISTANCE INTERMITTENT THRU TREES BEYOND
	2	±620'	SIGHT DISTANCE INTERMITTENT THRU TREES BEYOND

*SIGHT DISTANCE FOR SOUTH ENTRANCE ADJUSTED FROM MEASURED DISTANCES FOR SOUTH ENTRANCE DUE TO REALIGNMENT OF ENTRANCE



Notes:

1.) EXISTING STRIPING TO BE REMOVED SHALL BE REMOVED IN ACCORDANCE WITH TOWN OF NEWBURGH HIGHWAY SUPERINTENDENT SPECIFICATIONS.

2.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE TOWN OF NEWBURGH ROAD SPECIFICATIONS.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY
5	8-8-18	REVISED LIGHT LOCATIONS	LJM
4	7-31-18	BUILDING REDUCTION - FINAL DESIGN	LJM
3	7-6-17	ADDED PARKING SPACES	LJM
2	6-1-17	HYDRANT & SIGN LOCATIONS	LJM
1	5-12-17	BAZYDLO COMMENTS	LJM

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ZACHARY A. PETERS PE #093398

TOWN OF NEWBURGH PROJECT #2016-21

Amended Striping Plan for RAM Hotels

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TAX MAP REFERENCE:	
SECTION 97, BLOCK 2, LOT 37	
DEED REFERENCE: LIBER #7174, BLOCK 1810	
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DATE: 4 FEB 2017	SHEET
DRAFTED BY: ZAP	12 / 12
PROJECT: 4015	