

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)
MATTHEW J. SICKLER, P.E. (NY & PA)
PATRICK J. HINES
LYLE R. SHUTE, P.E. (NY, NJ, PA)

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

(845) 567-3100 fax: (845) 567-3232

e-mail: mheny@mhepc.com

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 HOTELS, INC.

PROJECT NO.:

16-21

PROJECT LOCATION:

SECTION 97, BLOCK 2, LOT 37

REVIEW DATE:

18 JULY 2017

MEETING DATE:

20 JULY 2017

PROJECT REPRESENTATIVE: MECURIO-NORTON-TAROLLI-MARSHALL

- 1. This office has reviewed a Stormwater Pollution Prevention Plan (SWPPP) last revised 7 July 2017. We find the document acceptable. The Stormwater Report was revised in order to treat the anticipated runoff from a conceptual development of the two acre balance parcel as well as the proposed Hotel site. The document identifies that green infrastructure has been implemented on the Hotel site.
- 2. A pre-construction notification to the Army Corps of Engineers for wetland disturbance is required prior to undertaking said disturbance.
- 3. An Architectural Review form has been submitted identifying materials for the Planning Boards use.
- **4.** Parking spaces have been revised based on conversations with the Town of Newburgh Planning Board. A number of these spaces have been identified as being land banked with the trigger being that they are required to be constructed upon notification by the town.
- 5. Security as well as inspection fees are required for stormwater improvements and landscaping.
- 6. A Stormwater Facilities Maintenance Agreement must be executed.
- 7. The common driveway easement is proposed to be modified to take into account common stormwater facilities. Mike Donnelly's review of this should be provided. Stormwater Facilities Maintenance Agreement should encumber both parties owning either of the lots as improvements are depicted on the Hotel lot which will serve any potential development of the balance parcel.
 - Regional Office 111 Wheatfield Drive Suite 1 Milford, Pennsylvania 18337 570-296-2765 •

Respectfully submitted,

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

Patrick J. Hines Principal

PJH/kbw



45 Main Street · P.O. Box 166 Pine Bush, New York 12566 Tel: (845) 744-3620

> Fax: (845) 744-3805 Email: mntm@mntm.co

William G. Norton, L.S. Alphonse Mercurio, L.S.

Lawrence J. Marshall, P.E. John Tarolli, P.E., L.S.

Zachary A. Peters, P.E. Kenneth W. Vriesema, L.S.

July 7, 2017

Planning Board Town of Newburgh 308 Gardnertown Road Newburgh, NY 12550

JUL 7 2017

Re: Job No. 4015

Lands of Newburgh Auto Park, LLC

Tax Map Parcel: 97-2-37

Town of Newburgh, Unity Place Subdivision & Hotel Site Plan

Town of Newburgh Project No. 2016-21

Dear Board Members:

Enclosed please find the following items in reference to the above-captioned project:

- 1. Twelve (12) copies of the revised Site Plan
- 2. Twelve (12) copies of the revised Subdivision Plan
- 3. Twelve (12) copies of the revised Lot 2 Development Sketch Plan
- 4. Two (2) copies of the revised Stormwater Pollution Prevention Plan
- 5. Twelve (12) copies of the revised Ecological Analysis letter dated May 12, 2017
- 6. Twelve (12) copies of the completed Architectural Review Form
- 7. Twelve (12) reduced size copies of the Building Elevations & Floor Plans
- 8. Twelve (12) copies of the City of Newburgh Flow Acceptance Letter
- 9. Twelve (12) copies of the revised Parking Analysis report

The plans have been revised as follows to address the Town of Newburgh Planning Board engineer's comments dated June 12, 2017:

- The Lot 2 potential development plan has been revised to reflect the correct lot area.
- 2. The City of Newburgh Flow Acceptance Letter was received on Monday, July 3, 2017. Copies of the letter have been enclosed for your records.
- 3. The parking analysis provided on Sheet 1 of the site plan set has been revised to reflect all the uses proposed on the site.
- 4. The Pre-Construction Notification for the Army Corps of Engineers wetland disturbance is being finalized and will be submitted shortly. Copies of all submissions will be forwarded to the Planning Board and all consultants when the submission is made.
- 5. The Ecological Analysis letter contained an error in units. The letter has been revised to correct this mistake. Copies of the revised letter have been enclosed for consideration.





The plans have been revised as follows to address the Town of Newburgh Planning Board traffic engineer's comments dated June 11, 2017:

- 1. Section V of the parking analysis report has been revised to correctly reference the 97 parking spaces anticipated to be utilized.
- 2. No response required.
- 3. No response required.
- 4. The site plan has been revised to provide an additional 7 banked parking spaces to increase the total number of available parking spaces to 143. In addition, an additional 13 parking spaces have been proposed to be constructed during initial construction for a total of 130 spaces. The remaining 13 spaces have been shown as being banked for potential future construction.
- 5. No response required.

Please note: the owner of Lot 2 has requested a bioretention basin be added to the southerly side of Lot 1. This bioretention basin will serve to treat the runoff from the future development on Lot 2, but will be built during the construction of the hotel site. The easement area in favor of Lot 2 over Lot 1 has been revised to encumber the area of the bioretention basin. The common driveway easement document for the joint entrance will be revised to reference the stormwater basin and all other necessary easements for the conveyance of the stormwater runoff. This document will be submitted as soon as it has been revised and found to be satisfactory to the buyer of Lot 1 and the owner of Lot 2.

Please place this project on the next available agenda for continued discussion of this application.

If you have any questions or concerns, please feel free to contact me at (845) 744-3620 or by email at lmarshall@mntm.co.

Sincerely,

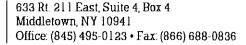
Lawrence J. Marshall, P.E.

LM/lm Enc.

cc: Karen Arent
Patrick Hines
Michael Donnelly, Esq
Ken Wersted, PE









May 12, 2017

Mr. Lawrence Marshall, PE
President
Mercurio-Norton-Tarolli-Marshall, PC
Engineering-Land Surveying
P.O. Box 166
45 Main Street
Pine Bush, NY 12566

RE:

Wetlands Delineation & Report Newburgh, Unity Place Property Town of Newburgh, Orange County

Dear Mr. Marshall:

As stated in our wetland delineation report. On December 14, 2016 a wetland delineation was conducted on the above referenced area on the Property. The area was walked and a field investigation was completed to determine whether there were any areas that met either the Army Corp of Engineers (ACOE) and/or the NYSDEC of regulated wetland areas.

Before conducting the field investigation, the available aerial, soils and wetland mapping were reviewed for the referenced property. This identifies if there are any mapped wetlands on the property, as well as any areas where we should verify whether or not the field conditions match the available mapping.

The field investigation was conducted in accordance to the 2012 Draft Interim Northcentral and Northeast Regional Supplement to the ACOE 1987 manual. The upland and wetland areas on the property were determined by observing plant species, hydrology and soil types and conditions in accordance with the agencies guideline. Data sheets were then filled out and the areas meeting the conditions set forth by the agencies were then flagged with pink "Wetland Delineation" flagging and numbered sequentially. A copy of the datasheets are enclosed for wetland flagged. Flags were hung on the property defining the edge of the regulated area.

The conclusion was stated that the wetland is regulated by the ACOE therefore any disturbance of the wetland, a permit would be required by the ACOE, our firm never stated that wetland was to be considered isolated and not regulated as suggested Mr. Bazydio letter. The closest NYSDEC wetland is over 0.60 miles from the site. The connecting stream is culverted underground for over 300 feet in that section. The culvert would by definition break any connect for this wetland to become a NYSDEC wetland as per NYSDEC code, there must be a vegetative connection for NYSDEC to connect any wetland and there cannot be any breaks of more than 50 meter in the vegetation for the NYSDEC to connect the wetlands. Since the stream has been put into a culvert for well over 300 feet then there is no chance for the wetlands to connect.

As per Mr. Bazydlo comment on the soils and filling possible wetlands: First the mapped submitted by Mr. Bazdlo clearly states that the soils map may not be valid at this scale. These maps are not hard and fast, guaranteeing that the soils are shown exactly at each locations, they estimates and most areas were not field verified when the maps were created. So it cannot state these type soils were filled when the stormwater pond was constructed until there is proof to that affect by prior mapping.

As to the comment that this small wetland could be considered stated regulated as an "unusual local importance wetland" highly unlikely. These type wetlands have to meet very specific guidelines such as known habitat for an endangered species such as a bog turtle. This is a typical urban wetland with a lot of invasive species. So it does not met the guidelines by any standard.

As to the last wetland comment; as per your request we have stated application to the ACOE for a Nationwide #29 permit and PCN for the project for the proposed wetland disturbance. Since this falls under the Nationwide Program, there should be no issues with the ACOE. Once submitted the ACOE has 45 days to respond or the applicant has the permit (PCN) by default as set forth by the nationwide program.

Ecological Analysis is grateful for this opportunity to be of service on this project and looks forward to the opportunity to work with you in the future. Feel free to call if you have any questions or if we can be of further assistance.

Sincerely yours,

James A. Bates

James Bates, CPESC, CPSWQ Managing Member Ecological Analysis, LLC

ARCHITECTURAL REVIEW FORM TOWN OF NEWBURGH PLANNING BOARD

DATE: JULY 6, 2017
NAME OF PROJECT: RAM HOTELS - HILTON GARDEN IN
The applicant is to submit in writing the following items prior to signing of the site
plans.
EXTERIOR FINISH (skin of the building):
Type (steel, wood, block, split block, etc.)
EIFS (STUCCO) & CULTURED STORE WITH ALLMWUM COPING /TRIM
COLOR OF THE EXTERIOR OF BUILDING:
GAUNTIET GRAY EIDER WHITE, DORAN GRAY HUMRIE GOLD, DORAN
GRAYA ECHO RIGGE BORNI COUTRY LEDGESTONE
ACCENT TRIM:
Location: AROCALD CUMPONS & DOORS SLONG FASCID & ALONG TOP
Location: AROCHID CHINDONS & DOORS, ALONG FASCID & ALONG TOP Color: TO MARCH ADJUCENT COLORS OF BUILDING
Type (material): Alom work
PARAPET (all roof top mechanicals are to be screened on all four sides):
ALONG PORTIONS OF ROOF
ROOF:
Type (gabled, flat, etc.):
Material (shingles, metal, tar & sand, etc.): <u>EPDM</u>
Color: BLACK

WINDOWS/SHUTTERS:
Color (also trim if different):
Type: Awww Trim Guss window
DOORS:
Color: GRAY & GLASS
Type (if different than standard door entrée):
SIGN:
Color: RED, WHITE, & BLUE Material: ALUMINUM & POLYCARBONATE
Material: Acommon & Polycarzonore
Square footage of signage of site: 940.2 35
LAWRENCE MARSHALL PROJECT ENGWER
Please print name and title (owner, agent, builder, superintendent of job, etc.)
Signature



CITY OF NEWBURGH

Office of the Engineer

83 Broadway, Newburgh, New York 12550 (845) 569-7447/Fax (845) 569-7349 www.cityofnewburgh-ny.gov

Jason C. Morris, P.E.
City Engineer
jmorris@cityofnewburgh-ny.gov

Chad M. Wade, R.L.A. Assistant City Engineer cwade@cityofnewburgh-ny.gov

July 3, 2017

James W. Osborne, PE Town Engineer Town of Newburgh 1496 Route 300 Newburgh, New York 12550

Re: Crossroads S.D. - City/Town of Newburgh Intermunicipal Agreement
Hilton Garden Inn - Unity Place (SBL: 97-2-37)

Hilton Garden Inn - Unity Place (SBL: 97-2-37) City of Newburgh Sewer Connection Approval (15,688 gpd)

Mr. Osborne,

Pursuant to the terms and conditions of the City-Town of Newburgh Intermunicipal Sewer Agreement dated May 6, 2004, permission is hereby granted for a new connection and increase in sewer flow to the Town of Newburgh's sewer main to serve the proposed Hilton Garden Inn project on Unity Place. The anticipated sewer flow increase of 15,688 gpd from this project will be counted toward the 3.8 million gallons per day capacity allocated to the Town, as stated in the City-Town Sewer Agreement. Be advised that this approval is conditioned upon the installation and regular maintenance of grease traps to serve the food preparation kitchen areas.

Please notify this office via email at least 48 hours prior to the commencement of the additional sewer flows from this proposed addition. If you have any questions regarding this approval, please contact this office at your convenience.

Sincerely,

Jason C. Morris, PE City Engineer

cc: Michael Ciaravino, City Manager

Michelle Kelson, Corporation Counsel George Garrison, DPW Superintendent Michael Batz, PE, Severn Trent Services

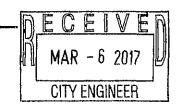
Gil Piaquadio, Town Supervisor Mark Taylor, Town Attorney

Lawrence Marshal, PE, MNTM Engineering & Land Surveying



TOWN OF NEWBURGH

1496 Route 300, Newburgh, New York 12550



February 27, 2017

Mr. Jason Morris City of Newburgh Engineer 83 Broadway Newburgh, NY 12550

RE:

S \ CROSSROADS S.D. — CITY OF NEWBURGH INTERMUNICIPAL

SEWER AGREEMENT (Hilton Garden Inn - Unity Way)

Dear Mr. Morris:

As required by the Intermunicipal Sewer Agreement, I am writing to request approval for a new connection to the Town of Newburgh's sanitary sewer system for the above referenced project. The projected sewage flow is 15,688 gallons per day as shown on the attached excerpt from the Project Narrative prepared by MNTM Engineering & Land Surveying.

If you have any questions, please feel free to contact me. I look forward to your reply.

Respectfully,

James W. Osborne Town Engineer

bi\OWL

Attachment

cc:

G. Piaquadio, Supervisor

M. Taylor, Attorney

J. Guido, Sewer Supt. (CAMO)

J. Ewasutyn, P.B. Chairman

P. Hines, MH&E

L. Marshall, P.E. - MNTM



45 Main Street · P.O. Box 166 Pine Bush, New York 12566

Tel: (845) 744-3620 Fax: (845) 744-3805

Email: mntm@mntm.co

William G. Norton, L.S. Alphonse Mercurio, L.S.

Lawrence J. Marshall, P.E. John Tarolli, P.E., L.S.

Zachary A. Peters, P.E. tenneth W. Vriesema, L.S.

February 16, 2017

FEB 2 1117

James Osborne, P.E. Town of Newburgh, Town Engineer 1496 Route 300 Newburgh, New York 12550

Re: Job No. 4015

Lands of Newburgh Auto Park, LLC Tax Map Parcel: 97-2-37 p/o Town of Newburgh, Unity Place Hilton Garden Inn Site Plan

Town of Newburgh Project #2016-21

Dear Mr. Osborne:

The above-captioned project is for a proposed Hilton Garden Inn. The proposed hotel is a 5-story, 112 room hotel with a 50 seat restaurant, 96 seat conference hall, 20 seat boardroom, 12 seat bar area, and guest laundry. Based upon New York State Department of Environmental Conservation (NYSDEC) anticipated flows for these facilities and assuming full occupancy, the anticipated sewer demand for the building is 15,688 gallons per day (gpd). A breakdown of the anticipated flow rates is provided in the project narrative for the hotel (enclosed).

Please forward a request to the City of Newburgh Engineer to obtain an acceptance letter from the City of Newburgh for this flow.

If you have any questions or concerns, please feel free to contact me at (845) 744-3620 or by email at lmarshall@mntm.co.

Sincerely,

Lawrence Marshall, P.E.

LM/lm

Cc: RA

RAM Hotels, Inc.

Town of Newburgh Planning Board

Patrick Hines





D. Traffic Generation

Based upon the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, the proposed hotel will generate 0.67 vehicular trips per occupied room during the peak morning weekday hour and 0.70 trips per occupied room during the peak afternoon weekday hour. Assuming maximum occupancy, the proposed hotel is expected to generate 74 trips in the peak morning hour and 77 trips in the peak afternoon hour. This generation results in one car entering or existing the site every 48 seconds in the morning and every 46 seconds in the afternoon.

E. Water Supply and Sewage Disposal

Water service will be provided by a connection to the existing 8" ductile iron water main located along Unity Place. To provide adequate supply for the required fire suppression system, an 8" water service will be installed to service the proposed hotel.

Sewage disposal will be provided by a connection to the existing 8" sewer main along Unity Place. The proposed 8" sewer service will be installed from the existing sewer main to the proposed hotel in accordance with all applicable New York State Department of Health, Orange County Department of Health, and Town of Newburgh regulations. The anticipated sewer design flow is calculated as follows:

Üse	Hydraulic Flow Rate	Units	Anticipated Flow
Dining Room	35 gpd/seat	50 seats	1,750 gpd
Banquet	10 gpd/seat	96 seats	960 gpd
Boardroom	5 gpd/seat	20 seats	100 gpd
Bar	20 gpd/seat	12 seats	240 gpd
Guest Laundry	580 gpd/machine	2 machines	1,160 gpd
	Subtotal	4,210 gpd	
	20% Reduction (Low I	-842 gpd	
	Anticipated Flow Rate		3,368 gpd
Guest Rooms	110 gpd/room	112 rooms	12,320 gpd
	Total Anticipated Flov	v Rate	15,688 gpd

As provided, the total anticipated sewer usage for the hotel at 100% occupancy is 15,688 gallons per day (gpd). Note: the bar and dining room areas are provided as amenities to guests and are not open to non-guests of the hotel.

F. Stormwater Management

The proposed area of disturbance exceeds 1.0 acres. A Stormwater Pollution Prevention Plan (SWPPP), including the design of stormwater treatment and detention facilities for the proposed improvements, will be prepared for the project. Erosion and sediment control measures will be installed during construction to prevent the transportation of sediment off-site. The SWPPP will be developed in full compliance with NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity, Permit Number GP-0-15-002.







William G. Norton, L.S. Alphonse Mercurio, L.S.

Lawrence J. Marshall, P.E. John Tarolli, P.E., L.S.

Zachary A. Peters, P.E. Kenneth W. Vriesema, L.S.

Tel: (845) 744-3620 Fax: (845) 744-3805 Email: mntm@mntm.co

45 Main Street P.O. Box 166 Pine Bush, New York 12566

Parking Analysis

For

RAM Hotels, Inc.

Unity Place Town of Newburgh Orange County, New York

Prepared for:

RAM Hotels, Inc. 1274 49th Street, Suite 342 Brooklyn, NY 11219

Prepared by:

Mercurio-Norton-Tarolli-Marshall, P.C. P. O. Box 166 45 Main Street Pine Bush, NY 12566 (845) 744-3620



Lawrence Marshall, P.E.

Prepared: May 18, 2017 Revised: July 7, 2017

I) Site Location & Description

The project site is located in the Town of Newburgh, Orange County, New York on the westerly side of Unity Place. The site is located approximately 200 feet south of the intersection of Unity Place and Auto Park Place. The project site consists of tax map parcel: Section 97, Block 2, Lot 37. The project site contains approximately 8.47 acres of land located in the IB zoning district. The project involves a subdivision of the existing parcel into two (2) lots: Lot 1 being 6.42 acres Lot 2 being 2.05 acres. The proposed development site is Lot 1.

Lot 1 is proposed to be developed for a 112 room, 5-story Hilton Garden Inn hotel and associated parking areas and stormwater facilities. The Hilton Garden Inn is a select service of Hilton Worldwide, Inc. Hilton Garden Inns are considered to be upscale, midpriced hotels that are designed for both business and leisure travelers. There are currently more than 686 Hilton Garden Inn locations in operation worldwide with a majority located within the United States.

II) Hotel Amenities

In addition to the 112 guest rooms, the hotel will feature the following amenities to guests of the hotel:

- 24-hour fitness facilities
- 24-hour front desk
- · Accessibility equipment for the deaf
- Accessible bathroom
- Accessible parking
- Accessible path of travel
- Bar/lounge
- · Braille or raised signage
- Bistro Breakfast and dinner
- Business center
- · Coffee/tea in lobby
- · Complimentary newspapers in lobby
- Concierge services
- Dry cleaning/laundry service
- Elevator/lift
- Express check-out
- Free RV, bus, truck parking
- Free Wi-Fi
- Free self-parking
- In-room accessibility
- Indoor pool
- Laundry facilities
- Luggage storage
- Meeting rooms
- Multilingual staff
- Number of floors 5
- Roll-in shower
- Safe-deposit box at front desk



Parking Analysis for RAM Hotels, Inc.

- Smoke-free property
- Spa tub
- Television in lobby
- Wedding Services

As stated in an outline of the hotel amenities and usage prepared by RAM Hotels, Inc. and provided in Appendix A (RAM) of this report, the bar/lounge area will feature approximately 12 seats and the Garden Bistro restaurant area will feature approximately 50 seats. As outlined in the RAM document, the bistro and bar areas will be offered exclusively to guests of the hotel and not open for patronage by the general public.

The meeting rooms in the hotel will consist of an approximately 325 square foot board room and a larger, approximately 1,450 square foot, banquet or conference room. The board room will feature a large conference table and approximately 12 chairs. The board room is primarily used by small business groups that are staying at the hotel, but may be rented out non-guest groups. The larger banquet or conference room will have an anticipated capacity of 96 seats and will be available for rental.

III) Hotel Occupancy

As stated in the RAM document, the average daily hotel occupancy for the year is anticipated to be 68%, or 76 rooms. This estimation is based upon the current data available for the Newburgh, NY area from Smith Travel Research, a Tennessee based research company that tracks supply and demand data for the global hotel industry. Projections based upon available data estimate that the hotel will be at full occupancy approximately 10-15 days per year. Full occupancy will primarily occur during long weekends (Memorial Day weekend, Labor Day weekend, etc.) or on Fridays and Saturdays.

Based upon the Institute of Transportation Engineers (ITE) "Parking Generation", 4th edition, hotels have average occupancies that range from 48% in December to 72% in July and is lowest on Sundays (51%) and highest on Saturdays (72%).

The average occupancy anticipated for the proposed Hilton Garden Inn stated in the RAM document is consistent with the ITE averages.

As outlined in the RAM document, the meeting spaces are primarily occupied between 9:00am and 5:00pm. Approximately 85% of the expected use of the meeting space will feature business meetings or other corporate events being held by local businesses from Monday through Thursday. The remaining 15% of the expected use of this space will feature leisure events by hotel guests, generally on Fridays, Saturdays, and Sundays. The anticipated occupancy for either meeting room is between 12% and 15% of the year, or 44 to 55 days out of the year.





IV) Required Parking & Parking Demand

The proposed hotel has two primary sources of off-street parking demands: guest rooms and public spaces. As previously specified, the hotel will feature 112 guest rooms and various amenities. The only amenities available for use by non-guests, as stated by the applicant, are the two meeting rooms. The board room and banquet/conference rooms have anticipated occupancies of 12 and 96 people, respectively.

To determine the necessary number of parking spaces for the proposed hotel, an analysis of several standards has been provided below. These standards include the following: Town of Newburgh Zoning Code Section 185-13.C; Institute of Transportation Engineers Parking Generation, 4th edition; Hilton Garden Inn corporate standards; and a review of the recently approved Hampton Inn & Suites Occupancy.

a) Town of Newburgh Zoning Code Section 185-13.C:

Section 185-13.C of the Town of Newburgh Zoning Code (Zoning Code) specifies a Hotel or Motel shall provide one (1) off-street parking space per guest room plus one (1) parking space per two (2) employees on the premises at any one period of time.

Section 185-13.C(5) of the Zoning Code specifies any public assembly or restaurant use where a maximum occupancy is posted by the Code Enforcement Officer, one off-street parking space shall be provided for every four (4) persons of the maximum occupancy.

Based upon Section 185-13.C of the Zoning Code, the proposed hotel has the following required parking spaces:

Table 1: Parking Requirements Based upon Town of Newburgh Zoning Code Section 185-13.C

Use	Unit	# Units	Parking Requirement	Required Spaces
Hotel	Rooms	112	1 space per room	112
Hotel	Staff	8	1 space per 2 staff	4
Meeting Room Occupancy	Persons	108	1 space per 4 persons	27
Total Required Parking Spa	ces	and the second		143

b) Institute of Transportation Engineers Parking Generation, 4th Edition
Section 185-13.C(1) of the Town of Newburgh Zoning Code (Zoning Code) specifies the
most recent edition of the Institute of Transportation Engineers (ITE) Parking Generation
may be used to assist the applicant and the Planning Board in determining the parking
requirements for proposed uses. In accordance with this section, the ITE Parking
Generation, 4th edition, specifies the average peak parking demand for hotels to be 0.89
vehicles per occupied room during a weekday and 1.2 vehicles per occupied room on a
Saturday. A copy of land use description 310 - Hotel from the ITE Parking Generation
has been provided in Appendix B of this report. To establish the parking demands, the
ITE completed studies of hotels of various sizes with meeting, conference, and restaurant
spaces (although the occupancy of these amenities is unknown).

Based upon the ITE Parking Generation, 4th Edition, the proposed hotel has the following anticipated parking demand at full occupancy on a Saturday:





Table 2: Parking Demand Based upon ITE Parking Generation rates

Use	Rooms	Average Peak Parking Demand	Assumed Occupancy	Required Spaces
Hotel - Weekday	112	0.87 spaces per occupied room	100%	97.4
Hotel - Saturday	112	1.2 spaces per occupied room	100%	134.4
Peak ITE Parking (135		

c) Hilton Garden Inn Brand Standards

As previously stated, Hilton currently has nearly 700 Hilton Garden Inn franchises worldwide. Hilton has developed a brand standard for the amount of parking spaces required for each of their Hilton Garden Inn hotels. Philip Russell, Director of Architecture & Construction for Hilton has provided a letter specifically discussing the parking and use of the restaurant and bar areas of the Hilton Garden Inn proposed on Unity Place. A copy of the letter has been enclosed in Appendix C of this report. In full awareness of the amenities proposed in the hotel and the anticipated use of such facilities, Mr. Russell states the site plan showing 116 parking spaces for the 112-room hotel meets all Hilton Brand Standards including the parking requirement of one parking space per guest room. The Hilton brand parking requirements are further illustrated in Table 3 below.

Table 3: Parking Requirements Based upon Hilton Brand Standards

Use	Rooms	Parking Requirement	Required Spaces
Hotel	112	1 space per room	112
Total Required Par		112	

d) Hampton Inn & Suites Occupancy:

Based upon concerns raised by a neighboring property owner's attorney during the April 20, 2017 Town of Newburgh Planning Board Public Hearing where Hampton Inn & Suites was specifically mentioned, Mercurio-Norton-Tarolli-Marshall (MNTM) reviewed the Hampton Inn & Suites hotel application and building plans. On June 18, 2015, the Town of Newburgh Planning Board approved a site plan for the Hampton Inn and Suites hotel on Crossroads Court and NYS Route 17K. The approval was for a 139 room Hampton Inn hotel with a 65-seat conference room and six (6) seat bar area. The site plan provides a total of 168 parking spaces in compliance with Section 185-13C of the Town of Newburgh Zoning Code. Based upon a recent visit of the newly constructed hotel by Mercurio-Norton-Tarolli-Marshall (MNTM), and a conversation with the Director of Sales for the Hotel, the hotel features two (2) meeting rooms available for rental and a bar/bistro area able to be utilized by the general public. conference room has an available capacity of up to 100 people. The smaller meeting room was unavailable during our visit, but shows a seating capacity of 10 seats. The bar area (17 seats) and adjoining bistro area seating (30 seats) are currently set to accommodate 47 people.

Based upon the stated 139 guest rooms (1 parking space per guest room) and 15 employees (1 parking space per 2 employees), the parking provided for the utilization of the conference room and bar/bistro area is equal to 18 spaces. Although the bar and bistro area were confirmed in our conversation to not be restricted to hotel guests, the seating in these areas was excluding in establishing the actual parking ratio for the



RAM Hotels, Inc.

Hampton Inn & Suites. Excluding the bar and bistro area seating, the Hampton Inn & Suites hotel provides 1 parking space per 6.11 persons for the available conference room.

Utilizing the calculated parking ratio for the Hampton Inn & Suites, the proposed Hilton Garden Inn hotel has the following anticipated parking requirements:

Table 4: Parking Requirements Based upon Hampton Inn & Suites Parking Ratio

Use which is the second	Unit	# Units	Parking Requirement	Required	Spaces
Hotel 10 11 11 11 11 11 11 11 11 11 11 11 11	Rooms	112	1 space per room	112	
Hotel 1975 He 1975	Staff	8	1 space per 2 staff	4	1 1 1 1
Meeting Room Occupancy	Persons	108	1 space per 6.11 persons	17.7	
Total Required Parking Spa	ces			135	

e) Parking Requirement/Demand Summary

Table 5 has been provided below to summarize the required parking spaces or anticipated parking demand for the proposed Hilton Garden Inn hotel based upon each of the standards analyzed.

Table 5: Parking Requirements / Demand Summary

Standard	Parking Requirement / Demand
Town of Newburgh Zoning Code	143
ITE Parking Generation – Weekday	98* ***
ITE Parking Generation – Saturday	135
Hilton Garden Inn Brand Standards	112
Hampton Inn & Suites Occupancy	134

V) Anticipated Parking Demand

To establish the anticipated parking demand for the proposed hotel, the hotel is assumed to be fully occupied throughout the following analysis. As the average occupancy for the hotel is anticipated to be less than 70% per day throughout the entire year and is anticipated to meet or exceed 90% occupancy between 10 and 15 days per year, the anticipated parking demands should be considered conservative.

a) Weekday Demand

Based upon the ITE parking demands, which accounts for the use of all amenities on the property (conference rooms, restaurants, etc.), the proposed hotel will have an average peak period parking demand of 97 spaces during the weekday. The parking demand for the facility will vary throughout the day. A distribution of the anticipated parking has been provided in Table 6 below.

Table 6: Weekday Parking Demand Time-of-day Distribution

Hour Beginning	% of Peak Period	Parking Demand – Weekday		
12:00 – 4:00am	-	100		
5:00am	-	100		
6:00am	100	100		
7:00am	96	96		





8:00am	90	90
9:00am	87	87
10:00am	82	82
11:00am	77	77
12:00pm	77	77
1:00pm	75	75
2:00pm	73	73
3:00pm	70	70
4:00pm	71	71
5:00pm	70	70
6:00pm	74	74
7:00pm	75	75
8:00pm	79	79
9:00pm	85	85
10:00pm	87	87
11:00pm	97	97

As stated in the RAM document in Appendix A, the conference room and board room will primarily be occupied during normal business hours (9:00am – 5:00pm) during weekdays. Between these times, the proposed hotel has anticipated parking demands between 87 and 70 parking spaces. As a conservative analysis, if you assume the ITE parking demands only account for the guest rooms, the current site plan, with 117 parking spaces shown, would have between 30 and 47 free spaces available for use by non-guests occupying the meeting rooms. Upon arrival, non-guests attending an event in one of the meeting rooms are anticipated to have 1 parking space available per 3.6 occupants. This ratio is equivalent to the Town of Newburgh Zoning Code parking regulations for public spaces.

b) Saturday Demand

Based upon the ITE parking demands, which accounts for the use of all amenities on the property (conference rooms, restaurants, etc.), the proposed hotel will have an average peak period parking demand of 134 spaces on a Saturday at full occupancy. Utilizing the demand ratio of 1.2 parking spaces per occupied room, the 117 spaces proposed on the project site represent compliance with the ITE estimates for an 86.6% (97 roooms) occupancy.

The parking demands established in the ITE Parking Generation document are based upon the study of fourteen (14) hotel locations of various sizes with various amenities. The average parking demand for Saturdays was established by the study of four (4) hotel sites with an average of 242 occupied rooms (130% larger than the total number of guest rooms in the proposed hotel). With nearly 700 Hilton Garden Inn franchises currently in operation, the brand standard established by Hilton utilizes data and actual usage from a much larger database. Hilton has established a minimum parking requirement of 1 parking space per guest room.

Based upon the brand standards, the 117 parking spaces proposed to be constructed exceed the minimum required spaces of 112 for the 112-room hotel.





RAM Hotels, Inc.

VI) Conclusion

The Hilton Garden Inn currently proposes to construct 117 parking spaces for the 112-room hotel. This exceeds the brand standard established by Hilton for the nearly 700 operating franchises of Hilton Garden Inn. Based upon these standards, MNTM considers the parking provided on the site plan to be adequate for the proposed hotel.

In addition to the 117 parking spaces proposed to be constructed, an additional 19 parking spaces are shown on the site plan as "banked" or potential parking spaces to be constructed if deemed necessary. If it is determined that the actual usage of the Hilton Garden Inn requires additional parking beyond the parking initially constructed, the owner of the hotel will have the ability to add these spaces. The banked parking spaces, if constructed, will bring the total available parking spaces on the project site to 136. This is consistent with the anticipated parking demand based upon the ITE parking demand for a Saturday and utilizing the parking ratios currently used by the recently constructed Hampton Inn & Suites.

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Appendix A: RAM Hotels, Inc. Letter





Hilton Garden Inn is a limited service hotel that is being proposed on Unity Place in the Town of Newburgh. The parking requirements for the hotel are based upon the use of its amenities and its capacity. Below is a full summary of the amenities, along with their respective capacities:

Amenity	Capacity		Newburgh	RAM Hotels
Guest Rooms	112 Guestrooms		112	112
GardenBistro	50 seats		0	0
Bar	12 seats		0	0
Meeting Room	96 seats	96 seats 1450 sq. ft.		20
Board Room	12 seats	325 sq. ft.	0	0
Employees	8 employees		4	4
TOTAL			140	136

The hotel will feature a bistro and bar that are being offered *exclusively* to guests of the hotel. This means that outside patrons coming off the street, who are not registered guests will not be able to use either the bistro area or the bar area. The bistro area will be offering 2 meals; breakfast and a limited in-room dinner service; **NO** lunch. Catering is also an amenity that will be directed and offered to patrons of the meeting space.

The hotel will feature meeting facilities as well, in the form of two options. The first will be a meeting room with 96 seats. The second, a board room with 8 seats. Each room will serve attendees of the function that has reserved the space. This space is expected to be occupied primarily for functions during normal business hours, 9AM-5PM. About 85% of the expected use of the meeting space are business meetings and other corporate events being held by local businesses, generally Monday through Thursday. About 15% of the expected use of the meeting space we expect leisure guests that are part of a group in the hotel, generally on Fridays, Saturdays and Sundays. This is where the hotel often offers the meeting space at little to no cost to the group staying at the hotel for gatherings, etc. This type of offering is the majority of the use we expect for our weekend business throughout the year, which will reduce the parking burden. Our expected occupancy of the meeting rooms is 12%-15%. This is right in line with the industry average for limited service hotels with similar meeting space.

As for our guest room usage, the hotel is expecting hotel room occupancy of 68% for the year. This is based upon current data for the market of Newburgh, NY, from Smith Travel Research. Projections indicate the hotel will achieve 100% occupancy on about 10-15 days in the year. This means that we expect our parking facilities to be at max use on approximately 15 days in the year. The remaining days will be lower use. Also, a majority, if not all of these high-demand days, will generally be on a Friday or Saturday or during long weekends. This generally is equated to leisure clients of the hotel, who often carpool or arrive in groups. A good example of this would be a family of 4-5 taking

two rooms, but arriving in one vehicle. We also expect this type of guest about 10%-15% of our weekday occupancy.

As shown above our justification for the parking requirements are based of anticipated demand, size, and scope of use for the hotel.

Regarding comments proposed previously:

- In comparing our development to the NOWAB project, the Holiday Inn: Holiday Inn is what the industry refers to as a *Full-Service* hotel. This is due to their requirements of the hotel, the restaurant, and the banquet facilities. Beginning with the restaurant. This is required in the Holiday Inn business model, as a full-service entity, to be offered to *all* guests. This includes local patrons of any kind, and is marketed that way. You can think of the restaurant at the Holiday Inn as *any* other free-standing restaurant in the market. Also, the bar proposed in their hotel undoubtedly exceeds our size, and again is available to *any* patron. Second, the banquet facility. The required spacing for a banquet facility for Holiday Inns is well over 5,000 sq. ft. This is done so on purpose to attract *large* functions. This includes weddings, trade shows, and any leisure event for that matter. Occupancy for this type of meeting space is generally higher (35%-45%), as they can entertain/hold many more leisure functions. As such, parking requirements are also different for this *type* of hotel.
- Also, the comparison to the previous HGI developed on Rt. 17k is incorrect. This
 is due to the brand changes that have occurred since that development was
 proposed and subsequently approved. Our contention is that the previous
 applicant used the space that was available to him in addition to to requirements
 by Hilton, and in addition to code/ITE requirements. This is not a concern of ours,
 as we are only proposing the requirement, not more. Just because the Hampton
 Inn proposed more, it does not mean more is required.

Appendix B: ITE Parking Generation, 4th Edition – Use: 310 Hotel



Parking Generation, 4th Edition

An Informational Report of the Institute of Transportation Engineers

The Institute of Transportation Engineers (ITE) is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of ground transportation. Through its products and services, ITE promotes professional development of its members, supports and encourages education, stimulates research, develops public awareness programs and serves as a conduit for the exchange of professional information.

Founded in 1930, ITE is a community of transportation professionals including, but not limited to transportation engineers, transportation planners, consultants, educators and researchers. Through meetings, seminars, publications and a network of 17,000 members, working in more than 90 countries, ITE is your source for expertise, knowledge and ideas.

Parking Generation is an informational report of the Institute of Transportation Engineers. The information has been obtained from the research and experiences of transportation engineering and planning professionals. ITE informational reports are prepared for informational purposes only and do not include Institute recommendations on which is the best course of action or the preferred application of the data.



Institute of Transportation Engineers

1627 Eye Street, NW, Suite 600 Washington, DC 20006 USA Telephone: 1 202-785-0060 Fax: 1 202-785-0609

ITE on the Web: www.ite.org

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Printed in the United States of America

Description -

Hotels are places of lodging that provide sleeping accommodations and supporting facilities such as restaurants; cocktail lounges; meeting and banquet rooms or convention facilities; limited recreational facilities (pool, fitness room); and/or other retail and service shops. All suites hotel (Land Use 311), business hotel (Land Use 312), motel (Land Use 320) and resort hotel (Land Use 330) are related uses.

Database Description

The database consisted of a mix of suburban and urban sites. Parking demand rates at the suburban sites differed from those at the urban sites and, therefore, the data were analyzed separately.

 Average parking supply ratio: 1.3 spaces per room for suburban sites (12 study sites) and 1.0 space per room for urban sites (two study sites).

Some of the submitted studies provided information on the size of the supporting facilities. For example, seven of the study sites reported the presence of convention facilities and two of these seven sites reported meeting or banquet rooms with capacities of 1,300 and 4,100 seats. As another example, five of the study sites reported the presence of a restaurant with an average capacity of 300 seats. However, none of the studies indicated the level of activity at these supporting facilities during observations (such as full, empty, partially active and number of people attending a meeting/banquet).

Weekday parking demand data were provided for five urban study sites. Transit services were available within three blocks of all the urban sites. The average size of the study sites was 458 rooms. The average peak period parking demand was 0.64 vehicles per occupied room. The weekday peak period occurred between 7:00 and 9:00 a.m., between 12:00 and 1:00 p.m. and between 8:00 and 9:00 p.m. Due to disjointed data sets with counts spread over several discontinuous time periods, a plot was not created for the parking demand of the urban study sites.

Saturday peak period parking demand for the urban sites was 0.90 vehicles per occupied room (two sites) and the Saturday peak period occurred between 8:00 and 9:00 p.m.

Although the weekend database was limited, it indicated that Saturday peak parking demand was higher than on weekdays for the suburban sites. Four suburban study sites provided both Saturday and weekday parking demand data; Saturday parking demand rates at these sites averaged 70 percent higher than the weekday rates. It should be noted that all four sites included significant supporting facilities (restaurants, lounges, meeting space), which may be more active on weekends. Two urban study sites provided both Saturday and weekday parking demand data; Saturday parking demand rates at these sites were not higher than the weekday rates. The Saturday parking demand rates averaged 8 percent lower than the weekday rates.

The following table presents the time-of-day distributions of parking demand variation for suburban and urban sites.

Based on Vehicles per 1,000 sq. ft. GFA	Weekday Suburban		Weekda	iy Urban
Hour Beginning	Percent of Peak Period	Number of Data Points*	Percent of Peak Period	Number of Data Points*
12:00-4:00 a.m.	_	0 .	_	0
5:00 a.m.		0	-	0
6:00 a.m.	100	4	79	1
7:00 a.m.	96	4	77	1
8:00 a.m.	90	4	100	1
9:00 a.m.	87	3	96	1
10:00 a.m.	82	3	55	1
11:00 a.m.	77	3	52	1
12:00 p.m.	77	4	60	1
1:00 p.m.	75	4	60	1
2:00 p.m.	73	4	55	1
3:00 p.m.	70	4	52	1
4:00 p.m.	71	4	53	1
5:00 p.m.	70	4	58	1
6:00 p.m.	74	4	62	1
7:00 p.m.	75	4	66	1
8:00 p.m.	79	4	68	1
9:00 p.m.	85	4	_	0
10:00 p.m.	87	4	_	0
11:00 p.m.	97	2	-	0

^{*} Subset of database

Parking demand at a hotel may be related to the presence of supporting facilities such as convention facilities, restaurants, meeting/banquet space and retail facilities. Future data submissions should specify the presence of these amenities. Reporting the level of activity at the supporting facilities (such as full, empty, partially active, number of people attending a meeting/banquet) during observation may also be useful in further analysis of this land use.

For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately estimate parking generation characteristics for the site.

Additional Data

During the course of a year, most hotels maintain at least an overall average occupancy ratio of 60 to 70 percent. Peak (above 90 percent) occupancy is common but generally occurs for limited times throughout the year. Analysts are encouraged to consider the month and day activity/occupancy trend of hotels. Supplementary information on seasonal and daily variation in hotel room occupancy is presented below from Smith Travel Research for all hotels in North America. Its direct applicability to this land use code is limited because the occupancy data averages all regions and hotel types, including resort, business, convention and all suites hotels. More parking survey data are needed to better understand these peak and non-peak trends.

	Average Hotel
Month	Occupancy (%)
January	51
February -	61
March	66
April	65
May	67
June	72
July	72
August	71
September	67
October	67
November	59
December	48

	Average Hotel
Day of Week	Occupancy (%)
Sunday	51
Monday	62
Tuesday	67
Wednesday	69
Thursday	66
Friday	69
Saturday	72

SOURCE: Smith Travel Research, average data from North American hotels from 2000. www.wwstar.com

Study Sites/Years

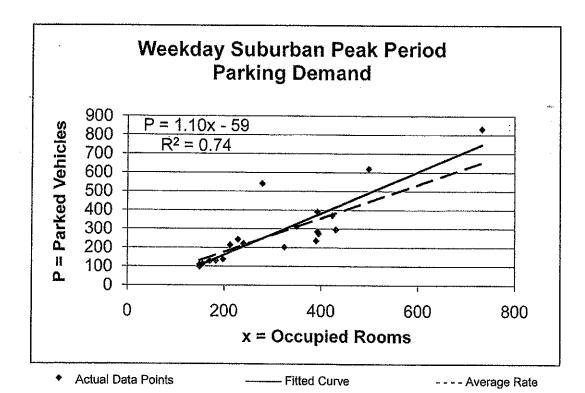
Rosemont, IL (1969); Chicago, IL (1973); Newport Beach, CA (1981); Boca Raton, FL (1983); Scottsdale, AZ (1983); Concord, CA (1985); Orlando, FL (1988); Cypress, CA (1989); La Palma, CA (1989); Burlingame, CA (2001); Milibrae, CA (2001); Milpitas, CA (2001); San Mateo, CA (2001); Ventura, CA (2007)

4th Edition Source Number

1015

Average Peak Period Parking Demand vs. Occupied Rooms On a: Weekday Location: Suburban

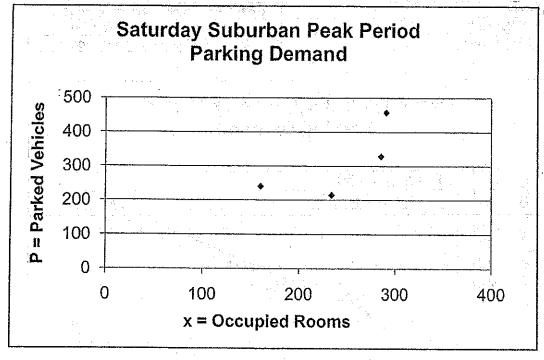
Statistic	Peak Period Demand
Peak Period	12:00-1:00 p.m.; 7:00-10:00 p.m.;
	11:00 p.m5:00 a.m.
Number of Study Sites	20
Average Size of Study Sites	315 occupied rooms
Average Peak Period Parking Demand	0.89 vehicles per occupied room
Standard Deviation	0.31
Coefficient of Variation	35%
95% Confidence Interval	0.75–1.02 vehicles per occupied room
Range	0.61-1.94 vehicles per occupied room
85th Percentile	1.08 vehicles per occupied room
33rd Percentile	0.72 vehicles per occupied room



Institute of Transportation Engineers

Average Peak Period Parking Demand vs. Occupied Rooms On a: Saturday Location: Suburban

Peak Period	Peak Period Demand: 7:00–8:00 p.m.; 9:00–10:00 p.m.
Number of Study Sites	4
Average Size of Study Sites	242 occupied rooms
Average Peak Period Parking Demand	1.20 vehicles per occupied room
Standard Deviation	0.31
Coefficient of Variation	26%
Range	0.92-1.57 vehicles per occupied room
85th Percentile	1.54 vehicles per occupied room
33rd Percentile	1.15 vehicles per occupied room



Actual Data Points

Appendix C: Hilton Letter









May 18, 2017

Mr. Manish Patel 1600 Central Avenue Albany, NY 12205

Re:

Hilton Garden Inn - Newburgh, NY

Parking Requirement

Dear Manish,

Thank you for your call to discuss parking requirements for Hilton Garden Inn Hotels and how that relates to the Food & Beverage operations of this brand of hotel.

Hilton designed the prototype property to meet all Brand Standard requirements one of which is the parking requirement of one parking space for each room in the hotel. Our studies and years of experience with this brand show that this parking ratio of spaces to rooms is more than adequate to support the operations of the hotel successfully.

You inquired as to how this ratio supports the Food & Beverage (F&B) operations as well as the hotel. Our postion on this is that Hilton and Hilton Garden Inn Hotels do not promote the F&B outlets as separate or independent restaurants. The F&B operation is an accommodation to our hotel guests for their convenience. And as such the parking ratio supports the Hilton Garden Inn brand successfully.

Hilton has franchised this brand nation wide and because guest satisfaction is of the utmost importance we are constantly reviewing our brand standards to improve guest satisfaction. Guest Satisfaction scores on parking have not come up and the 1:1 parking spaces to guest rooms will support this brand of hotel.

Please let me know if you have any questions. I am available to discuss in greater detail.

Regards,

Phil

Philip Russell
Director of Architecture & Construction

901.374.5723

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CONRAD

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TRIO











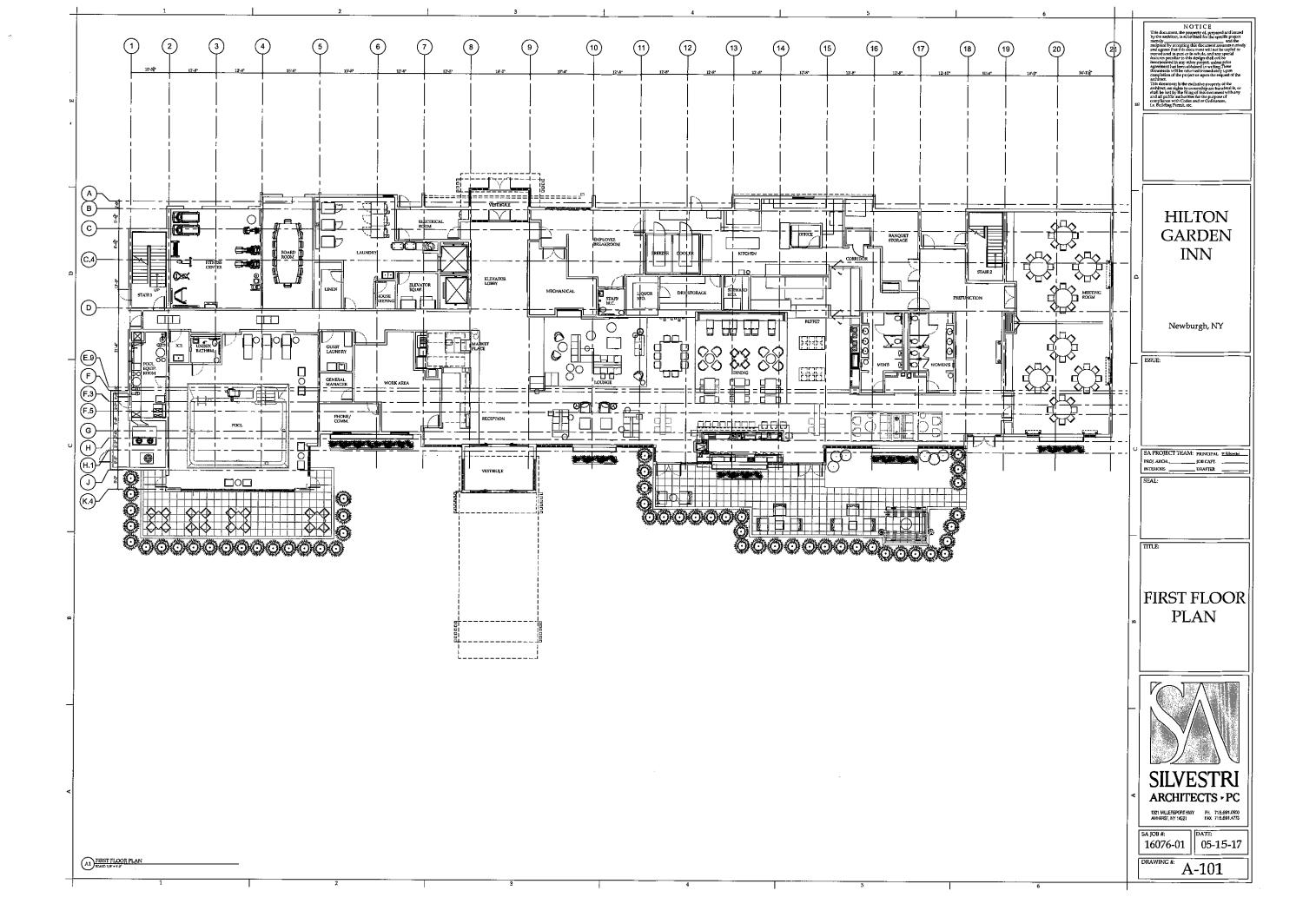


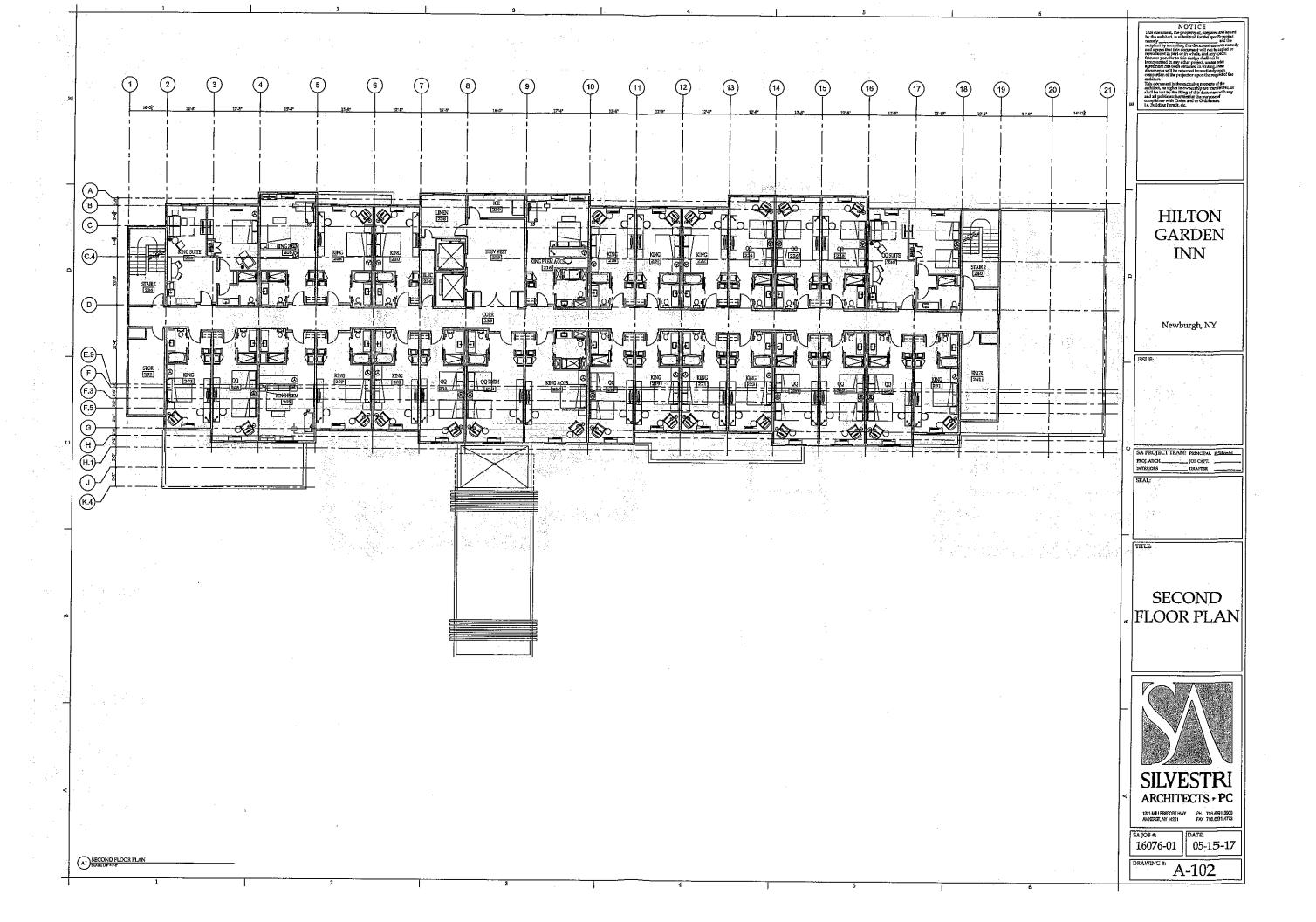


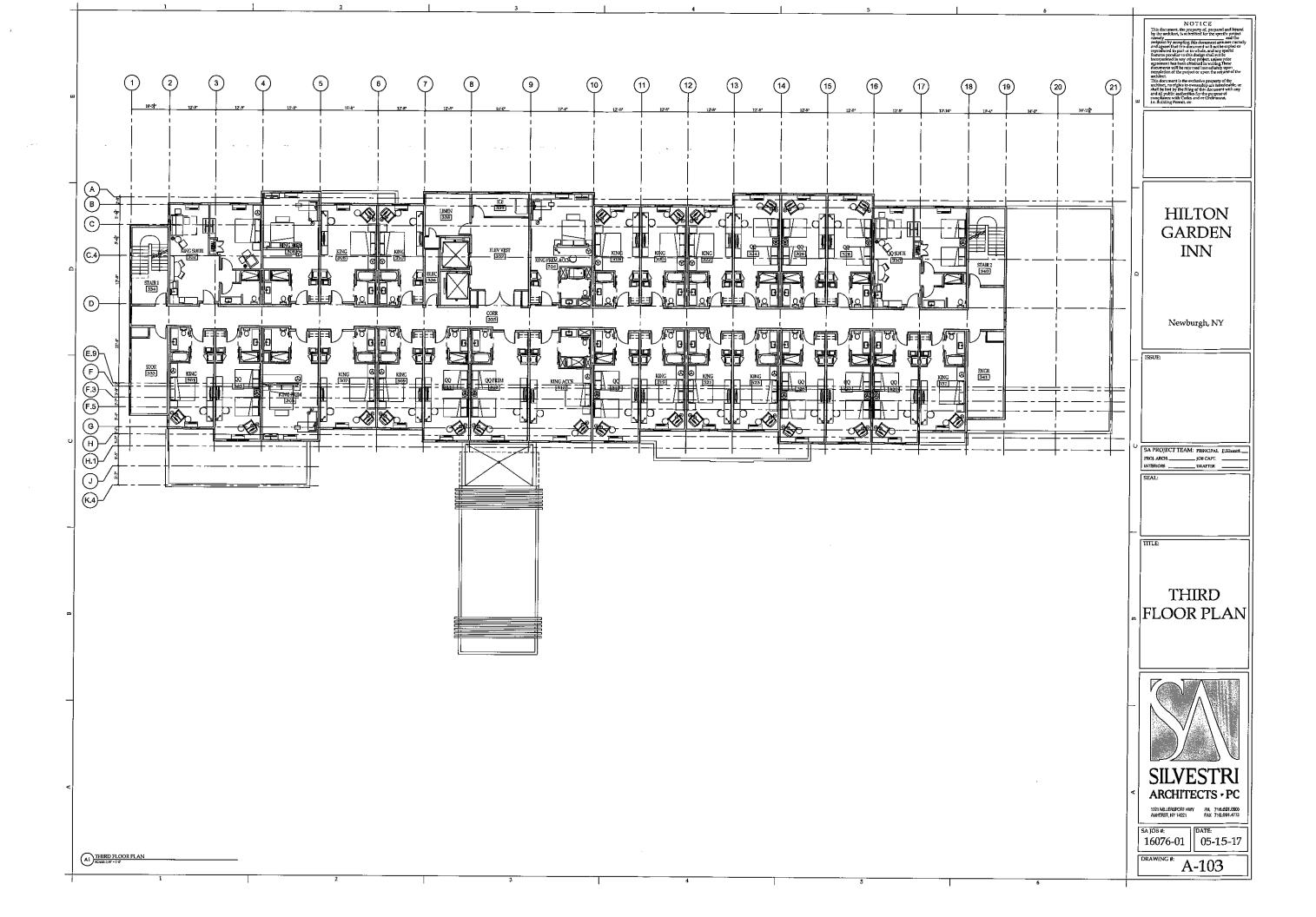


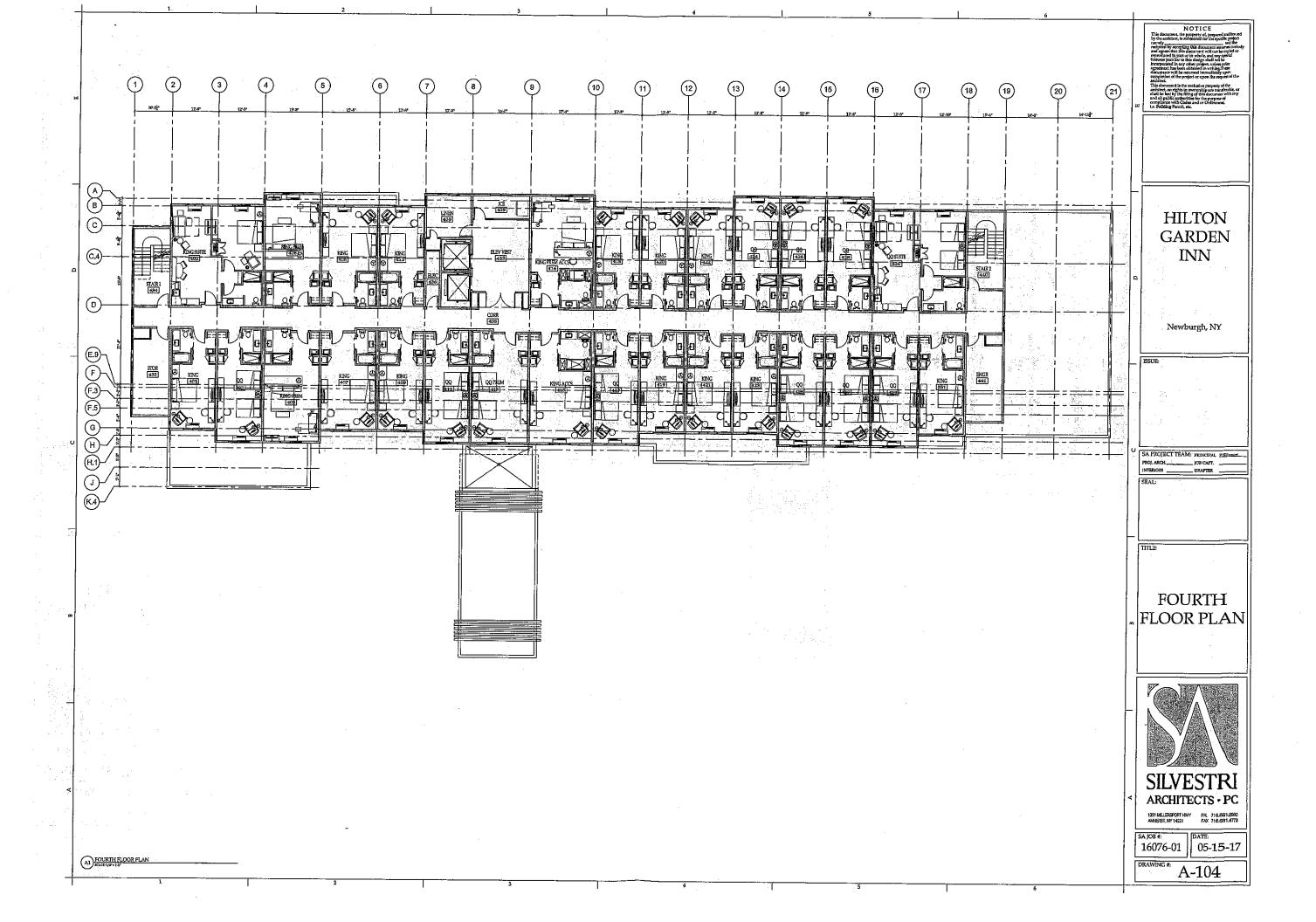


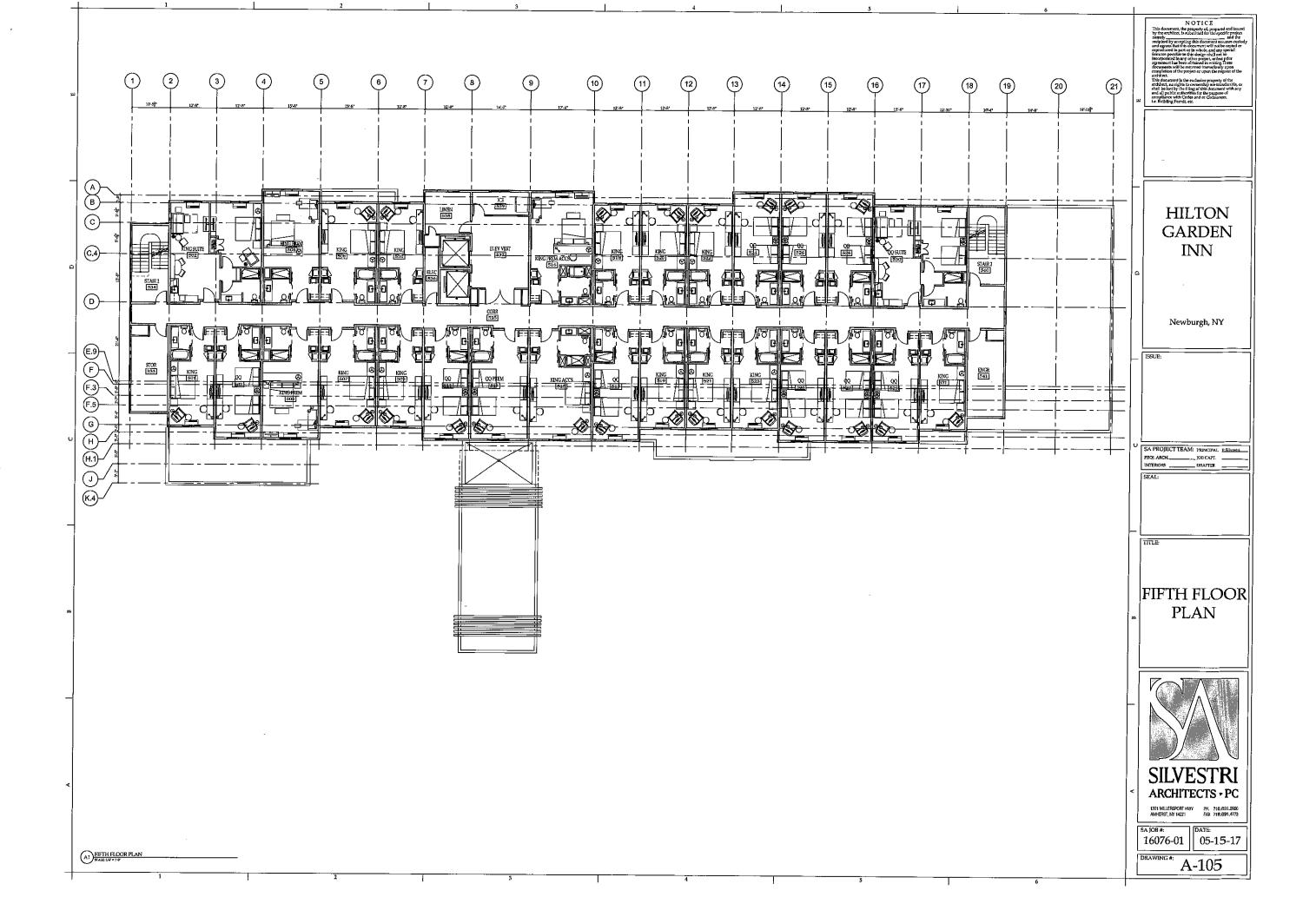


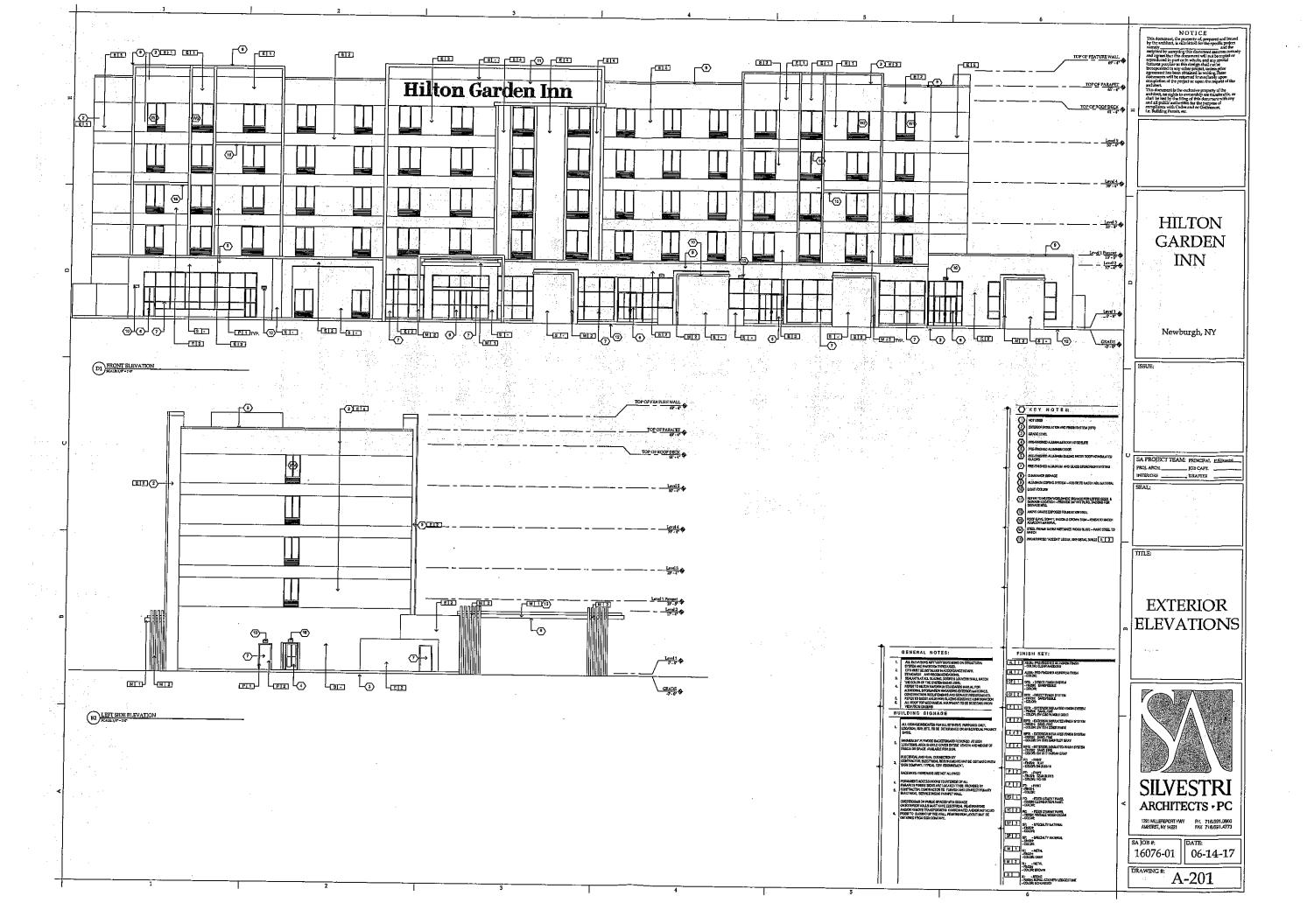


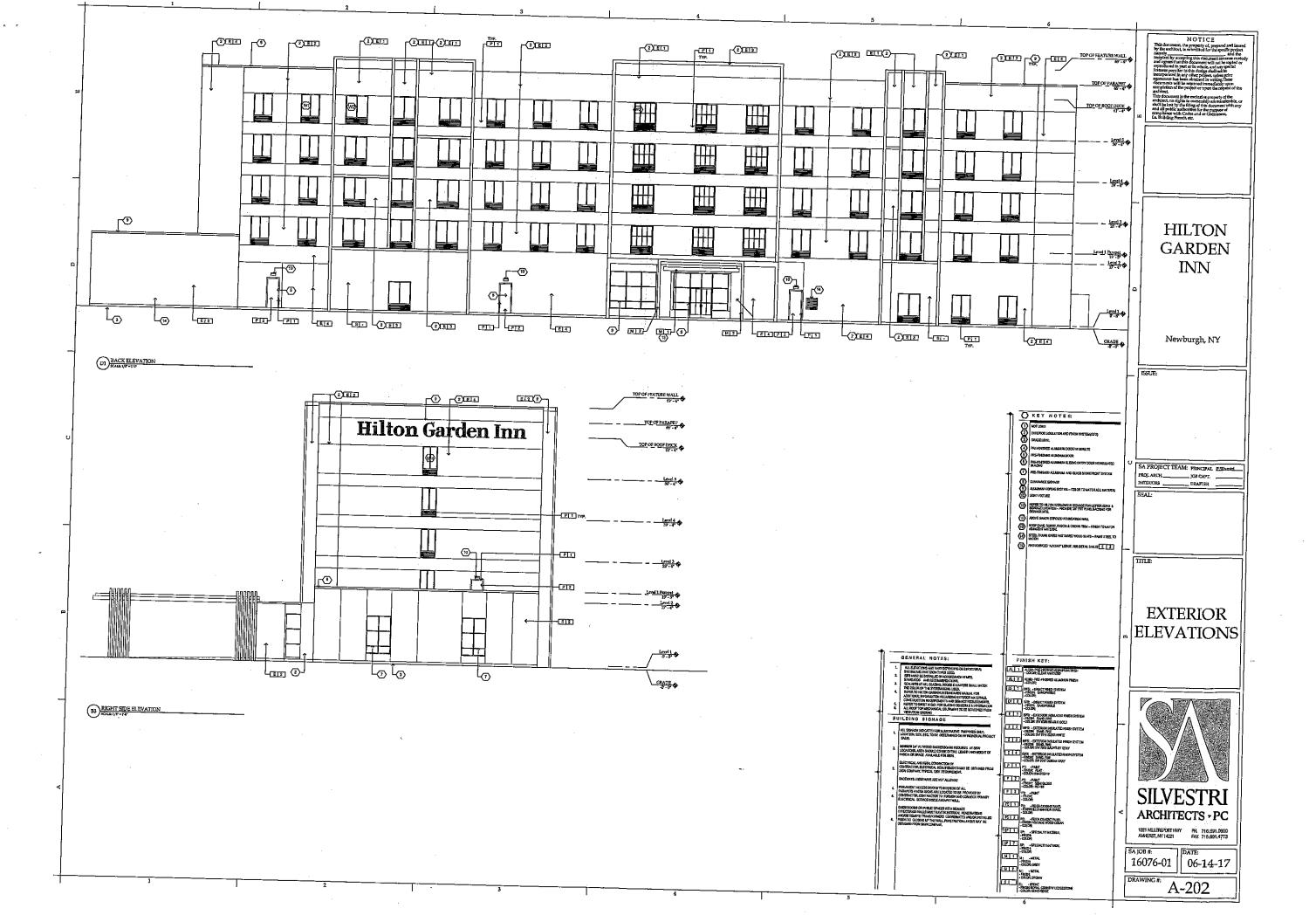


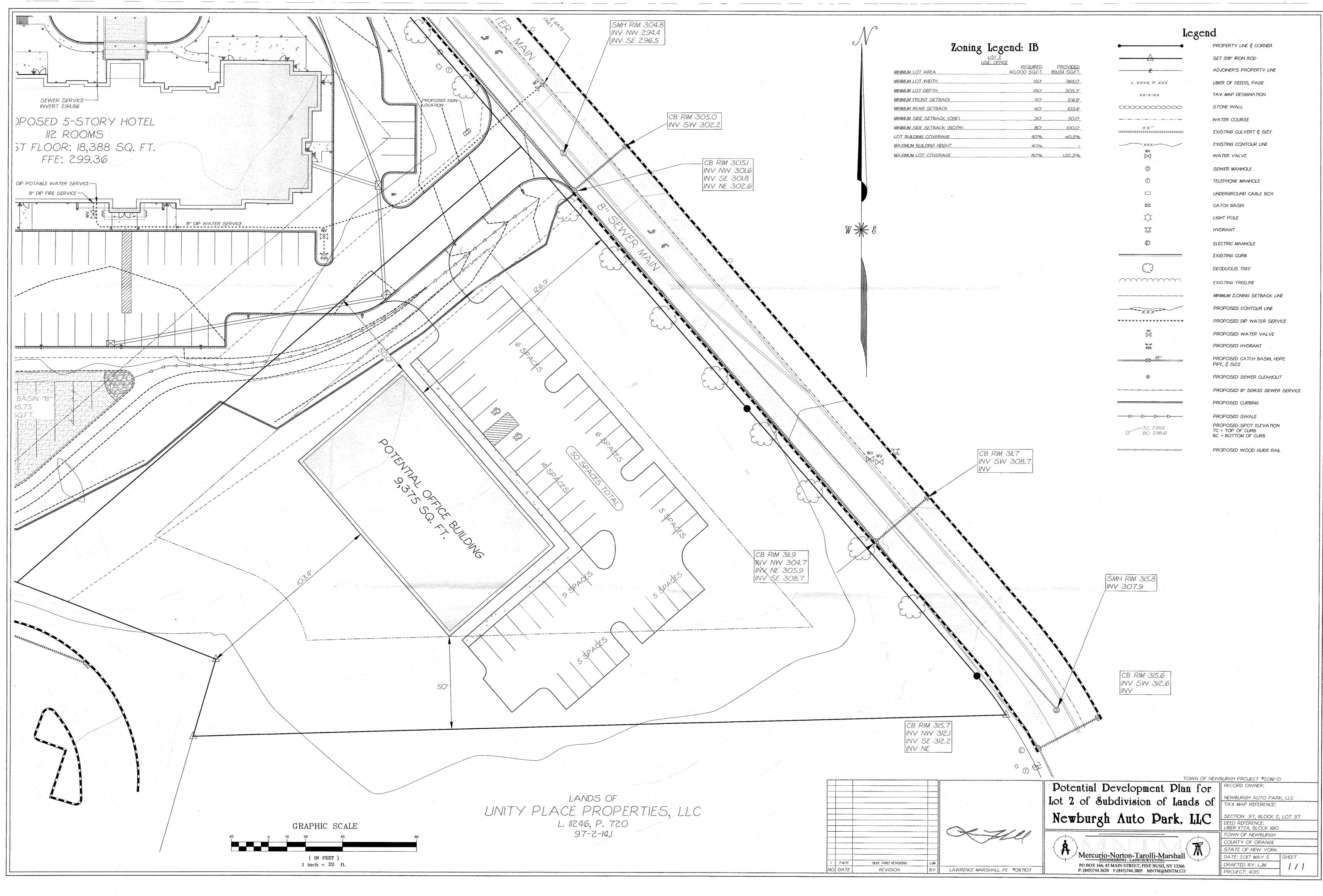


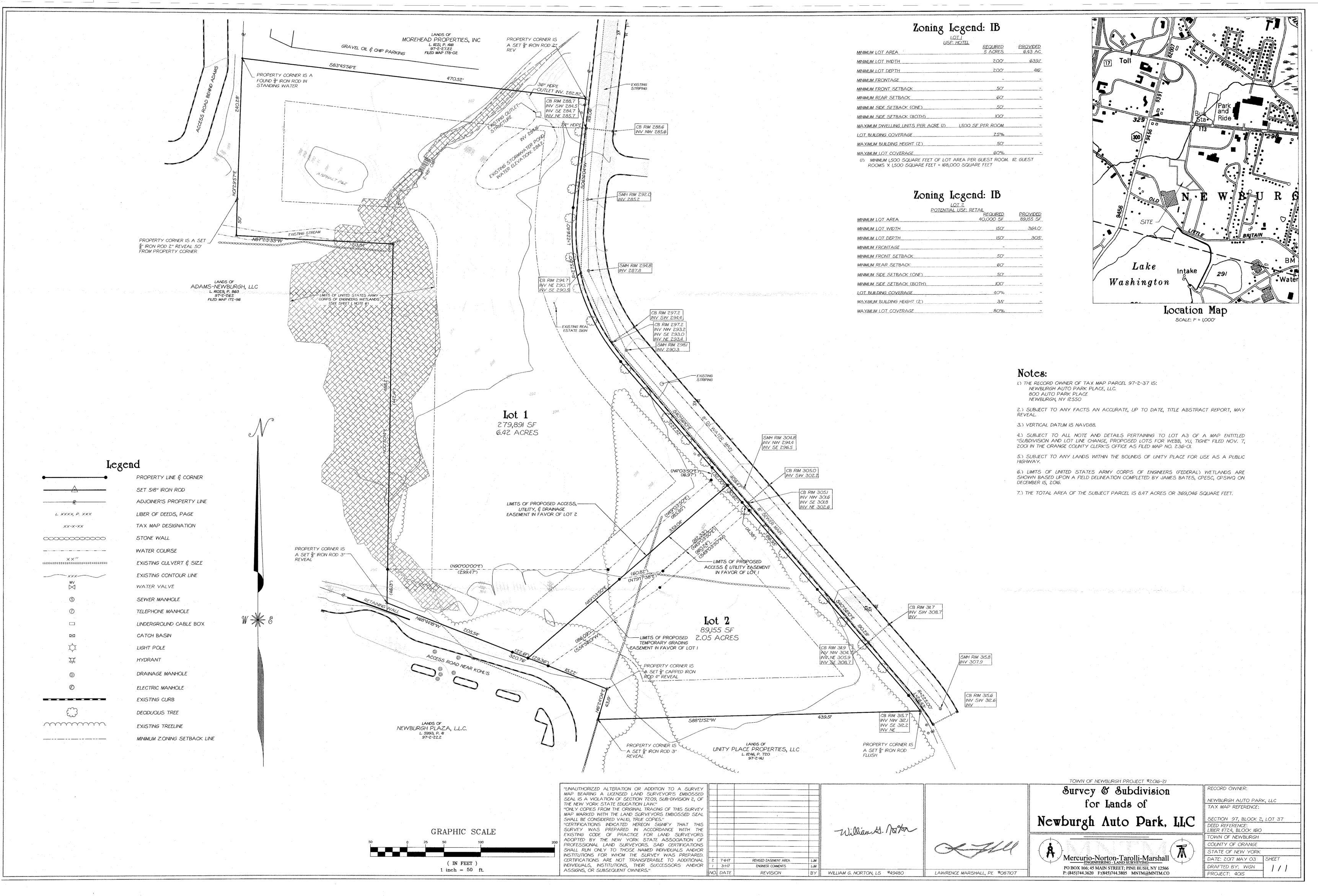


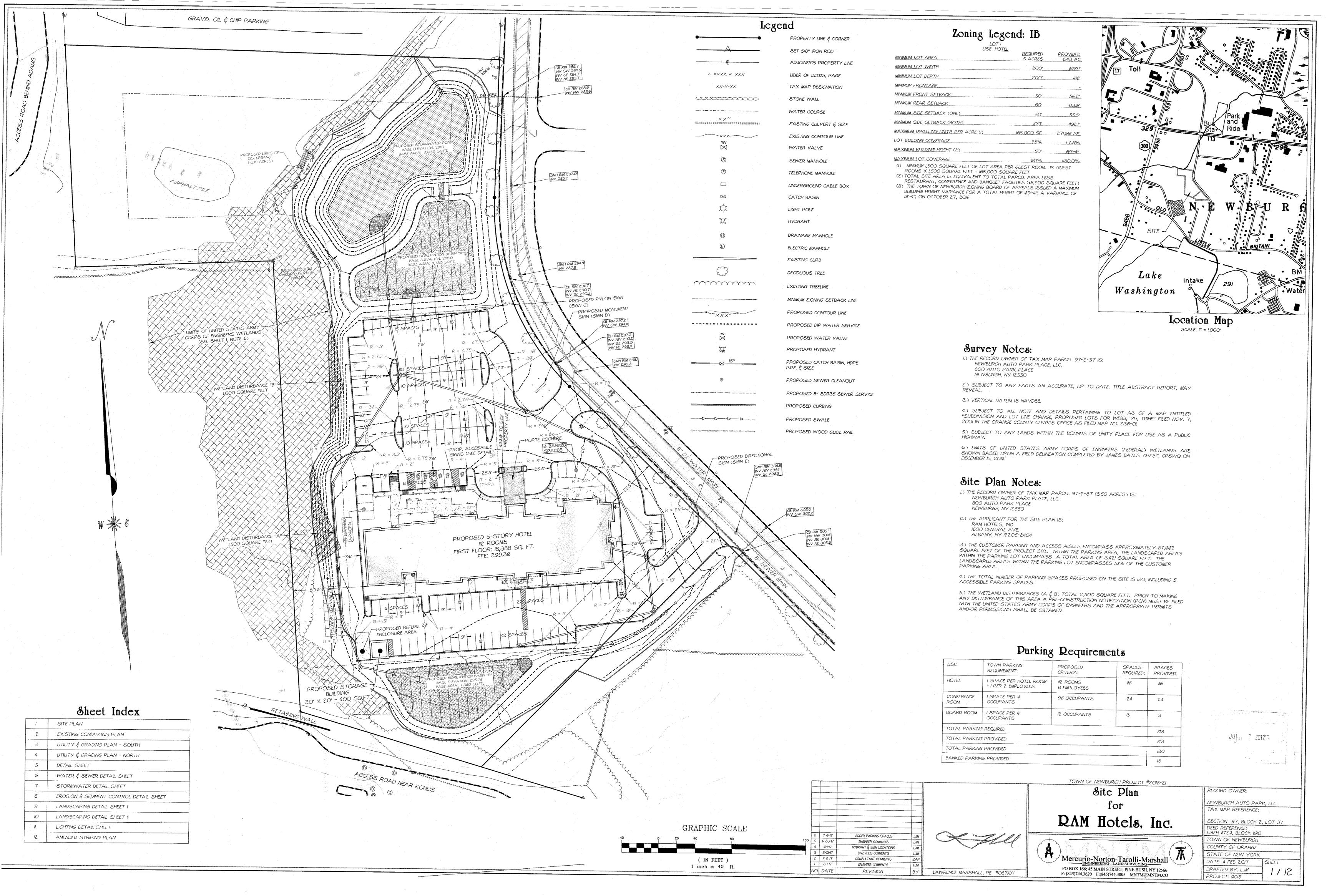


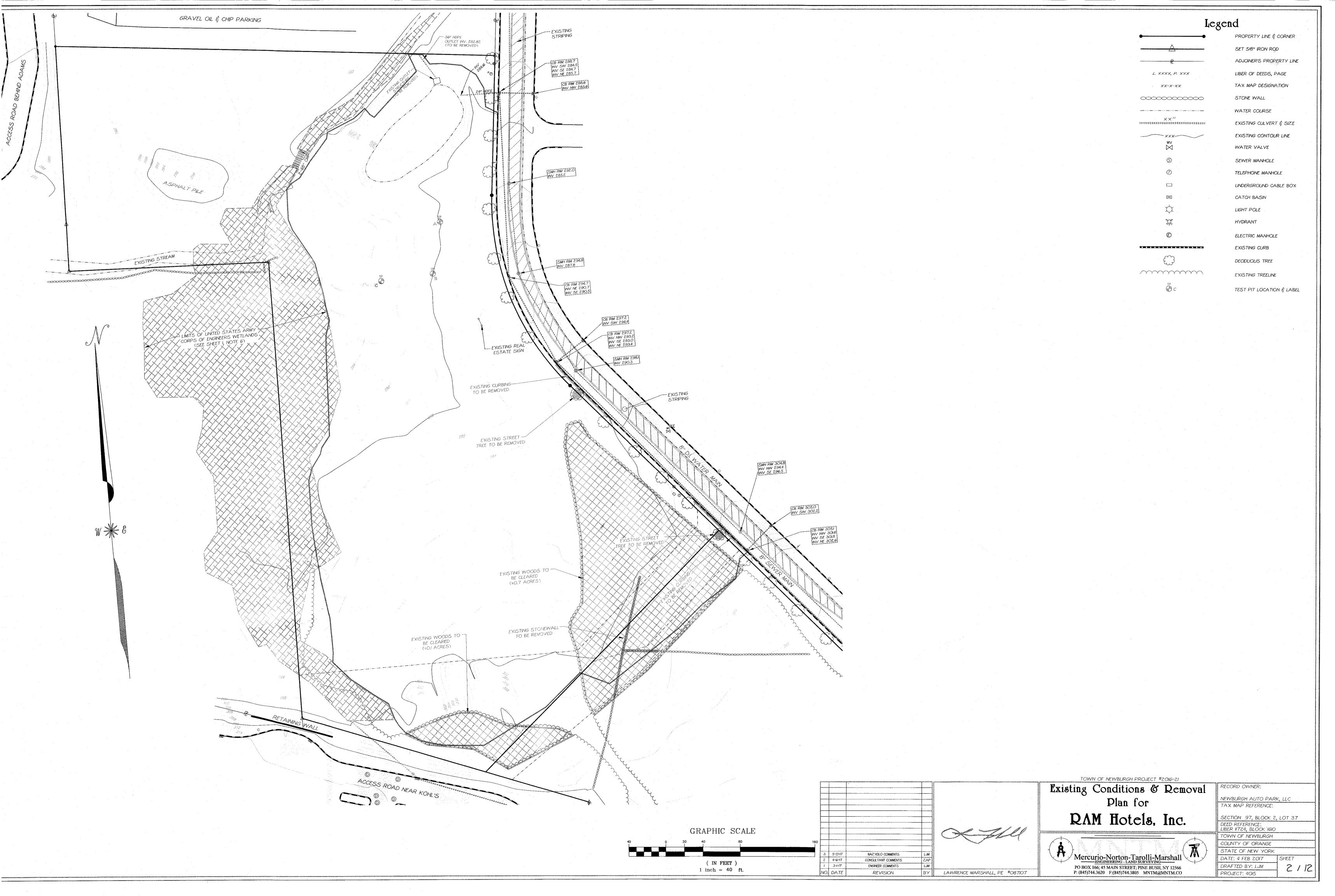


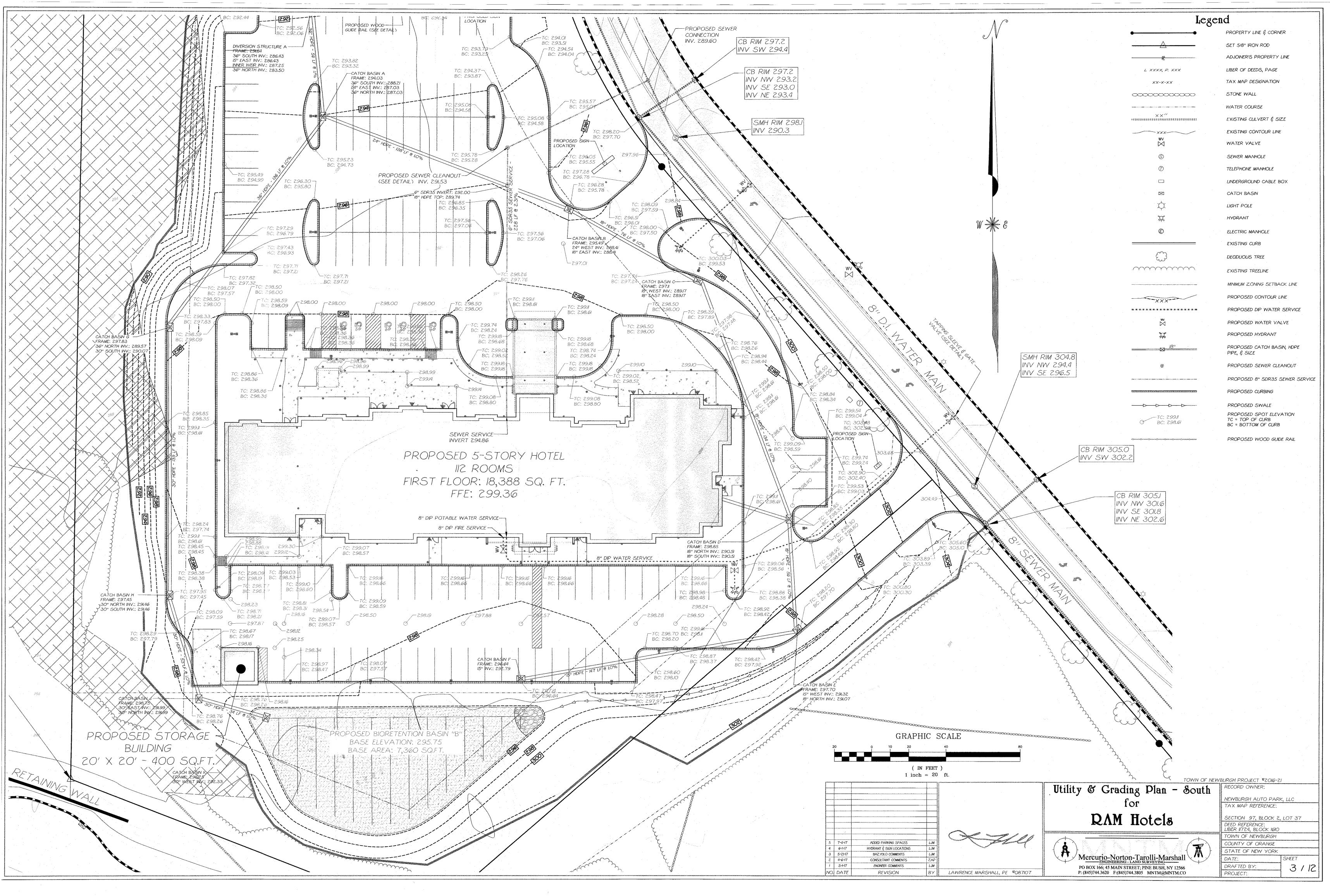


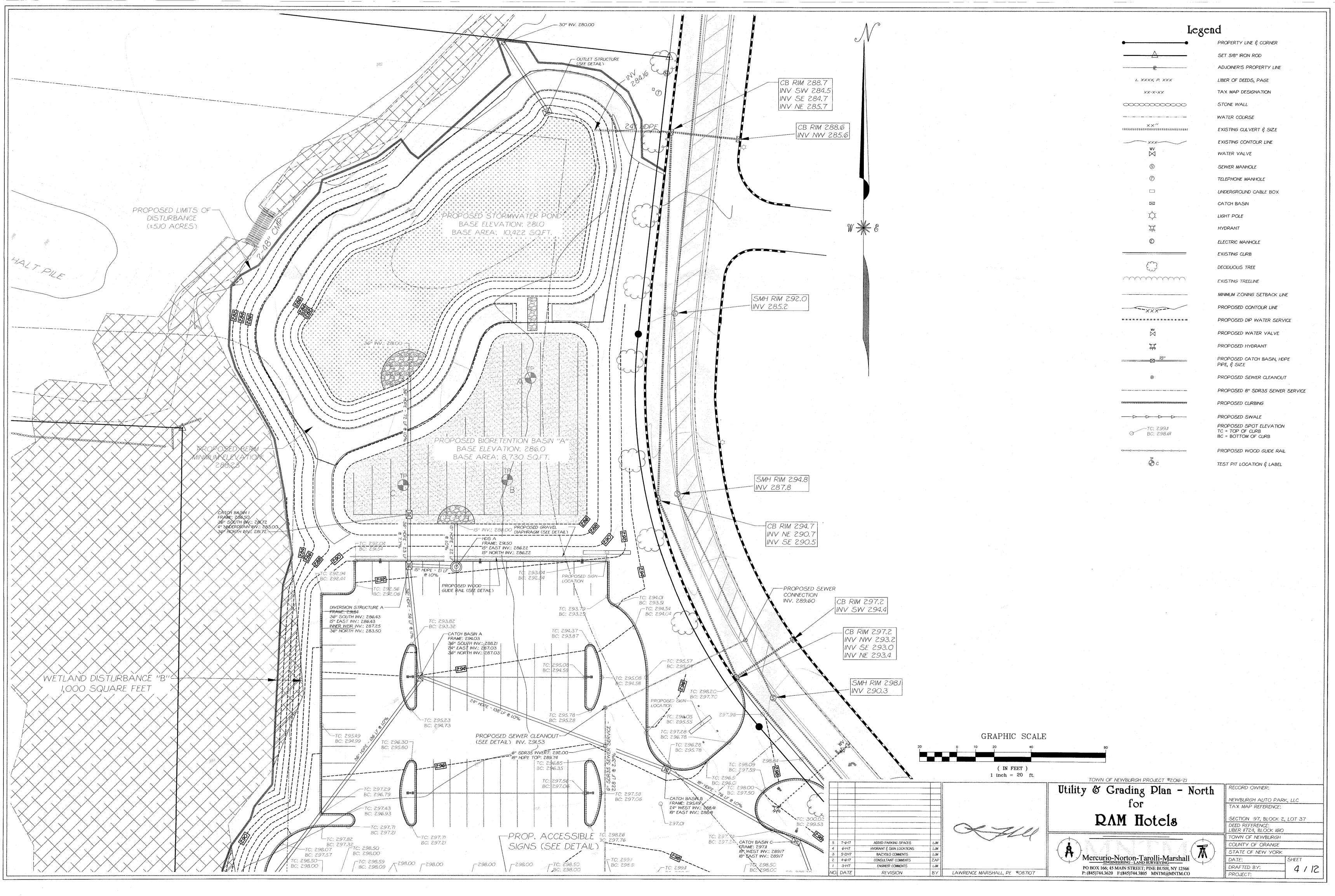


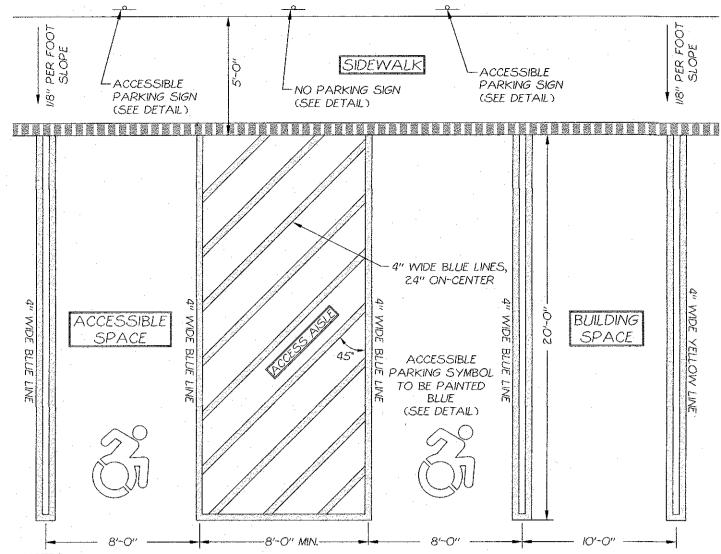












NOTES:
1.) ALL ACCESSIBLE RAMP AND ACCESS AISLES SHALL MEET ALL CURRENT CODES AND ADAAG REGULATIONS.
2.) PROPOSED ACCESS RAMP SHALL CONSIST OF COLORED TOOLED/SERRATE SLIP RESISTANT SURFACING AND/OR TACTILE WARNING DEVICE AS REQUIRED BY AMERICANS WITH DISABILITIES ACT ACCESSBILITY GUIDELINES AND CODE 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 B55Y300

PARKING LOT STRIPING & WHEELSTOPS: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT,

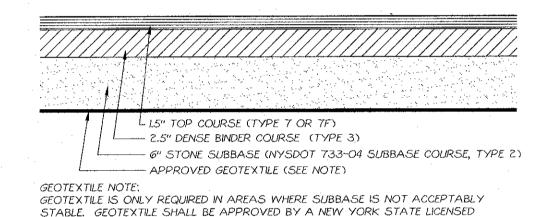
YELLOWTM5494

ACCESSIBLE STRIPING & DETAIL: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, "H.C." BLUE

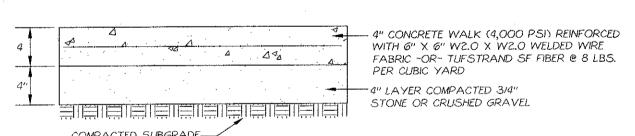
4.) STANDARD PARKING SPACES VARY IN SIZE, STANDARD SPACES ALONG FRONT OF BUILDING ARE 9' X 18.5'

SPACES (EXCEPT ACCESSIBLE SPACES AND AISLE). ALL OTHER SPACES ARE 9' X 18' SPACES.

Accessible & Building Parking Space Striping Detail



Standard Asphalt Pavement Section

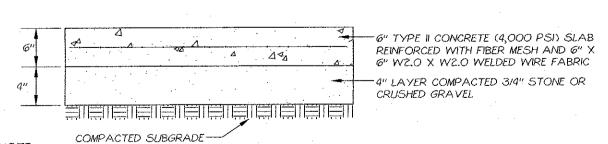


NOTE:

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

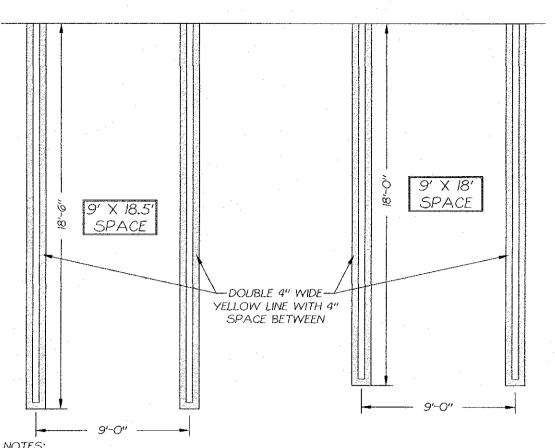


NOTE:

1) CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN IZ 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.

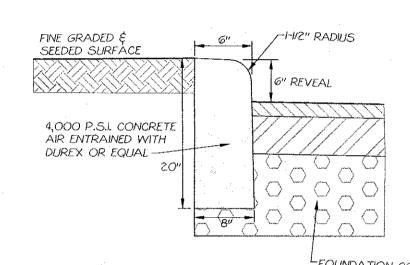
2) HEAVY DUTY CONCRETE PAVEMENT SHALL BE UTILIZED FOR THE AREA WITHIN THE REFUSE ENCLOSURE

Heavy Duty Concrete Pavement Detail



NOTES:
I.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
PARKING LOT STRIPING & WHEELSTOPS: TOP COAT SHERWIN WILLIAMS - PRO MAR

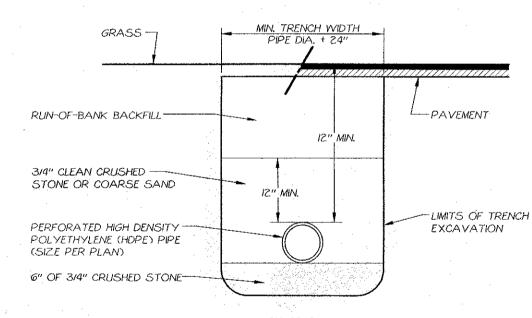
Parking Space Striping Detail



NOTES:
I.) CURB SHALL BE CAST IN PLACE. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMLAR 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

Standard Curb Detail



NOT TO SCALE

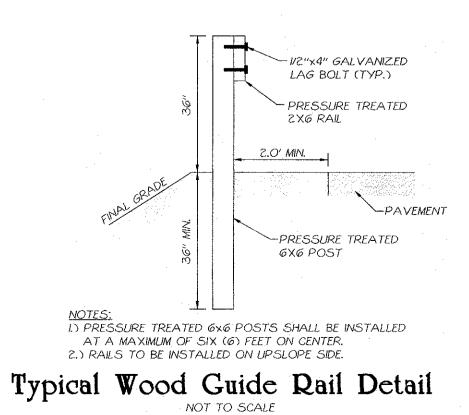
1) RUN-OF-BANK BACKFILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY. RUN OF BANK GRAVEL SHALL NOT CONTAIN STONES LARGER THAN 4".

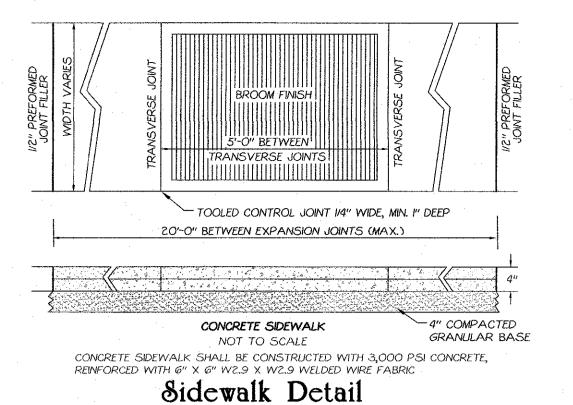
2) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE RUN-OF- BANK GRAVEL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO

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"

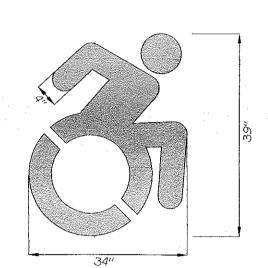
Typical Storm Sewer Trench Detail



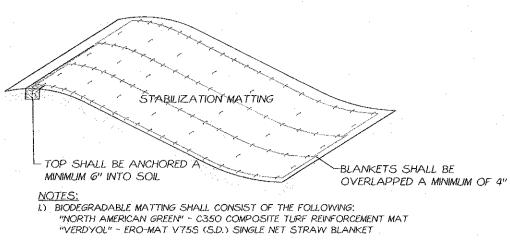


NOTES:
I.) PROPOSED STRIPING TO BE PAINTED IN
ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
PARKING LOT STRIPING: TOP COAT SHERWIN
WILLIAMS - PRO MAR TRAFFIC MARKING PAINT,
YELLOWTM5494

Island Striping Detail



Accessibile Parking Symbol



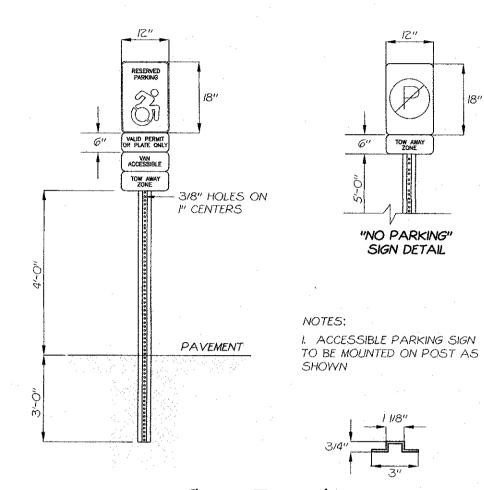
"NORTH AMERICAN GREEN" - C350 COMPOSITE TURF REINFORCEMENT MAT
"VERDYOL" - ERO-MAT V75S (S.D.) SINGLE NET STRAW BLANKET

2) MATTING SHALL BE STAPLED WITH 8" WIRE STAPLES ALONG ALL SEAMS (I2" ON CENTER) AND EVERY 3' ON CENTER WITHIN THE BLANKET.

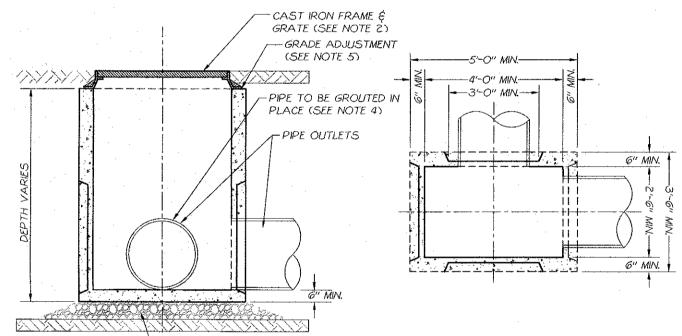
3) ALL SLOPES SHALL BE SEEDED WITH WILDFLOWER MIXTURE PRIOR TO INSTALLATION OF BIODEGRADABLE MATTING.

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

8lope Stabilization Detail



Sign Details



6" MIN. PEA STONE OR — RUN OF BANK GRAVEL

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

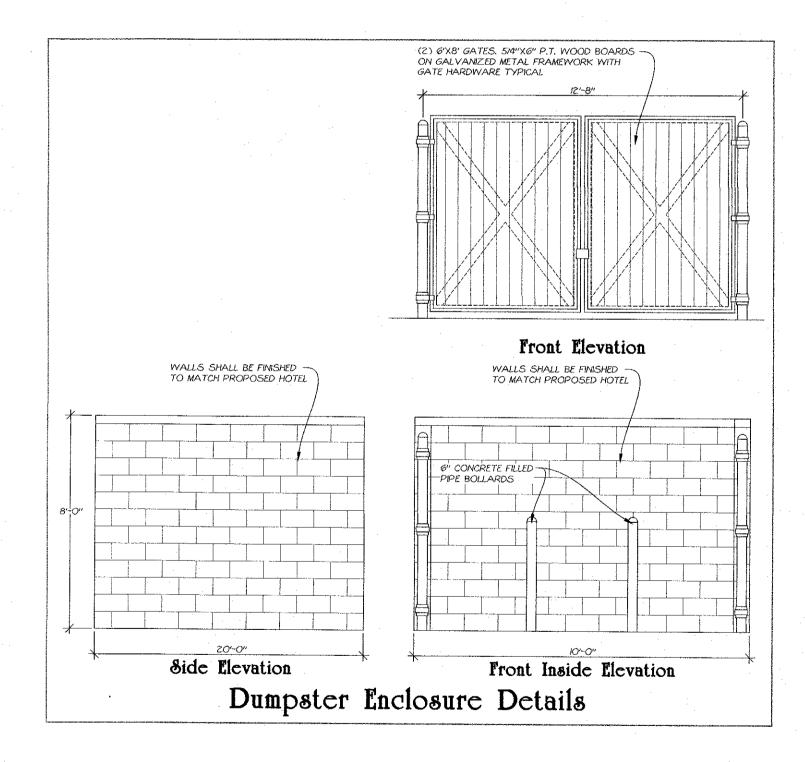
2) CAST IRON FRAME AND GRATE SHALL BE ABLE TO WITHSTAND H20 LOADING. GRATES SHALL BE BICYCLE GRATES. OPENINGS SHALL BE A MINIMUM OF 30" X 48" RECTANGULAR OPENING.

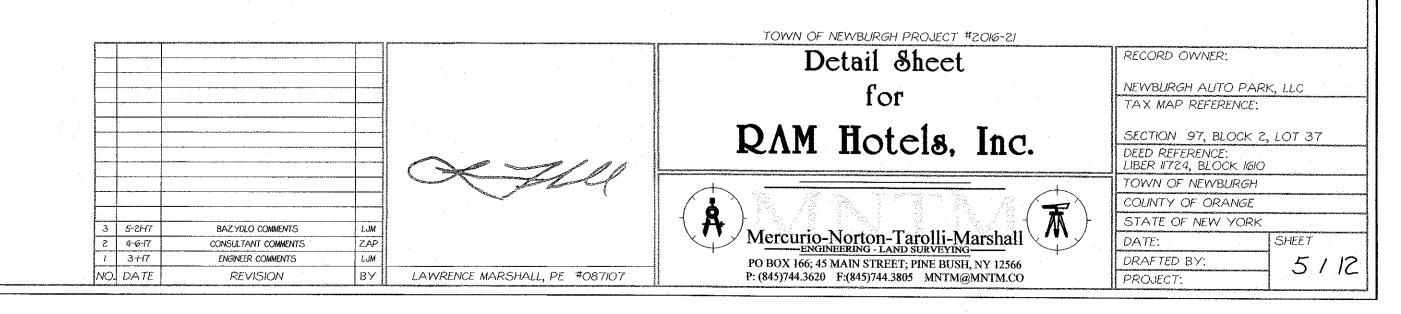
3) STEPS SHALL BE PROVIDED IZ" ON CENTER WHEN DEPTH OF BASIN EXCEEDS 4'-O".

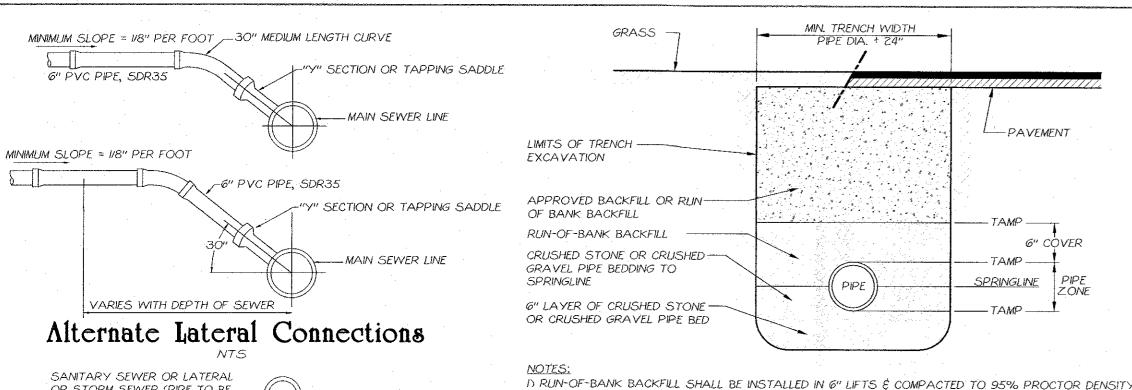
4) CONNECTIONS BETWEEN BASIN AND PIPE SHALL BE MADE BY FILLING THE SPACE AROUND EACH PIPE WITH MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIAL, OR CONCRETE REPAIR MATERIAL.

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







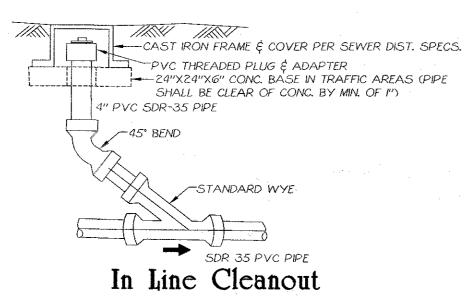
WATERMAIN EQUIDISTANT FROM CROSSING POINT

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 I-1/2" ASPHALT TOP COURSE.

Typical Sanitary Sewer Trench Detail



Town of Newburgh Sewer System Notes: D 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

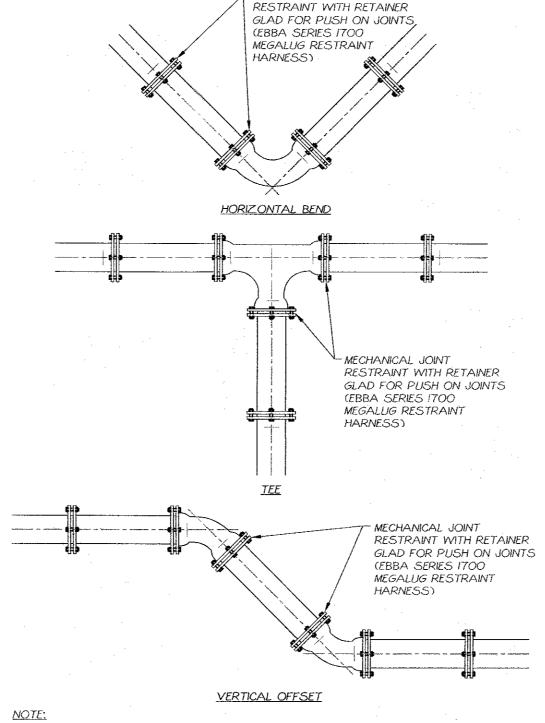
3) ALL GRAVITY SANITARY SEWER SERVICE LINES SHALL BE 4 INCHES IN DIAMETER OR LARGER AND SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034-89. JOINTS SHALL BE PUSH-ON WITH ELASTOMERIC RING GASKET CONFORMING ASTM D-3212. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A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

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

AND SPIGOT CONFIGURATION COMPATIBLE WITH THE PIPE.

5) THE FINAL LAYOUT OF THE PROPOSED WATER ANDIOR 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 SHLL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.

-MECHANICAL JOINT



I) ALL RESTRAINING GLANDS TO BE IN ACCORDANCE WITH TOWN OF NEWBURGH

-MECHANICAL JOINT WITH

BREAK OFF NUTS (TYP.)

L PROVIDE PIPE LENGTH REQUIRED

TO RESTRICT FITTING FROM

RETAINER GLAND BY EBAA "MEGA

LUG" SERIES 1100 OR APPROVED

EQUAL WITH WEDGE BOLTS AND

3/4" THREADED TIE ROD (TYP.)

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

Water Main Pipe Thrust Restraint Detail

- DUCTILE IRON PIPE (TYP.)

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 CI5I/AZI.51 FOR DUCTILE IRON PIPE, LATEST REVISION. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL

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 1100 OR APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER

4) ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA CIIO/AZI/O FOR DUCTILE AND GRAY IRON FITTINGS OR ANSI/AWWA CI53/AZI.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 IZ 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.

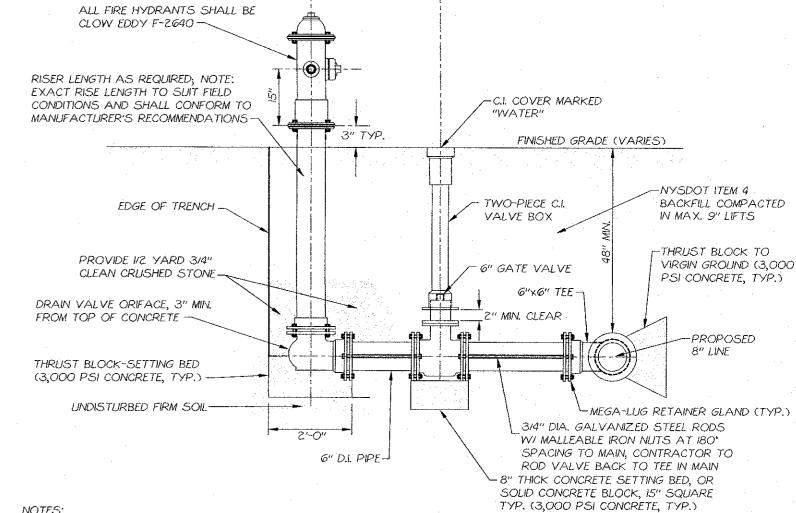
7) ALL HYDRANTS SHALL BE CLOW-EDDY F-2640 CONFORMING TO AWWA STANDARD C-502, LATEST REVISION. ALL HYDRANTS SHALL INCLUDE A 5-1/4 INCH MAIN VALVE OPENING, TWO 2-1/2 INCH DIAMETER NPT HOSE NOZZLES, ONE 4 INCH NPT STEAMER NOZZLE, A 6 INCH DIAMETER INLET CONNECTION AND A 1 1/2 INCH PENTAGON OPERATING NUT. 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-1502ON FOR 3/4 AND I INCH, MUELLER H-1500ON OR B-2500ON FOR I I/2 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-1502-2N FOR 3/4 AND I INCH AND MUELLER B-25204N FOR I I/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-103IAN FOR 3/4 AND I INCH AND MUELLER H-103ION FOR I I/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,

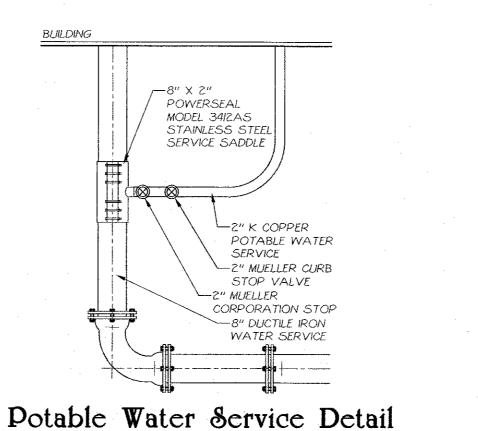
IN THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL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

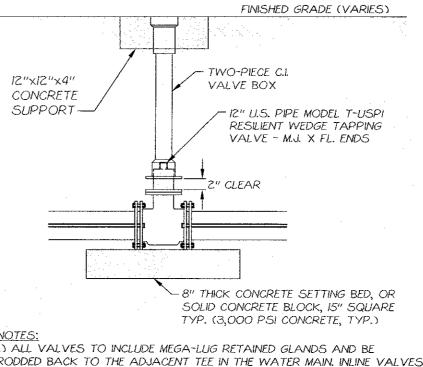


... 1) HYDRANTS SHALL BE DRY-BARREL HYDRANTS, TYPE MUELLER SUPER CENTURION, IN ACCORDANCE WITH AWWAC502. HYDRANTS SHALL HAVE A MAIN VALVE SIZE OPENING OF FIVE INCHES NOMINAL, ONE (1) FOUR-AND-A-HALF-INCH NST PUMPER NOZZLE, TWO (2) TWO-AND-A-HALF-INCH NST HOSE NOZZLES, A ONE-AND-ONE-HALF-INCH PENTAGON 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 PLUGGED AND THE HYDRANT MARKED OR LABELLED TO INDICATE THTAT THE BARREL MUST BE PUMPED OUT AFTER USE TO PREVENT DAMAGE FROM FREEZING.

Typical Fire Hydrant Assembly Detail

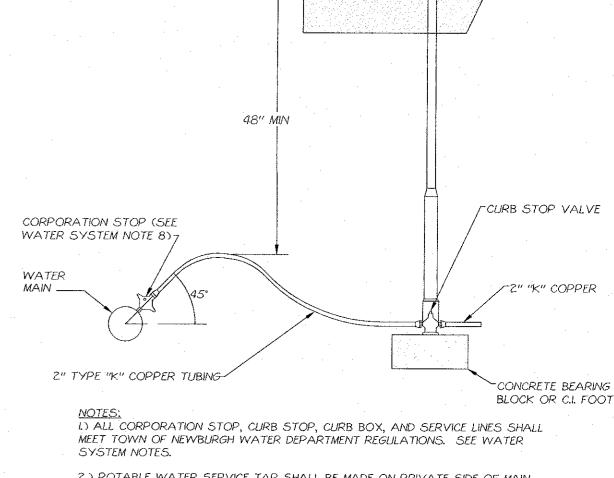




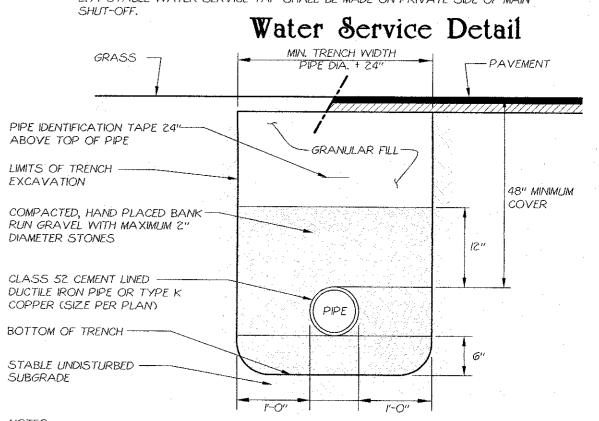
I) ALL VALVES TO INCLUDE MEGA-LUG RETAINED GLANDS AND BE RODDED BACK TO THE ADJACENT TEE IN THE WATER MAIN. INLINE VALVES NEED NOT BE RODDED. CONTRACTOR TO UTILIZE 3/4" DIA. GALVANIZED STEEL RODS WITH MALLEABLE IRON NUTS AT 180° SPACING.

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

Typical Water Valve Detail



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

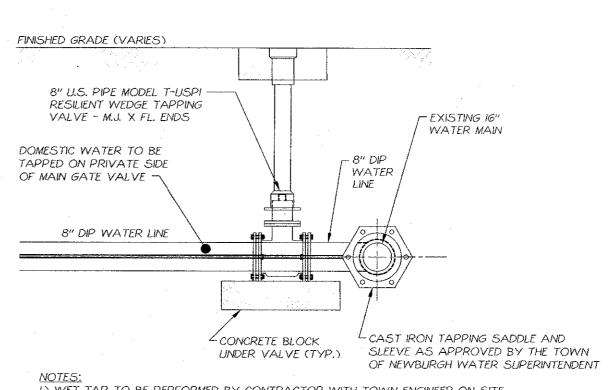


D GRANULAR FILL SHALL CONSIST OF SELECT GRANULAR FILL OR SUITABLE ON-SITE EXCAVATED SOIL (LARGEST STONE SHALL BE LESS THAN 3"). GRANULAR FILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY.

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

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 Water Pipe Bedding Detail



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.

BAZYDLO COMMENTS

CONSULTANT COMMENTS ENGINEER COMMENTS

VO. DATE

Water Wet Tap Detail

PIPE SIZE 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) 3 27. 10 in GM, SM 3 2 24 ਨੇ sw, *g*w 4 1 . 5 . 3 23 Water Main Pipe Restraint Tables

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

1) THRUST BLOCKING IS NOT PERMITTED.

DEFLECTIONS ALSO.

PIPE TRENCH DETAIL.

2) PIPE RESTRAINING TO BE USED FOR VERTICAL

3) SEE TABLES A & B FOR REQUIRED RESTRAINED LENGTH

FOR DUCTILE IRON PIPE. ALL MINIMUM RESTRAINT LENGTHS

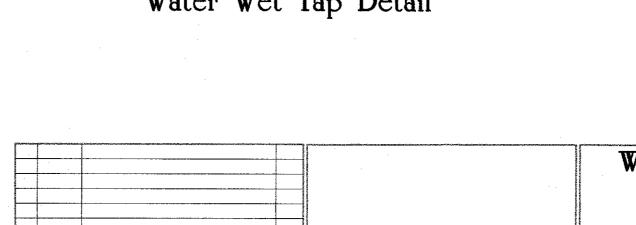
LENGTHS ARE NOT VALID AT HIGHER TESTING PRESSURES.

BASED UPON A TESTING PRESSURE OF 100 PSI. MINIMUM

4) PIPE BEDDING SHALL BE IN ACCORDANCE WITH WATER

5) THE CONTRACTOR SHALL PERFORM SOIL TEST TO

DETERMINE SOIL TYPE(S) INDICATED ON TABLE A.



LAWRENCE MARSHALL, PE #087107

TOWN OF NEWBURGH PROJECT #2016-21 Water & Sewer Detail Sheet for RAM Hotels, Inc.

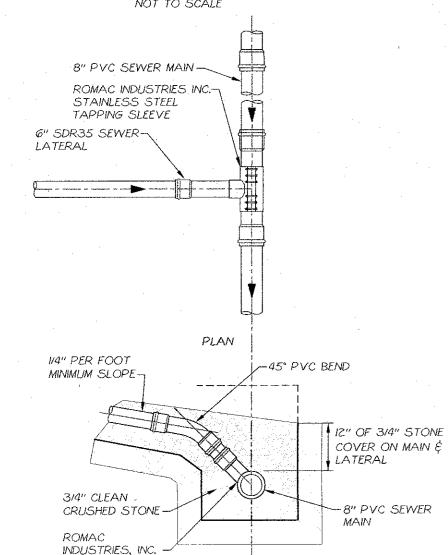
RECORD OWNER: NEWBURGH AUTO PARK, LLC TAX MAP REFERENCE: SECTION 97, BLOCK 2, LOT 37 DEED REFERENCE: LIBER 11724, BLOCK 1610 TOWN OF NEWBURGH COUNTY OF ORANGE STATE OF NEW YORK DATE: SHEET DRAFTED BY: PROJECT:

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

SANITARY SEWER OR LATERAL OR STORM SEWER (PIPE TO BE 150 PSI PRESSURE RATED) -SANITARY SEWER OR 18" MINIMUM VERTICAL CLEARANCE. NO EXCEPTION WITHOUT WRITTEN PERMISSION OF COUNTY DEPARTMENT OF HEALTH Storm / Sanitary Sewer-watermain Crossing -SANITARY SEWER OR LATERAL OR STORM SEWER WATERMAIN OR SERVICE CONNECTION

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

Parallel Sanitary Sewer / Storm Sewer Watermain Installation



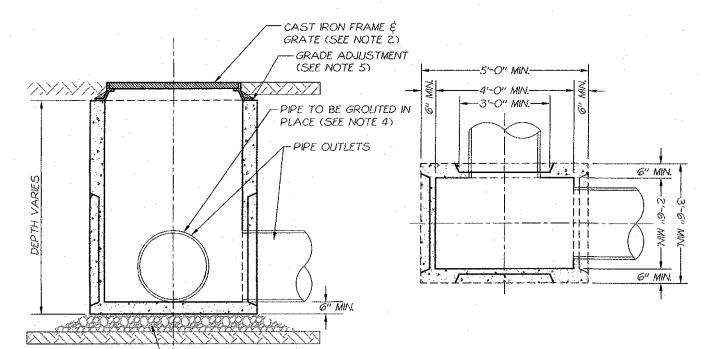
I.) FIELD LOCATION AND ALIGNMENT OF NEW SADDLE TO BE APPROVED BY THE TOWN OF NEWBURGH WATERISEWER SUPERINTENDENT PRIOR TO INSTALLATION. 2.) NEW STAINLESS STEEL TAPPING SLEEVE ON EXISTING SANITARY SEWER MAIN IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, TOWN OF NEWBURGH CODE, AND TEN STATE STANDARDS.

Sanitary Sewer Lateral Tap Detail

STAINLESS STEEL

TAPPING SLEEVE

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

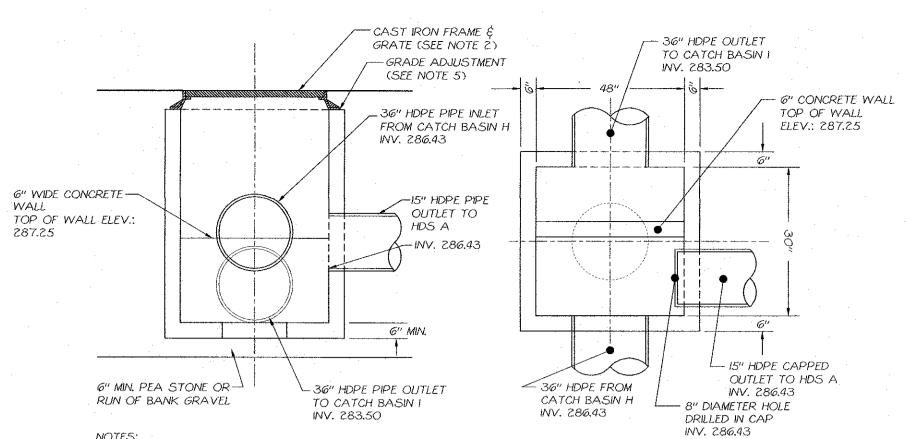


6" MIN. PEA STONE OR RUN OF BANK GRAVEL

D BASINS SHALL HAVE A MINIMUM OF HZO LOADING STRENGTH.

- 2) CAST IRON FRAME AND GRATE SHALL BE ABLE TO WITHSTAND HZO 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'-O".
- 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 IZ" SHALL BE MADE WITH CAST-IN-PLACE CONCRETE OR A COMBINATION OF PRECAST CONCRETE ADJUSTMENT ELEMENTS AND

Typical Catch Basin Detail



D BASINS SHALL BE PRECAST CONCRETE CATCH BASIN, MODEL CB-30×48, 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-30×48. GRATES

- SHALL BE BICYCLE GRATES. FRAMES AND GRATES AS MANUFACTURED BY WOODARDS CONCRETE PRODUCTS, BULLVILLE, NY, OR APPROVED EQUAL.
- 3) STEPS SHALL BE PROVIDED IZ" ON CENTER WHEN DEPTH OF BASIN EXCEEDS 4'-O".
- 4) CONNECTIONS BETWEEN BASIN AND PIPE SHALL BE MADE BY FILLING THE SPACE AROLIND 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

MAY 8, 2017

R.SMITHEM

285 5' LOAM

TOPSOIL

LARGE BOULDERS

SANDY

CLAY

CLAY

BIORETENTION

ELEV. TEST PIT

290 ---- 0'-

289

TEST HOLE #

TESTER:

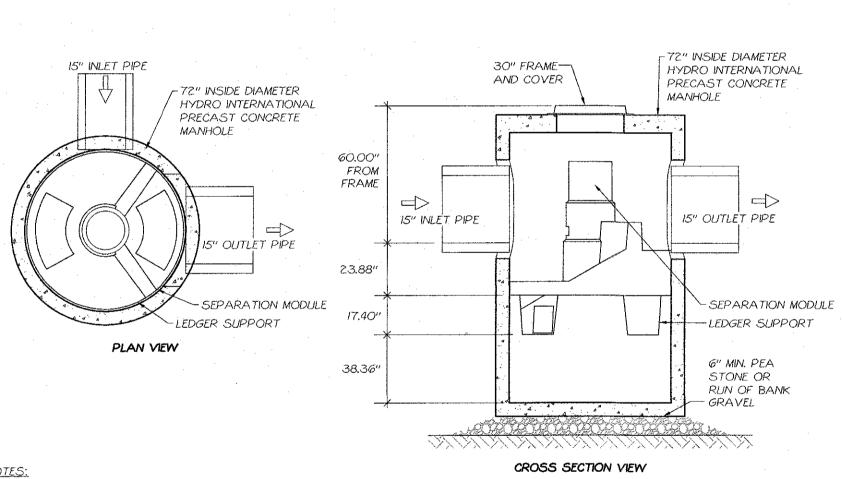
TESTING DATE:

DEEP TEST

SOIL LOG

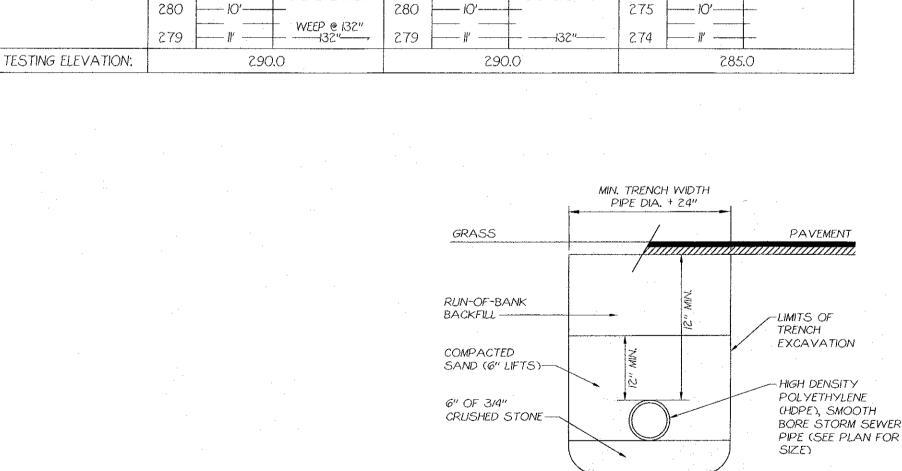
(NO WATER OR ROCK

UNLESS SO NOTED)



- D PROPOSED UNIT IS A HYDRO INTERNATIONAL FIRST DEFENSE HC STORWMATER 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 INTÉRNATIONAL 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.
- 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 & 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

Typical Hydrodynamic Separator Detail



MAY 8, 2017

R.SMITHEM

BIORETENTION

TOPSOIL

____9"____

MOTTLED

---- 30"-----

LOAM

ELEV. TEST PIT

- 24"- | 288 | - 2' - SILT LOAM |

-3'- SILT LOAM | 287 | 3'- CLAY

BASE OF 281 - 9'-

DEPTH

290 -0'-

285 - 5'

——·8′ ——

MAY 8, 2017

R.SMITHEM

284 | " | MOTTLED

279 6' BASE OF BIORETENTION

LOAM

ELEV. TEST PIT

285 ---- 0'----

281

DEPTH

280 5'

277 ---- 8' ----

276 - 9' -

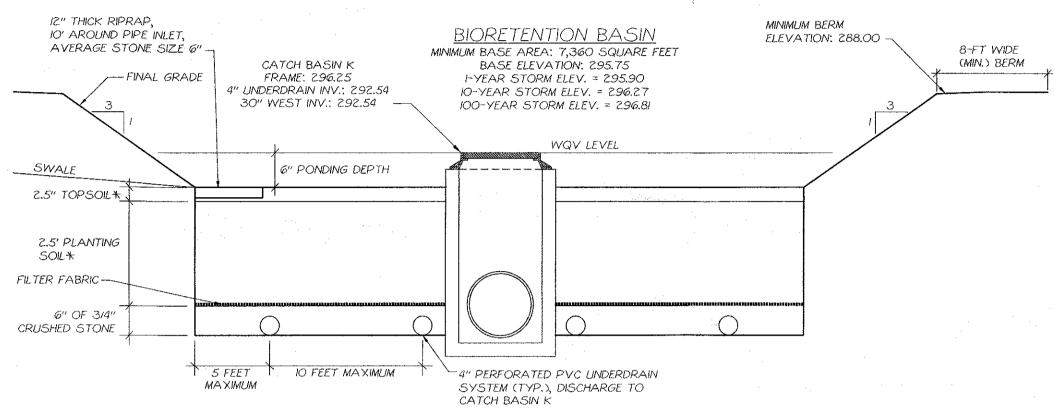
I.) ALL STORM SEWER PIPING SHALL BE SMOOTH-BORE HIGH DENSITY POLYETHYLENE (HDP), UNLESS OTHERWISE NOTED. 2.). STORM SEWER CULVERTS SHALL BE EQUIPPED WITH FLARED END SECTIONS AT ALL OPEN INLET/OULET LOCATIONS.

Typical Storm Sewer Trench Detail

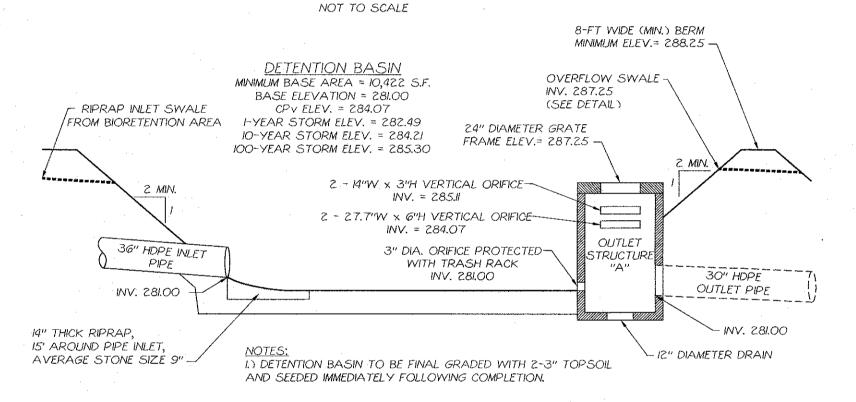
IZ" THICK RIPRAP, MINIMUM BERM BIORETENTION BASIN 10' AROUND PIPE INLET, ELEVATION: 288.25 MINIMUM BASE AREA: 9,093 SQUARE FEET 8-FT WIDE AVERAGE STONE SIZE 6" (MIN.) BERM CATCH BASIN I BASE ELEVATION: 286.00 — FINAL GRADE FRAME: 286.50 HYEAR STORM ELEV. = 286.79 OVERFLOW SWALE -36" SOUTH INV.: 281.72 IO-YEAR STORM ELEV. = 286.98 (SEE DETAIL) I'' UNDERDRAIN INV.; 283.00— 100-YEAR STORM ELEV. = 287.12 INV. 286.50 36" NORTH INV.: 281.72 WQV LEVEL 15" HDPE INLET OVERFLOW SWALE DIRECTED 6" PONDING DEPTH PIPFTO DETENTION BASIN 2.5" TOPSOIL* 2.5' PLANTING SOILX FILTER FABRIC-· 6" OF 3/4" CRUSHED STONE 5 FEET IO FEET MAXIMUM -4" PERFORATED PVC UNDERDRAIN MAXIMUM SYSTEM (TYP.), DISCHARGE TO

Bioretention Area "A" Detail NOT TO SCALE

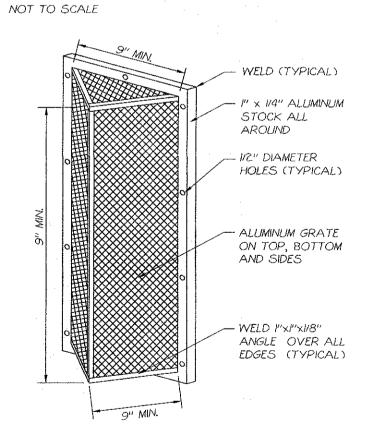
CATCH BASIN I



Bioretention Area "B" Detail



Detention Basin 'A' Detail

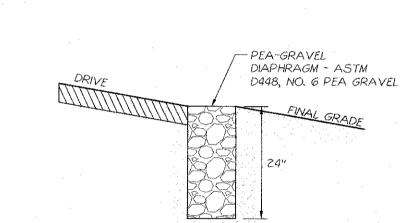


NOTES:
1.) TRASH RACK TO BE CENTERED OVER OPENING. 2.) TRASH RACK SHALL BE CONSTRUCTED FROM

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

Trash Rack Detail

ZACHARY A. PETERS PE #093918



Permeable Soil Notes

*PLANTING SOIL SHALL BE A SANDY LOAM, LOAMY

35-60% SAND, BY VOLUME). THE CLAY CONTENT FOR

CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION

THESE SOILS SHALL BE LESS THAN 25% BY VOLUME.

SYSTEM (USCS). A PERMEABILITY OF AT LEAST LO

BE FREE OF STONES, STUMPS, ROOTS, OR OTHER

FEET PER DAY (0.5"IHR) IS REQUIRED. THE SOIL SHALL

WOODY MATERIAL OVER I" IN DIAMETER AND BRUSH OR

LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER

SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE

PLANTING SOIL SHALL BE IN LIFTS OF 12 TO 18".

THE SOIL SPECIFICATIONS ARE AS FOLLOWS:

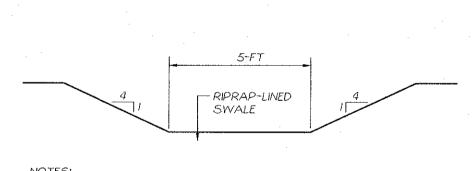
SAND, LOAM, OR A LOAM/SAND MIX (CONTAINING

SOILS SHALL FALL WITHIN THE SM, OR ML

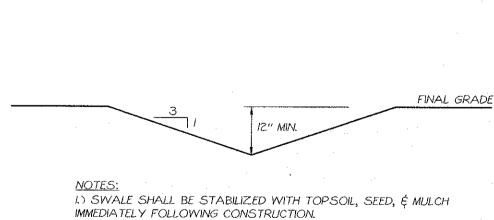
PERMEABLE SOIL NOTES:

OR BACKHOE BUCKET):

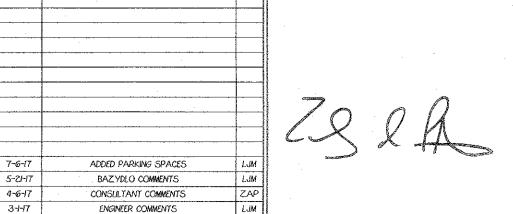
Gravel Diaphragm Detail



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



Diversion Swale Detail NOT TO SCALE



IO. DATE

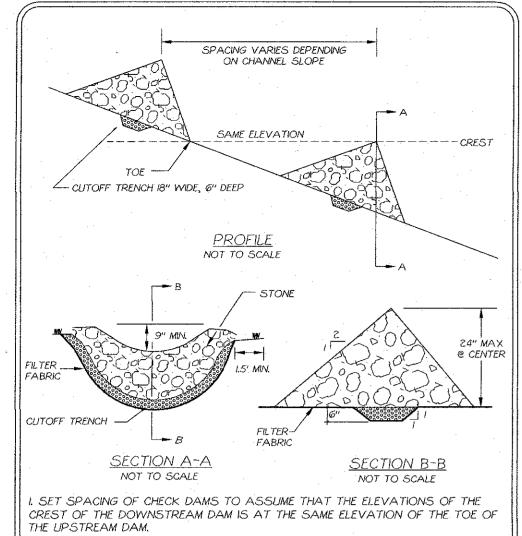
Stormwater Detail Sheet for



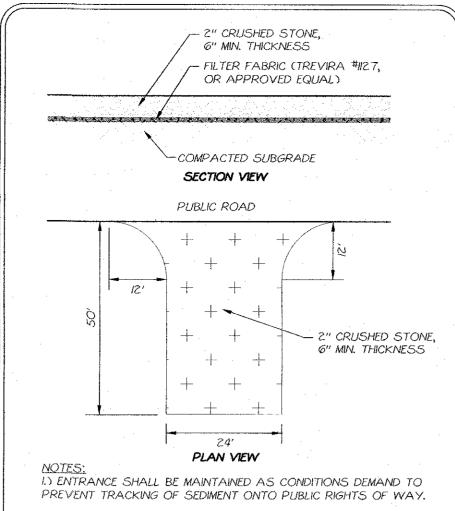
RECORD OWNER: NEWBURGH AUTO PARK, LLC TAX MAP REFERENCE: SECTION 97, BLOCK 2, LOT 37 DEED REFERENCE: LIBER 11724, BLOCK 1610 TOWN OF NEWBURGH COUNTY OF ORANGE STATE OF NEW YORK

DATE: 4 FEB 2017 SHEET DRAFTED BY: ZAP PROJECT: 4015

TOWN OF NEWBURGH PROJECT #2016-21 RAM Hotels



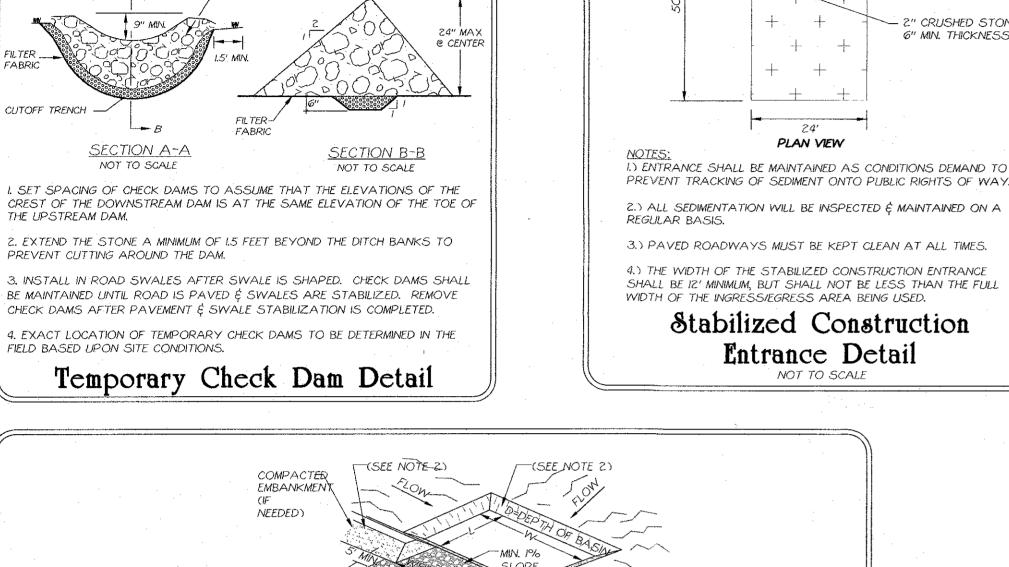
- 2. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO
- 3. INSTALL IN ROAD SWALES AFTER SWALE IS SHAPED. CHECK DAMS SHALL
- 4. EXACT LOCATION OF TEMPORARY CHECK DAMS TO BE DETERMINED IN THE

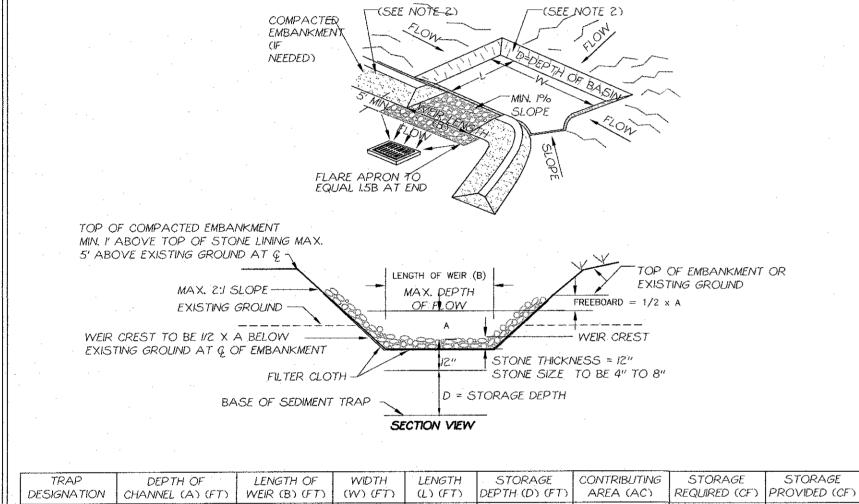


4.) THE WIDTH OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE IZ' MINIMUM, BUT SHALL NOT BE LESS THAN THE FULL

18,000

18,000





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.

60

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

OF THE WEIR CREST.

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

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 (I) FOOT BELOW THE LEVEL

100

5.) FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO THE PLACEMENTS OF STONE. SECTIONS OF FABRIC SHALL OVERLAP AT LEAST ONE (I) 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.

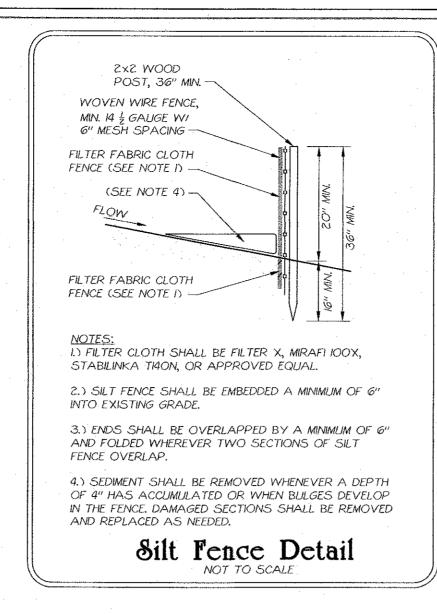
Temporary RipRap Outlet Sediment Trap Detail

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.

- I INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES ASSOCIATED WITH THE PROPOSED DISTURBANCE (SILT FENCE, CONSTRUCTION ENTRANCE, CHECK DAMS).
- Z.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.
- T.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.
- IO. 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.



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

3.) ALL DISTURBED AREAS THAT WILL REMAIN TEMPORARILY UNDISTURBED (714 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

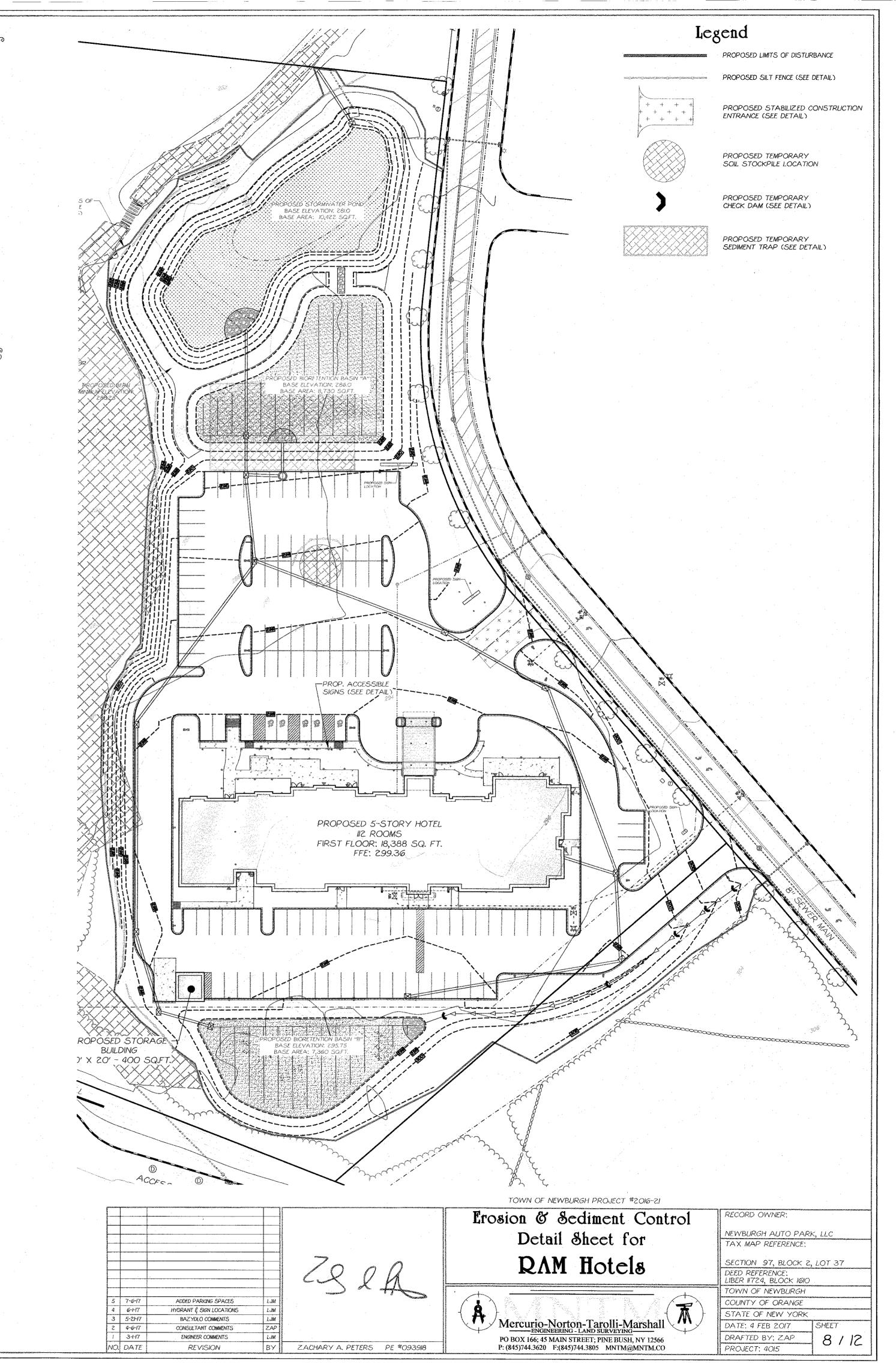
SOIL RESTORATION AS SPECIFIED IN THE CHART BELOW SHALL BE APPLIED TO ALL AREAS DISTURBED DURING

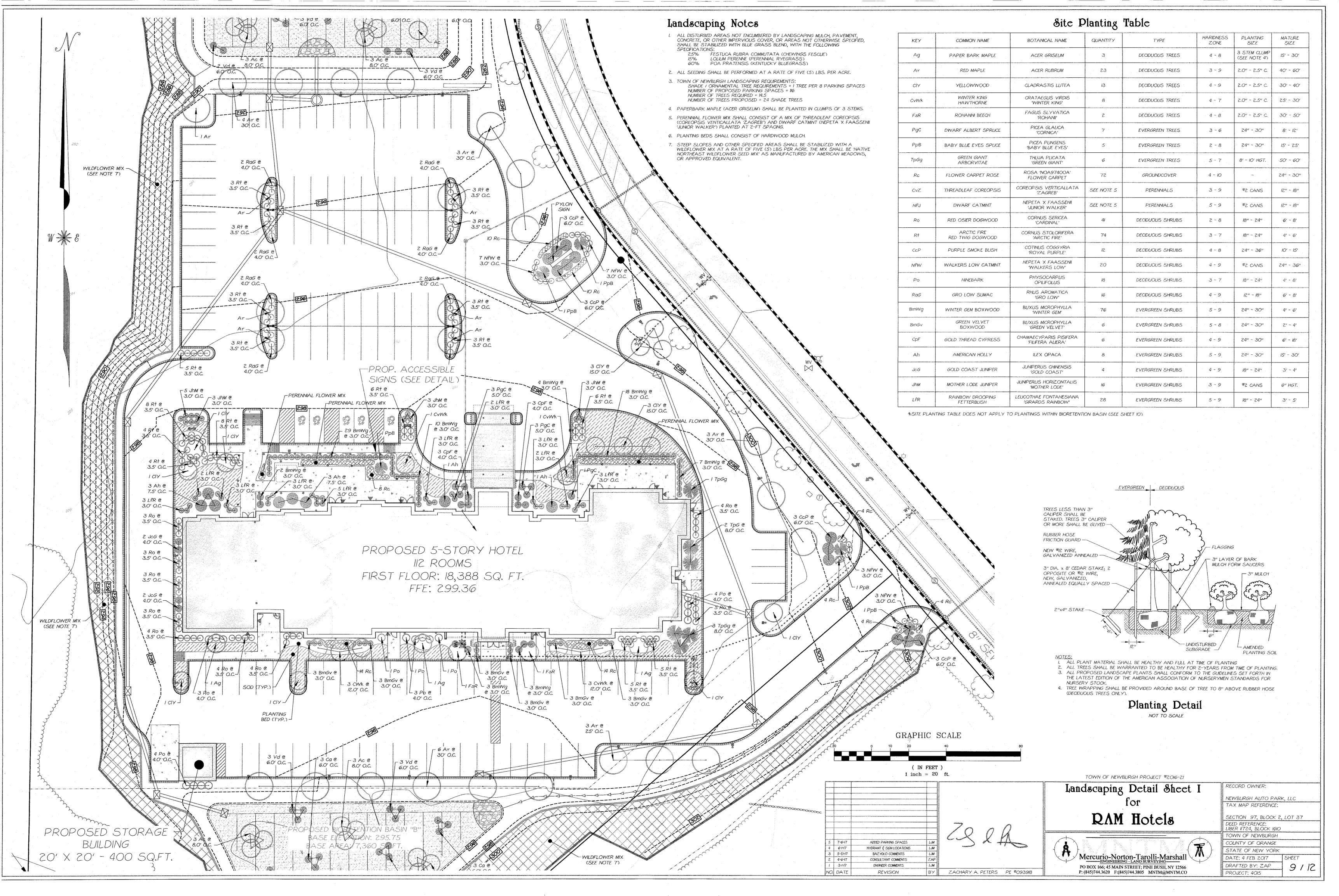
THE CONSTRUCTION PROCESS.		
TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT	COMMENTS/EXAMPLES
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED	PRESERVATION OF NATURAL FEATURES
MINIMAL SOIL DISTURBANCE	RESTORATION NOT REQUIRED	CLEARING AND GRUBBING
AREAS WHERE TOPSOIL IS STRIPPED ONLY-NO CHANGE IN 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.	

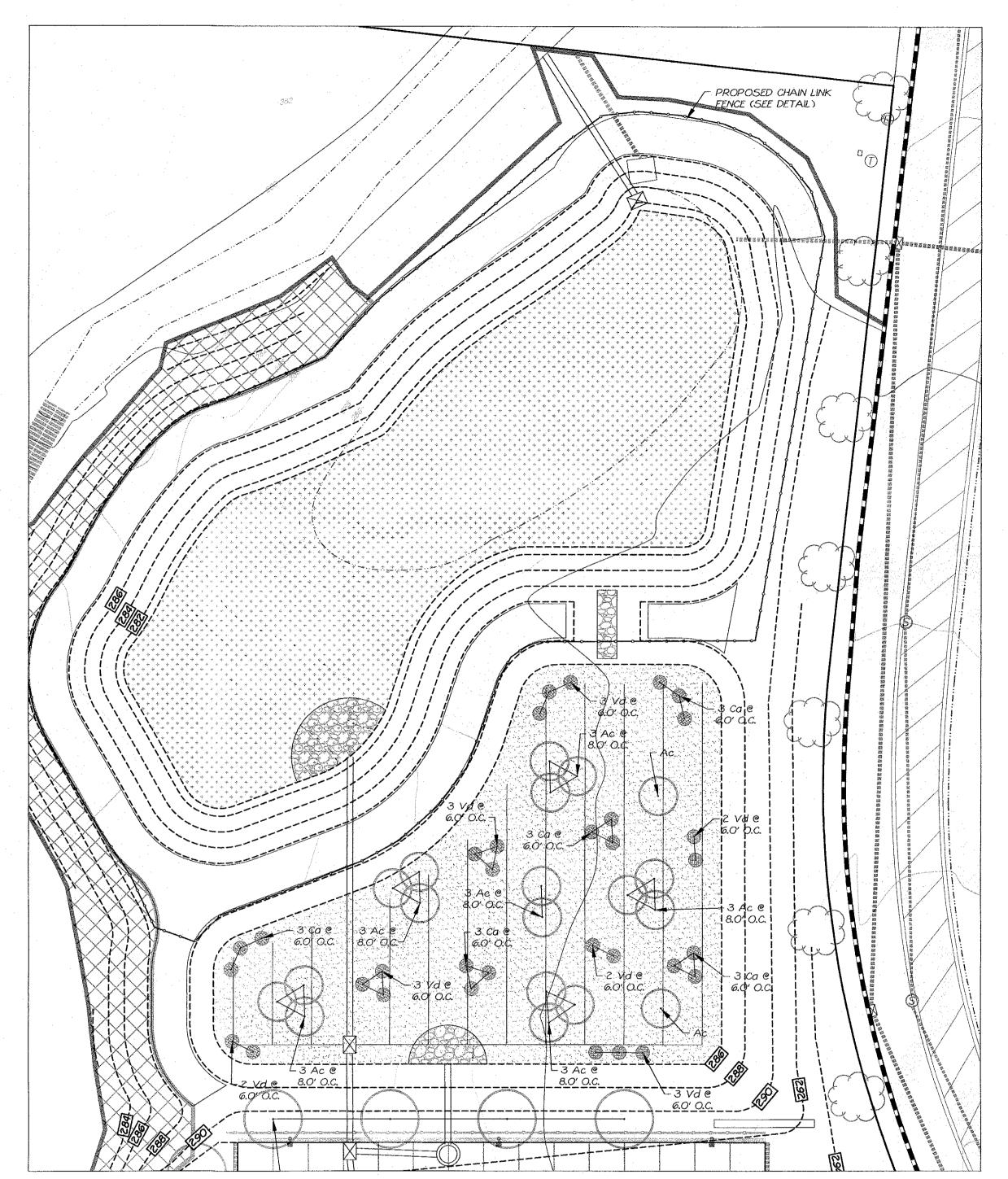
*AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR-DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOIL, A ROLLER WITH MANY SPIKES MAKING INDENTATIONS IN THE SOIL, OR PRONGS WHICH FUNCTION LIKE A MINI-SUBSOILER.

FULL SOIL RESTORATION SPECIFICATIONS:

- .) 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.
-) 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
- 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.





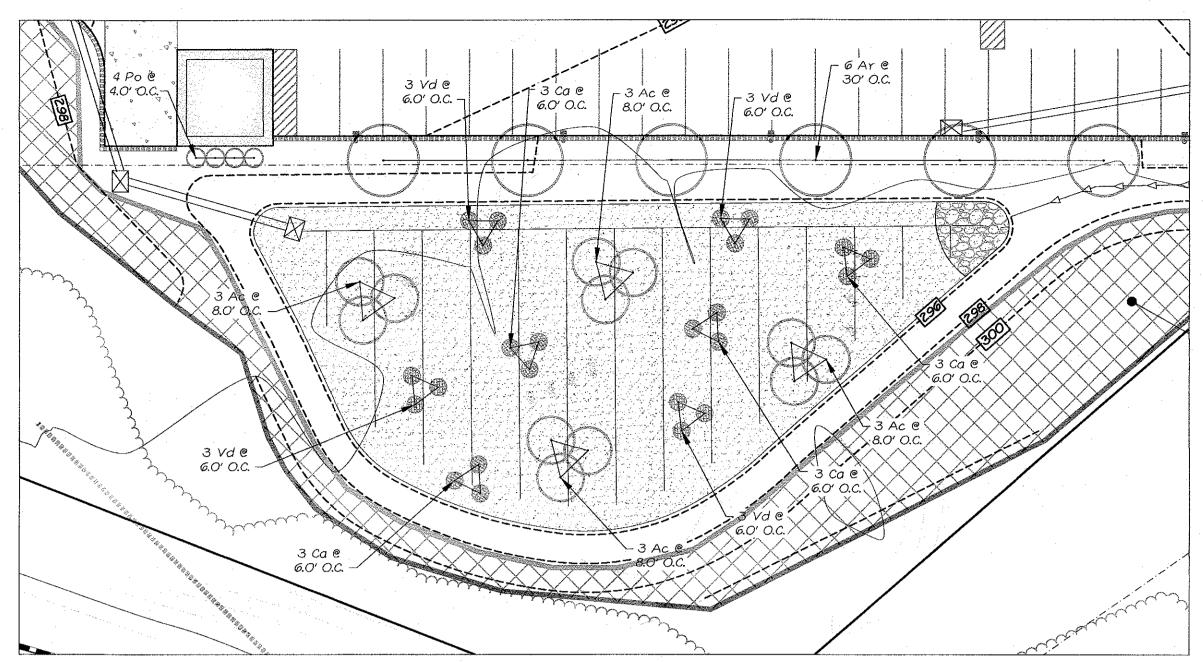


Bioretention Basin 'Λ'

Bioretention Basin 'A' - Stormwater Planting Table

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	TYPE	HARIDNESS ZONE	PLANTING SIZE	MATURE SIZE
Ac	SHADBLOW SERVICEBERRY	AMELANCIER CANADENSIS	19	DECIDUOUS SHRUBS	3 - 7	8' - 10' HGT.	20' - 30'
Ca	SILKY DOGWOOD	CORNUS AMOMIUM	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'

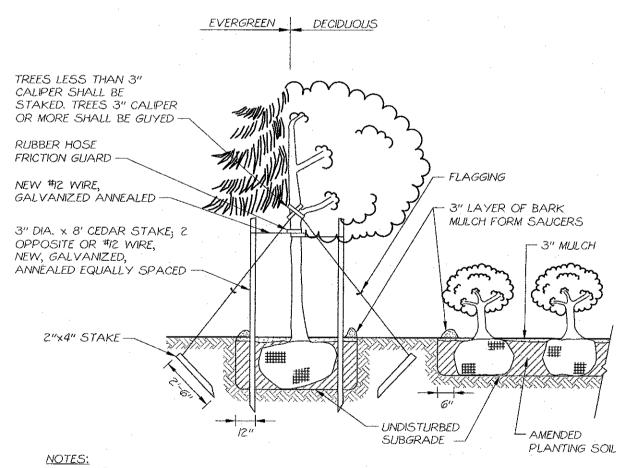
Bioretention Basin 'B' - Stormwater Planting Table

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	TYPE	HARIDNESS ZONE	PLANTING SIZE	MATURE SIZE
Ac .	SHADBLOW SERVICEBERRY	AMELANCIER CANADENSIS	. 12	DECIDUOUS SHRUBS	3-7	8' - 10' HGT.	20' - 30'
cá	SILKY DOGWOOD	CORNUS AMOMIUM	SI	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

- I. 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:
 - ECIFICATIONS. 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.



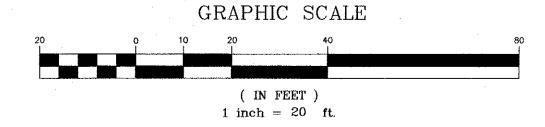
- NOTES:

 I. 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 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



ENGINEER COMMENTS

NO. DATE

ADDED PARKING SPACES CONSULTANT COMMENTS

ZACHARY A. PETERS PE #093918

Landscaping Detail Sheet II for

TOWN OF NEWBURGH PROJECT #2016-21

Mercurio-Norton-Tarolli-Marshall

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

RECORD OWNER:

DATE: 4 FEB 2017 DRAFTED BY: ZAP P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO PROJECT: 4015

