

5. Has parcel ever been subject to subdivision or land development approval? Yes
 If Yes: Date of Approval May 23, 2005
 Plan Title Subdivision Plan - Horizon Corporate Center
 Recording Date May 26, 2005
 Plan Book 328
 Page 76

6. Has parcel ever received relief from the Zoning Hearing Board? Variance for Min Lot Width (232-464(d))
 If yes, list date of decision and attach copy of the decision. copy not available

7. Deed restrictions that apply or are being contemplated. If no restrictions, state none. If yes, attach copy.
See Attached Title Report

8. List proposed improvements and utilities to be installed:
4 story-128 room hotel (Footprint: 25,750+/- SF) (GFA: 57,200+/- SF)
Parking Lot accommodating 152 spaces, incl 5 ADA parking stalls
New Utility service connections for water, sewer, gas, electric, and telecomm
Drainage/Stormwater Improvements

9. List title of each plan, report and any other documents submitted:
Prelim/Final Land Development Plans (11 Sheets)
Boundary and Topographic Survey (2 Sheets)
Title Report for Lot #7

10. List presence of floodplain, wetlands, steep slopes or any other environmental features on site:
The property does not fall within a Flood Plain Zone according to the most recent FEMA Firm Map #42017C048J
There are no existing freshwater wetlands located on site
Approximately 80% of the subject property is comprised of steep slopes, i.e. slopes exceeding 8%.

11. List all variances and special exceptions that will be required from the Zoning Hearing Board for this application:
The application contains a pre-existing non-conforming lot width of 346'+/-, where 400' is required
It is our understanding that the lot width variance was approved as part of the Major Subdivision Approval
in May of 2005.

12. List all zoning changes, conditional uses and waivers that will be required for this application:
See Attached List of Submission and Design Waivers

NOTE: Plan requirements can be found in The Code of the Township of Bensalem, Chapter 201

MUNICIPAL USE ONLY

Date Received: _____
 Application Fee: _____
 Escrow: _____

LIST OF SUBMISSION AND DESIGN WAIVERS

Application Question #12

AVA Development

Major Site Plan: Proposed Hotel

Horizon Blvd. & Old Lincoln Highway

TMP 2-1-18-17; Lot 7

Bensalem Township, Bucks County, Pennsylvania

PGLLC #1392-2

- 1) SUBMISSION WAIVERS ARE HEREBY REQUESTED FROM THE FOLLOWING:
 - a. §201-41(d)(3) - PROVIDING ELEVATIONS OF MONUMENTS
 - b. §201-41(d)(8) - PROVIDING A SOIL MAP WITH THE LOCATION OF ALL TREES LARGER THAN 8" CALIPER.
 - c. §201-41(d)(9) - PROVIDING ALL UTILITY INFORMATION WITHIN 400 FEET OF PROJECT BOUNDARY.
 - d. §201-41(d)(10) - PROVIDING VERTICAL DATUM BASED UPON THE BENSALEM TOWNSHIP MUNICIPAL AUTHORITY SANITARY SEWER SYSTEM.
 - e. §201-41(n)(6) - FROM PROVIDING SANITARY AND STORM PROFILES
 - f. FROM PROVIDING A TRAFFIC STUDY
 - g. FROM PROVIDING A FEASIBILITY AND LAND USE MARKET STUDY

- 2) DESIGN WAIVERS ARE REQUESTED FROM THE FOLLOWING:
 - a. §196-61(b)(1) - TO ALLOW FIFTEEN (15) INCH HDPE PIPING IN LIEU OF THE REQUIRED EIGHTEEN (18) RCP PIPING.
 - b. §201-112(p) - FROM PROVIDING LANDSCAPE BERMS ALONG ROW FOR HARRISON BOULEVARD.
 - c. §201-106(c)(8)a. - FROM PROVIDING EVERGREEN SCREEN IN REAR BUFFER YARD.
 - d. §201-111(h) - FROM PROVIDING A 5' SETBACK BETWEEN SIDEWALK & CURB AT AREAS OF ANGLE PARKING AND FROM PROVIDING CURB BUMPERS.



THE PETTIT GROUP, LLC

Engineering • Architecture • Planning

July 15, 2015

Mr. Harry Kramer, Secretary
Bensalem Township Planning Commission
2400 Byberry Road
Bensalem, PA 19020

**Re: AVA Development
Major Site Plan: Proposed Hotel
Horizon Blvd. & Old Lincoln Highway
TMP 2-1-18-17; Lot 7
Bensalem Township, Bucks County, Pennsylvania
PGLLC #1392-2**

Dear Mr. Kramer:

On behalf of AVA Development, our office respectfully submits the enclosed preliminary and final major site plan application to the Township of Bensalem Planning Commission for the construction of a new four (4) story - 128 room Hotel at the above referenced property. In support of the application, the following documentation has been enclosed for the Planning Commission's review and approval:

1. Thirty Seven (37) copies of the completed and signed Township of Bensalem Planning Commission Subdivision and Land Development application;
2. Thirty Seven (37) copies of the completed and signed Bucks County Planning Commission Subdivision and Land Development application;
3. Thirty Seven (37) copies of the Preliminary and Final Major Site Plans prepared by The Pettit Group, LLC, dated July 15, 2015, consisting of eleven (11) sheets.
4. Thirty Seven (37) copies of the Boundary and Topographic Survey prepared by Control Point Associates, LLC dated July 13, 2015, consisting of two (2) sheets.
5. The following checks for the following fees:
 - a. Check #2182 in the amount of \$1,370.00 to cover the Preliminary Land Development Application Fee;
 - b. Check #2180 in the amount of \$150.00 to cover the Final Land Development Application Fee;
 - c. Check #2181 in the amount of \$14,500.00 to cover the Preliminary Land Development Escrow Fees;
 - d. Check #2179 in the amount of \$7,250.00 to cover the Final Land Development Escrow Fees
 - e. Check #2178 in the amount of \$4,500.00 to cover the Non-Residential Land Development Application Fee

AVA Development
Major Site Plan: Proposed Hotel
Horizon Blvd. & Old Lincoln Highway
TMP 2-1-18-17; Lot 7
Bensalem Township, Bucks County, Pennsylvania
PGLLC #1392-2
Page 2 of 2

6. Five (5) copies of the Title Report for Lot #7, as prepared by First American Title Insurance Company, dated April 21, 2014.

Should you have any comments or questions regarding the enclosed, or should you require additional information, please feel free to contact our office at (856) 464-9600.

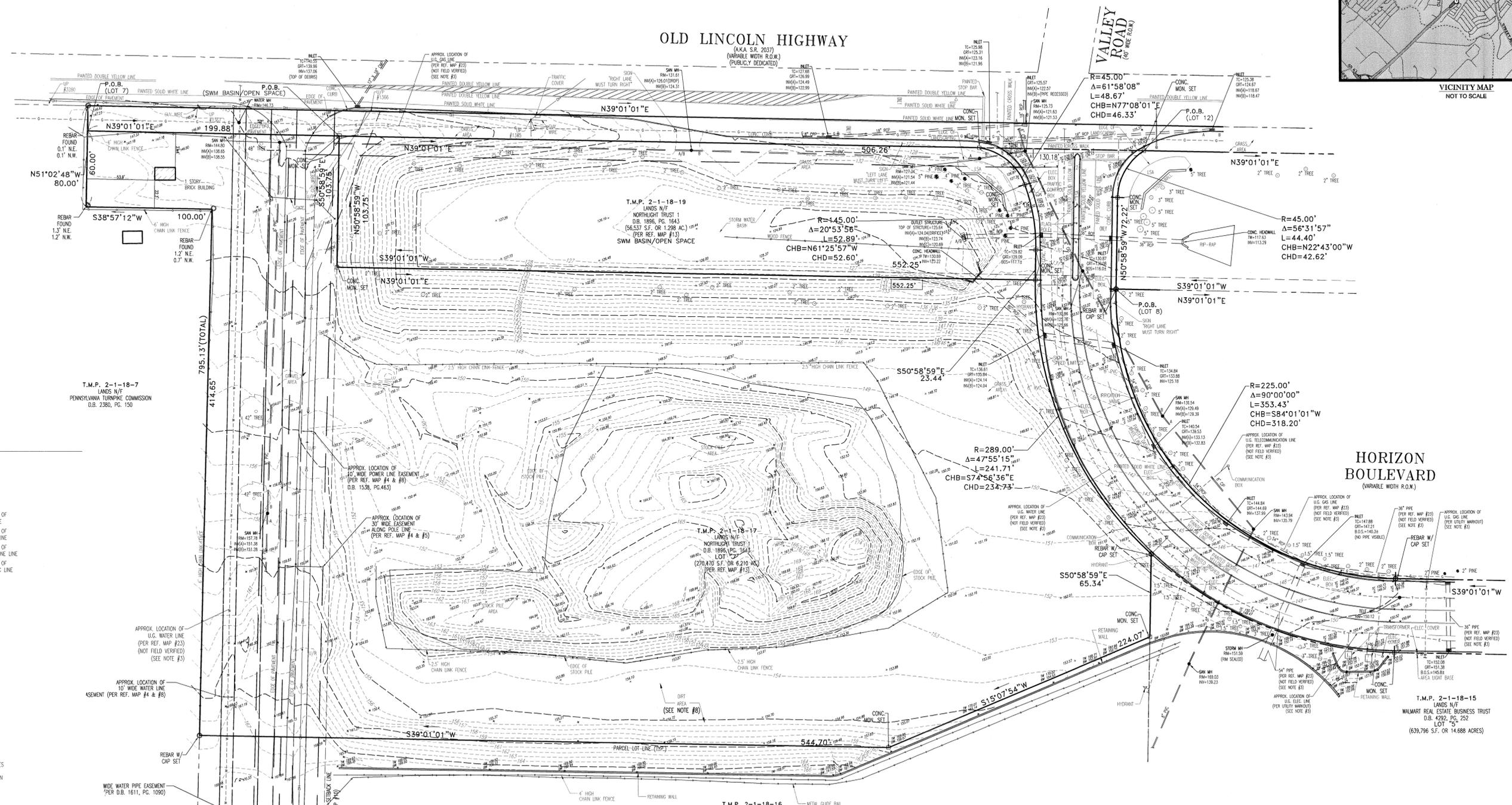
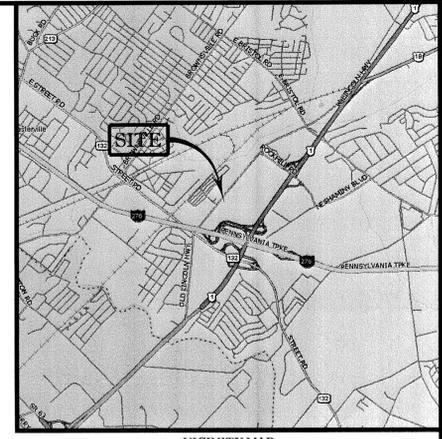
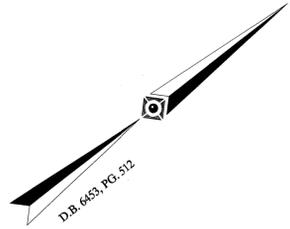
Sincerely,
THE PETTIT GROUP, LLC

David Kreck, PE
Associate

Enclosures

Copy:
Ajesh Patel





LEGEND

- CHAIN LINK FENCE
- WOODEN FENCE
- GUIDE RAIL
- OVERHEAD WIRES
- APPROXIMATE LOCATION OF UNDERGROUND GAS LINE
- APPROXIMATE LOCATION OF UNDERGROUND WATER LINE
- APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE LINE
- APPROXIMATE LOCATION OF UNDERGROUND ELECTRIC LINE
- SANITARY SEWER PIPING
- STORM SEWER PIPING
- TREELINE
- HYDRANT
- WATER VALVE
- GAS VALVE
- UTILITY POLE
- CLEANOUT
- AREA LIGHT
- TRAFFIC SIGNAL
- LIGHT POLE
- MONITORING WELL
- WELL LOCATION
- SIGN
- WETLANDS FLAGGING
- DENOTES NUMBER OF PAINTED PARKING SPACES
- TITLE REPORT EXCEPTION
- CONTOUR
- SPOT ELEVATION
- TOP OF CLUB ELEVATION
- GUTTER ELEVATION
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
- TOP OF ISLAND ELEVATION
- BOTTOM OF ISLAND ELEVATION
- BENCHMARK
- MANHOLE
- INLET
- PROPERTY CORNER (EVIDENCE)
- CONCRETE MONUMENT
- LANDSCAPED AREA
- BUILDING SQUARE FOOTAGE AREA

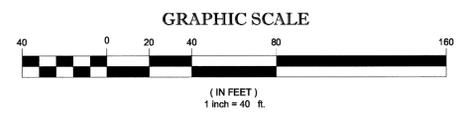
OLD LINCOLN HIGHWAY
(A.K.A. S.R. 2037)
(VARIABLE WIDTH R.O.W.)
(PUBLICLY DEDICATED)

VALLEY ROAD
(40' WIDE R.O.W.)

HORIZON BOULEVARD
(VARIABLE WIDTH R.O.W.)

T.M.P. 2-1-18-16
LOWES HOME CENTERS, INC.
D.B. 4195, PG. 2213
LOT "6"
(614,352 S.F. OR 14,103 AC.)
(PER REF. MAP #13)

T.M.P. 2-1-18-15
WALMART REAL ESTATE BUSINESS TRUST
D.B. 4292, PG. 252
LOT "5"
(639,796 S.F. OR 14,688 ACRES)



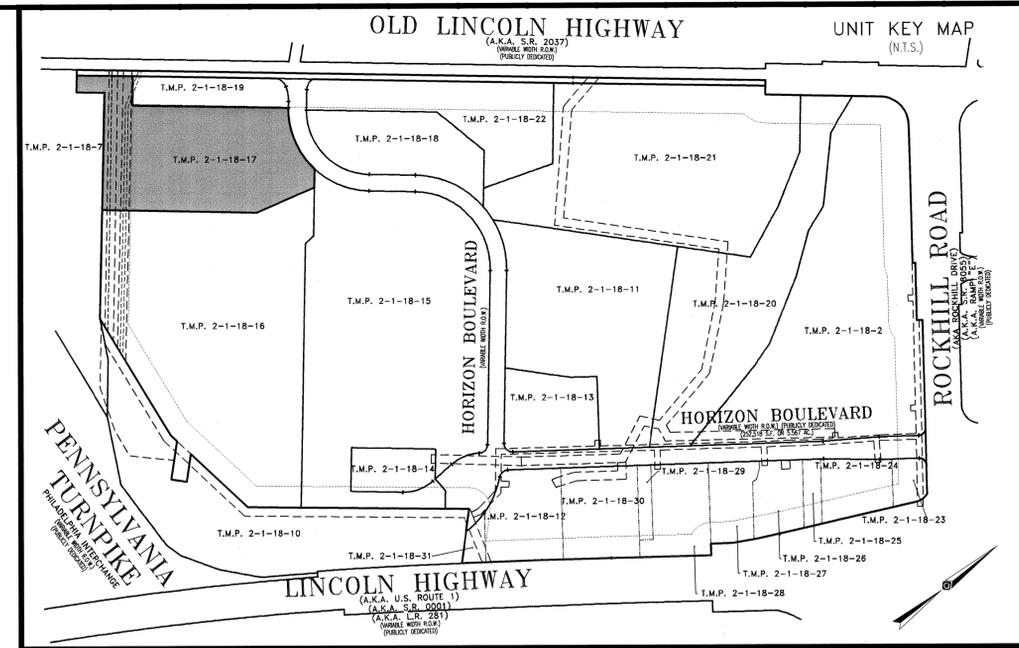
I HEREBY CERTIFY THAT THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THAT THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS. THAT THE PROPERTY LINES AND RELATIONSHIP OF BUILDINGS AND OTHER STRUCTURES TO THE PROPERTY LINES AND THE LAND INDICATED HEREON IS CORRECT, AND THAT THERE ARE NO ENCROACHMENTS OF BUILDINGS OR STRUCTURES ONTO SAID LAND EXCEPT AS SHOWN.

J.
PENNSYLVANIA PROFESSIONAL LAND SURVEYOR REG. NO. 300007

7-13-15
DATE

FIELD DATE	5-11-2015	BOUNDARY & TOPOGRAPHIC SURVEY	
FIELD BOOK NO.	CP15-02	THE PETTIT GROUP, LLC	
FIELD BOOK PG.	92	HORIZON BOULEVARD & OLD LINCOLN HIGHWAY	
		T.M.P. 2-1-18-17, LOT 7	
		BENSALEM TOWNSHIP, BUCKS COUNTY	
		COMMONWEALTH OF PENNSYLVANIA	
FIELD CREW	C.S.	CONTROL POINT ASSOCIATES, INC.	
DRAWN	M.C.B.	NEW BRITAIN CORPORATE CENTER 1800 MANOR DRIVE, SUITE 210 CHALFONTS, PA 18914 215.712.9800 • 215.712.9800 FAX	
REVIEWED	S.C.H.	DATE	7-13-15
APPROVED	M.F.D./J.F.H.	SCALE	1"=40'
FILE NO.	CP00146.40	FILE NO.	1 OF 2

CONTROL POINT ASSOCIATES, INC. - ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF CONTROL POINT ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF CONTROL POINT ASSOCIATES, INC.



METES AND BOUNDS DESCRIPTION
 TAX MAP PARCEL 2-1-18-17, LOT 7
 LANDS NOW OR FORMERLY
 HAMPTON BUCKS COUNTY ASSOCIATES, LP
 BENSALEM TOWNSHIP, BUCKS COUNTY
 COMMONWEALTH OF PENNSYLVANIA

BEGINNING AT A POINT ON THE SOUTHEASTERLY PROPOSED ULTIMATE RIGHT-OF-WAY LINE OF OLD LINCOLN HIGHWAY (A.K.A. S.R. 2037, VARIABLE WIDTH RIGHT-OF-WAY), AT ITS INTERSECTION WITH THE DIVIDING LINE BETWEEN TAX MAP PARCEL 2-1-18-17, LANDS NOW OR FORMERLY HAMPTON BUCKS COUNTY ASSOCIATES, LP AND TAX MAP PARCEL 2-1-18-7, LANDS NOW OR FORMERLY PENNSYLVANIA TURNPIKE COMMISSION, AND FROM SAID POINT OF BEGINNING RUNNING, THENCE;

1. ALONG THE SOUTHEASTERLY PROPOSED ULTIMATE RIGHT-OF-WAY LINE OF OLD LINCOLN HIGHWAY, NORTH 39 DEGREES 01 MINUTE 01 SECOND EAST, A DISTANCE OF 199.88 FEET TO A CONCRETE MONUMENT, THENCE;
2. SOUTH 50 DEGREES 58 MINUTES 59 SECONDS EAST, A DISTANCE OF 103.75 FEET TO A CONCRETE MONUMENT, THENCE;
3. NORTH 39 DEGREES 01 MINUTE 01 SECOND EAST, A DISTANCE OF 552.25 FEET TO A CONCRETE MONUMENT ON THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF HORIZON BOULEVARD, THENCE;
4. ALONG THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF HORIZON BOULEVARD, ALONG THE ARC OF A CIRCLE CURVING TO THE LEFT, HAVING A RADIUS OF 289.00 FEET, A CENTRAL ANGLE OF 47 DEGREES 55 MINUTES 15 SECONDS, AN ARC LENGTH OF 241.71 FEET, A CHORD BEARING SOUTH 74 DEGREES 56 MINUTES 36 SECONDS EAST AND A CHORD DISTANCE OF 234.73 FEET TO A REBAR, A POINT OF NON-TANGENCY, THENCE;
5. ALONG THE DIVIDING LINE BETWEEN TAX MAP PARCEL 2-1-18-17 AND TAX MAP PARCEL 2-1-18-15, LANDS NOW OR FORMERLY WALMART REAL ESTATE BUSINESS TRUST, SOUTH 50 DEGREES 58 MINUTES 59 SECONDS EAST, A DISTANCE OF 65.34 FEET TO A CONCRETE MONUMENT, THENCE;
6. SOUTH 15 DEGREES 07 MINUTES 54 SECONDS WEST, A DISTANCE OF 224.07 FEET TO A CONCRETE MONUMENT, THENCE;
7. SOUTH 39 DEGREES 01 MINUTE 01 SECOND WEST, A DISTANCE OF 544.70 FEET TO A CONCRETE MONUMENT, THENCE;
8. NORTH 50 DEGREES 42 MINUTES 48 SECONDS WEST, A DISTANCE OF 414.65 FEET TO A REBAR, THENCE;
9. SOUTH 38 DEGREES 57 MINUTES 12 SECONDS WEST, A DISTANCE OF 100.00 FEET TO A REBAR, THENCE;
10. NORTH 51 DEGREES 02 MINUTES 48 SECONDS WEST, A DISTANCE OF 60.00 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 270,470 SQUARE FEET OR 6.210 ACRES

NOTES:

1. PROPERTY KNOWN AS LOT 7, TAX MAP PARCEL 2-1-18-17 AS IDENTIFIED ON THE TAX MAPS OF BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. AREA OF LOT 7 = 270,467 S.F. OR 6.209 ACRES
3. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE ASBUILT PLANS AND UTILITY MARK-OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
5. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
6. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
7. ELEVATIONS ARE BASED UPON NAVD 88 (GEOID DERIVED) PER GPS OBSERVATIONS ON KEYNET VRS NETWORK.
8. PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN) PER REF. MAP #2.

REFERENCES:

1. SHEET #2-1 OF THE OFFICIAL TAX MAPS OF BUCKS COUNTY, BENSALEM TOWNSHIP, COMMONWEALTH OF PENNSYLVANIA.
2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BUCKS COUNTY, PENNSYLVANIA, PANEL 439 OF 537 PREPARED BY FEDERAL EMERGENCY MANAGEMENT AGENCY, COMMUNITY-PANEL 4201720439F, EFFECTIVE DATE MAY 18, 1999.
3. MAP ENTITLED "PENNSYLVANIA DEPARTMENT OF TRANSPORTATION MAPS OF DISTRICT 6-0, COUNTY BUCKS, TOWNSHIP, BENSALEM, & MIDDLETOWN, LANGHORNE MANOR BOROUGH & LANGHORNE, ROUTE 261 PAR. SECT. 12-A SHEETS 2, 3, 9, 10, 11A, 12A, 12B & 40A OF 68.
4. MAP ENTITLED "PLAN OF SURVEY HORIZON OF NESHAMIN" PREPARED BY J.G. PARK ASSOCIATES, INC., DRAWING DATED APRIL 23, 1998.
5. MAP ENTITLED "MINOR SUBDIVISION OF THE LAND OF COMMONWEALTH OF PENNSYLVANIA KNOWN AS EASTERN STATE SCHOOL & HOSPITAL; BENSALEM TOWNSHIP, BUCKS COUNTY PENNSYLVANIA" PREPARED BY VITELLO GROUP, INC. ENGINEERS, SURVEYORS, PLANNERS, & MANAGERS, RECORDED IN THE REGISTRY OF DEEDS IN BUCKS COUNTY DATED JUNE 19, 1997, IN PLAN BOOK 288, PAGE 16 A-1.
6. MAP ENTITLED "SUBDIVISION PLAN, HAMPTON BUCKS COUNTY ASSOC., L.P., PROPOSED DEVELOPMENT LINCOLN HIGHWAY (ROUTE 1) 7 ROCKHILL DRIVE, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY BOHLER ENGINEERING, INC., DATED 5-10-02, LAST REVISED 6-11-02, PROJECT NO. P00-015, SHEET NO.1 OF 1.
7. MAP ENTITLED "WORKSHEET, PHILA I/C BOUNDARY SURVEY AND TOPO, BENSALEM TWP., BUCKS COUNTY, PREPARED BY PA TURNPIKE COMMISSION - SURVEYS AND R/W, DATED: 5/17/96, LAST REVISED: 1/29/98.
8. MAP ENTITLED "PHILADELPHIA INTERCHANGE, HOSPITAL LINE STAKEOUT PLAN, PROPOSED SPECIAL 8 FOOT FENCE, CONTRACT 6913-14-650, SECT. NO. 344, BENSALEM TOWNSHIP, BUCKS COUNTY," PREPARED BY PA TURNPIKE COMMISSION, DATED: JULY 20, 1982, SHEET 1 OF 2.
9. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, HAMPTON BUCKS COUNTY ASSOC., L.P., LINCOLN HIGHWAY & ROCKHILL ROAD, TAX MAP PARCELS 2-1-18-2, 2-1-18-12, 2-1-18-14, 2-1-18-15, 2-1-18-16, 2-1-18-17, 2-1-18-18, 2-1-18-19 & HORIZON BOULEVARD, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-4-2002, LAST REVISED 10-22-04, FILE NO. CP00146E13, SHEET NO. 1 OF 1.
10. MAP ENTITLED "OVERALL SITE/SUBDIVISION PLAN, HAMPTON BUCKS COUNTY ASSOC., L.P., ONEILL PROPERTIES, INC., LINCOLN HIGHWAY (ROUTE 1) & ROCKHILL ROAD, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY BOHLER ENGINEERING, INC., DATED 11/24/04, LAST REVISED 1/08/05, PROJECT NO. P03-0836, CAD I.D. NO. P03-0836LANDDEV-17, SHEET NO. 1 OF 1.
11. MAP ENTITLED "SUBDIVISION PLAN, HAMPTON BUCKS COUNTY ASSOC., L.P., ONEILL PROPERTIES, INC., LINCOLN HIGHWAY (ROUTE 1) & ROCKHILL ROAD, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY BOHLER ENGINEERING, INC., DATED 6/24/03, LAST REVISED 3/19/04, PROJECT NO. P03-0836, CAD I.D. NO. P03-0836LANDDEV-17, SHEET NO. 2 OF 29, RECORDED AS PLAN BOOK 318, PG. 62.
12. MAP ENTITLED "OVERALL SITE/SUBDIVISION PLAN, HAMPTON BUCKS COUNTY ASSOC., L.P., ONEILL PROPERTIES, INC., LINCOLN HIGHWAY (ROUTE 1) & ROCKHILL ROAD, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY BOHLER ENGINEERING, INC., DATED 6/24/03, LAST REVISED 3/19/04, PROJECT NO. P03-0836, CAD I.D. NO. P03-0836LANDDEV-17, SHEET NO. 2 OF 29, RECORDED AS PLAN BOOK 318, PG. 62.
13. MAP ENTITLED "PRELIMINARY/FINAL LAND DEVELOPMENT PLANS, PROPOSED RED ROBIN RESTAURANT, HORIZON CORPORATE CENTER, LINCOLN HIGHWAY (ROUTE 1) & ROCKHILL ROAD, BENSALEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA, UTILITY PLAN," PREPARED BY BOHLER ENGINEERING, INC., PROJECT NO. P03-0912, CAD I.D. NO. P03-0912LANDDEV-5, SHEET NO. 5 OF 12, DATED 5/30/03, LAST REVISED 12/31/03.
14. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, HAMPTON BUCKS COUNTY ASSOCIATES, L.P., LINCOLN HIGHWAY 9 1/4 ROUTE 1, AND ROCKHILL ROAD, TAX MAP PARCEL 2-1-18-12, LOT 3, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA, 19020," PREPARED BY CONTROL POINT ASSOCIATES, INC., FILE NO. CP00146.08, DRAWING NO'S 1 & 2 OF 2, DATED 12/15/2004, LAST REVISED 1/14/2005.
15. MAP ENTITLED "PRELIMINARY AND FINAL SITE PLAN, SITE PLAN, PROPOSED LEASE AREA SITUATE ON A PORTION OF PARCEL 2-1-18-012, LOT 80.524, TOWNSHIP OF BETHLEHEM, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY KENDERIAN - ZILINSKI, DATED 3/26/04, LAST REVISED 7/9/04, FILE NO. 010601, SHEET C2.
16. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, RED ROBIN INTERNATIONAL, INC. LOT 21; HORIZON BOULEVARD, PART OF TAX MAP PARCEL 2-1-18-12 BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 1-21-2005, FILE NO. CP00146.09, DWG. NO. 1 & 2 OF 2.
17. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, CFA PROPERTIES, INC., LOT 16; HORIZON BOULEVARD, PART OF TAX MAP PARCEL 2-1-18-12, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 4-12-2005, FILE NO. CP00146.12, DWG. NO. 1 OF 1.
18. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, HORIZON HOTEL ASSOCIATES, L.P., HORIZON BOULEVARD, LOT 2, PART OF T.M.P. 2-1-18-13, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY CONTROL POINT ASSOCIATES, INC., FILE NO. CP00146.04, DATED 10-20-2003, LAST REVISED 10-22-04.
19. MAP ENTITLED "SITE PLAN, HORIZON HOTEL ASSOCIATES, L.P., PROPOSED DEVELOPMENT HORIZON BOULEVARD, BENSALEM TOWNSHIP, BUCKS COUNTY, COMMONWEALTH OF PENNSYLVANIA" PREPARED BY BOHLER ENGINEERING, INC., DATED 2/20/04, LAST REVISED 1/11/05, PROJECT NO. P01-1098, CAD I.D. #01-1098-SS-9, SHEET NO.1-10 OF 10.
20. MAP ENTITLED "COND0 PLAN FOR INTREPID HORIZON LOT 2 OWNER, LP, HORIZON BOULEVARD, LOT 2; PART OF T.M.P. 2-1-18-13, BENSALEM TOWNSHIP, BUCKS COUNTY, PA," PREPARED BY BOHLER ENGINEERING, PROJECT NO. PVT20760, RECORDED AS JUST # 2013077005, ON 9/13/2013.
21. MAP ENTITLED "LAYOUT PLAN(RECORD PLAN), PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR HORIZON CORPORATE CENTER LOT 2 (PHASE2), BENSALEM TOWNSHIP, BUCKS COUNTY," PREPARED BY TMC CONSULTING ENGINEERS, DATED APRIL 17, 2009, LAST REVISED MAY 24TH, 2010, RECORDED AS PB.378, PG. 40.
21. MAP ENTITLED "OVERALL SITE PLAN, 99 RESTAURANT & PUB, LINCOLN HIGHWAY (ROUTE 1) & ROCKHILL ROAD, BENSALEM TOWNSHIP, BUCKS COUNTY," PREPARED BY NOMEANE AND ASSOCIATES, INC., DATED MARCH 21, 2005, LAST REVISED 09-14-05, SHEET 2 OF 10.

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY THE PENNSYLVANIA ONE-CALL SYSTEM (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST. SERIAL NUMBER: 20151262894

UTILITY COMPANY	PHONE NUMBER
VERIZON	215-968-0025
PECO	215-345-9300
COMCAST CABLEVISION	215-961-3800
AQUA PENNSYLVANIA, INC.	610-525-1400
BUCKS COUNTY WATER & SEWER	215-750-0285
BENSALEM TOWNSHIP	215-633-3630

ZONING DATA:

ZONE: PCD - PLANNED COMMERCIAL DISTRICT

LOT AREA:	REQUIRED
(HORIZON CORP. CENTER - LOT 2)	100 ACRES
MIN. LOT WIDTH:	100'
MIN. YARD SETBACKS:	
FRONT:	100'
SIDE:	75'
REAR:	100'
MAX. BLDG. HEIGHT:	15 STOREYS
MAX. BLDG. COVERAGE:	35%
MAX. IMPERVIOUS COVERAGE:	75%

PARKING REQUIREMENT (FOR LOT#2):
 5 SPACES REQUIRED PER 1,000 S.F. OF BUILDING AREA

ZONING INFORMATION IS PER REF. MAP NO. 20 AND SHOULD BE VERIFIED PRIOR TO USE TO CONFIRM IT REPRESENTS CURRENT INFORMATION.

I HEREBY CERTIFY THAT THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THAT THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS. THAT THE PROPERTY LINES AND RELATIONSHIP OF BUILDINGS AND OTHER STRUCTURES TO THE PROPERTY LINES AND LAND INDICATED HEREON IS CORRECT, AND THAT THERE ARE NO ENCROACHMENTS OF BUILDINGS OR STRUCTURES (ONTO SAID LAND) EXCEPT AS SHOWN.

TH _____
 (UNLESS SEALED IN RED INK)

7-13-15
 DATE

PENNSYLVANIA PROFESSIONAL LAND SURVEYOR NO. 50026807

FIELD DATE	5-11-2015
FIELD BOOK NO.	CP15-02
FIELD BOOK PG.	92
FIELD CREW	C.S.
DRAWN	M.C.B.
REVIEWED	S.C.H.
APPROVED:	M.F.D./J.F.H.
DATE	7-13-15
SCALE	1"=40'
FILE NO.	CP00146.40
DWG. NO.	2 OF 2

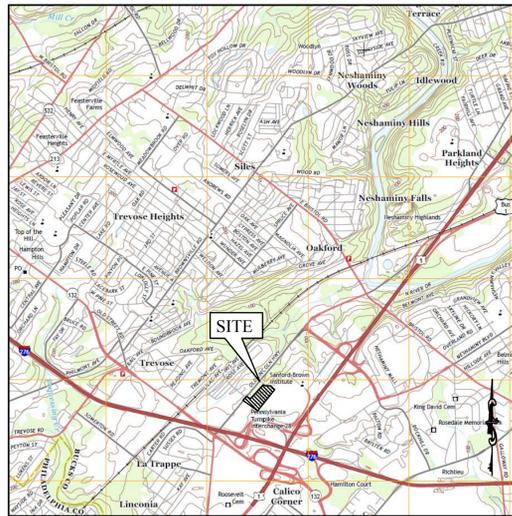
BOUNDARY & TOPOGRAPHIC SURVEY
THE PETTIT GROUP, LLC
 HORIZON BOULEVARD & OLD LINCOLN HIGHWAY
 T.M.P. 2-1-18-17, LOT 7
 BENSALEM TOWNSHIP, BUCKS COUNTY
 COMMONWEALTH OF PENNSYLVANIA

CONTROL POINT ASSOCIATES, INC.
 NEW BRITAIN CORPORATE CENTER
 1400 MANOR DRIVE, SUITE 200
 CHALFONTS, PA 19014
 215.750.0285 FAX
 MANHATTAN, NY 646.780.0411
 MT. LAUREL, NJ 609.857.2099
 WARREN, NJ 908.668.0099
 SOUTH BRIDGES, MA 508.948.3000

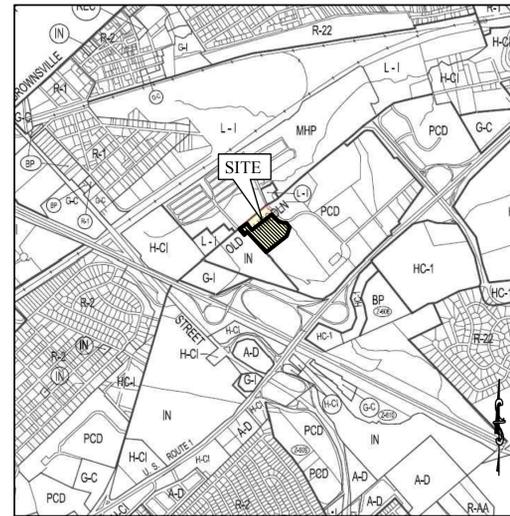
PROPOSED HOTEL

PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

T.M.P. 2-1-18-17, LOT 17
 BENSLEM TOWNSHIP
 BUCKS COUNTY, PENNSYLVANIA



U.S.G.S. QUAD MAP
 SCALE: 1" = 1,000'



ZONING MAP
 NOT TO SCALE

PREPARED FOR:
AVA GROUP
 3737 ROUTE 46 EAST
 PARSIPPANY, NJ 07054

PREPARED BY:



THE PETTIT GROUP, LLC
 Engineering • Architecture • Planning

497 Center Street • Sewell, NJ 08080
 Tel: 856-464-9600 Fax: 856-464-9606
 www.pettitgroup.com

INDEX OF DRAWINGS

1 OF 11	COVER SHEET & INDEX OF DRAWINGS
2 OF 11	DEMOLITION PLAN
3 OF 11	SITE PLAN
4 OF 11	GRADING PLAN
5 OF 11	UTILITY PLAN
6 OF 11	LIGHTING & LANDSCAPING PLAN
7 OF 11	SOIL EROSION & SEDIMENT CONTROL PLAN
8 OF 11	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS
9 OF 11	CONSTRUCTION DETAILS
10 OF 11	CONSTRUCTION DETAILS
11 OF 11	CONSTRUCTION DETAILS

APPROVED BY THE TOWNSHIP COUNCIL ON THIS ___ DAY OF ___ 20__

APPLICATION# _____

CHAIRMAN _____

SECRETARY _____

ENGINEER _____

APPROVED BY THE COUNTY OF BUCKS ON THIS ___ DAY OF ___ 20__

COUNTY PLANNING BOARD _____

COUNTY SECRETARY _____

COUNTY PLANNING DIRECTOR _____

I HEREBY CERTIFY THAT I AM THE OWNER OF RECORD OF THE SITE
 HEREIN DEPICTED AND THAT I CONCUR WITH THE PLAN

OWNER _____

THE PETTIT GROUP, LLC
 Engineering • Architecture • Planning
 497 Center Street • Sewell, NJ 08080
 Tel: 856-464-9600 Fax: 856-464-9606
 www.pettitgroup.com
 Certificate of Authorization No. 24GA28131400

REVISIONS		
NO.	DESCRIPTION	DATE

**FOR APPROVAL
 PURPOSES ONLY**

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (800-275-1060) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: AS NOTED

PROJECT:
**PRELIMINARY/FINAL
 MAJOR LAND
 DEVELOPMENT PLAN**
 HORIZON BOULEVARD &
 OLD LINCOLN HIGHWAY
 T.M.P. 2-1-18-17, LOT 17,
 BENSLEM TOWNSHIP,
 BUCKS COUNTY,
 PENNSYLVANIA
 FOR
 AVA GROUP
 3737 ROUTE 46 EAST
 PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
 Professional Engineer
 State of New Jersey • License # GE 37906
 State of Pennsylvania • License # 052685-E
 State of Delaware • License # 15980
 State of Maryland • License # 44560

**COVER SHEET &
 INDEX OF SHEETS**

SHEET NUMBER:
1 of 11

OLD LINCOLN HIGHWAY
(A.K.A. S.R. 2037)
(VARIABLE WIDTH R.O.W.)
(PUBLICLY DEDICATED)

VALLEY ROAD

GENERAL NOTES

- OWNER:
NORTH LIGHT TRUST
60 EAST 42ND STREET SUITE 2800
NEW YORK, NY 10165
- APPLICANT:
AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054
- EXISTING CONDITIONS TAKEN FROM A PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY", BY CONTROL POINT ASSOCIATES, INC., DATED 07/13/15.
- APPLICANT SEEKS SITE PLAN APPROVAL SO AS TO PERMIT CONSTRUCTION OF A 25,753 SF HOTEL (4 STORY, 128 ROOMS) AND ASSOCIATED SITE IMPROVEMENTS.
- PROPOSED BUILDINGS TO BE SERVICED WITH NEW SEWER AND WATER LINES.
- NEW UTILITY LINES (GAS, ELECTRIC) ARE PROPOSED TO SERVICE THE BUILDINGS. ALL ELECTRIC, TELEPHONE, AND CABLE SERVICE LINES SHALL BE UNDERGROUND.
- ELEVATION DATUM IS NAVD 1988.
- NO FRESHWATER WETLANDS EXIST ON THIS SITE.
- THE PROPERTY DOES NOT FALL WITHIN A FLOOD PLANE ZONE ACCORDING TO THE MOST RECENT FEMA FIRM MAP 42017C048J.
- REQUIRED OUTSIDE AGENCY APPROVALS:
 - BUCKS COUNTY PLANNING COMMISSION
 - BUCKS COUNTY CONSERVATION DISTRICT
 - PENNSYLVANIA DEP WATER & SEWER PLANNING MODULES
 - PENNDOT (PENDING TRAFFIC STUDY)

THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24GA28131400

REVISIONS

NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (800-275-1060) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: 1" = 40'

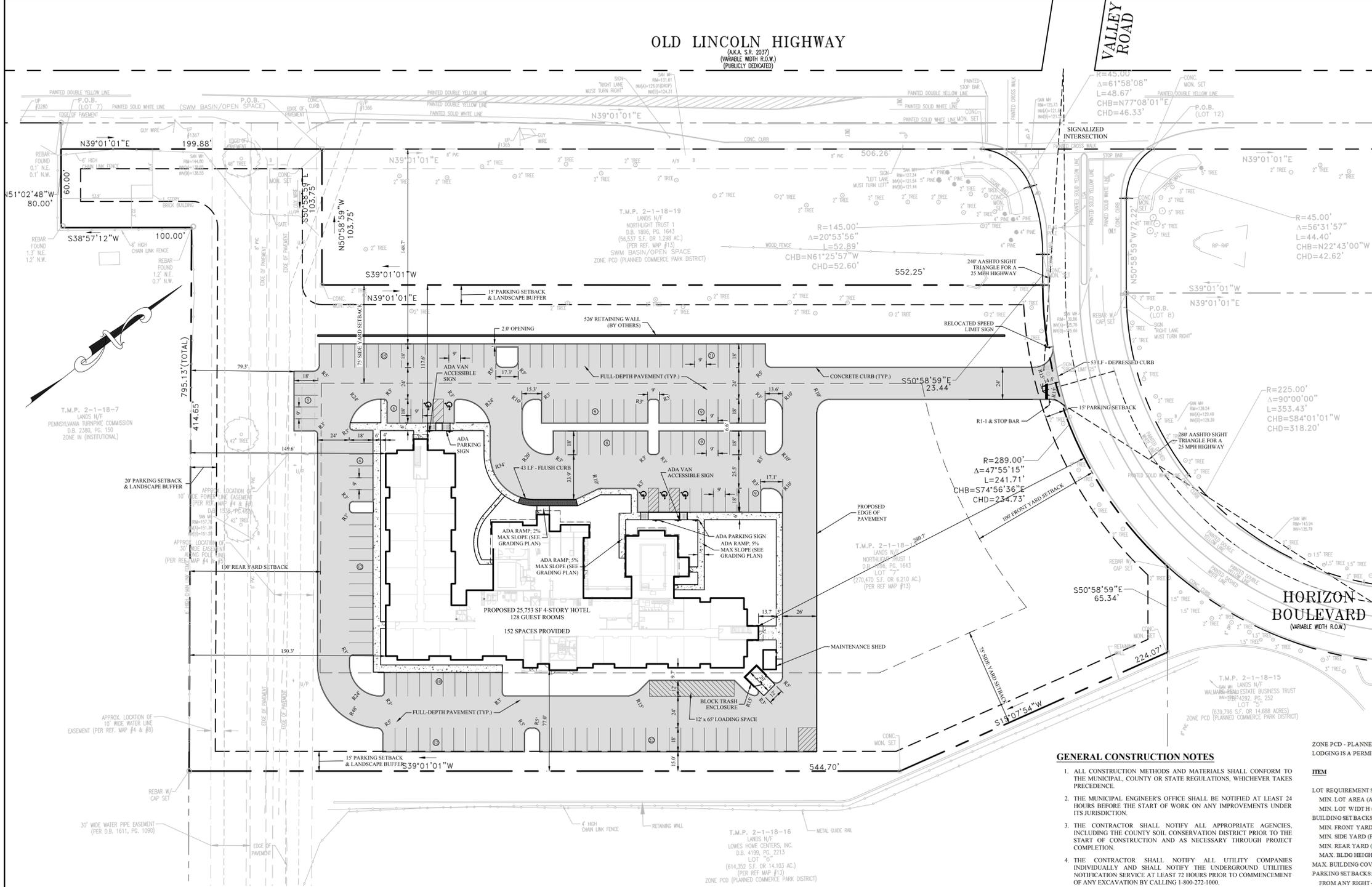
PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

**HORIZON BOULEVARD & OLD LINCOLN HIGHWAY
T.M.P. 2-1-18-17, LOT 7
BENSALEM TOWNSHIP,
BUCKS COUNTY,
PENNSYLVANIA**

FOR
AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
Professional Engineer
State of New Jersey • License # GE 37906
State of Pennsylvania • License # 052685-E
State of Delaware • License # 15980
State of Maryland • License # 44560

SITE PLAN



WAIVERS & VARIANCES

- 1) SUBMISSION WAIVERS ARE REQUESTED FROM THE FOLLOWING:
- §201-41(d)(3) - PROVIDING ELEVATIONS OF MONUMENTS
 - §201-41(d)(8) - PROVIDING A SOIL MAP WITH THE LOCATION OF ALL TREES LARGER THAN 8" CALIPER.
 - §201-41(d)(9) - PROVIDING ALL UTILITY INFORMATION WITHIN 400 FEET OF PROJECT BOUNDARY.
 - §201-41(d)(10) - ELEVATIONS BASED UPON THE BENSALEM TOWNSHIP MUNICIPAL AUTHORITY SANITARY SEWER SYSTEM.
 - §201-41(n)(6) - FROM PROVIDING SANITARY AND STORM PROFILES
 - FROM PROVIDING A TRAFFIC STUDY
 - FROM PROVIDING A FEASIBILITY AND LAND USE MARKET STUDY
 - FROM PROVIDING PARKING BUMPERS
 - §201-112(p) - FROM PROVIDING LANDSCAPE BERMS ALONG ROW FOR HARRISON BOULEVARD.
 - §201-106(c)(8)a - FROM PROVIDING EVERGREEN SCREEN IN REAR BUFFER YARD
 - §201-111(b) - FROM PROVIDING A 5' SETBACK BETWEEN SIDEWALK & CURB AT AREAS OF ANGLE PARKING AND FROM PROVIDING CURB BUMPERS.
- 2) DESIGN WAIVERS ARE REQUESTED FROM THE FOLLOWING:
- §196-61(b)(1) - TO ALLOW FIFTEEN (15) INCH HDPE PIPING IN LIEU OF THE REQUIRED EIGHTEEN (18) RCP PIPING.
- 3) VARIANCES ARE REQUESTED FROM THE FOLLOWING:
- §232-464(d) - LOT WIDTH
400' IS REQUIRED; 346' IS THE EXISTING LOT WIDTH

BENSALEM ZONING SCHEDULE

ZONE PCD - PLANNED COMMERCE PARK
LODGING IS A PERMITTED USE

ITEM	REQUIRED	PROPOSED	ORDINANCE
LOT REQUIREMENTS:			
MIN. LOT AREA (AC)	1	6,210 (270,467 SF)	§232-464(b)
MIN. LOT WIDTH (FT)	400	346'	§232-464(d)
BUILDING SETBACKS & HEIGHT:			
MIN. FRONT YARD (FT)	100	280.7	§232-464(e)(1)
MIN. SIDE YARD (FT)	75	77.0	§232-464(e)(2)
MIN. REAR YARD (FT)	100	149.6	§232-464(e)(3)
MAX. BLDG HEIGHT (STORIES)	5	4	§232-466
MAX. BUILDING COVERAGE (%)	35	9.52 (25,753 SF)	§232-463(a)(2)
PARKING SETBACKS:			
FROM ANY RIGHT-OF-WAY (FT)	15	148.7	§232-592(7)
FROM SIDE PROPERTY LINE (FT)	15	15	§232-592(7)
FROM REAR PROPERTY LINE (FT)	20	79.3	§232-464(e)(3)
SIGNAGE:			
FREETANDING SIGNS			
MAX. NUMBER OF SIGNS PER FRONTAGE	1	2 FRONTAGES	§232-716(2)c
MAX. NUMBER OF SIGNS	2	TBD	§232-716(2)c
MAX. SIGN AREA (SF)	40	TBD	§232-716(2)d.2
MAX. HEIGHT (FT)	20	TBD	§232-716(2).1.
MAX. SETBACK FROM RIGHT-OF-WAY (FT)	10	TBD	§232-716(2).2.
MAX. SETBACK LOT LINE (FT)	25	TBD	§232-716(2).2.
FACE SIGNS			
MAX. SIGN AREA CALCULATION (SF)	6% OF FAÇADE	XXX SF FAÇADE	§232-716(5)b
MAX. SIGN AREA (SF)			
PARKING REQUIREMENTS			
PARKING:			
MIN. STANDARD SPACE SIZE (FT)	9 x 18	9 x 18	§232-586(b)(1)
MIN. AISLE WIDTH (90 DEGREE PARKING) (FT)	24	24	§232-586(b)(1)
MIN. NUMBER OF SPACES FOR HOTEL	1 PER GUEST ROOM	128 GUEST ROOMS	§232-586(e)(3)
TOTAL NUMBER OF SPACES	128	152	§232-586(e)(3)
LOADING SPACES:			
STANDARD LOADING SPACE SIZE (FT)	12 x 65	12 x 65	§232-587(1)
MIN. NUMBER OF SPACES	1	1	§232-587

* DENOTES EXISTING NON-CONFORMING CONDITION

GENERAL CONSTRUCTION NOTES

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE MUNICIPAL, COUNTY OR STATE REGULATIONS, WHICHEVER TAKES PRECEDENCE.
- THE MUNICIPAL ENGINEER'S OFFICE SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE THE START OF WORK ON ANY IMPROVEMENTS UNDER ITS JURISDICTION.
- THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, INCLUDING THE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE START OF CONSTRUCTION AND AS NECESSARY THROUGH PROJECT COMPLETION.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INDIVIDUALLY AND SHALL NOTIFY THE UNDERGROUND UTILITIES NOTIFICATION SERVICE AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ANY EXCAVATION BY CALLING 1-800-272-1000.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER IMMEDIATELY.
- ALL CONCRETE USED FOR SITE WORK SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI OR AS REQUIRED BY THE APPROVAL AUTHORITY.
- ALL TRENCHES IN PAVEMENT AREAS TO REMAIN ARE TO BE SAW CUT. ALL EXISTING PAVEMENT TO REMAIN SHALL BE SAW CUT TO MEET ALL NEW OR RECONSTRUCTED PAVEMENT AREAS.
- WHERE NEW PAVEMENT IS PROPOSED ADJACENT TO EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAWCUT ONE (1) FOOT FROM THE EDGE TO PROVIDE A NEAT LINE AGAINST WHICH TO PAVE.
- ALL TRAFFIC CONTROL SIGNAGE AND MARKINGS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- ALL SITE IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PENNDOT STANDARD SPECIFICATIONS.
- SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANIC AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
- THE OWNER, OR HIS REPRESENTATIVE, IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS.



OLD LINCOLN HIGHWAY
(A.K.A. SR. 2037)
(VARIABLE WIDTH R.O.W.)
(PUBLICLY DEDICATED)

VALLEY ROAD

GRADING & UTILITY NOTES:

- EXISTING CONDITIONS TAKEN FROM A PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY", BY CONTROL POINT ASSOCIATES, INC., DATED 05/19/15.
- ALL GRADING SHALL PROMOTE POSITIVE DRAINAGE FROM BUILDINGS AND STRUCTURES TO DRAINAGE FACILITIES WITHOUT LOW SPOTS THAT CAUSE PONDING.
- THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHALL NOT BE LESS THAN 0.75%.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXISTING UTILITIES SHOWN. THE CONTRACTOR SHALL EMPLOY ALL MEANS NECESSARY, INCLUDING TEST PITS, TO LOCATE AND AVOID DAMAGE TO ALL EXISTING UTILITIES WITHIN THE VICINITY OF THE PROPOSED IMPROVEMENTS. SHOULD ANY EXISTING UTILITY BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL REPORT THE CONFLICT TO THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION.
- ALL ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION AND OTHER PUBLIC UTILITY LINES SHALL BE INSTALLED UNDERGROUND. MINIMUM HORIZONTAL CLEARANCE BETWEEN PUBLIC UTILITY LINES AND WATER OR SEWER MAINS SHALL BE THREE (3) FEET.
- THE CONTRACTOR SHALL BACKFILL HIS TRENCH AND PROTECT THE PUBLIC FROM THE WORK AREA AT THE END OF EACH WORKING DAY. NO TRENCHES SHALL REMAIN OPEN OVERNIGHT.
- ALL GRAVITY SANITARY SEWER MAINS AND LATERALS SHALL BE PVC PIPE, SDR-35 CONFORMING TO ASTM D-3034 WITH PUSH-ON JOINTS, UNLESS OTHERWISE SPECIFIED. MINIMUM COVER OVER PVC AND DUCTILE IRON SANITARY SEWER MAINS AND LATERALS SHALL BE THREE (3) FEET. ALL SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS DETAILLED.
- WATER MAINS AND SANITARY SEWER SHALL BE SEPARATED BY 10 FEET HORIZONTALLY WHEREVER POSSIBLE. OTHERWISE, THE SEWER AND WATER SHALL BE IN SEPARATE TRENCHES WITH THE SEWER 18" BELOW THE BOTTOM OF THE WATER MAIN. AT WATER AND SEWER CROSSINGS, THE SEWER SHALL BE C.L.D.I.P. WITH SLIP-ON JOINTS AND DUCTILE IRON SANITARY SEWER MAINS AND LATERALS SHALL BE ENCASED IN CONCRETE FOR 10 FEET MINIMUM ON EACH SIDE OF THE CROSSING. WHERE SANITARY SEWER CROSS OVER OR WITHIN 18" UNDER A STORM PIPE, THE SANITARY SEWER SHALL BE C.L.D.I.P. WITH SLIP-ON JOINTS AND ENCASED IN CONCRETE FOR 10 FEET EACH SIDE OF THE CROSSING.
- REINFORCED CONCRETE PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
- CLEAN OUTS AND CURB BOXES WITHIN THE PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.
- ALL INLET GRATES SHALL BE BICYCLE-SAFE GRATES.
- ALL HANDICAPPED ACCESSIBLE AREAS SHALL BE GRADED WITH A 2% MAXIMUM SLOPE.

THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24GA28131400

REVISIONS		
NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (800-727-0800) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS OWN EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-2
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: 1" = 40'

PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

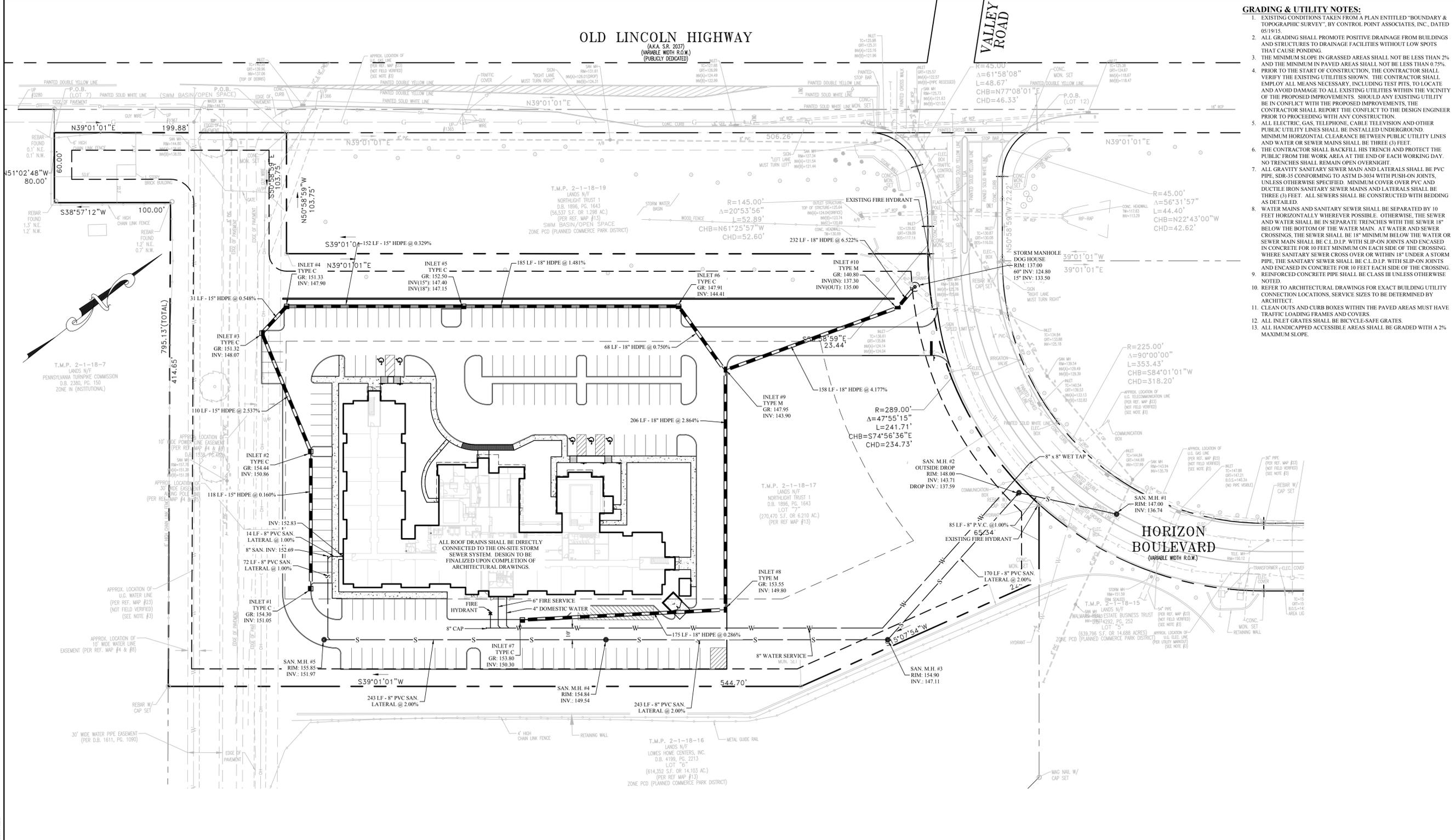
HORIZON BOULEVARD & OLD LINCOLN HIGHWAY
T.M.P. 2-1-18-17, LOT 7
BENSALEM TOWNSHIP,
BUCKS COUNTY,
PENNSYLVANIA

FOR
AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
Professional Engineer
State of New Jersey • License # GE 37906
State of Pennsylvania • License # 052685-E
State of Delaware • License # 15080
State of Maryland • License # 44560

UTILITY PLAN

SHEET NUMBER
5 of 11



THE PETTIT GROUP, LLC
PIPE PROFILE AND HYDRAULIC CALCULATIONS WORKSHEET

SUB-AREA BASIN CHARACTERISTICS & HYDROLOGY CALCULATIONS

07/15/15
10:11 AM

Plan No.	Node	Grate Elev	PIPE Diam	Node Elev	U/S Inv	D/S Inv	OVERIDES INVERTS	MIN COVER	PIPE UPSTREAM	DESIGN FLOW	PIPE SLOPE	MANNINGS	WOOD IMP	FULL CAPACITY	VEL	CAPCTY	CHECK
Inl-1	1	154.30	15	118	2 151.05	150.86				0.60	0.160%	0.011	3.06	2.50	OK		
Inl-2	2	154.44	15	110	3 150.86	148.07				2.28	2.537%	0.011	12.19	9.94	OK		
Inl-3	3	151.32	15	31	4 148.07	147.90		147.90	1	3.29	0.548%	0.011	5.67	4.62	OK		
Inl-4	4	151.33	15	152	5 147.90	147.40		147.40	3	4.07	0.329%	0.011	4.39	3.58	OK		
Inl-5	5	152.50	18	185	6 147.15	144.41			4	7.02	1.481%	0.011	15.15	8.57	OK		
Inl-6	6	147.91	18	68	9 144.41	143.90		143.90	5	9.76	0.750%	0.011	10.78	6.10	OK		
Inl-7	7	153.80	18	175	8 150.30	149.80			6	6.12	0.286%	0.011	6.65	3.77	OK		
Inl-8	8	153.55	18	206	9 149.80	143.90		143.90	7	6.61	2.864%	0.011	21.07	11.92	OK		
Inl-9	9	147.95	18	158	10 143.90	137.30			6 8	19.33	4.177%	0.011	25.44	14.40	OK		
Inl-10	10	140.80	18	23	11 135.00	133.50		135.00	9	28.80	6.522%	0.011	31.79	17.99	OK		
MH-1	11	137.00							10	28.78		0.011					

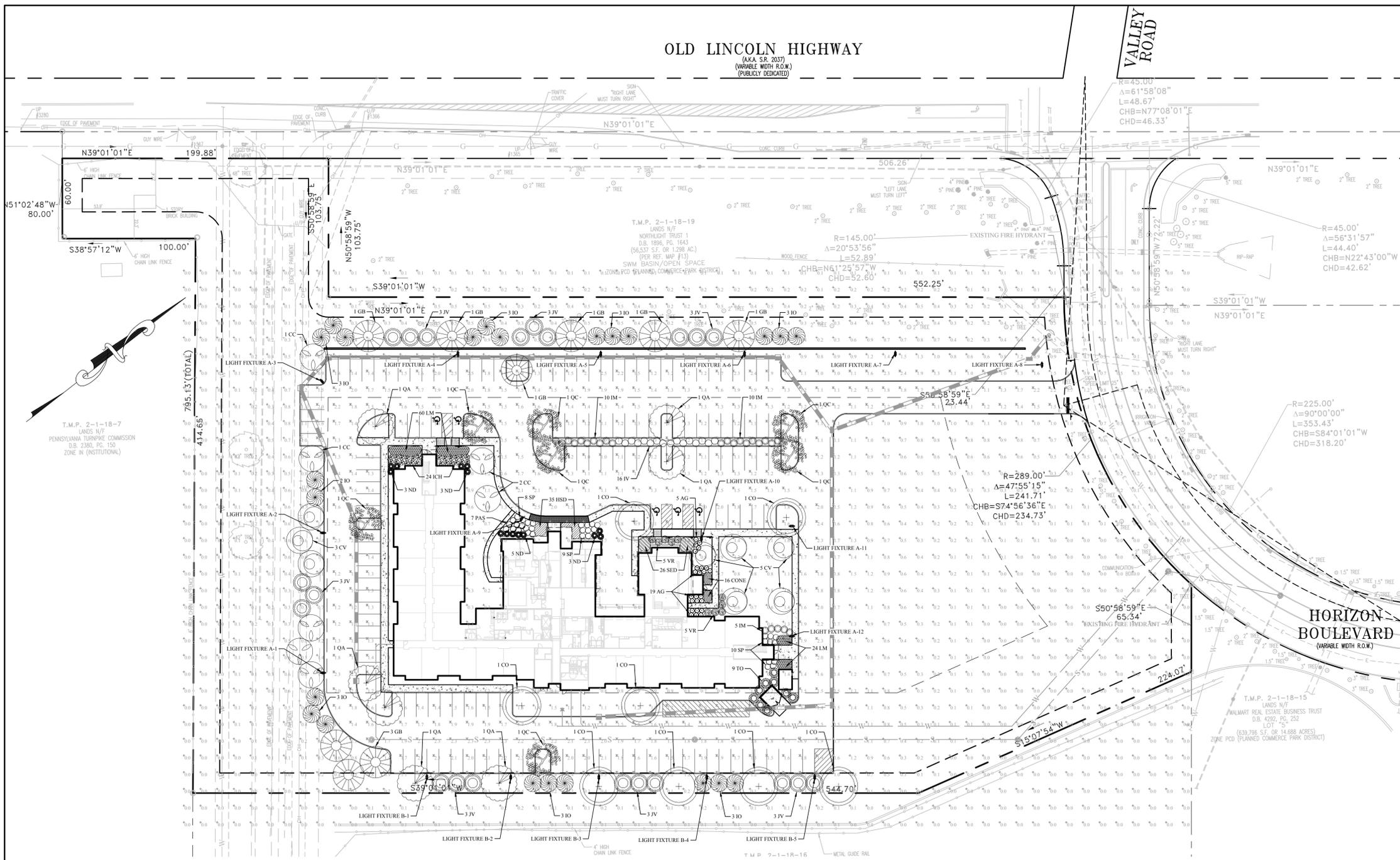
PLAN I.D.	NODE #	AREA (acres)	C FACTOR	Tc (min)	WOOD IMP				UPSTREAM REACH			RAINFALL		DISCHARGE	
					AREA	WOOD	IMPRV	PERV	AGG UP	AGG TRAVEL TIMES	A	B	C	SUBAREA (IN/HR)	ACCUM (IN/HR)
Inl-1	1	0.117	0.56	6	0.000	0.047	0.45	0.95	0.30	0.066	6.0	9.10	9.10	0.60	0.60
Inl-2	2	0.247	0.77	6	0.000	0.179	0.45	0.95	0.30	0.256	6.8	9.10	8.88	1.73	2.28
Inl-3	3	0.152	0.76	6	0.000	0.108	0.45	0.95	0.30	0.372	7.0	9.10	8.83	1.06	3.29
Inl-4	4	0.104	0.87	6	0.000	0.090	0.45	0.95	0.30	0.462	7.1	9.10	8.80	0.82	4.07
Inl-5	5	0.387	0.91	6	0.000	0.366	0.45	0.95	0.30	0.816	7.8	9.10	8.61	3.22	7.02
Inl-6	6	0.429	0.77	6	0.000	0.311	0.45	0.95	0.30	1.147	8.2	9.10	8.51	3.01	9.76
Inl-7	7	0.881	0.76	6	0.000	0.628	0.45	0.95	0.30	0.672	6.0	9.10	9.10	6.12	6.12
Inl-8	8	0.089	0.81	6	0.000	0.069	0.45	0.95	0.30	0.744	6.8	9.10	8.89	0.65	6.61
Inl-9	9	0.545	0.72	6	0.000	0.356	0.45	0.95	0.30	2.285	8.3	9.10	8.46	3.59	19.33
Inl-10	10	1.279	0.89	6	0.000	1.165	0.45	0.95	0.30	3.426	8.5	9.10	8.41	10.38	28.80
MH-1	11	0.000	1.10	6	0.000	0.000	0.45	0.95	0.30	3.426	8.5	9.10	8.40	0.00	28.78



P:\300_AVA_Group2\Bensalem Hotel\Eng\Commissioning\Drawings\100-100-000-001-AM_Michael P. Landi

OLD LINCOLN HIGHWAY
(A.K.A. SR. 2037)
(VARIABLE WIDTH R.O.W.)
(PUBLICLY DEDICATED)

VALLEY ROAD



- LANDSCAPE NOTES:**
- ALL DISTURBED AREAS ARE TO BE STABILIZED WITH 6" OF TOPSOIL IN ADDITION TO BEING SEEDED WITH THE FOLLOWING SEED MIXTURE (AFTER FINAL GRADING):
SEED MIXTURE #14
TURF - TYPE TALL FESCUE (BLEND OF 3 CULTIVARS)
THIS SEED MIXTURE IS TO BE APPLIED AT A RATE OF 150 LBS./AC. (3.5 LBS./1000 SF.) RECOMMENDED PLANTING DATES ARE FROM MAY 1 - AUGUST 14.
 - ALL SEEDED AREAS SHALL BE LIMED AND FERTILIZED AT THE RATE DETERMINED BY SOIL ANALYSIS AND APPROVED BY THE MUNICIPAL ENGINEER OR THE SOIL CONSERVATION DISTRICT, OR AT THE RATES SPECIFIED ON THE "SOIL EROSION AND SEDIMENT CONTROL AND DRAINAGE AREA PLAN".
 - LOCATION OF PROPOSED PLANT MATERIAL MAY BE ADJUSTED IN FIELD BY THE LANDSCAPE CONTRACTOR ONLY WITH APPROVAL OF THE LANDSCAPE ARCHITECT OR APPROVING ENGINEER.
 - ALL SHADE TREES SHALL BE PLANTED IN A DORMANT STATE.
 - THE PLANTING HOLE BACKFILL MIX SHALL CONSIST OF 2 PARTS TOPSOIL, 1 PART PEAT MOSS, EXCEPT IN WET SOILS WHERE SAND WILL REPLACE THE PEAT MOSS.
 - ALL PLANT MATERIAL SHALL BE WATERED UNTIL SOAKED IMMEDIATELY AFTER PLANTING.
 - ALL MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH COMMONLY ACCEPTED HORTICULTURAL PRACTICES.
 - SEE SOIL EROSION & SEDIMENT CONTROL PLAN FOR GRASS SEEDING MIXTURE, RATES OF APPLICATION AND/OR SOD COMPOSITION.
 - ALL PLANTS AND PLANTING STANDARDS SHALL CONFORM TO OR SURPASS MINIMUM QUALITY STANDARDS AS DEFINED BY THE CURRENT CURRENT EDITION OF AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORT.
 - SHOULD A SPECIES BE UNAVAILABLE AT THE TIME OF INSTALLATION, ALL SUBSTITUTIONS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT OR APPROVING ENGINEER.
 - IN THE EVENT THAT DISCREPANCIES OCCUR BETWEEN THE QUANTITIES OF PLANTS INDICATED ON THE PLANT LIST AND AS INDICATED ON THE PLAN, THE PLANT QUANTITIES ON THE PLAN SHALL GOVERN.
 - ALL PAVING AND SUBBASE MATERIAL, INDICATED TO BE REMOVED, SHALL BE ENTIRELY REMOVED AND REPLACED WITH CLEAN FILL AND TOPSOIL. TOPSOIL SHALL BE INSTALLED TO A DEPTH AS STATED ABOVE.
 - ALL PROPOSED PLANT MATERIAL SHALL BE FULLY GUARANTEED FOR TWO (2) YEARS FROM DATE OF INSTALLATION AND SHALL BE IN A HEALTHY AND VIGOROUS CONDITION. ANY PLANT MATERIAL WHICH DIES WITHIN THAT PERIOD SHALL BE REPLACED WITH THE SAME SIZE AND SPECIES OF PLANT MATERIAL DURING THE NEXT GROWING SEASON.

THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24CA28131400

REVISIONS

NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC OR OWNER. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK-OUT SERVICE (800-272-0800) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: 1" = 40'

PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

HORIZON BOULEVARD & OLD LINCOLN HIGHWAY
T.M.P. 2-1-18-17, LOT 7
BENSALEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

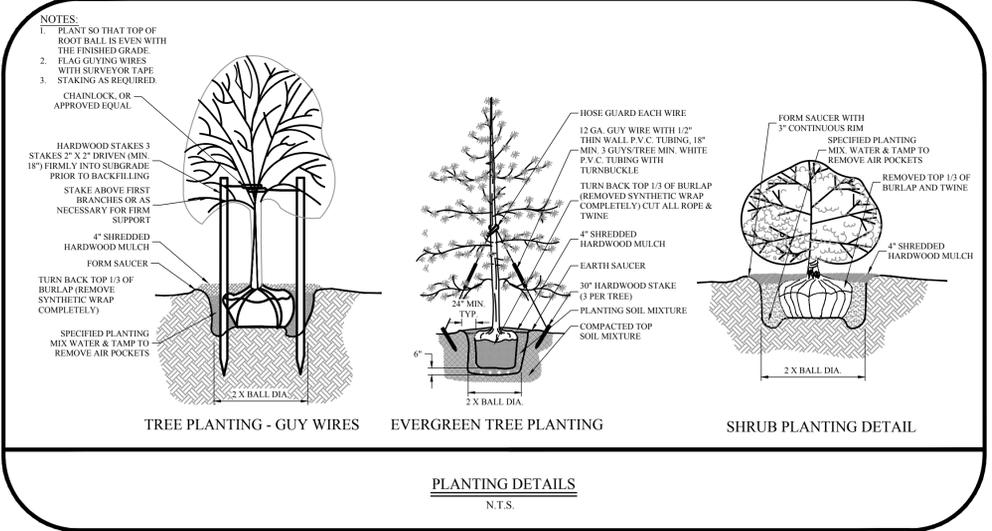
FOR
AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
Professional Engineer
State of New Jersey • License # GE 37906
State of Pennsylvania • License # 052885-E
State of Delaware • License # 15800
State of Maryland • License # 44560

LANDSCAPING & LIGHTING PLAN

LANDSCAPE SCHEDULE

key	quantity	botanical name	common name	size	caliper	root	comments
AG	24	Abelia x grandiflora	Glossy Abelia	24" to 30"	-	Cans	Semi-Evergreen Shrub
CC	7	Cercis canadensis	Eastern Redbud	8" to 10"	-	B & B, heavy	Deciduous Tree
CO	8	Celtis occidentalis 'Magnifica'	Magnifica Hackberry	12" to 14"	2 1/2"	B & B	Decid. Tree, No Fall Ptg
Cone	100	Echinacea sp.	Purple Coneflower	2 gal	-	Cans	Perennial
CV	8	Chionodoxa virginiana	White Fringetree	6" to 8"	1 1/2" to 1 3/4"	B & B, Heavy	Deciduous Tree
GB	9	Ginkgo biloba	Ginkgo	10" to 12"	2" to 2 1/2"	B & B	Decid. Tree, Males Only
HSD	35	Hemerocallis "Stella D'Oro"	Stella D'Oro Daylily	2 gal	-	Cans	Perennial
ICH	24	Ilex crenata helleri	Dwarf Japanese Holly	15" to 18"	-	Cans	Evergreen Shrub
IM	25	Ilex X meserveae	Blue Princess Holly	24" to 30"	-	Cans (1 Male/4 Female)	Evergreen Shrub
IO	23	Ilex opaca	American Holly	5" to 6"	-	B & B, (1 Male/4 Fem)	Evergreen Tree
JV	16	Ilex verticillata	Winterberry Holly	24" to 30"	-	5 Cans / Cans	Deciduous Shrub
JV	21	Juniperus virginiana	Eastern Red Cedar	5" to 6"	-	B & B, Heavy	Evergreen Tree
LM	84	Liriodendron 'Big Blue'	Big Blue Liriodendron	1 gal	-	Cans	Evergreen groundcover
ND	14	Nandina domestica	Dwarf Nandina	24" to 30"	-	Cans	Semi-Evergreen Shrub
PAS	7	Pennisetum alopecuroides	Dwarf Fountain Grass	2 gal	-	Cans	Ornamental Grass
QA	7	Quercus alba	White Oak	10" to 12"	2" to 2 1/2"	B & B	Decid. Tree, No Fall Ptg
QC	7	Quercus coccinea	Scarlet Oak	10" to 12"	2" to 2 1/2"	B & B	Decid. Tree, No Fall Ptg
Sed	72	Sedum 'Autumn Joy'	Autumn Joy Sedum	2 gal	-	Cans	Perennial
SP	27	Syringa palibian "Miss Kimm"	Miss Kim Dwarf Lilac	24" to 30"	-	Cans	Deciduous Shrub
TO	9	Thuja occidentalis nigra	Dark American Arborvitae	5" to 6"	-	B & B	Evergreen Shrub
VR	10	Viburnum rhytidophyllum	Leatherleaf Viburnum	24" to 30"	-	Cans	Evergreen Shrub



LUMINAIRE SCHEDULE

Symbol	Label	Qty	Height	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
A	A	12	30'-0"	DSX2 LED 80C 530 40K TTFM MVOLT	DSX2 LED W2/LARGE & 2 SMALL LIGHT ENGINES, (2) 530mA DRIVERS, 4000K LED, TYPE TTFM OPTICS	LED	DSX2_LED_80_C_530_40K_TF_TM_MVOLT.tss	Absolute	1.00	142
B	B	5	30'-0"	DSX2 LED 80C 530 40K TTFM MVOLT HS	DSX2 LED W2/LARGE & 2 SMALL LIGHT ENGINES, (2) 530mA DRIVERS, 4000K LED, TYPE TTFM OPTICS, WITH HOUSE SIDE SHIELD	LED	DSX2_LED_80_C_530_40K_TF_TM_MVOLT_HS.tss	Absolute	1.00	142

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.7 fc	2.5 fc	0.0 fc	N/A	N/A
Parking & Driveways	X	1.5 fc	2.5 fc	1.0 fc	2.5:1	1.5:1



OLD LINCOLN HIGHWAY
(A.K.A. S.R. 2037)
(VARIABLE WIDTH R.O.W.)
(PUBLICLY DEDICATED)

VALLEY ROAD

THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24GA28131400

REVISIONS

NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (480-870-0869) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR (AT HIS EXPENSE) ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: 1" = 40'

PROJECT: **PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN**

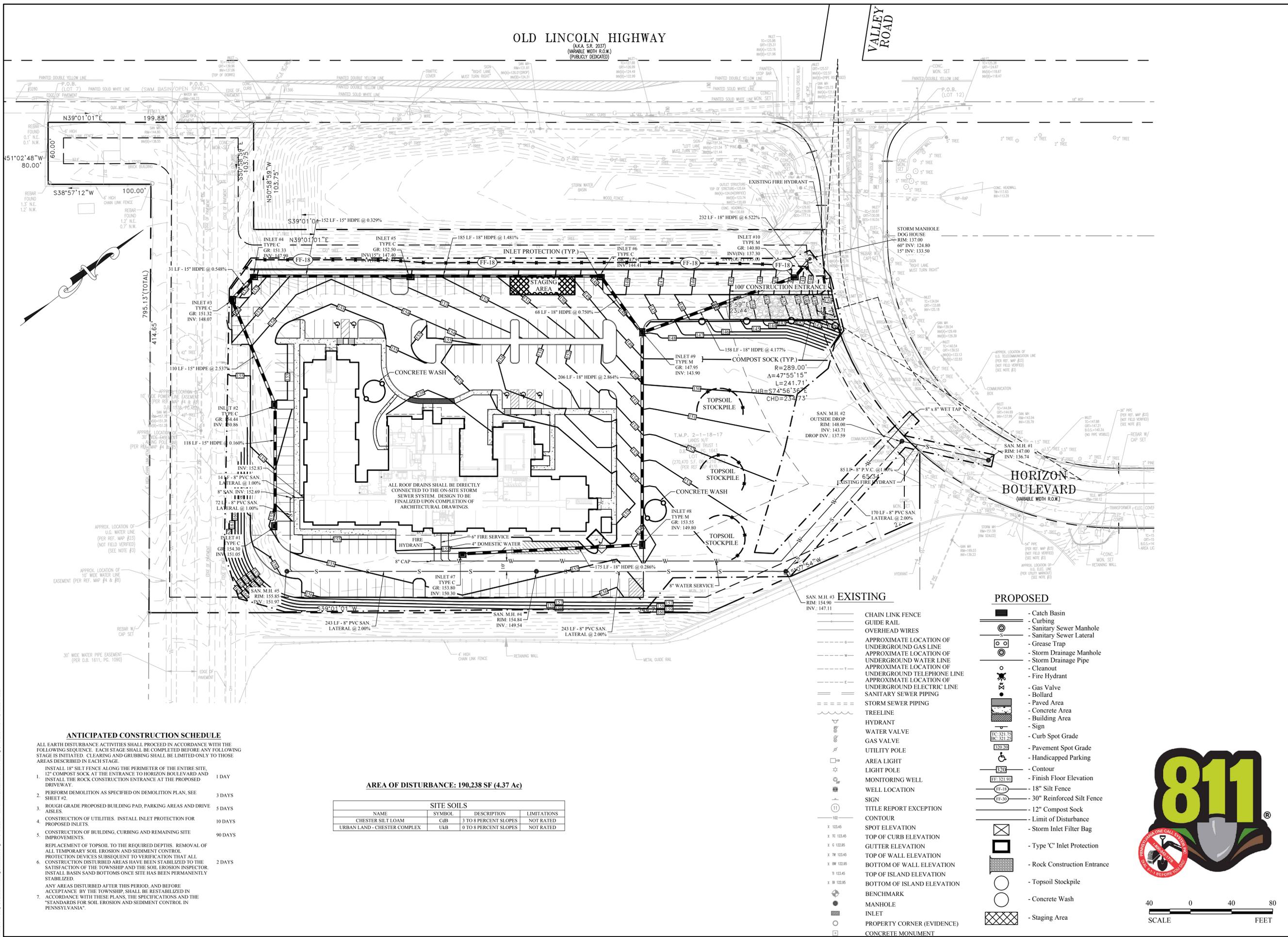
HORIZON BOULEVARD & OLD LINCOLN HIGHWAY T.M.P. 2-1-18-17, LOT 7, BENSALEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

FOR **AVA GROUP**
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
Professional Engineer
State of New Jersey • License # GE 37906
State of Pennsylvania • License # 052685-E
State of Delaware • License # 15080
State of Maryland • License # 44560

SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER: **7 of 11**



- ANTICIPATED CONSTRUCTION SCHEDULE**
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- INSTALL 18" SILT FENCE ALONG THE PERIMETER OF THE ENTIRE SITE. 1 DAY
 - INSTALL 12" COMPOST SOCK AT THE ENTRANCE TO HORIZON BOULEVARD AND THE ROCK CONSTRUCTION ENTRANCE AT THE PROPOSED DRIVEWAY. 1 DAY
 - PERFORM DEMOLITION AS SPECIFIED ON DEMOLITION PLAN. SEE SHEET #2. 3 DAYS
 - ROUGH GRADE PROPOSED BUILDING PAD, PARKING AREAS AND DRIVE AISLES. 5 DAYS
 - CONSTRUCTION OF UTILITIES. INSTALL INLET PROTECTION FOR PROPOSED INLETS. 10 DAYS
 - CONSTRUCTION OF BUILDING, CURBING AND REMAINING SITE IMPROVEMENTS. 90 DAYS
 - REPLACEMENT OF TOPSOIL TO THE REQUIRED DEPTHS. REMOVAL OF ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL PROTECTION DEVICES SUBSEQUENT TO VERIFICATION THAT ALL CONSTRUCTION DISTURBED AREAS HAVE BEEN STABILIZED TO THE SATISFACTION OF THE TOWNSHIP AND THE SOIL EROSION INSPECTOR. INSTALL BASIN SAND BOTTOMS ONCE SITE HAS BEEN PERMANENTLY STABILIZED. 2 DAYS
 - ANY AREAS DISTURBED AFTER THIS PERIOD, AND BEFORE ACCEPTANCE BY THE TOWNSHIP, SHALL BE RESTABILIZED IN ACCORDANCE WITH THESE PLANS, THE SPECIFICATIONS AND THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN PENNSYLVANIA".

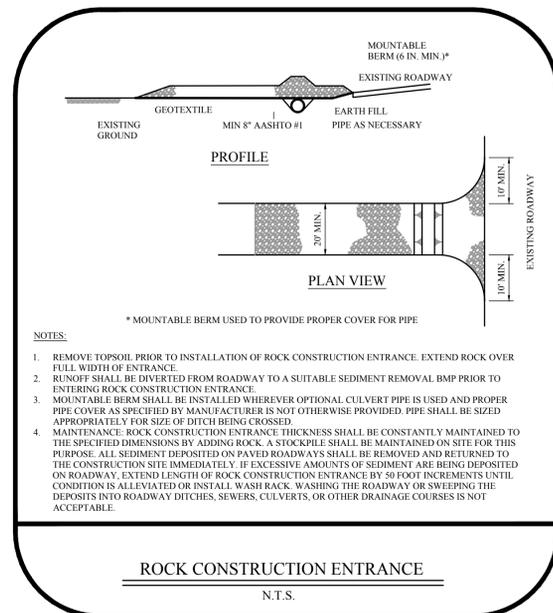
AREA OF DISTURBANCE: 190,238 SF (4.37 Ac)

NAME	SYMBOL	DESCRIPTION	LIMITATIONS
CHESTER SILT LOAM	CJB	3 TO 8 PERCENT SLOPES	NOT RATED
URBAN LAND - CHESTER COMPLEX	UKB	0 TO 8 PERCENT SLOPES	NOT RATED

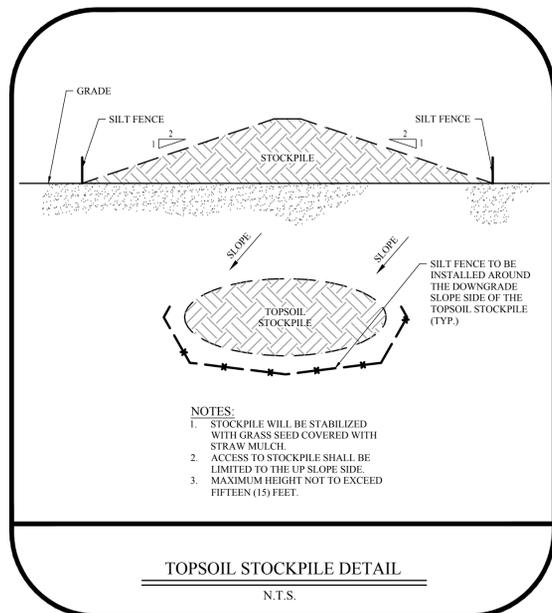
- PROPOSED**
- Catch Basin
 - Curbing
 - Sanitary Sewer Manhole
 - Sanitary Sewer Lateral
 - Grease Trap
 - Storm Drainage Manhole
 - Storm Drainage Pipe
 - Cleanout
 - Fire Hydrant
 - Gas Valve
 - Bollard
 - Paved Area
 - Concrete Area
 - Building Area
 - Sign
 - Curb Spot Grade
 - Handicapped Parking
 - Contour
 - Finish Floor Elevation
 - 18" Silt Fence
 - 30" Reinforced Silt Fence
 - 12" Compost Sock
 - Limit of Disturbance
 - Storm Inlet Filter Bag
 - Type 'C' Inlet Protection
 - Rock Construction Entrance
 - Topsoil Stockpile
 - Concrete Wash
 - Inlet
 - Staging Area



P:\100_AVA_Group2_Revision_Horizon_Highway\Drawings\100_Sheet07_Soil Erosion & Sediment Control Plan.dwg - 2/15/2015 10:12:41 AM - Michael P. Lang



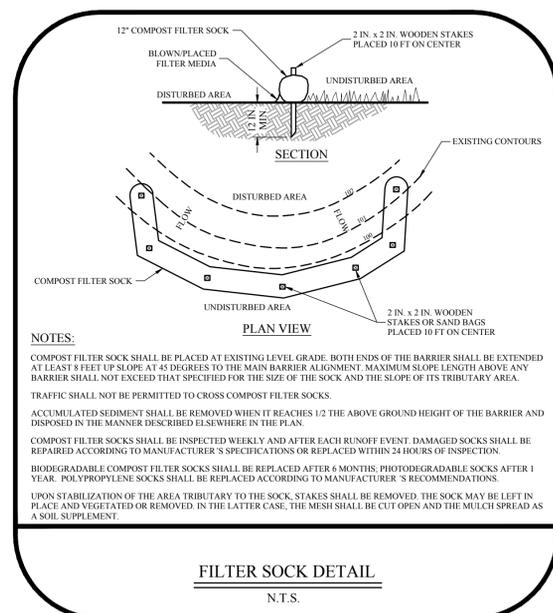
ROCK CONSTRUCTION ENTRANCE
N.T.S.



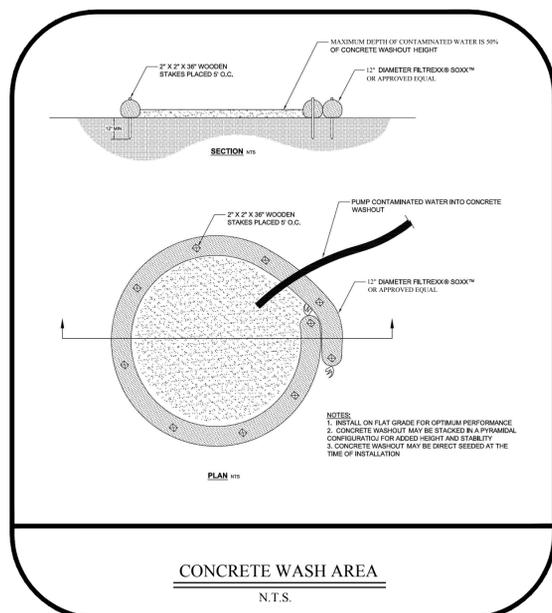
TOPSOIL STOCKPILE DETAIL
N.T.S.



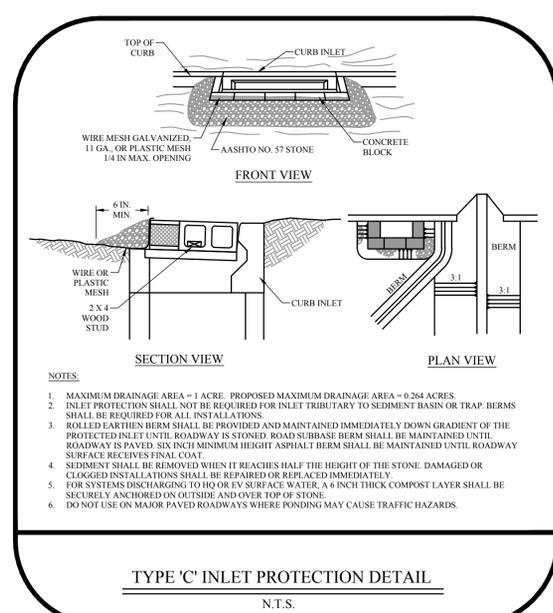
SOILS MAP
NOT TO SCALE



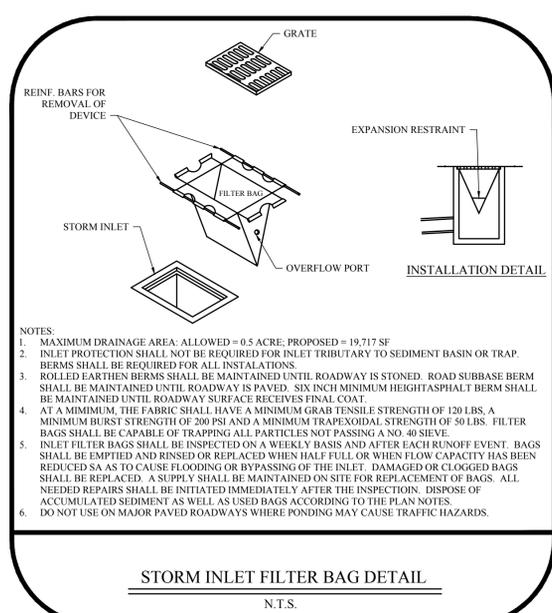
FILTER SOCK DETAIL
N.T.S.



CONCRETE WASH AREA
N.T.S.



TYPE 'C' INLET PROTECTION DETAIL
N.T.S.



STORM INLET FILTER BAG DETAIL
N.T.S.

BCCD EROSION/SEDIMENT CONTROL PLAN STANDARD NOTES

1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET; STOCKPILE SLOPES MUST NOT EXCEED 2:1.
2. THE OPERATOR RESPONSIBLE PERSON (ORP) ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
3. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE ORP SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
4. THE ORP SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED AND APPROVED BY THE BUCKS COUNTY CONSERVATION DISTRICT AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOILS AND/OR ROCK SOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS.
5. ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER AN UNDISTURBED AREA.
6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
7. EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.
8. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING THE REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
9. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, THE ORP SHALL INVITE ALL CONTRACTORS INVOLVED IN THAT ACTIVITY, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER AND THE BUCKS COUNTY CONSERVATION DISTRICT TO A PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INC. AT 1-800-242-1776 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATIONS.
10. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITY CEASES, THE ORP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS.
11. DISTURBED AREAS THAT ARE AT A FINISHED GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
12. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% VEGETATIVE OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
13. UPON THE INSTALLATION OF TEMPORARY SEDIMENT BASIN RISERS, A QUALIFIED SITE REPRESENTATIVE SHALL CONDUCT AN IMMEDIATE INSPECTION OF THE RISERS, WHEREUPON THE BUCKS COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE RISER IS SEALED (WATER TIGHT).
14. AT STREAM CROSSINGS, A 50-FOOT BUFFER SHALL BE MAINTAINED ON BUFFERS, CLEARINGS, SOIL DISTURBANCES AND EXCAVATIONS. EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITY SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGED RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE AVOIDED WITHIN BUFFER ZONES.
15. UNTIL A SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED.
16. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN SOIL STOCKPILES AND STABILIZED.
17. ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEPS SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.) AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

TEMPORARY STABILIZATION	PERMANENT STABILIZATION
DUST CONTROL SHALL BE ACCOMPLISHED BY PERIODIC SPRINKLING OF DISTURBED AREAS WITH WATER AS REQUIRED.	DUST CONTROL SHALL BE ACCOMPLISHED BY PERIODIC SPRINKLING OF DISTURBED AREAS WITH WATER AS REQUIRED.
MATERIAL	MATERIAL
ANNUAL RYE GRASS** (SPRING OR FALL)	TOPSOIL REPLACEMENT DEPTH OF 4 INCHES
% PURE LIVE SEED: 80.75	% PURE LIVE SEED: 76
APPLICATION RATE: 10 LB / ACRE	APPLICATION RATE: 60 LB / ACRE
10-10-10 FERTILIZER	TALL FESCUE
APPLICATION RATE: 500 LB / ACRE	% PURE LIVE SEED: 76
AGRICULTURAL LIMES	APPLICATION RATE: 60 LB / ACRE
APPLICATION RATE: 1 TON / ACRE	PERENNIAL RYEGRASS
STRAW OR HAY MULCH**	% PURE LIVE SEED: 80.75
APPLICATION RATE: 3 TONS / ACRE	APPLICATION RATE: 15 LB / ACRE
	10-10-10 FERTILIZER
	APPLICATION RATE: 1,000 LB / ACRE
	AGRICULTURAL LIMES
	APPLICATION RATE: 6 TONS / ACRE
	STRAW OR HAY MULCH**
	APPLICATION RATE: 3 TONS / ACRE

** MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR CAN BE IRRIGATED.

** MULCHING IS REQUIRED ON ALL SEEDED AREAS TO ENSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLY VEGETATIVE COVER. SYNTHETIC BINDER OR CHEMICAL BINDER MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH, PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NOT TOXIC TO NATIVE PLANT AND ANIMAL SPECIES. MULCH ON SLOPES GREATER THAN 6% OR STEEPER SHALL BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER OR PAPER NETS MAY BE STAPLED OVER MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24GA28131400

REVISIONS		
NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON PROJECTIONS OF THE PROJECT OR ANY OTHER PROJECT ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (1-800-275-1060) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

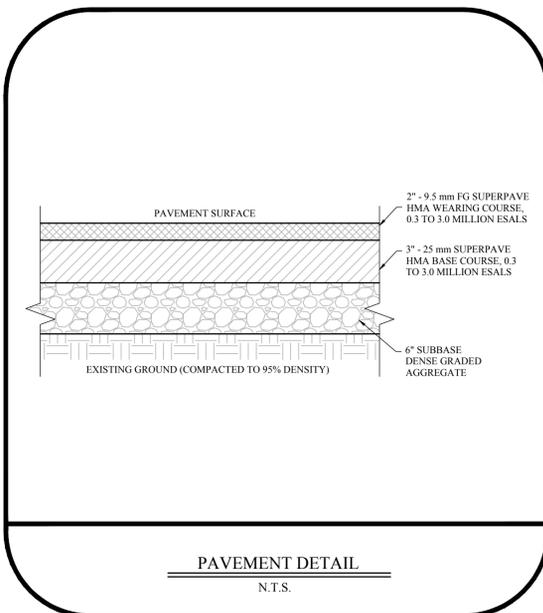
DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: AS NOTED

PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

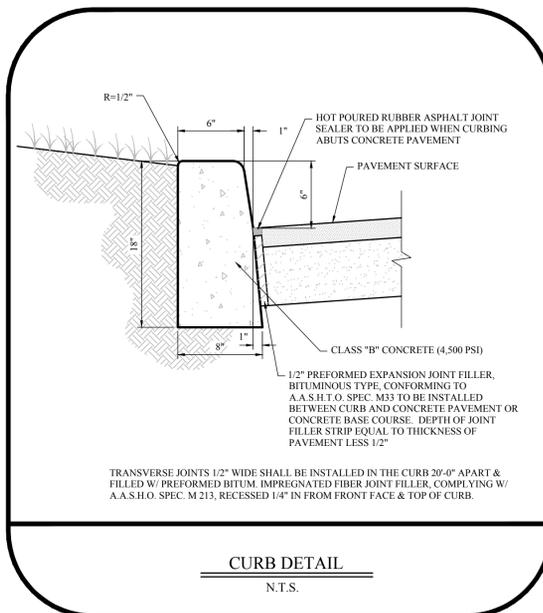
**HORIZON BOULEVARD & OLD LINCOLN HIGHWAY
T.M.P. 2-1-18-17, LOT 7
BENSALEM TOWNSHIP,
BUCKS COUNTY,
PENNSYLVANIA**

FOR
**AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054**

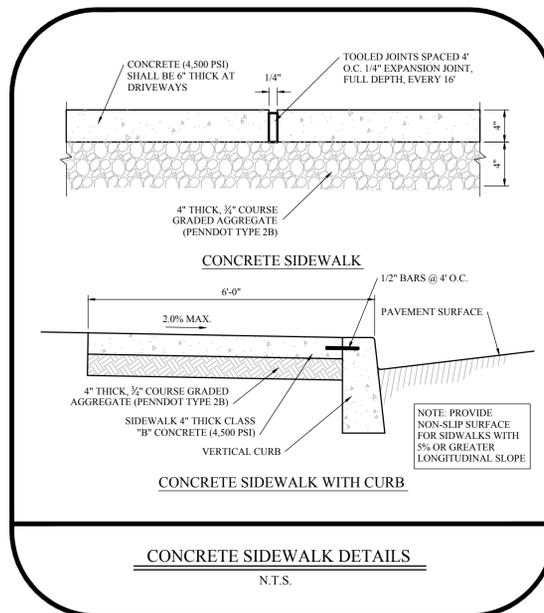
SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS



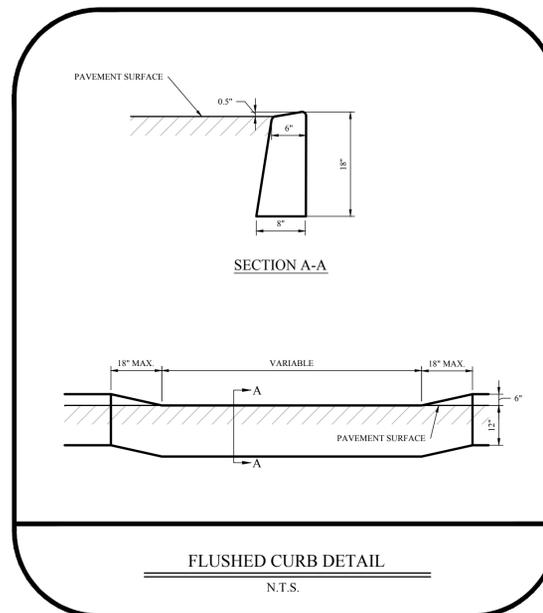
PAVEMENT DETAIL
N.T.S.



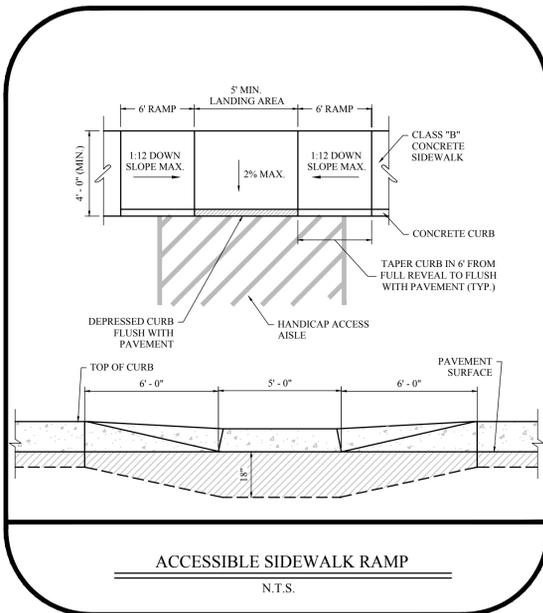
CURB DETAIL
N.T.S.



CONCRETE SIDEWALK DETAILS
N.T.S.



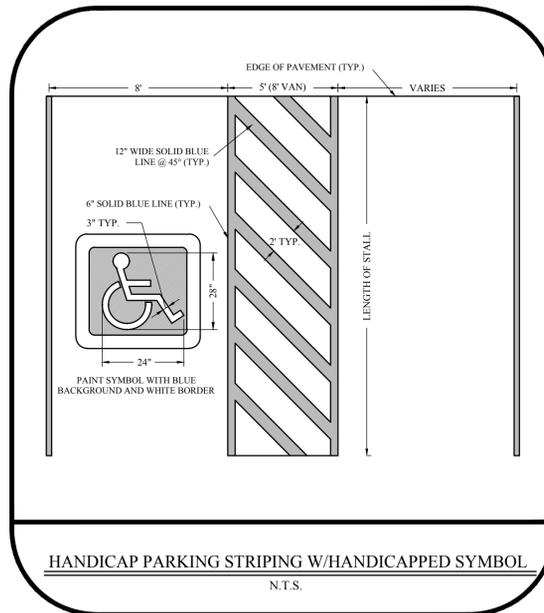
FLUSHED CURB DETAIL
N.T.S.



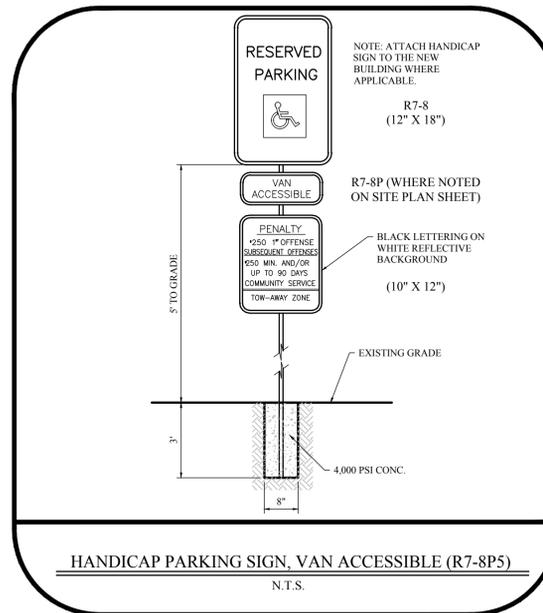
ACCESSIBLE SIDEWALK RAMP
N.T.S.



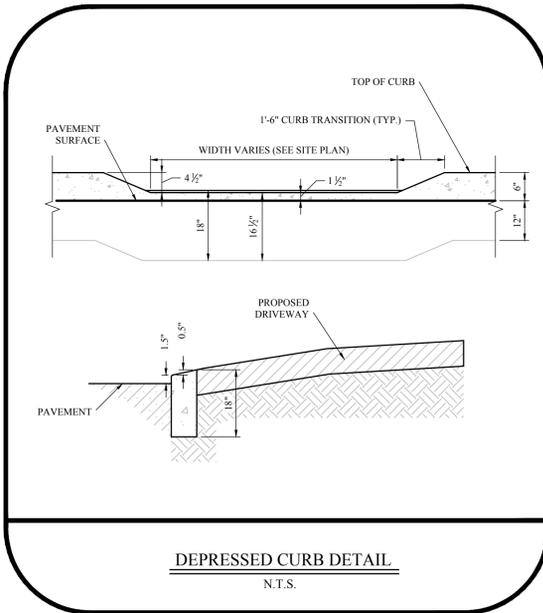
PAINTED PAVEMENT MARKINGS
N.T.S.



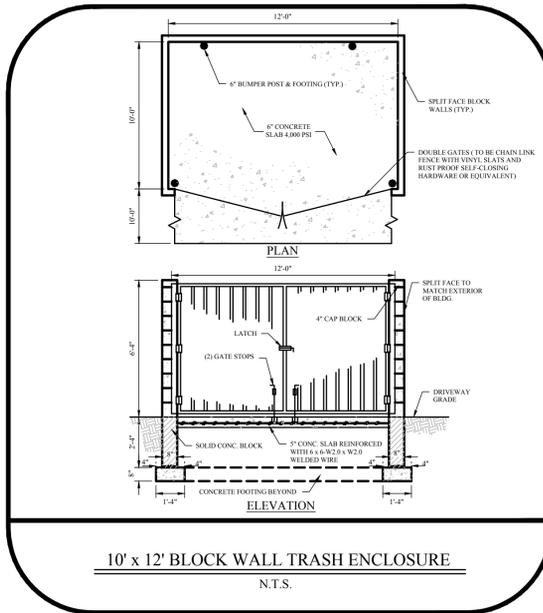
HANDICAP PARKING STRIPING W/HANDICAPPED SYMBOL
N.T.S.



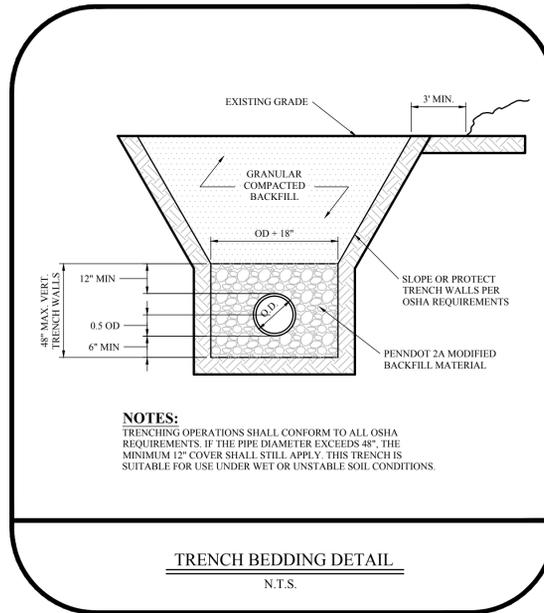
HANDICAP PARKING SIGN, VAN ACCESSIBLE (R7-8P5)
N.T.S.



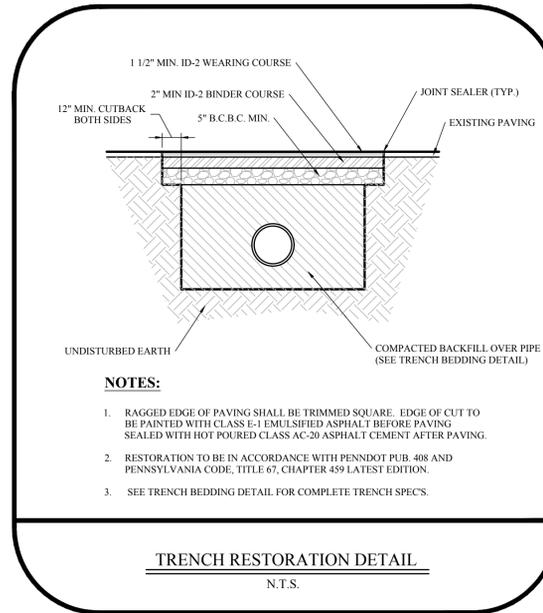
DEPRESSED CURB DETAIL
N.T.S.



10' x 12' BLOCK WALL TRASH ENCLOSURE
N.T.S.



TRENCH BEDDING DETAIL
N.T.S.



TRENCH RESTORATION DETAIL
N.T.S.

THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24GA28131400

REVISIONS		
NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (1-800-275-1000) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: AS NOTED

PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

HORIZON BOULEVARD & OLD LINCOLN HIGHWAY T.M.P. 2-1-18-17, LOT 7, BENSALEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

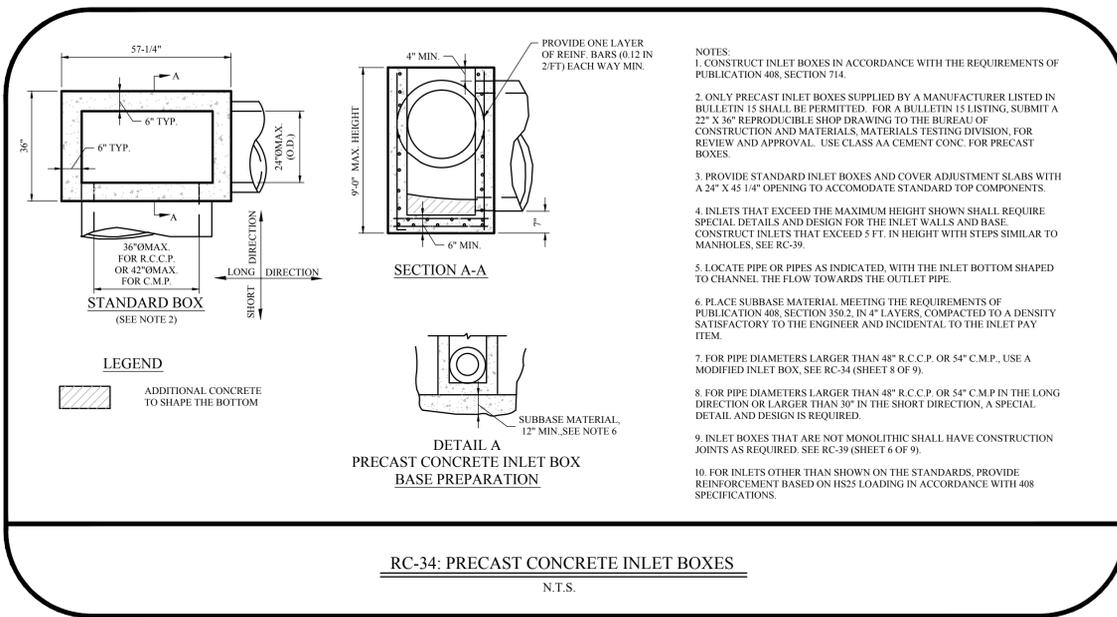
FOR

AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
Professional Engineer
State of New Jersey • License # GE 37906
State of Pennsylvania • License # 052685-E
State of Delaware • License # 15980
State of Maryland • License # 44560

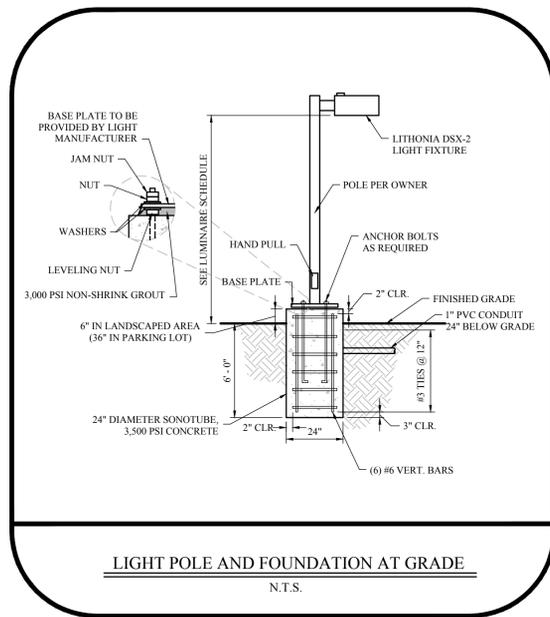
CONSTRUCTION DETAILS

P:\102_AVA_Group\2_Horizon_Highway\Construction_Dwg\1392-02_Sheet 09-11 - Construction Details.dwg 7/15/2015 10:10 AM, Michael P. Lantini

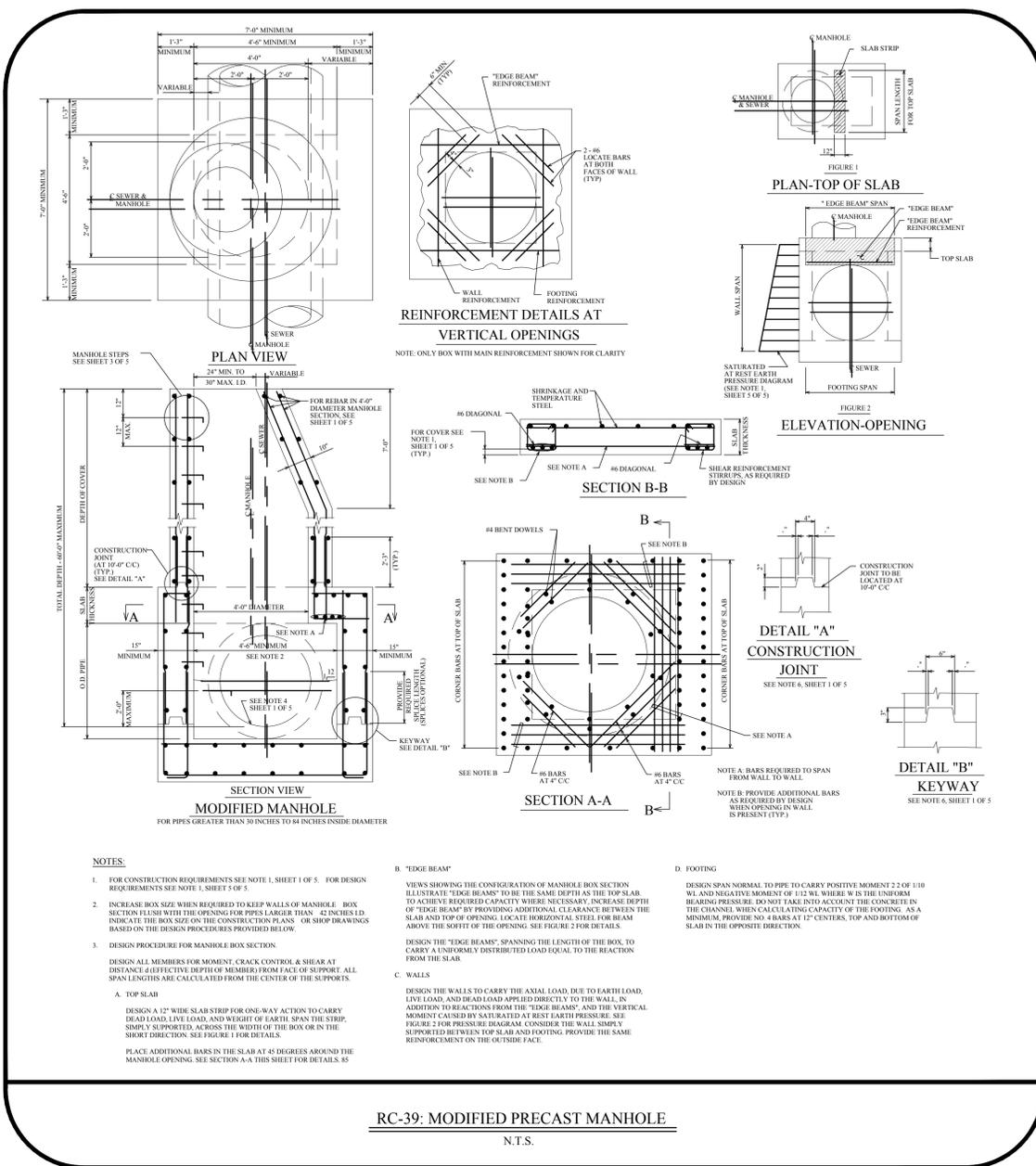


NOTES:

1. CONSTRUCT INLET BOXES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 714.
2. ONLY PRECAST INLET BOXES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED. FOR A BULLETIN 15 LISTING, SUBMIT A 22" X 36" REPRODUCIBLE SHOP DRAWING TO THE BUREAU OF CONSTRUCTION AND MATERIALS, MATERIALS TESTING DIVISION, FOR REVIEW AND APPROVAL. USE CLASS AA CEMENT CONC. FOR PRECAST BOXES.
3. PROVIDE STANDARD INLET BOXES AND COVER ADJUSTMENT SLABS WITH A 24" X 45 1/4" OPENING TO ACCOMMODATE STANDARD TOP COMPONENTS.
4. INLETS THAT EXCEED THE MAXIMUM HEIGHT SHOWN SHALL REQUIRE SPECIAL DETAILS AND DESIGN FOR THE INLET WALLS AND BASE. CONSTRUCT INLETS THAT EXCEED 5 FT. IN HEIGHT WITH STEPS SIMILAR TO MANHOLES, SEE RC-39.
5. LOCATE PIPE OR PIPES AS INDICATED, WITH THE INLET BOTTOM SHAPED TO CHANNEL THE FLOW TOWARDS THE OUTLET PIPE.
6. PLACE SUBBASE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 350.2, IN 4" LAYERS, COMPACTED TO A DENSITY SATISFACTORY TO THE ENGINEER AND INCIDENTAL TO THE INLET PAY ITEM.
7. FOR PIPE DIAMETERS LARGER THAN 48" R.C.C.P. OR 54" C.M.P., USE A MODIFIED INLET BOX, SEE RC-34 (SHEET 8 OF 9).
8. FOR PIPE DIAMETERS LARGER THAN 48" R.C.C.P. OR 54" C.M.P. IN THE LONG DIRECTION OR LARGER THAN 30" IN THE SHORT DIRECTION, A SPECIAL DETAIL AND DESIGN IS REQUIRED.
9. INLET BOXES THAT ARE NOT MONOLITHIC SHALL HAVE CONSTRUCTION JOINTS AS REQUIRED. SEE RC-39 (SHEET 6 OF 9).
10. FOR INLETS OTHER THAN SHOWN ON THE STANDARDS, PROVIDE REINFORCEMENT BASED ON HS25 LOADING IN ACCORDANCE WITH 408 SPECIFICATIONS.



LIGHT POLE AND FOUNDATION AT GRADE
N.T.S.



NOTES:

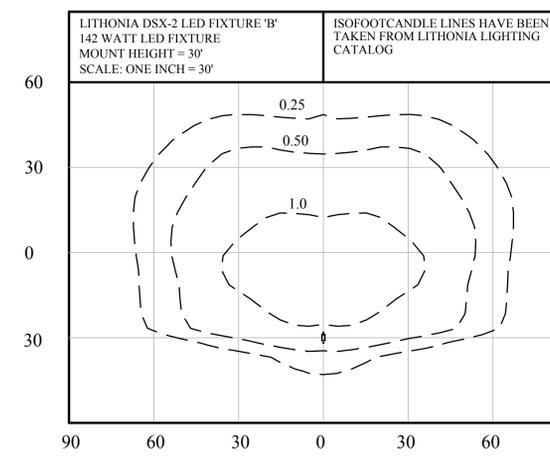
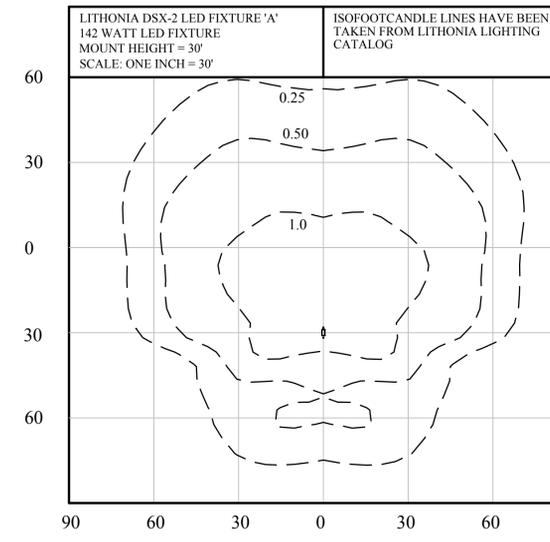
1. FOR CONSTRUCTION REQUIREMENTS SEE NOTE 1, SHEET 1 OF 5. FOR DESIGN REQUIREMENTS SEE NOTE 1, SHEET 5 OF 5.
2. INCREASE BOX SIZE WHEN REQUIRED TO KEEP WALLS OF MANHOLE BOX SECTION FLUSH WITH THE OPENING FOR PIPES LARGER THAN 42 INCHES I.D. INDICATE THE BOX SIZE ON THE CONSTRUCTION PLANS OR SHOP DRAWINGS BASED ON THE DESIGN PROCEDURES PROVIDED BELOW.
3. DESIGN PROCEDURE FOR MANHOLE BOX SECTION:
DESIGN ALL MEMBERS FOR MOMENT, CRACK CONTROL & SHEAR AT DISTANCE 4 (EFFECTIVE DEPTH OF MEMBER) FROM FACE OF SUPPORT. ALL SPAN LENGTHS ARE CALCULATED FROM THE CENTER OF THE SUPPORTS.

A. TOP SLAB
DESIGN A 12" WIDE SLAB STRIP FOR ONE-WAY ACTION TO CARRY DEAD LOAD, LIVE LOAD, AND WEIGHT OF EARTH SPAN THE STRIP. SLABLY SUPPORTED, ACROSS THE WIDTH OF THE BOX OR IN THE SHORT DIRECTION. SEE FIGURE 1 FOR DETAILS.
PLACE ADDITIONAL BARS IN THE SLAB AT 45 DEGREES AROUND THE MANHOLE OPENING. SEE SECTION A-A THIS SHEET FOR DETAILS. 85

B. "EDGE BEAM"
VIEWS SHOWING THE CONFIGURATION OF MANHOLE BOX SECTION ILLUSTRATE "EDGE BEAMS" TO BE THE SAME DEPTH AS THE TOP SLAB TO ACHIEVE REQUIRED CAPACITY WHERE NECESSARY, INCREASE DEPTH OF "EDGE BEAM" BY PROVIDING ADDITIONAL CLEARANCE BETWEEN THE SLAB AND TOP OF OPENING. LOCATE HORIZONTAL STEEL FOR BEAM ABOVE THE SLOTH OF THE OPENING. SEE FIGURE 2 FOR DETAILS.
DESIGN THE "EDGE BEAMS", SPANNING THE LENGTH OF THE BOX, TO CARRY A UNIFORMLY DISTRIBUTED LOAD EQUAL TO THE REACTION FROM THE SLAB.

C. WALLS
DESIGN THE WALLS TO CARRY THE AXIAL LOAD, DUE TO EARTH LOAD, LIVE LOAD, AND DEAD LOAD APPLIED DIRECTLY TO THE WALL, IN ADDITION TO REACTIONS FROM THE "EDGE BEAMS", AND THE VERTICAL MOMENT CAUSED BY SATURATED AT REST EARTH PRESSURE. SEE FIGURE 3 FOR PRESSURE DIAGRAM. CONSIDER THE WALL SIMPLY SUPPORTED BETWEEN TOP SLAB AND FOOTING; PROVIDE THE SAME REINFORCEMENT ON THE OUTSIDE FACE.

D. FOOTING
DESIGN SPAN NORMAL TO PIPE TO CARRY POSITIVE MOMENT 2.2 OF 1/10 WL AND NEGATIVE MOMENT OF 1/12 WL WHERE WL IS THE UNIFORM BEARING PRESSURE. DO NOT TAKE INTO ACCOUNT THE CONCRETE IN THE CHANNEL WHEN CALCULATING CAPACITY OF THE FOOTING. AS A MINIMUM, PROVIDE NO. 4 BARS AT 12" CENTERS, TOP AND BOTTOM OF SLAB IN THE OPPOSITE DIRECTION.



THE PETTIT GROUP, LLC
Engineering • Architecture • Planning
497 Center Street • Sewell, NJ 08080
Tel: 856-464-9600 Fax: 856-464-9606
www.pettitgroup.com
Certificate of Authorization No. 24GA28131400

REVISIONS		
NO.	DESCRIPTION	DATE

FOR APPROVAL PURPOSES ONLY

ALL DOCUMENTS PREPARED BY THE PETTIT GROUP, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT TO THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN PERMISSION BY THE PETTIT GROUP, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE PETTIT GROUP, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS THE PETTIT GROUP, LLC FROM CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE OWNER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL UNDERSTAND THAT THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE ONLY APPROXIMATE. IT IS IMPORTANT TO NOTE THAT NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES (AERIAL AND BURIED) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE UNDERGROUND UTILITY MARK OUT SERVICE (800-375-7000) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR AT HIS EXPENSE ALL DAMAGED UTILITIES RESULTING FROM HIS WORK.

DESIGNED BY: DK	JOB NO: 1392-02
DRAWN BY: MPL	DATE: 07/15/15
CHECKED BY: DK	SCALE: AS NOTED

PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT PLAN

HORIZON BOULEVARD & OLD LINCOLN HIGHWAY T.M.P. 2-1-18-17, LOT 7, BENSELEM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

FOR

AVA GROUP
3737 ROUTE 46 EAST
PARSIPPANY, NJ 07054

JOHN M. PETTIT, PE, PP, CME
Professional Engineer
State of New Jersey • License # GE 37906
State of Pennsylvania • License # 052685-E
State of Delaware • License # 15980
State of Maryland • License # 44560

CONSTRUCTION DETAILS