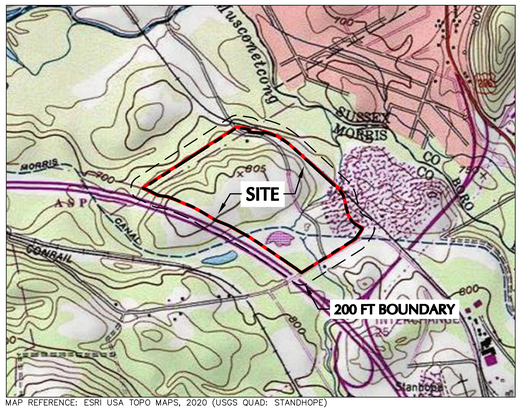
PRELIMINARY AND FINAL MAJOR SITE PLAN APPLICATION
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT

TOWNSHIP OF MOUNT OLIVE, MORRIS COUNTY, NEW JERSEY

BLOCK 200, LOT 1

SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE
1	GI101	COVER SHEET
2	CS100	OVERALL SITE PLAN
3	CS101	PARTIAL SITE PLAN 1
4	CS102	PARTIAL SITE PLAN 2
5	CS103	PARTIAL SITE PLAN 3
6	CS104	PARTIAL SITE PLAN 4
7	CS105	ACCESS ROAD IMPROVEMENTS
8	CS201	BANKED PARKING LAYOUT
9	DM100	DEMOLITION PLAN
10	DM101	PARTIAL DEMOLITION PLAN 1
11	DM102	PARTIAL DEMOLITION PLAN 2
12	DM103	PARTIAL DEMOLITION PLAN 3
13	DM104	PARTIAL DEMOLITION PLAN 4
14	CP100	PAVEMENT PLAN
15	CS701	CIRCULATION PLAN
16	SS100	SIGNAGE PLAN
17	CG100	OVERALL GRADING PLAN
18	CG101	PARTIAL GRADING PLAN 1
19	CG102	PARTIAL GRADING PLAN 2
20	CG103	PARTIAL GRADING PLAN 3
21	CG104	PARTIAL GRADING PLAN 4
22	CG200	OVERALL DRAINAGE PLAN
23	CG201	PARTIAL DRAINAGE PLAN 1
24	CG202	PARTIAL DRAINAGE PLAN 2
25	CG203	PARTIAL DRAINAGE PLAN 3
26	CG204	PARTIAL DRAINAGE PLAN 4
27	CG301	STORM SEWER PROFILES 1
28	CG302	STORM SEWER PROFILES 2
29	CG303	STORM SEWER PROFILES 3
30	CG304	STORM SEWER PROFILES 4
31	CG305	STORM SEWER PROFILES 5
32	CG306	STORM SEWER PROFILES 6
33	CU100	OVERALL UTILITY PLAN
34	CU101	PARTIAL UTILITY PLAN 1
35	CU102	PARTIAL UTILITY PLAN 2
36	CU103	PARTIAL UTILITY PLAN 3
37	CU104	PARTIAL UTILITY PLAN 4
38	CE100	OVERALL SOIL EROSION AND SEDIMENT CONTROL PLAN
39	CE101	PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 1
40	CE102	PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 2
41	CE103	PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 3
42	CE104	PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 4
43	CE501	SOIL EROSION AND SEDIMENT CONTROL DETAILS
44	EN100	STEEP SLOPES PLAN
45	LD100	TREE REMOVAL PLAN
46	LP100	OVERALL LANDSCAPE PLAN
47	LP101	PARTIAL LANDSCAPE PLAN 1
48	LP102	PARTIAL LANDSCAPE PLAN 2
49	LP103	PARTIAL LANDSCAPE PLAN 3
50	LP104	PARTIAL LANDSCAPE PLAN 4
51	LP105	PARTIAL LANDSCAPE PLAN 5
52	LP501	LANDSCAPE NOTES AND DETAILS
53	LL100	OVERALL LIGHTING PLAN
54	LL101	PARTIAL LIGHTING PLAN 1
55	LL102	PARTIAL LIGHTING PLAN 2
56	LL103	PARTIAL LIGHTING PLAN 3
57	LL104	PARTIAL LIGHTING PLAN 4
58	LL501	LIGHTING NOTES AND DETAILS
59	CS501	SITE DETAILS 1
60	CS502	SITE DETAILS 2
61	CS503	SITE DETAILS 3
62	CS504	SITE DETAILS 4



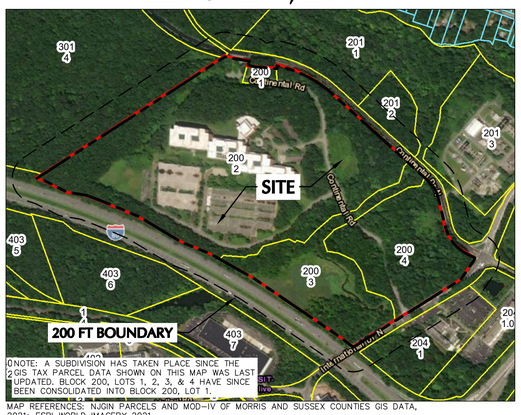
MAP REFERENCE: ESRI USA TOPO MAPS, 2020 (USGS QUAD: STANDHOPE)

PROJECT LOCATION

SCALE: 1" = 1000'

1000 0 500 1000

SCALE IN FEET



NOTE: A SUBDIVISION HAS TAKEN PLACE SINCE THE GIS TAX PARCEL DATA SHOWN ON THIS MAP WAS LAST UPDATED. BLOCK 200, LOTS 1, 2, 3, & 4 HAVE SINCE BEEN CONSOLIDATED INTO BLOCK 200, LOT 1.

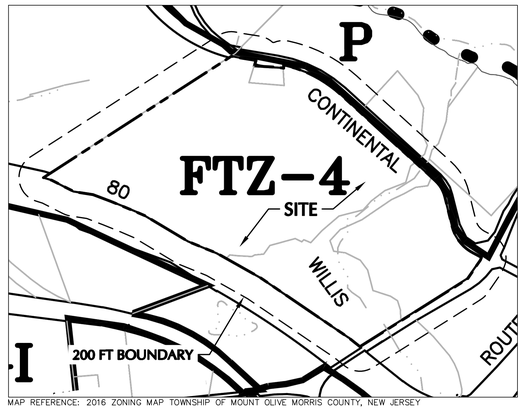
MAP REFERENCES: NJGIN PARCELS AND MOD-IV OF MORRIS AND SUSSEX COUNTIES GIS DATA, 2021; ESRI WORLD IMAGERY 2021

TAX MAP

SCALE: 1" = 500'

500 0 250 500

SCALE: 1 INCH = 500 FEET



MAP REFERENCE: 2016 ZONING MAP TOWNSHIP OF MOUNT OLIVE MORRIS COUNTY, NEW JERSEY

ZONING MAP

SCALE: 1" = 500'

500 0 250 500

SCALE: 1 INCH = 500 FEET

ZONING TABLE

Zone: FTZ-4 Foreign Trade Zone Special District

Bulk Regulations		Required	Proposed	Complies
Use		The principal uses permitted in the G-I, C-1 and C-2 Zones. G-I: Offices and office buildings, research laboratories or other experimental testing or research establishments, assembly of products, utilities, lumberyards, airports, motels and hotels, warehousing, shipping and receiving, outside storage areas, the manufacturing, finishing and assembly of products, and public uses.	Warehouse	Yes
Min. Lot Area (AC)		1	97.046	Yes
Min. Lot Width (FT)		100	N/A	Yes
Min. Lot Depth (FT)		150	N/A	Yes
Min. Front Yard (FT)	Principal Building	25	255	Yes
	Accessory Building	25	111	Yes
Min. Side Yard (FT)		N/A	N/A	N/A
Min. Rear Yard (FT)		N/A	N/A	N/A
Max. Building Coverage (%)		N/A	N/A	N/A
Max. Lot Coverage (%)		70	33.5%	Yes*
Max. Building Height (FT)		185	< 50	Yes
Max. FAR		0.4	0.14	Yes
Loading Requirements				
Min. size of Loading Space		10 FT X 60 FT	12.5 FT x 60 FT	Yes
Min. Number of Loading Docks		Warehouse (557,500 SF): 1 space for the first 5,000 SF and 1 space for the next 40,000 SF. Add a space for each additional 30,000 SF after the first two requirements are met. (19 loading docks required) Office (27,500 SF): 1 space for the first 10,000 SF and 1 space for the next 100,000 SF. Add a space for each additional 100,000 SF after the first two requirements are met. (2 loading docks required) Total loading docks required = 21 loading docks	107	Yes
Off-Street Parking Requirements				
Min. Size of Parking Space		10 FT X 18 FT OR 9 FT x 20 FT	9 FT X 20 FT	Yes
Min. Aisle Width for Two Way 90 Degree Parking		25 FT	25 FT	Yes
Min. Parking Setback		25 FT from lot line or street R.O.W	164.9 FT	Yes
Min. Number of Parking Spaces		Warehouse (585,000 SF): 1 Space per 5000 SF GFA (117 spaces required)	163 car parking spaces 143 banked spaces	Yes**
Fence/Wall Requirements				
Max. Fence/Wall Height		No fence or wall shall be erected, altered or constructed in any nonresidential zone which shall exceed 6 feet in height above ground level.	37.79 FT	No
Signage Requirements				
Wall Sign	Max. Size	N/A	100 SF	N/A
Ground Sign (Type M)	Max. Size	64 SF	64 FT	Yes
	Max. Height	8 FT	8 FT	Yes
	Setback	10 FT	17 FT	Yes
Directional Sign (Type B)	Amount	55.25 SF	55.25 SF	Yes
	Max. Height	8.5 FT	8.5 FT	Yes
Illumination		Permitted	Proposed	Yes

*In accordance with Ordinance Section 550-39.F.1.b., impervious coverage of any site shall be calculated by excluding all steep slopes and 50% of the moderate slope.

**In accordance with Ordinance Section 550-56.J, a maximum of 20% of GFA can be office use without additional parking for the office use. Office use above 20% shall require parking at the appropriate rate.

Requested Variances / Waivers

1. Relief is requested from Ordinance Section 550-82.A.2 for the height of the proposed retaining wall. The ordinance permits a maximum height of 6 FT. The proposed maximum height of the retaining wall is 37.79 FT.
2. Relief is requested from Ordinance Section 550-39.F.2.a for disturbing critical slope areas. The ordinance permits no site disturbance, structures, and impervious coverage within critical slope areas except driveways and roads. The proposed development disturbs approximately 103,459 SF of critical slope areas.
3. Relief is requested from Ordinance Section 550-56 for landscaping in loading areas. The ordinance requires that landscaping be provided around all loading areas. Landscaping is not proposed around the northwestern loading area.
4. Relief is requested from Ordinance Section 550-71 for the minimum street tree diameter. The ordinance requires that all street trees shall have a minimum diameter of 2.5 IN. Street trees with a minimum diameter of 1.5 IN are proposed.
5. Relief is requested from Ordinance Section 550-53 for the average light intensity. The ordinance requires that the intensity shall average a maximum of 0.5 footcandle over the entire area. The average light intensity proposed is 1.4 footcandle over the entire area.
6. Relief is requested from Ordinance Section 550-53 for the maximum height for light source. The ordinance permits a maximum height of 18 FT. The proposed maximum height for light source is more than 18 FT.

GENERAL NOTES

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOT 1 WAS OBTAINED FROM "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC.
2. THE MERIDIAN SHOWN IS REFERENCED TO NEW JERSEY STATE PLANE COORDINATE SYSTEM NAD 83 (2011).
3. APPLICANT OR TENANT SHALL CONTRACT OUT SOLID WASTE DISPOSAL WITH PRIVATE CONTRACTING FIRM.
4. ALL CONSTRUCTION SHOWN HEREON SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE TOWNSHIP OF MOUNT OLIVE EXCEPT WHERE NOTED.
5. ALL SANITARY SEWERS AND WATER MAINS SHOWN HEREON SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE TOWNSHIP OF MOUNT OLIVE.
6. ALL ON-SITE SANITARY SEWER SHOWN HEREON SHALL BE PVC-SDR 35 SEWER PIPE WITH RING TIGHT FITTINGS UNLESS OTHERWISE SPECIFIED.
7. ALL WATER MAINS SHOWN HEREON SHALL BE C900 UNLESS OTHERWISE SPECIFIED. PRIOR TO WET TAP, CONTRACTOR SHALL CONSULT NEW JERSEY AMERICAN WATER FOR COORDINATION.
8. GAS, ELECTRIC, AND TELECOM SERVICE NETWORKS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER, ARCHITECT, AND MEP ENGINEER TO DETERMINE ACTUAL LOCATION AND SERVICE SIZE. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
9. EXISTING UTILITIES:

   A. OWNER AND CONTRACTOR ARE HEREBY NOTIFIED THAT EXISTING UTILITIES ARE PRESENT IN THE VICINITY OF THE PROJECT. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION.

   B. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITIES ALONG THE LINE OF THE PROPOSED WORK THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION. CONTRACTORS SHALL NOT PROCEED WITH WORK IN STREETS WHERE UTILITIES HAVE NOT BEEN LOCATED.

   C. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES, SUCH THAT CONFLICTS MAY BE AVOIDED. THESE TEST PITS SHALL BE EXCAVATED AT THE START OF CONSTRUCTION, PRIOR TO THE CONSTRUCTION OF ANY UTILITIES. THE CONTRACTOR WILL NOTIFY LANGAN 48 HOURS PRIOR TO THE TEST PIT EXCAVATION AND WILL PROVIDE LANGAN WITH THE RESULTS OF THESE EXPLORATIONS WITHIN 24 HOURS OF THEIR COMPLETION.
10. LOCATION AND SIZE OF ROOF LEADER CONNECTION AND SANITARY SEWER, WATER, ELECTRIC, TELEPHONE AND GAS SERVICES INTO BUILDING ARE APPROXIMATE AND MUST BE COORDINATED WITH ARCHITECT AND RESPECTIVE UTILITY COMPANIES. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
11. ELECTRIC, TELEPHONE, GAS AND CABLE TO BE PROVIDED BY RESPECTIVE UTILITY COMPANY IN ACCORDANCE WITH THEIR B.P.U. CHARTERS.
12. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
13. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF APPLICABLE GOVERNING AUTHORITIES.
14. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION.
15. ALL NEW UTILITIES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE SPECIFIED.
16. THESE PLANS REPRESENT THE OVERALL SITEWORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
17. CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REQUIREMENTS.
18. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS, AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
19. THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
20. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
21. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
22. ALL OPERATIONS SHALL BE CONDUCTED SO AS NOT TO DAMAGE, DESTROY, OR ENDANGER THE INTEGRITY OF ANY ADJACENT BUILDINGS, ROADWAYS, ACTIVE UTILITIES, AND RAILROADS.
23. REFER TO LP100 AND LT100 FOR LIGHTING AND LANDSCAPING COMPLIANCE CHARTS.

CERTIFIED PROPERTY OWNER'S LIST
3000 International Drive, Town of Mount Olive, NJ
BLOCK 200, Lot 1

BLK. NO.	LOT NO.	PROP ADDRESS	OWNER NAME / ADDRESS
200	1	3000 Continental Drive	3000 Contintal Drive Associates 4000 Forsgate Drive Cranbury, NJ 08512
201	1	120 Continental Drive	State of NJ John Fitch Plaza Trenton, NJ 08625
201	2	120 Continental Drive	State of NJ John Fitch Plaza Trenton, NJ 08625
201	3	110 Continental Drive	Musconetcong Sewerage Authority P.O. Box 416 Stanhope, NJ 07874
202	1	2000 International Drive	TEIF 2000 Mount Olive LLC CN 4000 Forsgate Drive Cranbury, NJ 08512
204	1	1000 International Drive	Sreekrishna Hospitality Holiday Inn 1000 International Drive Budd Lake, NJ 07828
204	1.01	271 Continental Drive	NE Stanhope Owner LLC c/o SLK Global 2727 LBJ Freeway, Suite 806 Dallas, TX 75234
300	1	200 Continental Drive	Dept. of Environmental Protection John Fitch Plaza Trenton, NJ 08625
301	4	3100 Continental Drive	Mt. Olive Township 204 Flanders-Drakestown Budd Lake, NJ 07828

UTILITIES AND AGENCIES

R. Albanese
New Jersey Natural Gas
1415 Wyckoff Road
Wall, NJ 07719

Bruce Reynolds
Columbia Gas Transmission Corp
1470 Poorhouse Road
Downington, PA 19335-342

Public Service Electric & Gas Company
Manager - Corporate Properties
80 Park Plaza, T6B
Newark, NJ 07102

New Jersey - American Water Co. Inc.
P.O. Box 5627
Cherry Hill, NJ 08034

NJ Department of Transportation
1035 Parkway Dr CN 600
Trenton, NJ 08625

Applied Wastewater Management
2 Clerico Lane
Hillsborough, NJ 08844

Bruce D. Smith
Hackettstown Municipal Utilities Authority
P.O. Box 450
Hackettstown, NJ 07840

Mt. Olive Township, Water & Sewer Department
P.O. Box 450
204 Flanders-Drakestown Road

PROJECT CONTACTS

APPLICANT/OWNER:
3000 CONTINENTAL DRIVE ASSOCIATES, LLC
CN 4000, FORSGATE DRIVE
CRANBURY, NJ 08512

ARCHITECT:
FORD & ASSOCIATES ARCHITECTS, INC.
1500 WEST FIRST AVENUE
COLUMBUS, OHIO 43212
(614) 488-6252

CIVIL ENGINEER:
LANGAN
300 KIMBALL DRIVE
PARSIPPANY, NJ 07054
(973) 560-4900
NJ Certificate of Authorization No: 24GA27996400

APPROVED BY THE TOWNSHIP OF MOUNT OLIVE PLANNING BOARD
PRELIMINARY & FINAL SITE PLAN

CHAIRMAN OF THE PLANNING BOARD DATE

SECRETARY OF THE PLANNING BOARD DATE

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
COVER SHEET

Project No.	Drawing No.
100980201	GI101
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 1 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).

NJ NAD 83

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

SIGHT TRIANGLE
845–FT

INTERSECTION IMPROVEMENTS.
REFER TO DRAWING CS105

SIGHT TRIANGLE
775–FT

SHEET 101

SHEET 102
BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

474.0–FT

50–FT FRONT YARD SETBACK

164.9–FT

235.9–FT

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

82 TRAILER PARKING SPACES

52 LOADING DOCKS

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9
BASIN 10
BASIN 11
BASIN 12
BASIN 13
BASIN 14

WALL MOUNTED SIGN –
OWNERSHIP IDENTIFICATION
(100–SF)

520–FT WALL MOUNTED SIGN –
TENANT IDENTIFICATION
(72–SF)

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

WALL MOUNTED SIGN –
TENANT IDENTIFICATION
(72–SF)

143 BANKED CAR PARKING SPACES

163 CAR PARKING SPACES

WALL MOUNTED SIGN –
OWNERSHIP IDENTIFICATION
(100–SF)

UTILITY ROOM
1125–FT

55 LOADING DOCKS

60 TRAILER PARKING SPACES

255.0–FT

75–FT ROUTE 80 SETBACK

NJDOT LANDSCAPE
EASEMENT
SCHEDULE B–II, ITEM 36

182.0–FT

111.0–FT

1427–19–0001.1
FRESHWATER WETLANDS
/ WATER BOUNDARY
LINE AS VERIFIED BY
NJDEP (TYP)

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

50–FT WETLAND
BUFFER (TYP.)

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

APPROXIMATE LOCATION KAYS
ROAD, 66' ROW, VACATED BY
TOWNSHIP ORDINANCE
No. 37–87
SCHEDULE B–II, ITEM 27

50–FT WETLAND
BUFFER (TYP.)

FEMA FLOOD HAZARD
AREAS (TYP.)
FLOOD ZONE B BASED ON
FEMA EFFECTIVE FIRM
MAP 34035C0002B (TYP.)

25' WIDE UTILITY EASEMENT
PER DB 3384 PG 255
SCHEDULE B–II, ITEM 18

INTERSECTION IMPROVEMENTS.
REFER TO DRAWING CS105

SIGHT TRIANGLE
845–FT

50–FT FRONT
YARD SETBACK

1427–19–0001.1 FRESHWATER
WETLANDS / WATER BOUNDARY LINE
AS VERIFIED BY NJDEP (TYP).

WILLS BROOK

SHEET 103

SHEET 104

WEST BOUND

EAST BOUND

INTERSTATE ROUTE 80
(WIDTH VARIES)

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO
INTERNATIONAL DRIVE

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA
HOSPITALITY
C/O HOLIDAY INN

SIGHT TRIANGLE
775–FT

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and
Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL SITE PLAN

Project No.	Drawing No.
100980201	CS100
Date: 10/01/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 2 of 62

© 2022 Langan

Date: 11/23/2022 Time: 14:56 User: ryemerou Style Table: Langan.stb Layout: CS100 Document Code: 100980201-0302-CS101-0101

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).

NAD 83

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

8-FT CHAIN LINK FENCE, IF REQUIRED BY OWNER (TYP.)

GRASSED SWALE

R15-FT

FIRE LANE SIGNAGE TO BE INSTALLED AT 100-FT MAX. SPACING (TYP.)

R60-FT

40-FT

10-FT (TYP.)

10-FT CONCRETE DOLLY PAD

TRAILER PARKING (TYP.)

10-FT (TYP.)

55-FT (TYP.)

82 TRAILER PARKING SPACES

24-FT WIDE DOUBLE SWING GATE IF REQUIRED BY OWNER

70-FT

185-FT

HYDRANT WITH BOLLARDS (TYP.)

R80-FT R20-FT

RETAINING WALL (DESIGNED BY OTHERS)

60 FT CONCRETE APRON

12.5-FT (TYP.)

BOLLARDS (TYP.)

60-FT (TYP.)

52 LOADING DOCKS

6-IN CONCRETE CURB

RETAINING WALL (DESIGNED BY OTHERS)

GUIDE RAIL (TYP.)

30-FT

GREEN INFRASTRUCTURE (TYP.)

13-FT

15-FT

DRIVE-IN DOOR

DOCK DOOR (TYP.)

MAN DOOR AND STAIRS (TYP.)

FIRE LANE STRIPING (TYP) INSTALL PER DETAIL ON SHEET SS501

FUTURE OFFICE AREA (6,875 SF)

9-FT

TRASH COMPACTOR TO BE LOCATED IN DOCK POSITION. ACTUAL DOCK LOCATION TO BE DETERMINED BY OWNER/TENANT. DISPOSAL CONTRACTED WITH A PRIVATE WASTE HAULER BY TENANT/OWNER.

BASIN 12

R280-FT

GUIDE RAIL (TYP.)

11-FT x 18-FT ADA VAN PARKING SPACE WITH SIGN (R7-8p) (TYP.)

R15-FT

FLUSH CURB

ADA RAMP

MAN DOOR (TYP.)

R15-FT

STOP BAR & STOP SIGN (R1-1)

R5-FT (TYP.)

R15-FT

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

6-FT WIDE CONCRETE SIDEWALK

MATCHLINE SHEET 102

MATCHLINE SHEET 104

WHEEL STOP (TYP.)

30-FT

18-FT

143 BANKED CAR PARKING SPACES

WALL MOUNTED SIGN - TENANT IDENTIFICATION (72-SF)

6-IN CONCRETE CURB

30 0 15 30
SCALE: 1 INCH = 30 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL SITE PLAN 1

Project No.	100980201
Date	11/18/2022
Drawn By	RY
Checked By	KMR/RB

Drawing No. CS101
Sheet 3 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).

NJ NAD 83

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

50-FT FRONT YARD SETBACK

PROPOSED DIRECTIONAL SIGN. REFER TO SHEET SS100 FOR ADDITIONAL DETAILS.

PROPOSED CURB TO TIE INTO EXISTING CURB

8-FT CHAIN LINK FENCE, IF REQUIRED BY OWNER (TYP.)

GRASSED SWALE

6-IN CONCRETE CURB

GREEN INFRASTRUCTURE (TYP.)

FIRE LANE SIGNAGE TO BE INSTALLED AT 100-FT MAX. SPACING (TYP.)

HYDRANT WITH BOLLARDS (TYP.)

BASIN 1

BASIN 2

POTENTIAL GUARDHOUSE LOCATION, IF REQUIRED BY OWNER.

R105-FT

13-FT

R15-FT

10-FT

STOP BAR & STOP SIGN (R1-1)

R55-FT

55-FT (TYP.)

10-FT (TYP.)

TRAILER PARKING (TYP.)

10-FT CONCRETE DOLLY PAD

10-FT (TYP.)

30-FT

12-FT WIDE SWING GATE

R135-FT

15-FT

10-FT

70-FT

185-FT

60 FT CONCRETE APRON

BOLLARDS (TYP.)

12.5-FT (TYP.)

R30-FT

6-IN CONCRETE CURB

60-FT (TYP.)

FIRE LANE STRIPING (TYP) INSTALL PER DETAIL ON SHEET SS501

BASIN 3

PROPOSED DIRECTIONAL SIGN. REFER TO SHEET SS100 FOR ADDITIONAL DETAILS.

BASIN 4

26-FT

BASIN 13

15-FT

DOCK DOOR (TYP.)

MAN DOOR AND STAIRS (TYP.)

RETAINING WALL (DESIGNED BY OTHERS)

DRIVE-IN DOOR

TRASH COMPACTOR TO BE LOCATED IN DOCK POSITION. ACTUAL DOCK LOCATION TO BE DETERMINED BY OWNER/TENANT. DISPOSAL CONTRACTED WITH A PRIVATE WASTE HAULER BY TENANT/OWNER.

WALL MOUNTED SIGN - OWNERSHIP IDENTIFICATION (100-SF)

6-IN CONCRETE CURB

BLOCK 200
LOT 1
AREA=4,227,140± S.F.
OR 97.04± ACRES

PROPOSED CURB TO TIE INTO EXISTING CURB

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

FLUSH CURB

FUTURE OFFICE AREA (6,875 SF)

R5-FT (TYP.)

16-FT

8-FT x 18-FT ADA PARKING SPACES WITH SIGN (R7-8) (TYP.)

ADA RAMP

15-FT

GUIDE RAIL (TYP.)

BASIN 5

PROPOSED DIRECTIONAL SIGN. REFER TO SHEET SS100 FOR ADDITIONAL DETAILS.

9-FT (TYP.)

25-FT (TYP.)

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

MAN DOOR (TYP.)

18-FT (TYP.)

R30-FT

BASIN 14

R4-FT

25-FT

6-IN CONCRETE CURB

R30-FT

PROPOSED CURB TO TIE INTO EXISTING CURB

R4-FT

STOP BAR & STOP SIGN (R1-1)

6-FT WIDE CONCRETE SIDEWALK

MATCHLINE
SHEET 103

MATCHLINE
SHEET 101

WALL MOUNTED SIGN - TENANT IDENTIFICATION (72-SF)

10-FT

3.5-FT

163 CAR PARKING SPACES

20-FT

20-FT

BASIN 6

30 0 15 30
SCALE: 1 INCH = 30 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

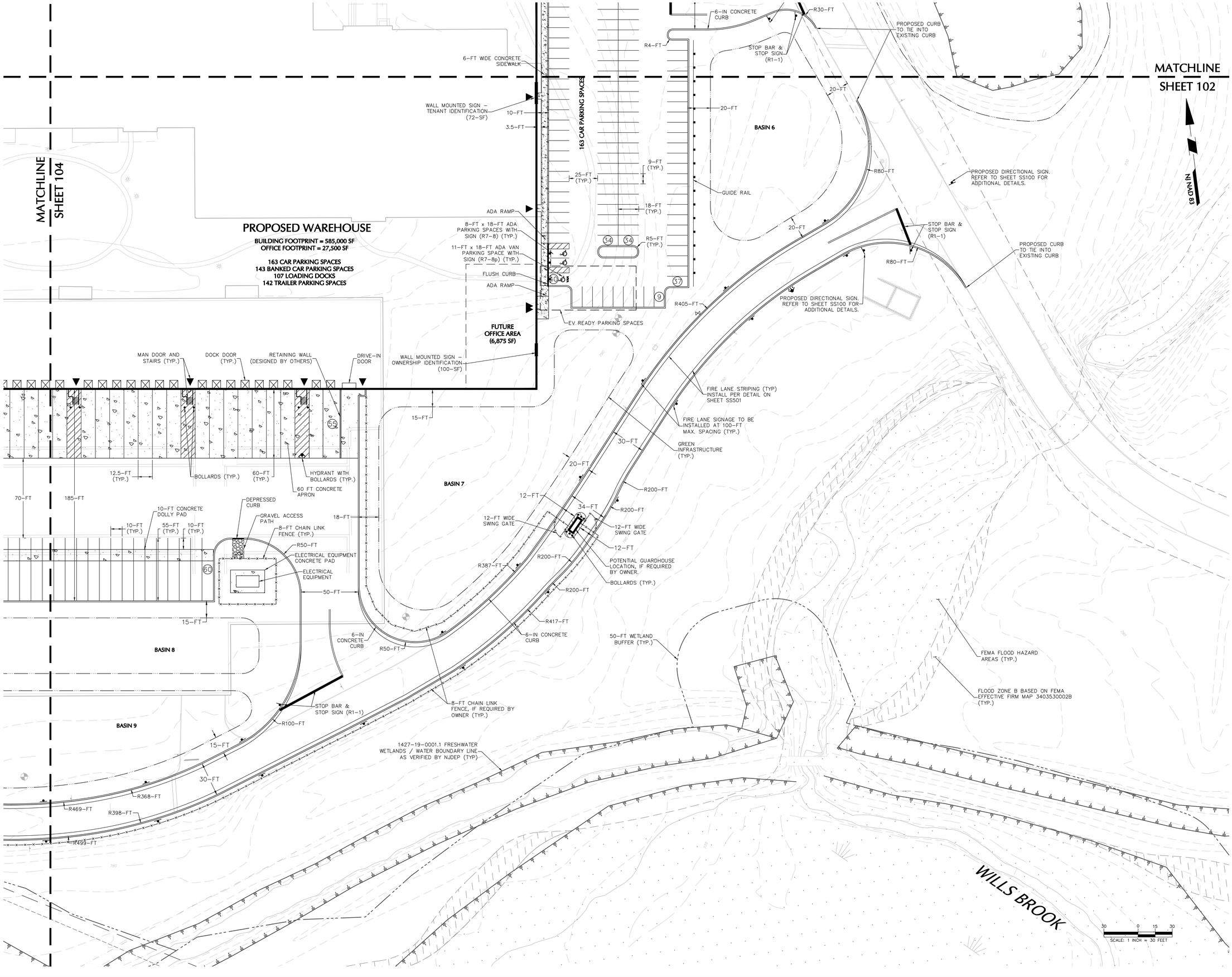
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL SITE PLAN 2

Project No.	Drawing No.
100980201	CS102
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 4 of 62

© 2022 Langan



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL SITE PLAN 3

Project No. 100980201	Drawing No. CS103
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 5 of 62

© 2022 Langan

MATCHLINE
SHEET 101

MATCHLINE
SHEET 103

NAD 83

143 BANKED CAR PARKING SPACES

6-FT WIDE CONCRETE SIDEWALK

WALL MOUNTED SIGN – TENANT IDENTIFICATION (72-SF)

6-IN CONCRETE CURB

WHEEL STOP (TYP.)

30-FT

18-FT

6-IN CONCRETE CURB

25-FT (TYP.)

13.5-FT

MAN DOOR (TYP.)

18-FT (TYP.)

GRASSED SWALE

FIRE LANE SIGNAGE TO BE INSTALLED AT 100-FT MAX. SPACING (TYP.)

9-FT (TYP.)

29 29

FUTURE OFFICE AREA (6,875 SF)

R5-FT (TYP.)

33 36

ADA RAMP

8-FT x 18-FT ADA PARKING SPACES WITH SIGN (R7-8) (TYP.)

9

FLUSH CURB

R25-FT

EV READY PARKING SPACES

15-FT

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

DRIVE-IN DOOR

DOCK DOOR (TYP.)

MAN DOOR AND STAIRS (TYP.)

UTILITY ROOM

RETAINING WALL (DESIGNED BY OTHERS)

BOLLARDS (TYP.)

60 FT CONCRETE APRON

12.5-FT (TYP.)

60-FT (TYP.)

10-FT X 10-FT TRANSFORMER PAD

55 LOADING DOCKS

HYDRANT WITH BOLLARDS (TYP.)

70-FT

185-FT

BASIN 11

R280-FT

R250-FT

8-FT CHAIN LINK FENCE, IF REQUIRED BY OWNER (TYP.)

19-FT

10-FT CONCRETE DOLLY PAD

TRAILER PARKING (TYP.)

10-FT (TYP.)

55-FT (TYP.)

10-FT (TYP.)

60 TRAILER PARKING SPACES

30-FT

R30-FT

R15-FT

60-FT

15-FT

R50-FT

GREEN INFRASTRUCTURE (TYP.)

6-IN CONCRETE CURB

STOP BAR & STOP SIGN (R1-1)

R75-FT

15-FT

12-FT WIDE SWING GATE

24-FT WIDE DOUBLE SWING GATE IF REQUIRED BY OWNER

BASIN 10

BASIN 8

12-FT

75-FT ROUTE 80 SETBACK

R200-FT

34-FT

15-FT

BOLLARDS (TYP.)

12-FT WIDE SWING GATE

BASIN 9

R200-FT

NJDOT LANDSCAPE EASEMENT SCHEDULE B-6, ITEM 26

12-FT

R200-FT

R200-FT

R530-FT

POTENTIAL GUARDHOUSE LOCATION, IF REQUIRED BY OWNER.

30-FT

R500-FT

R349-FT

FIRE LANE STRIPING (TYP) INSTALL PER DETAIL ON SHEET SS501

R469-FT

8-FT CHAIN LINK FENCE, IF REQUIRED BY OWENER (TYP.)

R379-FT

R499-FT

WEST BOUND

INTERSTATE ROUTE 80
(WIDTH VARIES)

EAST BOUND

50-FT WETLAND BUFFER (TYP.)

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

30 0 15 30
SCALE: 1 INCH = 30 FEET

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

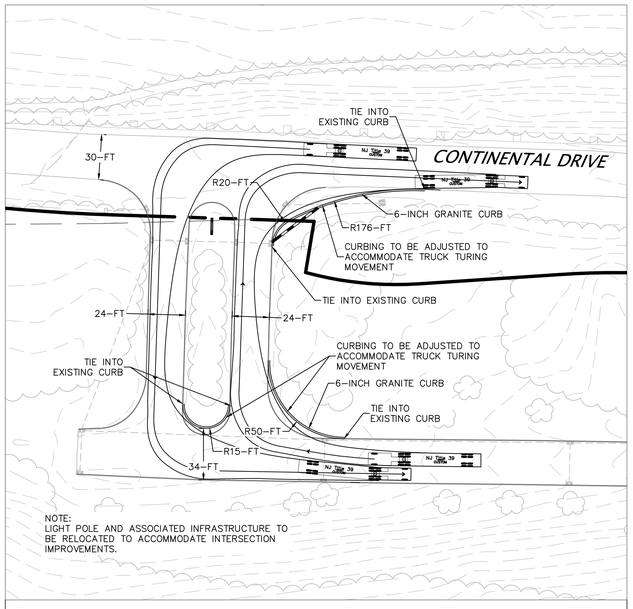
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

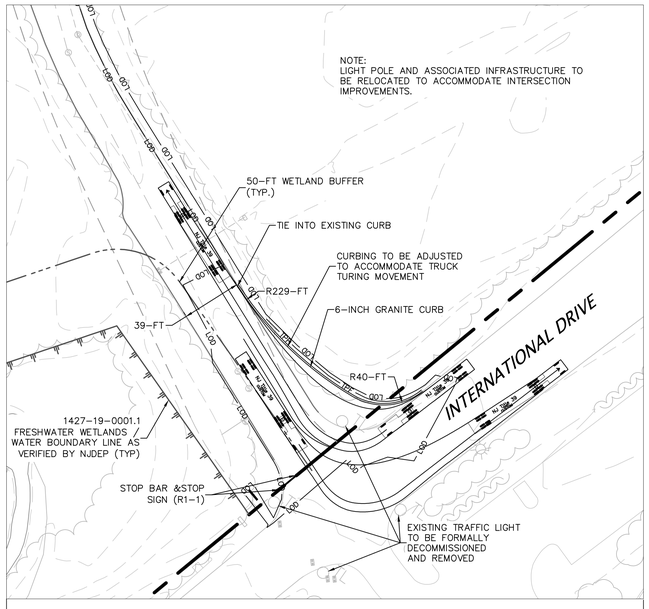
Drawing Title
PARTIAL SITE PLAN 4

Project No.	Drawing No.
100980201	CS104
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 6 of 62

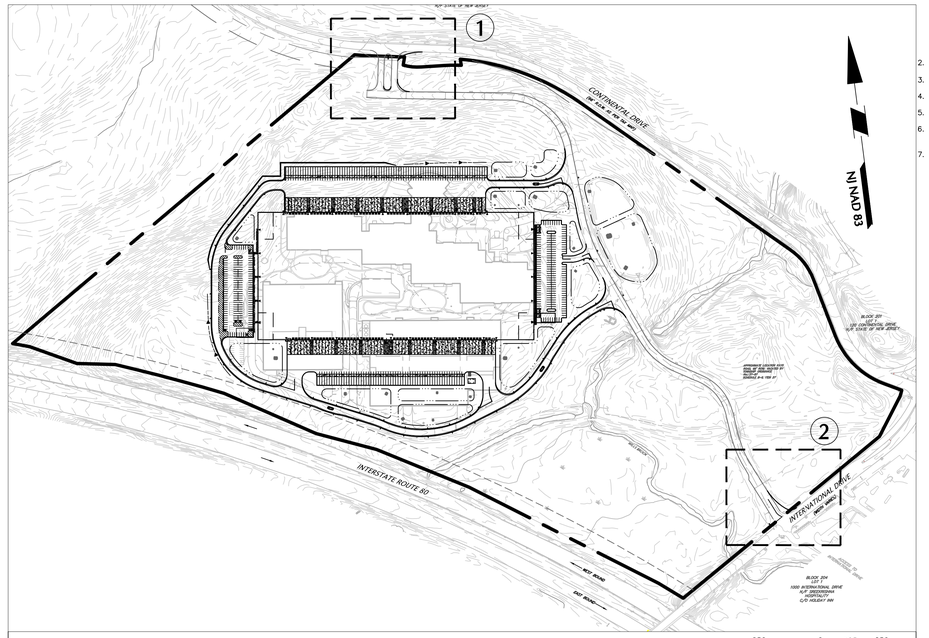
© 2022 Langan



SITE PLAN AREA 1



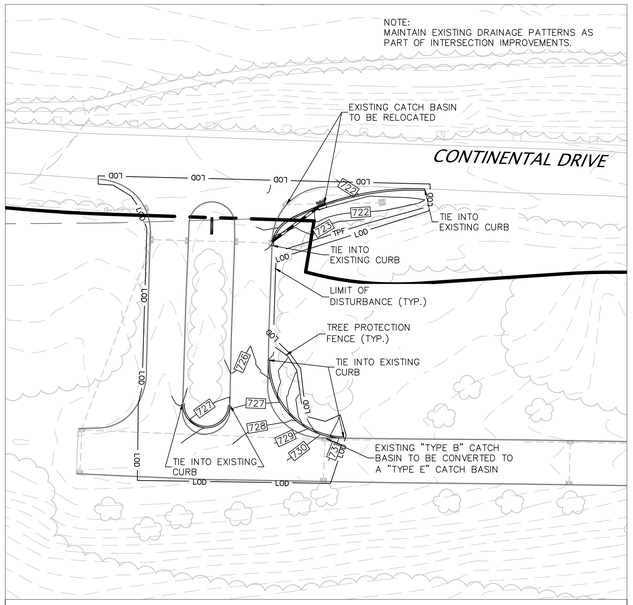
SITE PLAN AREA 2



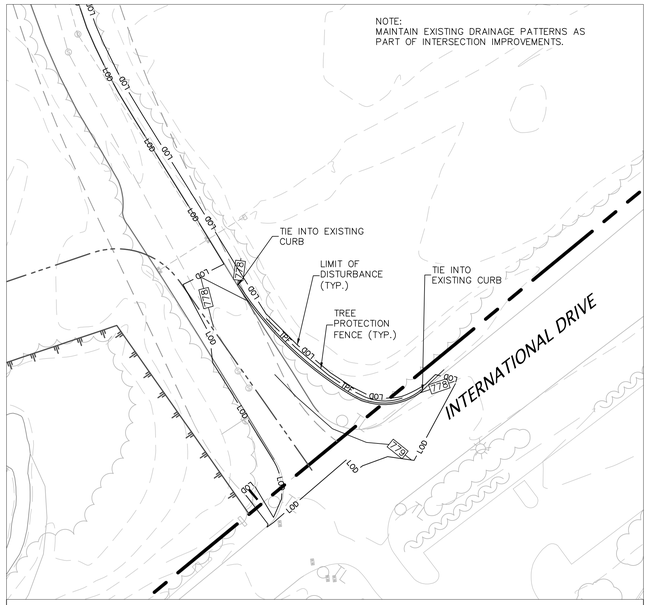
KEY MAP

SCALE: 1 INCH = 250 FEET

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).



GRADING PLAN AREA 1



GRADING PLAN AREA 2

SCALE: 1 INCH = 40 FEET

Date	Description	No.

Revisions

11-29-2022

SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

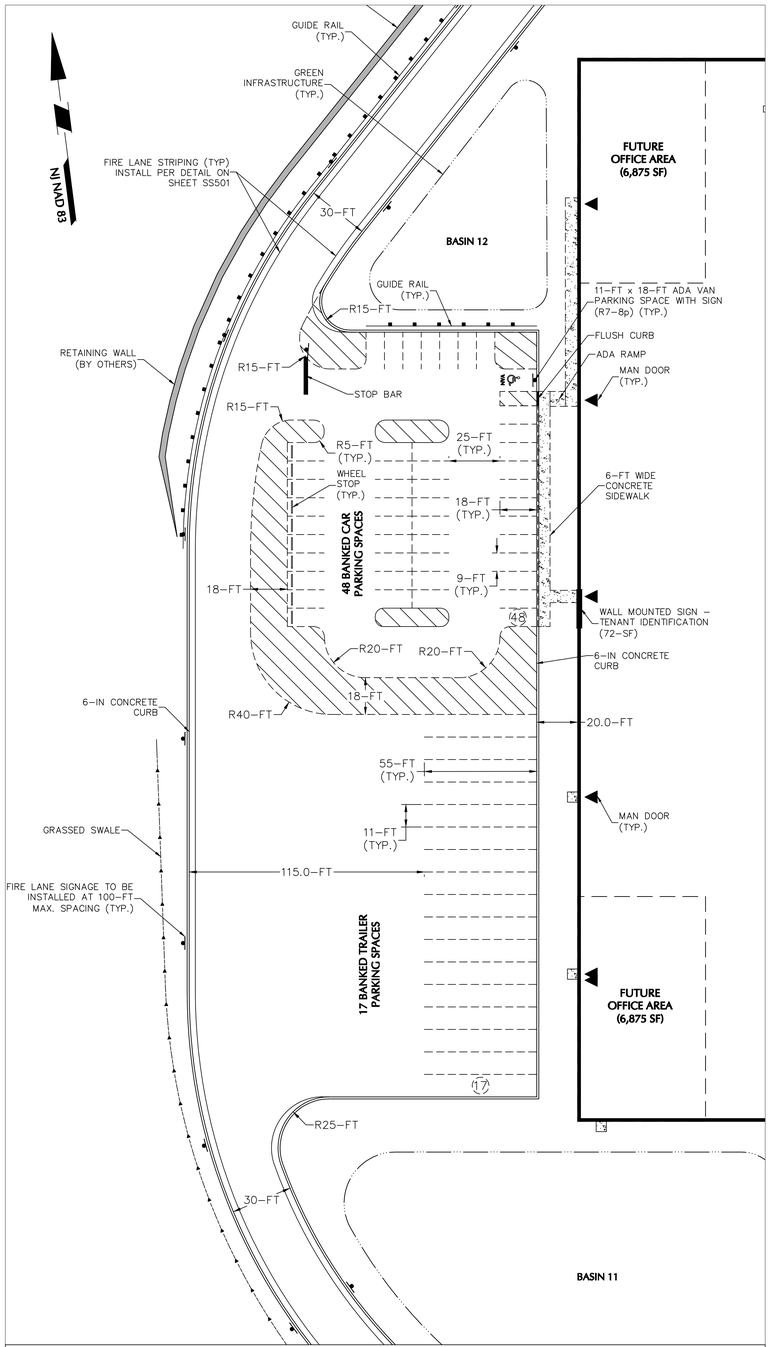
Drawing Title
ACCESS ROAD IMPROVEMENTS

Project No.	Drawing No.
100980201	CS105
Date: 11/18/2022	
Drawn By: RY/SL	
Checked By: KMR/RB	Sheet 7 of 62

© 2022 Langan

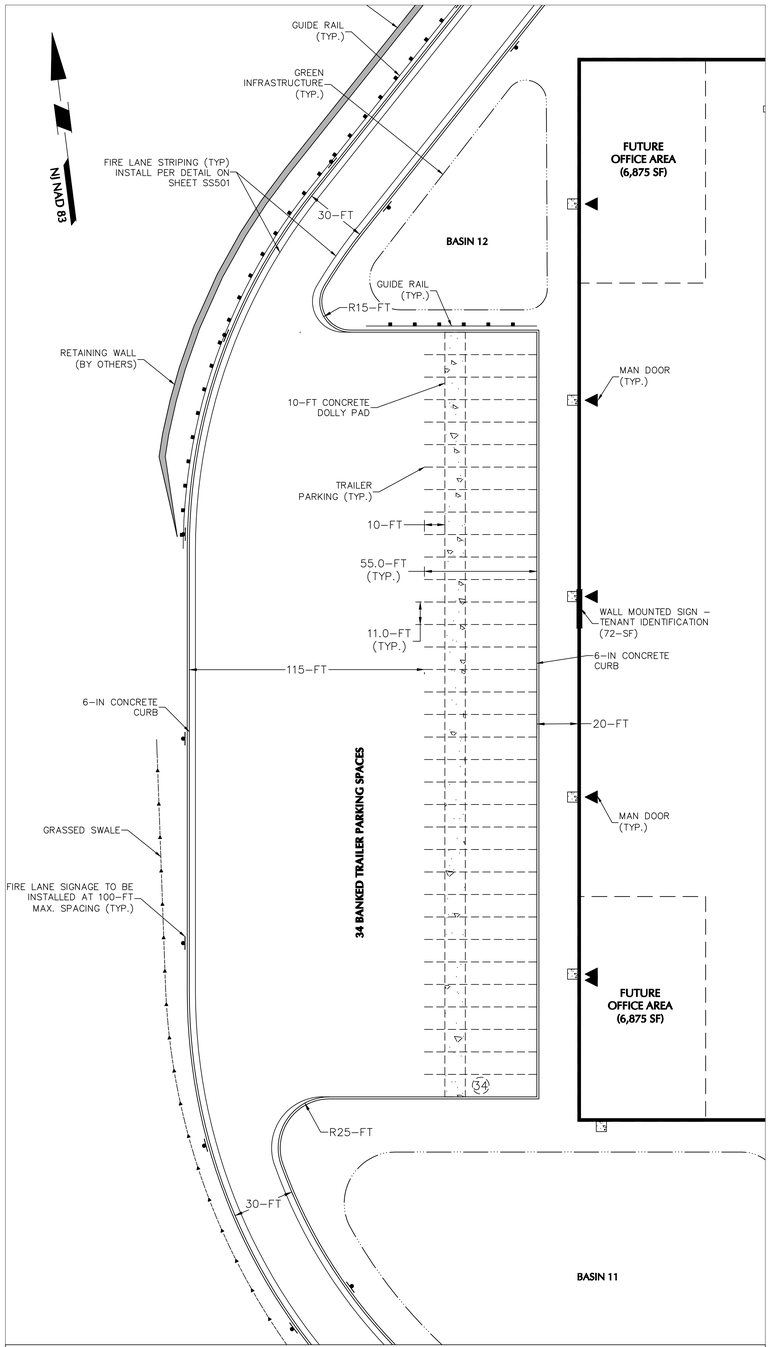
Date: 11/29/2022 Time: 09:55 User: ryemerou Style Table: Langan.stb Layout: CS105 Document Code: 100980201-0302-CS101-0105

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ALL CURBS TO BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
4. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE SPECIFIED.
5. REFER TO ARCHITECTURAL FOR DETAILED BUILDING DIMENSIONS.
6. ALL REGULATORY SIGNS AND TRAFFIC MARKINGS SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223 (STANDARDS FOR INSTALLATION OF EVCS AND CHARGING READY PARKING SPACES DATED JULY 9, 2021).



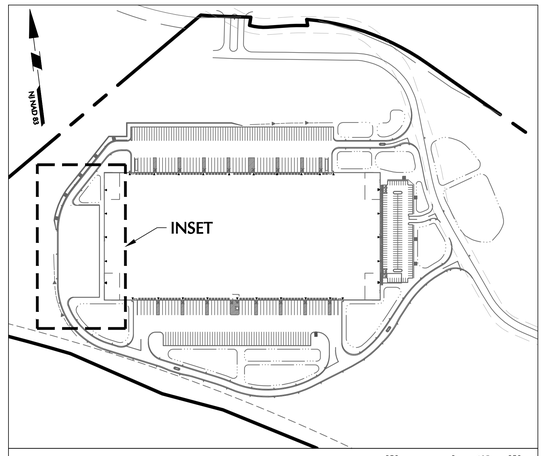
INSET - ALTERNATIVE OPTION 1
LAND BANKED CAR AND TRAILER PARKING SPACES

30 0 15 30
SCALE: 1 INCH = 30 FEET



INSET - ALTERNATIVE OPTION 2
LAND BANKED TRAILER PARKING SPACES

30 0 15 30
SCALE: 1 INCH = 30 FEET



KEY MAP

250 0 125 250
SCALE: 1 INCH = 250 FEET

Date	Description	No.

Revisions

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
LAND BANKED PARKING LAYOUT

Project No. 100980201	Drawing No. CS201
Date 11/18/2022	
Drawn By RY	
Checked By KMR/RB	Sheet 8 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. THE CONTRACTOR SHALL DEMOLISH ALL BUILDINGS, PAVEMENT, ETC WHERE INDICATED WITHIN THE LIMIT OF DISTURBANCE. EDGES OF PAVEMENT DEMOLITION SHALL BE SAW CUT. DEMOLISHED CONCRETE AND ASPHALT SHALL BE CRUSHED TO THE DIMENSIONS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND STOCKPILED FOR REUSE AS SITE FILL. ALL DEMOLITION AND MATERIAL REUSE SHALL BE IN ACCORDANCE WITH OWNER'S REQUIREMENTS.
4. THE CONTRACTOR MUST ACCEPT THE SITE AS IS AND SHALL BE DEEMED TO HAVE INSPECTED THE SITE AND REVIEWED ALL CONTRACT DOCUMENTS PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL APPLICABLE EXISTING UTILITIES. SOME UNDERGROUND UTILITIES MAY BE LOCATED DIFFERENT THAN SHOWN ON THIS PLAN. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CONSTRUCTION MANAGER. CONTRACTOR SHALL PROTECT AND MAINTAIN UTILITIES AS NOTED.
5. THE CONTRACTOR SHALL CARRY OUT THE WORK OF THIS CONTRACT PLACING THE SAFETY AND PROTECTION OF THE SURROUNDING COMMUNITY AND PROPERTY AT THE HIGHEST PRIORITY. THE CONTRACTOR SHALL ENSURE FREE AND SAFE PASSAGE OF PERSONS AROUND THE AREA OF THE DEMOLITION AS DIRECTED BY THE GOVERNING AGENCIES AND THE OWNER. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE. THE CONSULTANT DOES NOT HAVE THE RIGHT TO STOP DEMOLITION ACTIVITIES, SUCH DIRECTION MUST COME FROM THE OWNER.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION SIGNAGE AND ASSOCIATED TRAFFIC MEASURES. THE CONTRACTOR SHALL SUBMIT A SIGNAGE AND TRAFFIC CONTROL PLAN TO BE APPROVED BY THE PROJECT ENGINEER AND OWNERSHIP TEAM.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE SECURITY OF THE PROJECT SITE AT ALL TIMES.
8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UTILITIES, WHETHER SHOWN OR NOT ON THE CONTRACT DRAWING, AND SHALL ABANDON, REMOVE, OR PROTECT THE UTILITIES AS INDICATED HEREON OR AS DIRECTED BY THE OWNER, SUBCONSULTANT, OR INTERESTED UTILITY COMPANY.
9. THE CONTRACTOR SHALL VERIFY THAT A SOIL EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN OBTAINED FOR DEMOLITION ACTIVITIES OUTSIDE THE EXISTING BUILDING AND PARKING GARAGES. CONTRACTOR SHALL COMPLY WITH THE CONDITIONS THEREON BY INSTALLING AND MAINTAINING ALL SESC MEASURES AND MAKING THE REQUIRED NOTIFICATIONS.
10. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONTENTS OF THE BUILDINGS TO BE DEMOLISHED INCLUDING, BUT NOT NECESSARILY LIMITED TO, FURNISHINGS, MECHANICAL EQUIPMENT, RESERVOIR TANKS, PLUMBING FIXTURES, FURNITURE, CABINETS, ETC. IN ACCORDANCE WITH STATE AND LOCAL LAWS, AS DIRECTED BY OWNER.
11. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY SERVICES TO BE DEMOLISHED WILL NOT AFFECT OTHER SERVICES OUTSIDE THE CONTRACT LIMIT.
12. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL DISCONNECT AND CAP/TERMINATE AT THE UTILITY MAIN ALL BUILDING SERVICES, E.G. WATER, SEWER, GAS, ELECTRIC, TELEPHONE, ETC. (UNLESS OTHERWISE NOTED) IN ACCORDANCE WITH ALL LOCAL REGULATION AND UTILITY COMPANY REQUIREMENTS. THIS WORK SHALL INCLUDE COORDINATION WITH UTILITY COMPANIES AND OBTAINING AND PAYING FEES FOR ALL STREET AND SIDEWALK OPENING PERMITS.
13. THE CONTRACTOR SHALL DEMOLISH AND REMOVE THE BUILDINGS WHERE INDICATED, INCLUDING ALL FLOOR SLABS, PITS, WALLS, FOOTINGS, GRADE BEAMS, COLUMNS, UTILITIES ETC. ALL VOIDS REMAINING FROM THE REMOVAL OF SUBSURFACE ELEMENTS SHALL BE BACKFILLED WITH COMPACTED MATERIAL AS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND OWNERSHIP DIRECTION.
14. ALL EXISTING SITE ELEMENTS SLATED FOR DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING, BUT NOT LIMITED TO, ASPHALT, BUSHES, TREES, PLANTERS, ETC. WITHIN THE CONTRACT LIMITS UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO VERIFY THAT ALL ASBESTOS, LEAD BASED PAINT, HAZMAT MATERIALS, UNDERGROUND STORAGE TANKS, TRANSFORMERS, ETC. HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT RIGHT-OF-WAYS AND ADJACENT PROPERTIES CLEAN DURING DEMOLITION.
17. CONTRACTOR SHALL STOCKPILE REMOVED ASPHALT AND CONCRETE IN SEPARATE PILES. REMOVED MATERIAL MAY BE REUSED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL, AS DIRECTED BY OWNER OR OWNER'S ENGINEER.
18. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
19. DEMOLITION ACTIVITIES ONSITE SHALL BE COORDINATED WITH THE SITE OWNER, AND SHALL NOT BE CONDUCTED WITHOUT APPROVAL FROM OWNER.

NJ NAD 83

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

SHEET 101

SHEET 102
BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

ALL STORM INLETS AND PIPES DOWNSTREAM OF THIS STRUCTURE TO BE MAINTAINED AND PROTECTED

LIMIT OF DISTURBANCE (TYP.)

TEMPORARY STOCKPILE LOCATION

TEMPORARY STOCKPILE LOCATION

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

INLET PROTECTION (TYP.)

EXISTING BUILDING

EXISTING BUILDING, PARKING GARAGES, STRUCTURES, PAVEMENT, AND OTHER FEATURES LOCATED WITHIN THE LIMIT OF DISTURBANCE TO BE REMOVED UNLESS OTHERWISE SPECIFIED. REFER TO CD101, CD102, CD103, AND CD104 FOR EXTENT OF UTILITY DEMOLITION.

LIMIT OF DISTURBANCE = 38.0 ACRES

EXISTING BUILDING

CONSTRUCTION ENTRANCE (TYP.)

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

TEMPORARY STOCKPILE LOCATION

EXISTING PARKING STRUCTURE

EXISTING PARKING STRUCTURE

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

ALL STORM INLETS AND PIPES DOWNSTREAM OF THIS STRUCTURE TO BE MAINTAINED AND PROTECTED

APPROXIMATE LOCATION KAYS ROAD, 66' ROW, VACATED BY TOWSHIP ORDINANCE No.:37-87 SCHEDULE B-II, ITEM 27

INLET PROTECTION (TYP.)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B FLOOD ZONE B BASED ON FEMA EFFECTIVE FIRM MAP 3403530002B (TYP.)

INLET PROTECTION (TYP.)

LIMIT OF DISTURBANCE (TYP.)

25' WIDE UTILITY EASEMENT PER DB 3384 PG 255 SCHEDULE B-II, ITEM 18

ALEXIS LANDSCAPE SCHEDULE B-II, ITEM 28

WEST BOUND

EAST BOUND

SHEET 104

INTERSTATE ROUTE 80
(WIDTH VARIES)

WELLS BROOK

SHEET 103

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA HOSPITALITY
C/O HOLIDAY INN

WEST BOUND

EAST BOUND

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
OVERALL DEMOLITION PLAN

Project No. 100980201	Drawing No. CD100
Date 10/01/2022	
Drawn By RY	
Checked By KMR/RB	Sheet 9 of 62

© 2022 Langan

NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. THE CONTRACTOR SHALL DEMOLISH ALL BUILDINGS, PAVEMENT, ETC WHERE INDICATED WITHIN THE LIMIT OF DISTURBANCE. EDGES OF PAVEMENT DEMOLITION SHALL BE SAW CUT. DEMOLISHED CONCRETE AND ASPHALT SHALL BE CRUSHED TO THE DIMENSIONS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND STOCKPILED FOR REUSE AS SITE FILL. ALL DEMOLITION AND MATERIAL REUSE SHALL BE IN ACCORDANCE WITH OWNER'S REQUIREMENTS
4. THE CONTRACTOR MUST ACCEPT THE SITE AS IS AND SHALL BE DEEMED TO HAVE INSPECTED THE SITE AND REVIEWED ALL CONTRACT DOCUMENTS PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL APPLICABLE EXISTING UTILITIES. SOME UNDERGROUND UTILITIES MAY BE LOCATED DIFFERENT THAN SHOWN ON THIS PLAN. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CONSTRUCTION MANAGER. CONTRACTOR SHALL PROTECT AND MAINTAIN UTILITIES AS NOTED.
5. THE CONTRACTOR SHALL CARRY OUT THE WORK OF THIS CONTRACT PLACING THE SAFETY AND PROTECTION OF THE SURROUNDING COMMUNITY AND PROPERTY AT THE HIGHEST PRIORITY. THE CONTRACTOR SHALL ENSURE FREE AND SAFE PASSAGE OF PERSONS AROUND THE AREA OF THE DEMOLITION AS DIRECTED BY THE GOVERNING AGENCIES AND THE OWNER. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE. THE CONSULTANT DOES NOT HAVE THE RIGHT TO STOP DEMOLITION ACTIVITIES. SUCH DIRECTION MUST COME FROM THE OWNER.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION SIGNAGE AND ASSOCIATED TRAFFIC MEASURES. THE CONTRACTOR SHALL SUBMIT A SIGNAGE AND TRAFFIC CONTROL PLAN TO BE APPROVED BY THE PROJECT ENGINEER AND OWNERSHIP TEAM.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE SECURITY OF THE PROJECT SITE AT ALL TIMES.
8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UTILITIES, WHETHER SHOWN OR NOT ON THE CONTRACT DRAWING, AND SHALL ABANDON, REMOVE, OR PROTECT THE UTILITIES AS INDICATED HEREON OR AS DIRECTED BY THE OWNER, SUBCONSULTANT, OR INTERESTED UTILITY COMPANY.
9. THE CONTRACTOR SHALL VERIFY THAT A SOIL EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN OBTAINED FOR DEMOLITION ACTIVITIES OUTSIDE THE EXISTING BUILDING AND PARKING GARAGES. CONTRACTOR SHALL COMPLY WITH THE CONDITIONS THEREON BY INSTALLING AND MAINTAINING ALL SESC MEASURES AND MAKING THE REQUIRED NOTIFICATIONS.
10. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONTENTS OF THE BUILDINGS TO BE DEMOLISHED INCLUDING, BUT NOT NECESSARILY LIMITED TO, FURNISHINGS, MECHANICAL EQUIPMENT, RESERVOIR TANKS, PLUMBING FIXTURES, FURNITURE, CABINETS, ETC. IN ACCORDANCE WITH STATE AND LOCAL LAWS, AS DIRECTED BY OWNER.
11. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY SERVICES TO BE DEMOLISHED WILL NOT AFFECT OTHER SERVICES OUTSIDE THE CONTRACT LIMIT.
12. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL DISCONNECT AND CAP/TERMINATE AT THE UTILITY MAIN ALL BUILDING SERVICES, E.G. WATER, SEWER, GAS, ELECTRIC, TELEPHONE, ETC. (UNLESS OTHERWISE NOTED) IN ACCORDANCE WITH ALL LOCAL REGULATION AND UTILITY COMPANY REQUIREMENTS. THIS WORK SHALL INCLUDE COORDINATION WITH UTILITY COMPANIES AND OBTAINING AND PAYING FEES FOR ALL STREET AND SIDEWALK OPENING PERMITS.
13. THE CONTRACTOR SHALL DEMOLISH AND REMOVE THE BUILDINGS WHERE INDICATED, INCLUDING ALL FLOOR SLABS, PITS, WALLS, FOOTINGS, GRADE BEAMS, COLUMNS, UTILITIES ETC. ALL VOIDS REMAINING FROM THE REMOVAL OF SUBSURFACE ELEMENTS SHALL BE BACKFILLED WITH COMPACTED MATERIAL AS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND OWNERSHIP DIRECTION.
14. ALL EXISTING SITE ELEMENTS SLATED FOR DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING, BUT NOT LIMITED TO, ASPHALT, BUSHES, TREES, PLANTERS, ETC. WITHIN THE CONTRACT LIMITS UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO VERIFY THAT ALL ASBESTOS, LEAD BASED PAINT, HAZMAT MATERIALS, UNDERGROUND STORAGE TANKS, TRANSFORMERS, ETC. HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT RIGHT-OF-WAYS AND ADJACENT PROPERTIES CLEAN DURING DEMOLITION.
17. CONTRACTOR SHALL STOCKPILE REMOVED ASPHALT AND CONCRETE IN SEPARATE PILES. REMOVED MATERIAL MAY BE REUSED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL, AS DIRECTED BY OWNER OR OWNER'S ENGINEER.
18. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
19. DEMOLITION ACTIVITIES ONSITE SHALL BE COORDINATED WITH THE SITE OWNER, AND SHALL NOT BE CONDUCTED WITHOUT APPROVAL FROM OWNER.

RESERVE AND PROTECT EXISTING STORM LINES

RESERVE AND PROTECT EXISTING STORM SEWER INLET

RESERVE AND PROTECT EXISTING STORM LINES

N NAD 83

LIMIT OF DISTURBANCE (TYP.)

SILT FENCE (TYP.)

LIGHT STRUCTURE TO BE REMOVED

EXISTING FIRE HYDRANT TO BE REMOVED (TYP.)

EXISTING STORM LINE TO BE REMOVED/ABANDONED (TYP.)

EXISTING INLET TO BE REMOVED (TYP.)

TEMPORARY STOCKPILE LOCATION

INLET PROTECTION (TYP.)

EXISTING BUILDING, PARKING GARAGES, STRUCTURES, PAVEMENT, AND OTHER FEATURES LOCATED WITHIN THE LIMIT OF DISTURBANCE TO BE REMOVED UNLESS OTHERWISE SPECIFIED.

EXISTING BUILDING

MATCHLINE SHEET 102

MATCHLINE SHEET 104

EXISTING TREES WITHIN LIMIT OF DISTURBANCE SHALL BE REMOVED (TYP.)

EXISTING UNDER DRAIN TO BE REMOVED

30 0 15 30
SCALE: 1 INCH = 30 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

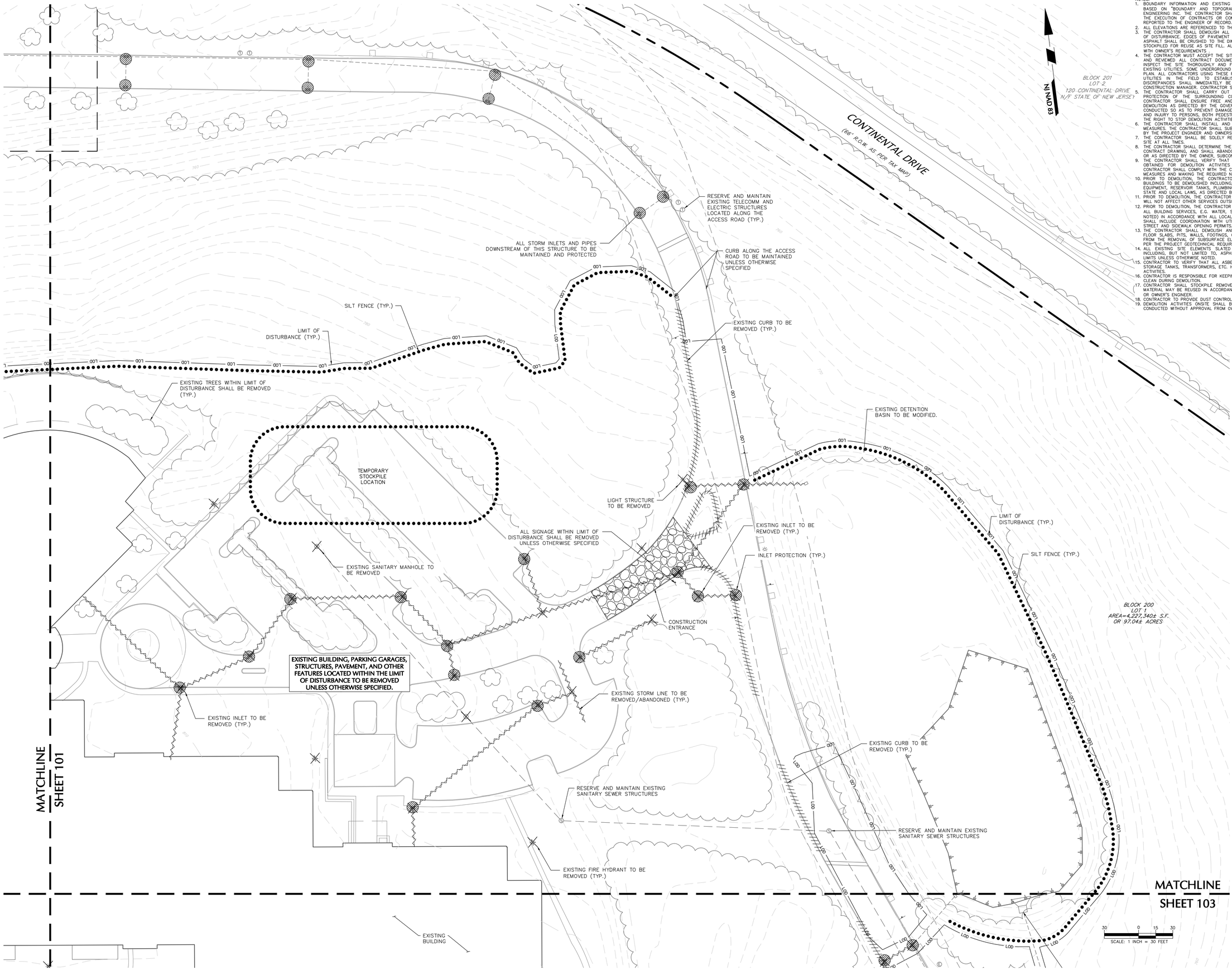
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL DEMOLITION PLAN 1

Project No. **100980201**	Drawing No. **CD101**
Date **11/18/2022**	
Drawn By **RY**	
Checked By **KMR/RB**	Sheet **10** of **62**

© 2022 Langan

Date: 11/23/2022 Time: 14:58 User: ryemerou Style Table: Langan.stb Layout: CD101 Document Code: 100980201-0302-CD101-0102



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3. THE CONTRACTOR SHALL DEMOLISH ALL BUILDINGS, PAVEMENT, ETC WHERE INDICATED WITHIN THE LIMIT OF DISTURBANCE. EDGES OF PAVEMENT DEMOLITION SHALL BE SAW CUT. DEMOLISHED CONCRETE AND ASPHALT SHALL BE CRUSHED TO THE DIMENSIONS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND STOCKPILED FOR REUSE AS SITE FILL. ALL DEMOLITION AND MATERIAL REUSE SHALL BE IN ACCORDANCE WITH OWNER'S REQUIREMENTS.
4. THE CONTRACTOR MUST ACCEPT THE SITE AS IS AND SHALL BE DEEMED TO HAVE INSPECTED THE SITE AND REVIEWED ALL CONTRACT DOCUMENTS PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL APPLICABLE EXISTING UTILITIES. SOME UNDERGROUND UTILITIES MAY BE LOCATED DIFFERENT THAN SHOWN ON THIS PLAN. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CONSTRUCTION MANAGER. CONTRACTOR SHALL PROTECT AND MAINTAIN UTILITIES AS NOTED.
5. THE CONTRACTOR SHALL CARRY OUT THE WORK OF THIS CONTRACT PLACING THE SAFETY AND PROTECTION OF THE SURROUNDING COMMUNITY AND PROPERTY AT THE HIGHEST PRIORITY. THE CONTRACTOR SHALL ENSURE FREE AND SAFE PASSAGE OF PERSONS AROUND THE AREA OF THE DEMOLITION AS DIRECTED BY THE GOVERNING AGENCIES AND THE OWNER. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE. THE CONSULTANT DOES NOT HAVE THE RIGHT TO STOP DEMOLITION ACTIVITIES. SUCH DIRECTION MUST COME FROM THE OWNER.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION SIGNAGE AND ASSOCIATED TRAFFIC MEASURES. THE CONTRACTOR SHALL SUBMIT A SIGNAGE AND TRAFFIC CONTROL PLAN TO BE APPROVED BY THE PROJECT ENGINEER AND OWNERSHIP TEAM.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE SECURITY OF THE PROJECT SITE AT ALL TIMES.
8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UTILITIES, WHETHER SHOWN OR NOT ON THE CONTRACT DRAWING, AND SHALL ABANDON, REMOVE, OR PROTECT THE UTILITIES AS INDICATED HEREON OR AS DIRECTED BY THE OWNER, SUBCONSULTANT, OR INTERESTED UTILITY COMPANY.
9. THE CONTRACTOR SHALL VERIFY THAT A SOIL EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN OBTAINED FOR DEMOLITION ACTIVITIES OUTSIDE THE EXISTING BUILDING AND PARKING GARAGES. CONTRACTOR SHALL COMPLY WITH THE CONDITIONS THEREON BY INSTALLING AND MAINTAINING ALL SESC MEASURES AND MAKING THE REQUIRED NOTIFICATIONS.
10. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONTENTS OF THE BUILDINGS TO BE DEMOLISHED INCLUDING, BUT NOT NECESSARILY LIMITED TO, FURNISHINGS, MECHANICAL EQUIPMENT, RESERVOIR TANKS, PLUMBING FIXTURES, FURNITURE, CABINETS, ETC. IN ACCORDANCE WITH STATE AND LOCAL LAWS, AS DIRECTED BY OWNER.
11. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY SERVICES TO BE DEMOLISHED WILL NOT AFFECT OTHER SERVICES OUTSIDE THE CONTRACT LIMIT.
12. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL DISCONNECT AND CAP/TERMINATE AT THE UTILITY MAIN ALL BUILDING SERVICES, E.G. WATER, SEWER, GAS, ELECTRIC, TELEPHONE, ETC. (UNLESS OTHERWISE NOTED) IN ACCORDANCE WITH ALL LOCAL REGULATION AND UTILITY COMPANY REQUIREMENTS. THIS WORK SHALL INCLUDE COORDINATION WITH UTILITY COMPANIES AND OBTAINING AND PAYING FEES FOR ALL STREET AND SIDEWALK OPENING PERMITS.
13. THE CONTRACTOR SHALL DEMOLISH AND REMOVE THE BUILDINGS WHERE INDICATED, INCLUDING ALL FLOOR SLABS, PITS, WALLS, FOOTINGS, GRADE BEAMS, COLUMNS, UTILITIES ETC. ALL VOIDS REMAINING FROM THE REMOVAL OF SUBSURFACE ELEMENTS SHALL BE BACKFILLED WITH COMPACTED MATERIAL AS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND OWNERSHIP DIRECTION.
14. ALL EXISTING SITE ELEMENTS SLATED FOR DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING, BUT NOT LIMITED TO, ASPHALT, BUSHES, TREES, PLANTERS, ETC. WITHIN THE CONTRACT LIMITS UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO VERIFY THAT ALL ASBESTOS, LEAD BASED PAINT, HAZMAT MATERIALS, UNDERGROUND STORAGE TANKS, TRANSFORMERS, ETC. HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT RIGHT-OF-WAYS AND ADJACENT PROPERTIES CLEAN DURING DEMOLITION.
17. CONTRACTOR SHALL STOCKPILE REMOVED ASPHALT AND CONCRETE IN SEPARATE PILES. REMOVED MATERIAL MAY BE REUSED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL, AS DIRECTED BY OWNER OR OWNER'S ENGINEER.
18. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
19. DEMOLITION ACTIVITIES ONSITE SHALL BE COORDINATED WITH THE SITE OWNER, AND SHALL NOT BE CONDUCTED WITHOUT APPROVAL FROM OWNER.

Date	Description	No.
Revisions		

11-29-2022

SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

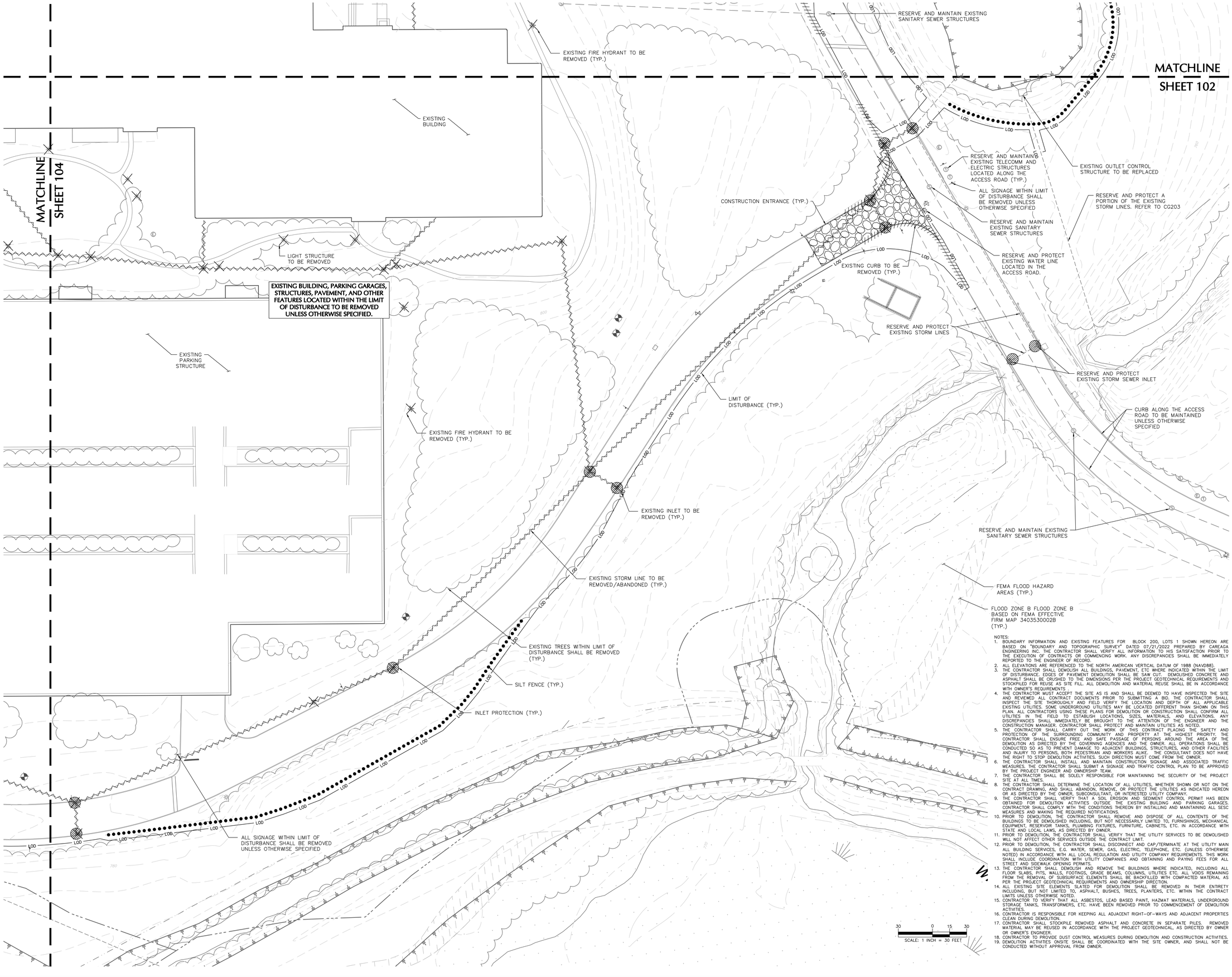
Drawing Title
PARTIAL DEMOLITION PLAN 2

Project No.	**100980201**
Date	**11/18/2022**
Drawn By	**RY**
Checked By	**KMR /RB**

Drawing No. **CD102**

Sheet **11** of **62**

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. THE CONTRACTOR SHALL DEMOLISH ALL BUILDINGS, PAVEMENT, ETC WHERE INDICATED WITHIN THE LIMIT OF DISTURBANCE. EDGES OF PAVEMENT DEMOLITION SHALL BE SAW CUT. DEMOLISHED CONCRETE AND ASPHALT SHALL BE CRUSHED TO THE DIMENSIONS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND STOCKPILED FOR REUSE AS SITE FILL. ALL DEMOLITION AND MATERIAL REUSE SHALL BE IN ACCORDANCE WITH OWNER'S REQUIREMENTS .
4. THE CONTRACTOR MUST ACCEPT THE SITE AS IS AND SHALL BE DEEMED TO HAVE INSPECTED THE SITE AND REVIEWED ALL CONTRACT DOCUMENTS PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL APPLICABLE EXISTING UTILITIES. SOME UNDERGROUND UTILITIES MAY BE LOCATED DIFFERENT THAN SHOWN ON THIS PLAN. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CONSTRUCTION MANAGER. CONTRACTOR SHALL PROTECT AND MAINTAIN UTILITIES AS NOTED.
5. THE CONTRACTOR SHALL CARRY OUT THE WORK OF THIS CONTRACT PLACING THE SAFETY AND PROTECTION OF THE SURROUNDING COMMUNITY AND PROPERTY AT THE HIGHEST PRIORITY. THE CONTRACTOR SHALL ENSURE FREE AND SAFE PASSAGE OF PERSONS AROUND THE AREA OF THE DEMOLITION AS DIRECTED BY THE GOVERNING AGENCIES AND THE OWNER. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE. THE CONSULTANT DOES NOT HAVE THE RIGHT TO STOP DEMOLITION ACTIVITIES. SUCH DIRECTION MUST COME FROM THE OWNER.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION SIGNAGE AND ASSOCIATED TRAFFIC MEASURES. THE CONTRACTOR SHALL SUBMIT A SIGNAGE AND TRAFFIC CONTROL PLAN TO BE APPROVED BY THE PROJECT ENGINEER AND OWNERSHIP TEAM.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE SECURITY OF THE PROJECT SITE AT ALL TIMES.
8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UTILITIES, WHETHER SHOWN OR NOT ON THE CONTRACT DRAWING, AND SHALL ABANDON, REMOVE, OR PROTECT THE UTILITIES AS INDICATED HEREON OR AS DIRECTED BY THE OWNER, SUBCONSULTANT, OR INTERESTED UTILITY COMPANY.
9. THE CONTRACTOR SHALL VERIFY THAT A SOIL EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN OBTAINED FOR DEMOLITION ACTIVITIES OUTSIDE THE EXISTING BUILDING AND PARKING GARAGES. CONTRACTOR SHALL COMPLY WITH THE CONDITIONS THEREON BY INSTALLING AND MAINTAINING ALL SESC MEASURES AND MAKING THE REQUIRED NOTIFICATIONS.
10. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONTENTS OF THE BUILDINGS TO BE DEMOLISHED INCLUDING, BUT NOT NECESSARILY LIMITED TO, FURNISHINGS, MECHANICAL EQUIPMENT, RESERVOIR TANKS, PLUMBING FIXTURES, FURNITURE, CABINETS, ETC. IN ACCORDANCE WITH STATE AND LOCAL LAWS, AS DIRECTED BY OWNER.
11. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY SERVICES TO BE DEMOLISHED WILL NOT AFFECT OTHER SERVICES OUTSIDE THE CONTRACT LIMIT.
12. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL DISCONNECT AND CAP/TERMINATE AT THE UTILITY MAIN ALL BUILDING SERVICES, E.G. WATER, SEWER, GAS, ELECTRIC, TELEPHONE, ETC. (UNLESS OTHERWISE NOTED) IN ACCORDANCE WITH ALL LOCAL REGULATION AND UTILITY COMPANY REQUIREMENTS. THIS WORK SHALL INCLUDE COORDINATION WITH UTILITY COMPANIES AND OBTAINING AND PAYING FEES FOR ALL STREET AND SIDEWALK OPENING PERMITS.
13. THE CONTRACTOR SHALL DEMOLISH AND REMOVE THE BUILDINGS WHERE INDICATED, INCLUDING ALL FLOOR SLABS, PITS, WALLS, FOOTINGS, GRADE BEAMS, COLUMNS, UTILITIES ETC. ALL VOIDS REMAINING FROM THE REMOVAL OF SUBSURFACE ELEMENTS SHALL BE BACKFILLED WITH COMPACTED MATERIAL AS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND OWNERSHIP DIRECTION.
14. ALL EXISTING SITE ELEMENTS SLATED FOR DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING, BUT NOT LIMITED TO, ASPHALT, BUSHES, TREES, PLANTERS, ETC. WITHIN THE CONTRACT LIMITS UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO VERIFY THAT ALL ASBESTOS, LEAD BASED PAINT, HAZMAT MATERIALS, UNDERGROUND STORAGE TANKS, TRANSFORMERS, ETC. HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT RIGHT-OF-WAYS AND ADJACENT PROPERTIES CLEAN DURING DEMOLITION.
17. CONTRACTOR SHALL STOCKPILE REMOVED ASPHALT AND CONCRETE IN SEPARATE PILES. REMOVED MATERIAL MAY BE REUSED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL, AS DIRECTED BY OWNER OR OWNER'S ENGINEER.
18. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
19. DEMOLITION ACTIVITIES ONSITE SHALL BE COORDINATED WITH THE SITE OWNER, AND SHALL NOT BE CONDUCTED WITHOUT APPROVAL FROM OWNER.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

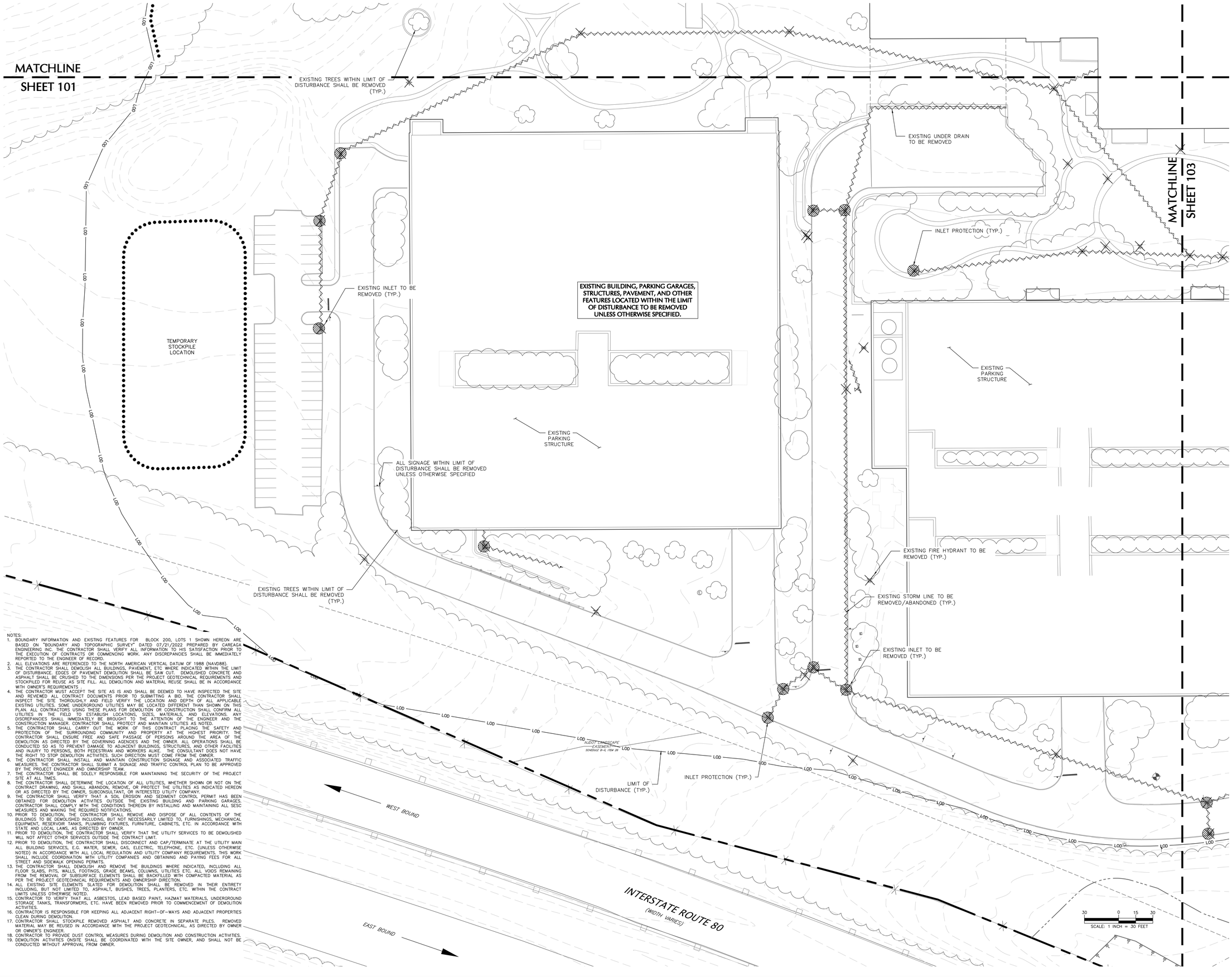
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL DEMOLITION PLAN 3

Project No.	**100980201**
Date	**11/18/2022**
Drawn By	**RY**
Checked By	**KMR /RB**
Drawing No.	**CD103**
Sheet	**12** of **62**

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. THE CONTRACTOR SHALL DEMOLISH ALL BUILDINGS, PAVEMENT, ETC WHERE INDICATED WITHIN THE LIMIT OF DISTURBANCE. EDGES OF PAVEMENT DEMOLITION SHALL BE SAW CUT. DEMOLISHED CONCRETE AND ASPHALT SHALL BE CRUSHED TO THE DIMENSIONS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND STOCKPILED FOR REUSE AS SITE FILL. ALL DEMOLITION AND MATERIAL REUSE SHALL BE IN ACCORDANCE WITH OWNER'S REQUIREMENTS
4. THE CONTRACTOR MUST ACCEPT THE SITE AS IS AND SHALL BE DEEMED TO HAVE INSPECTED THE SITE AND REVIEWED ALL CONTRACT DOCUMENTS PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL APPLICABLE EXISTING UTILITIES. SOME UNDERGROUND UTILITIES MAY BE LOCATED DIFFERENT THAN SHOWN ON THIS PLAN. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CONSTRUCTION MANAGER. CONTRACTOR SHALL PROTECT AND MAINTAIN UTILITIES AS NOTED.
5. THE CONTRACTOR SHALL CARRY OUT THE WORK OF THIS CONTRACT PLACING THE SAFETY AND PROTECTION OF THE SURROUNDING COMMUNITY AND PROPERTY AT THE HIGHEST PRIORITY. THE CONTRACTOR SHALL ENSURE FREE AND SAFE PASSAGE OF PERSONS AROUND THE AREA OF THE DEMOLITION AS DIRECTED BY THE GOVERNING AGENCIES AND THE OWNER. ALL OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS, BOTH PEDESTRIAN AND WORKERS ALIKE. THE CONSULTANT DOES NOT HAVE THE RIGHT TO STOP DEMOLITION ACTIVITIES. SUCH DIRECTION MUST COME FROM THE OWNER.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION SIGNAGE AND ASSOCIATED TRAFFIC MEASURES. THE CONTRACTOR SHALL SUBMIT A SIGNAGE AND TRAFFIC CONTROL PLAN TO BE APPROVED BY THE PROJECT ENGINEER AND OWNERSHIP TEAM.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE SECURITY OF THE PROJECT SITE AT ALL TIMES.
8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL UTILITIES, WHETHER SHOWN OR NOT ON THE CONTRACT DRAWING, AND SHALL ABANDON, REMOVE, OR PROTECT THE UTILITIES AS INDICATED HEREON OR AS DIRECTED BY THE OWNER, SUBCONSULTANT, OR INTERESTED UTILITY COMPANY.
9. THE CONTRACTOR SHALL VERIFY THAT A SOIL EROSION AND SEDIMENT CONTROL PERMIT HAS BEEN OBTAINED FOR DEMOLITION ACTIVITIES OUTSIDE THE EXISTING BUILDING AND PARKING GARAGES. CONTRACTOR SHALL COMPLY WITH THE CONDITIONS THEREON BY INSTALLING AND MAINTAINING ALL SESC MEASURES AND MAKING THE REQUIRED NOTIFICATIONS.
10. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONTENTS OF THE BUILDINGS TO BE DEMOLISHED INCLUDING, BUT NOT NECESSARILY LIMITED TO, FURNISHINGS, MECHANICAL EQUIPMENT, RESERVOIR TANKS, PLUMBING FIXTURES, FURNITURE, CABINETS, ETC. IN ACCORDANCE WITH STATE AND LOCAL LAWS, AS DIRECTED BY OWNER.
11. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY SERVICES TO BE DEMOLISHED WILL NOT AFFECT OTHER SERVICES OUTSIDE THE CONTRACT LIMIT.
12. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL DISCONNECT AND CAP/TERMINATE AT THE UTILITY MAIN ALL BUILDING SERVICES, E.G. WATER, SEWER, GAS, ELECTRIC, TELEPHONE, ETC. (UNLESS OTHERWISE NOTED) IN ACCORDANCE WITH ALL LOCAL REGULATION AND UTILITY COMPANY REQUIREMENTS. THIS WORK SHALL INCLUDE COORDINATION WITH UTILITY COMPANIES AND OBTAINING AND PAYING FEES FOR ALL STREET AND SIDEWALK OPENING PERMITS.
13. THE CONTRACTOR SHALL DEMOLISH AND REMOVE THE BUILDINGS WHERE INDICATED, INCLUDING ALL FLOOR SLABS, PITS, WALLS, FOOTINGS, GRADE BEAMS, COLUMNS, UTILITIES ETC. ALL VOIDS REMAINING FROM THE REMOVAL OF SUBSURFACE ELEMENTS SHALL BE BACKFILLED WITH COMPACTED MATERIAL AS PER THE PROJECT GEOTECHNICAL REQUIREMENTS AND OWNERSHIP DIRECTION.
14. ALL EXISTING SITE ELEMENTS SLATED FOR DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING, BUT NOT LIMITED TO, ASPHALT, BUSHES, TREES, PLANTERS, ETC. WITHIN THE CONTRACT LIMITS UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO VERIFY THAT ALL ASBESTOS, LEAD BASED PAINT, HAZMAT MATERIALS, UNDERGROUND STORAGE TANKS, TRANSFORMERS, ETC. HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT RIGHT-OF-WAYS AND ADJACENT PROPERTIES CLEAN DURING DEMOLITION.
17. CONTRACTOR SHALL STOCKPILE REMOVED ASPHALT AND CONCRETE IN SEPARATE PILES. REMOVED MATERIAL MAY BE REUSED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL, AS DIRECTED BY OWNER OR OWNER'S ENGINEER.
18. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
19. DEMOLITION ACTIVITIES ONSITE SHALL BE COORDINATED WITH THE SITE OWNER, AND SHALL NOT BE CONDUCTED WITHOUT APPROVAL FROM OWNER.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL DEMOLITION PLAN 4

Project No. 100980201	Drawing No. CD104
Date 11/18/2022	
Drawn By RY	
Checked By KMR/RB	Sheet 13 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. REFER TO DRAWING CS501 FOR PAVEMENT SECTIONS.

NJ NAD 83

LEGEND

- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- STANDARD-DUTY BITUMINOUS PAVEMENT
- HEAVY-DUTY BITUMINOUS PAVEMENT TRUCK COURTS
- AREA TO BE REPAIRED AS REQUIRED BY OWNER

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

INTERSECTION IMPROVEMENTS TO CONSIST OF HEAVY DUTY BITUMINIOUS PAVEMENT (ACCESS ROAD)

BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9
BASIN 10
BASIN 11
BASIN 12
BASIN 13
BASIN 14

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

APPROXIMATE LOCATION KAYS ROAD, 66' ROW, VACATED BY TOWNSHIP ORDINANCE No.:37-87 SCHEDULE B-II, ITEM 27

25' WIDE UTILITY EASEMENT PER DB 3384 PG 255 SCHEDULE B-II, ITEM 18

NJDOT LANDSCAPE EASEMENT SCHEDULE B-II, ITEM 36

INTERSECTION IMPROVEMENTS TO CONSIST OF HEAVY DUTY BITUMINIOUS PAVEMENT (ACCESS ROAD)

WILLS BROOK

WEST BOUND
EAST BOUND
INTERSTATE ROUTE 80
(WIDTH VARIES)

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA HOSPITALITY
C/O HOLIDAY INN

100 0 50 100
SCALE IN FEET

No.	Description	Date
	Revisions	

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA2796400

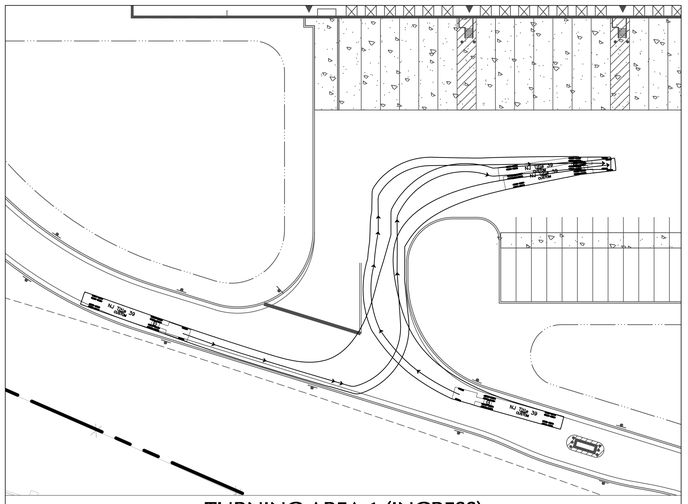
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PAVEMENT PLAN

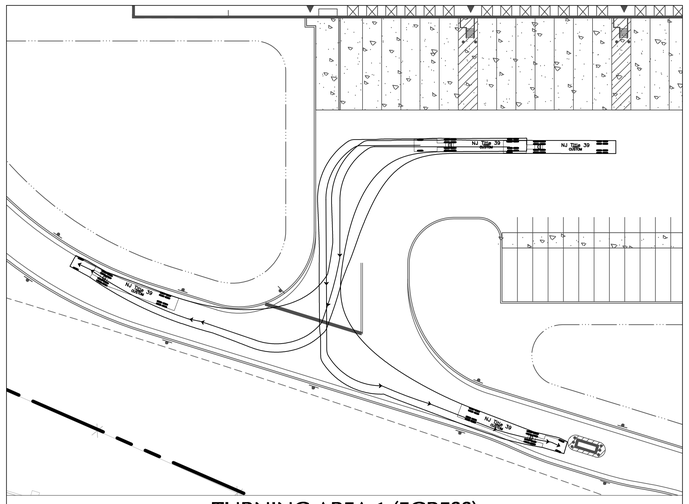
Project No.	100980201
Date	11/18/2022
Drawn By	RY
Checked By	KMR/RB

Drawing No.
CP100
Sheet 14 of 62

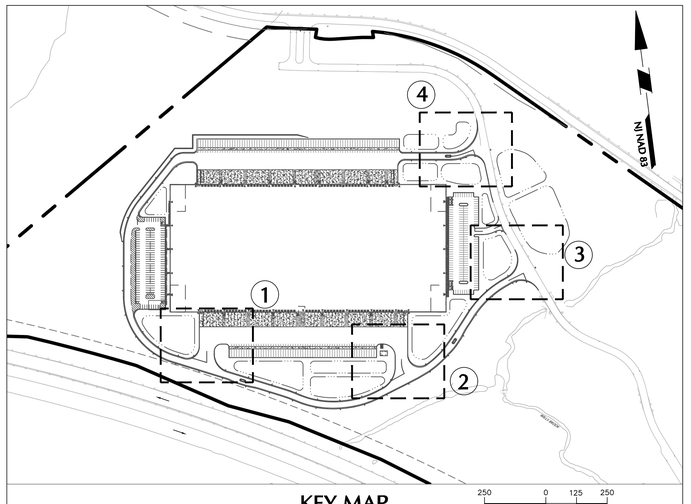
© 2022 Langan.



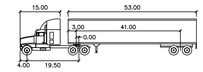
TURNING AREA 1 (INGRESS)



TURNING AREA 1 (EGRESS)



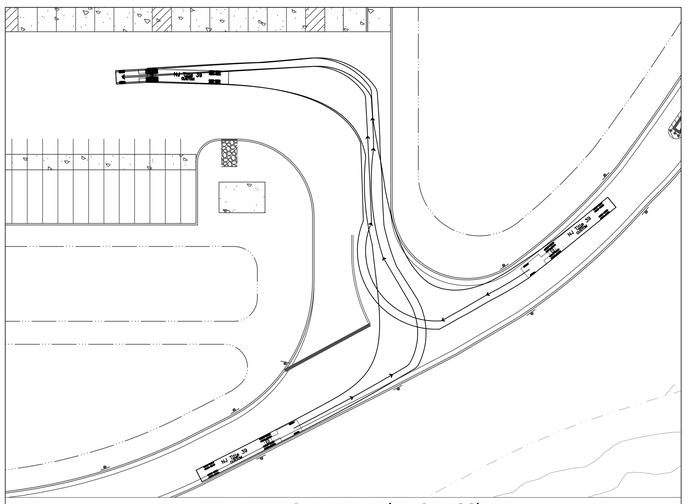
KEY MAP



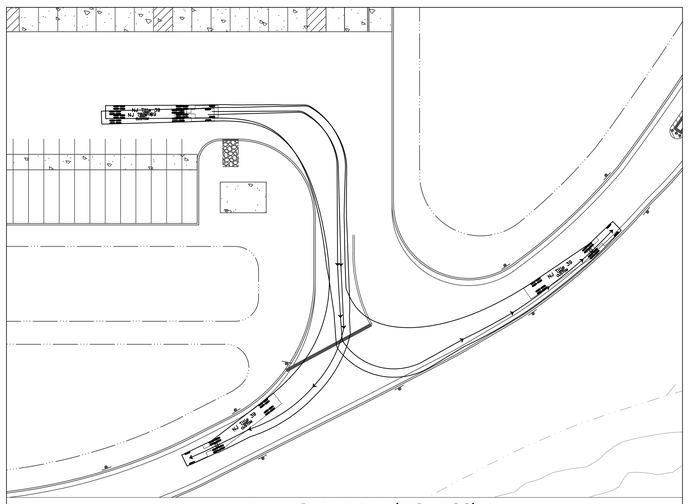
NJ Title 39

feet

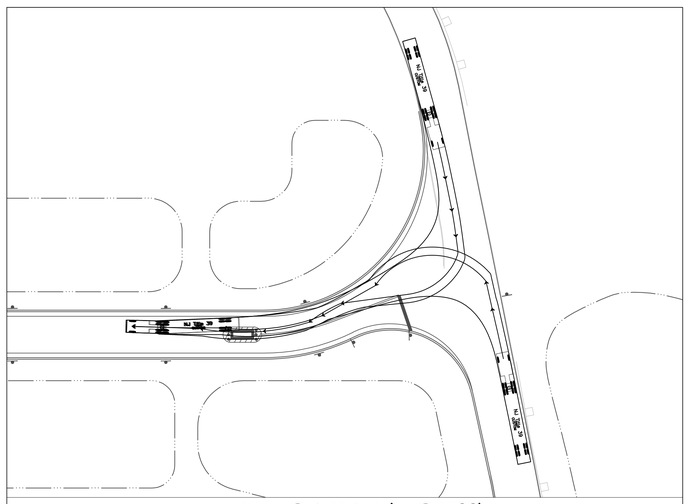
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 29.2
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		



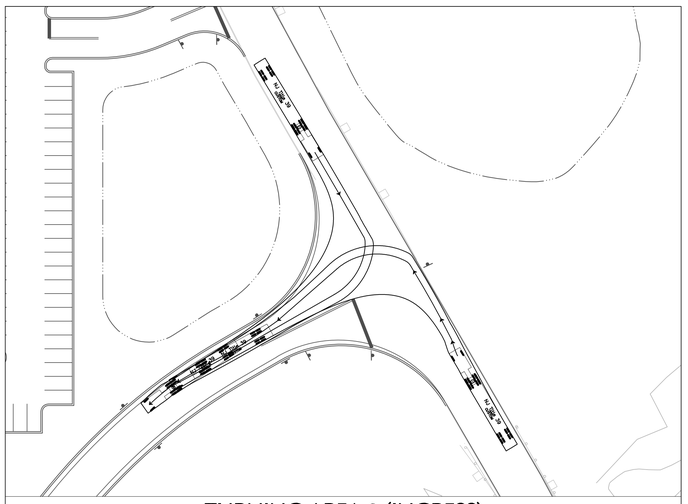
TURNING AREA 2 (INGRESS)



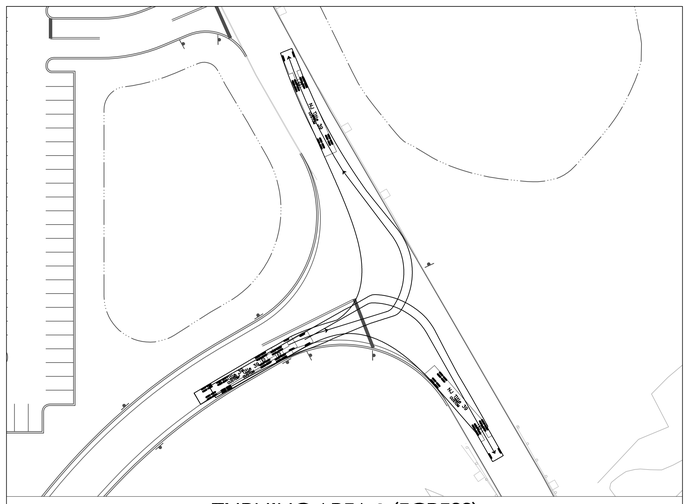
TURNING AREA 2 (EGRESS)



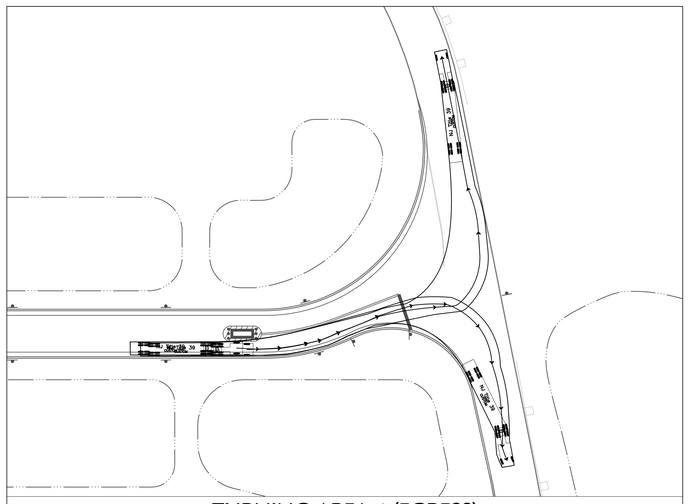
TURNING AREA 4 (INGRESS)



TURNING AREA 3 (INGRESS)



TURNING AREA 3 (EGRESS)



TURNING AREA 4 (EGRESS)

40 0 10 25 40
SCALE: 1 INCH = 40 FEET

Date	Description	No.

Revisions

11-29-2022

SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT

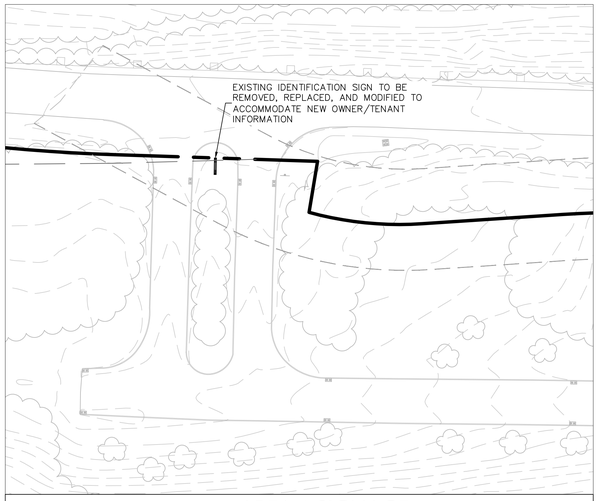
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title

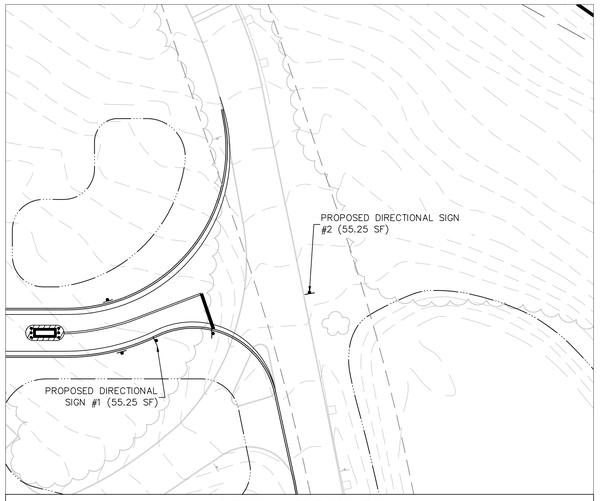
SITE CIRCULATION PLAN

Project No. **100980201**	Drawing No. **CS701**
Date **11/18/2022**	
Drawn By **RY**	
Checked By **KMR/RB**	Sheet **15** of **62**

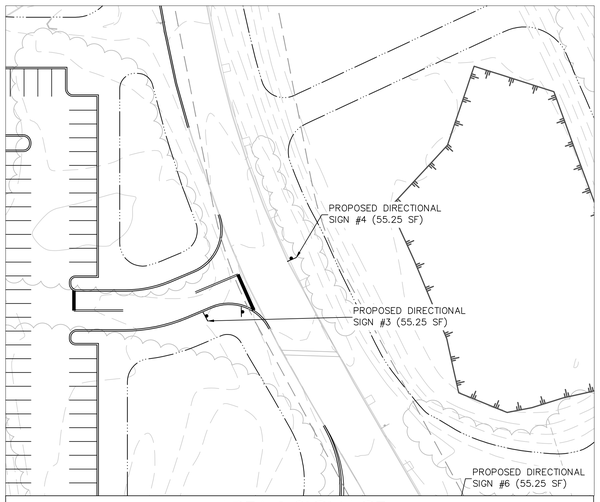
© 2022 Langan



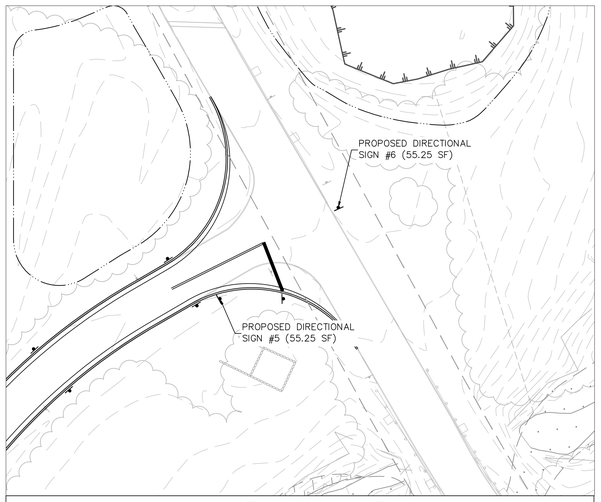
AREA 1 SIGNAGE



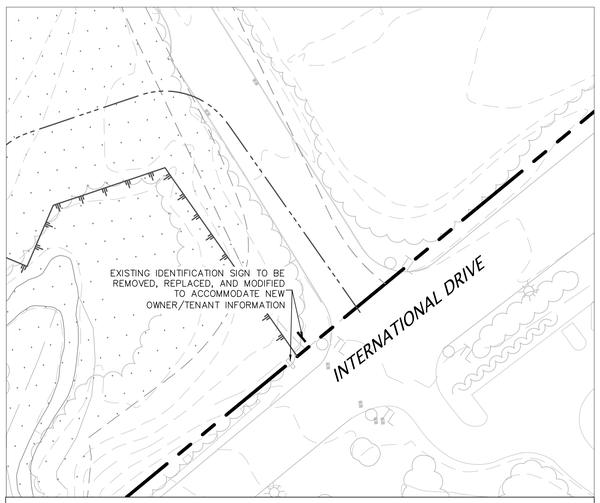
AREA 2 SIGNAGE



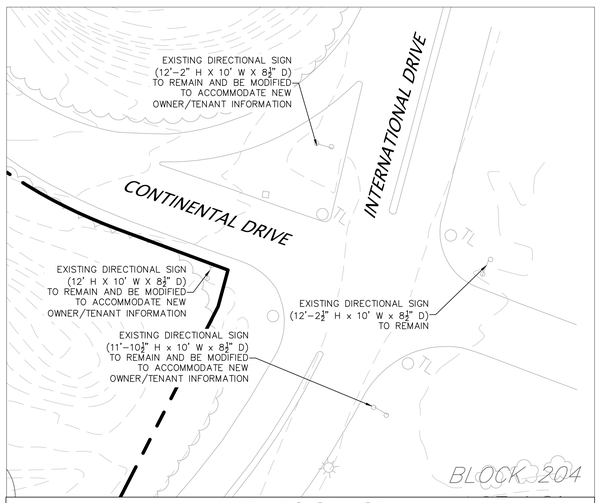
AREA 3 SIGNAGE



AREA 4 SIGNAGE

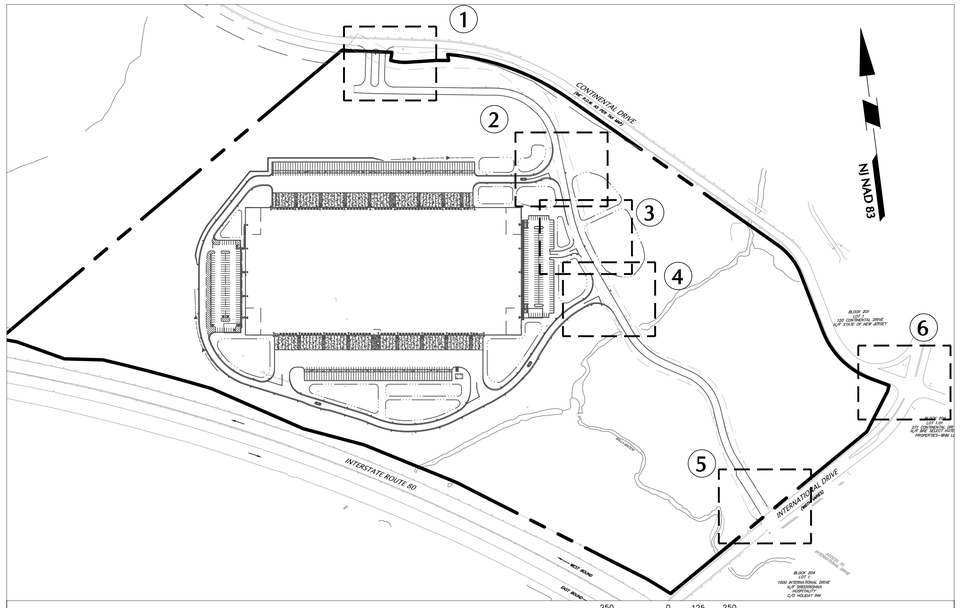


AREA 5 SIGNAGE



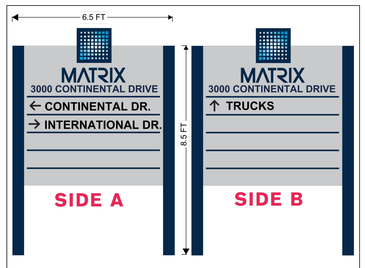
AREA 6 SIGNAGE

40 0 10 25 40
SCALE: 1 INCH = 40 FEET

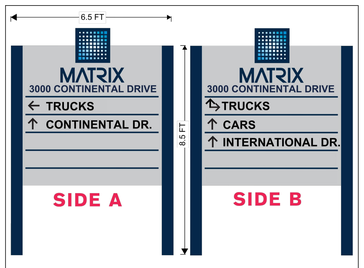


KEY MAP

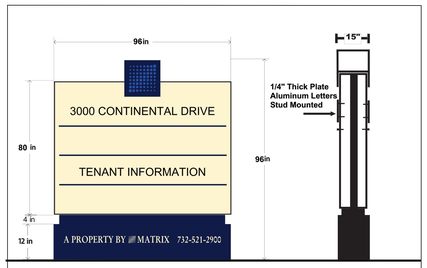
250 0 125 250
SCALE: 1 INCH = 250 FEET



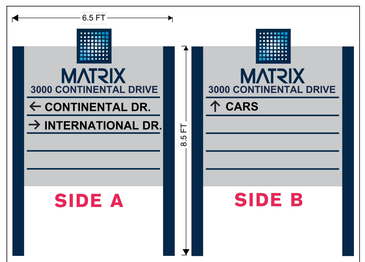
DIRECTIONAL SIGN #1



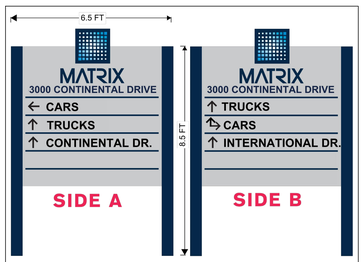
DIRECTIONAL SIGN #2



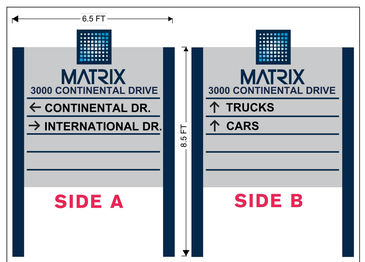
IDENTIFICATION (GROUND) SIGN



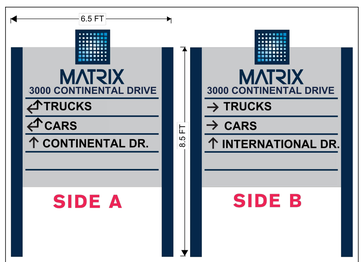
DIRECTIONAL SIGN #3



DIRECTIONAL SIGN #4



DIRECTIONAL SIGN #5



DIRECTIONAL SIGN #6

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
SIGNAGE PLAN

Project No.	Drawing No.
100980201	SS100
Date: 11/18/2022	
Drawn By: RY/SL	
Checked By: KMR /RB	Sheet 16 of 62

© 2022 Langan

AVERAGE GRADE PLANE FOR BUILDING	
POINTS	ELEVATIONS (FT)
1	796.57
2	793.95
3	793.95
4	793.95
5	793.95
6	793.33
7	797.93
8	797.39
9	797.37
10	795.76
11	793.95
12	793.95
13	793.95
14	793.95
15	796.56
16	797.95
17	797.95
AVERAGE	795.44

NOTES:
1. POINT 1 IS 5 FT OFF THE NORTHWESTERN CORNER OF THE BUILDING, SUBSEQUENT POINTS THEN MOVE ALONG THE BUILDING IN A CLOCKWISE DIRECTION.

2. THE POINTS ABOVE REPRESENT ELEVATIONS 5 FT OFF THE BUILDING PERIMETER AND WERE USED TO CALCULATE THE AVERAGE GRADE PLAN. THIS GRADE PLANE WAS USED TO CALCULATE THE BUILDING HEIGHT.

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1. WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

NJ NAD 83

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

INTERSECTION IMPROVEMENTS. REFER TO DRAWING CS105

SHEET 101

SHEET 102
BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9
BASIN 10
BASIN 11
BASIN 12
BASIN 13
BASIN 14

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES
F.F.E = 798

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

APPROXIMATE LOCATION KAYS ROAD, 66' ROW, VACATED BY TOWNSHIP ORDINANCE No. 37-87 SCHEDULE B-II, ITEM 27

25' WIDE UTILITY EASEMENT PER DB 1384 PG 255 SCHEDULE B-II, ITEM 18

SLOPE LANDSCAPE EASEMENT SCHEDULE B-II, ITEM 26

50-FT WETLAND BUFFER (TYP.)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B FLOOD ZONE B BASED ON FEMA EFFECTIVE FIRM MAP 34035J0002B (TYP.)

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP.)

WILLS BROOK

INTERSECTION IMPROVEMENTS. REFER TO DRAWING CS105

SHEET 103

SHEET 104

WEST BOUND
EAST BOUND

INTERSTATE ROUTE 80
(WIDTH VARIES)

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA HOSPITALITY
C/O HOLIDAY INN

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

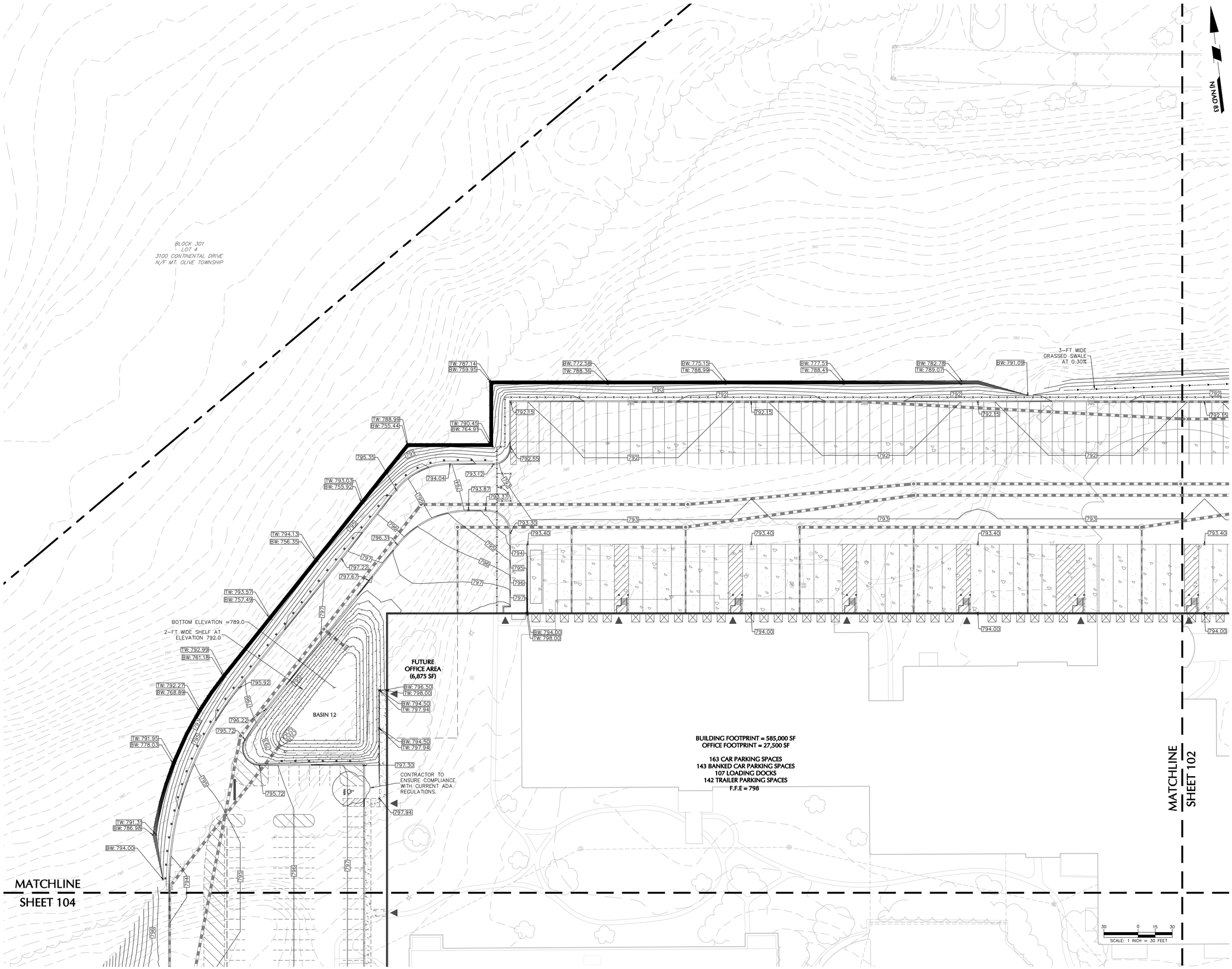
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL GRADING PLAN

Project No.	Drawing No.
100980201	CG100
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 17 of 62

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWSE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1. WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022

SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

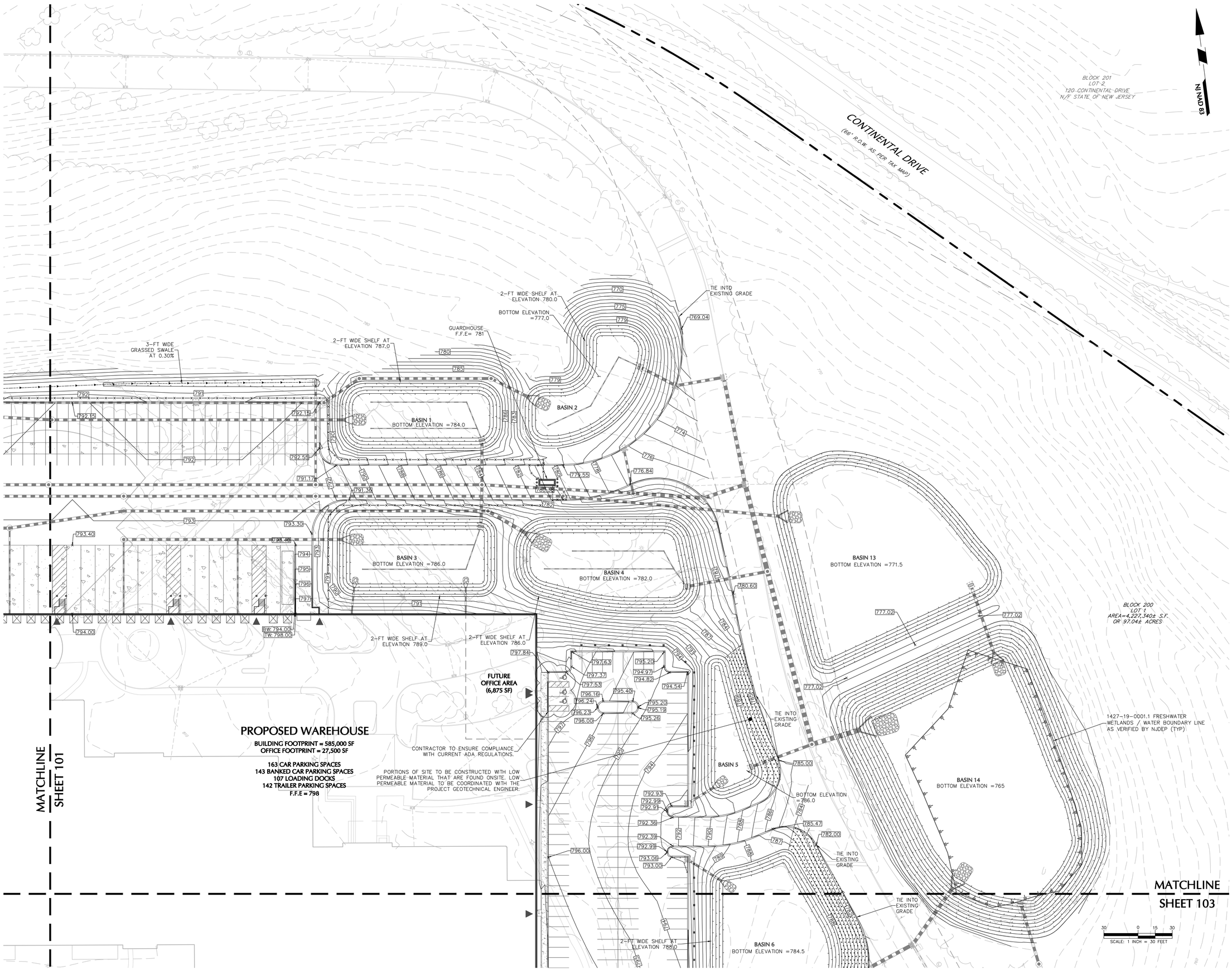
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL GRADING PLAN 1

Project No.	Drawing No.
100980201	CG101
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 18 of 62

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1. WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022

SIGNATURE DATE SIGNED

RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT

BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title

PARTIAL GRADING PLAN 2

Project No.	100980201
Date	11/18/2022
Drawn By	RY
Checked By	KMR /RB

Drawing No. CG102

Sheet 19 of 62

© 2022 Langan

MATCHLINE SHEET 104

MATCHLINE SHEET 102

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES
F.F.E = 798

CONTRACTOR TO ENSURE COMPLIANCE WITH CURRENT ADA REGULATIONS.

FUTURE OFFICE AREA (6,875 SF)

2-FT WIDE SHELF AT ELEVATION 792.0

2-FT WIDE SHELF AT ELEVATION 788.0

BASIN 6
BOTTOM ELEVATION =784.5

TIE INTO EXISTING GRADE

PORTIONS OF SITE TO BE CONSTRUCTED WITH LOW PERMEABLE MATERIAL THAT ARE FOUND ONSITE. LOW PERMEABLE MATERIAL TO BE COORDINATED WITH THE PROJECT GEOTECHNICAL ENGINEER.

BASIN 7
BOTTOM ELEVATION =788.0

GUARDHOUSE F.F.E= 783.8

BASIN 8
BOTTOM ELEVATION =783.0

2-FT WIDE SHELF AT ELEVATION 786.0

BASIN 9
BOTTOM ELEVATION =783.0

2-FT WIDE SHELF AT ELEVATION 787.0

50-FT WETLAND BUFFER (TYP.)

1427-19-0001.1
FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B FLOOD ZONE B BASED ON FEMA EFFECTIVE FIRM MAP 3403530002B (TYP.)

WILLS BROOK

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1, WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

NJ NAD 83

30 0 15 30
SCALE: 1 INCH = 30 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

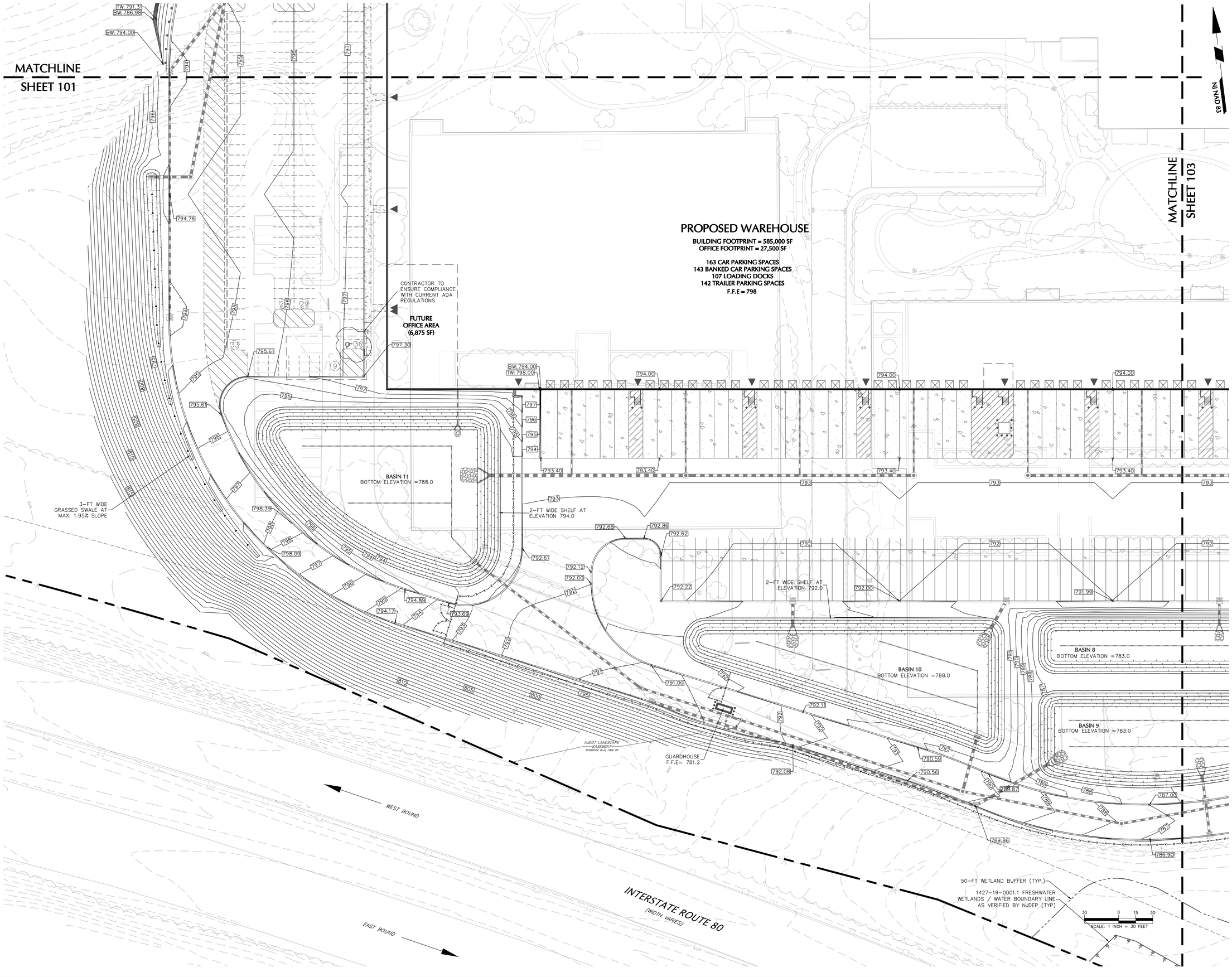
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL GRADING PLAN 3

Project No.	**100980201**
Date	**11/18/2022**
Drawn By	**RY**
Checked By	**KMR/RB**

Drawing No. **CG103**
Sheet **20** of **62**

© 2022 Langan



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1, WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL GRADING PLAN 4

Project No. 100980201	Drawing No. CG104
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 21 of 62

© 2022 Langan

BASIN #	GREEN INFRASTRUCTURE BMP TYPE
1	BIO-RETENTION
2	BIO-RETENTION
3	BIO-RETENTION
4	BIO-RETENTION
5	INFILTRATION
6	INFILTRATION
7	BIO-RETENTION
8	BIO-RETENTION
9	BIO-RETENTION
10	BIO-RETENTION
11	BIO-RETENTION
12	INFILTRATION
13	INFILTRATION
14	BIO-RETENTION

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1. WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

NJ NAD 83

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

INTERSECTION IMPROVEMENTS. REFER TO DRAWING CS105

SHEET 101

SHEET 102
BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9
BASIN 10
BASIN 11
BASIN 12
BASIN 13
BASIN 14

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

APPROXIMATE LOCATION KAYS ROAD, 66' ROW, VACATED BY TOWNSHIP ORDINANCE No. 37-87 SCHEDULE B-II, ITEM 27

25' WIDE UTILITY EASEMENT PER DB 1384 PG 255 SCHEDULE B-II, ITEM 18

50-FT WETLAND BUFFER (TYP.)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B BASED ON FEMA EFFECTIVE FIRM MAP 34035C0002B (TYP.)

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

INTERSECTION IMPROVEMENTS. REFER TO DRAWING CS105

SHEET 103

SHEET 104

INTERSTATE ROUTE 80
(WIDTH VARIES)

WEST BOUND
EAST BOUND

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA HOSPITALITY
C/O HOLIDAY INN

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

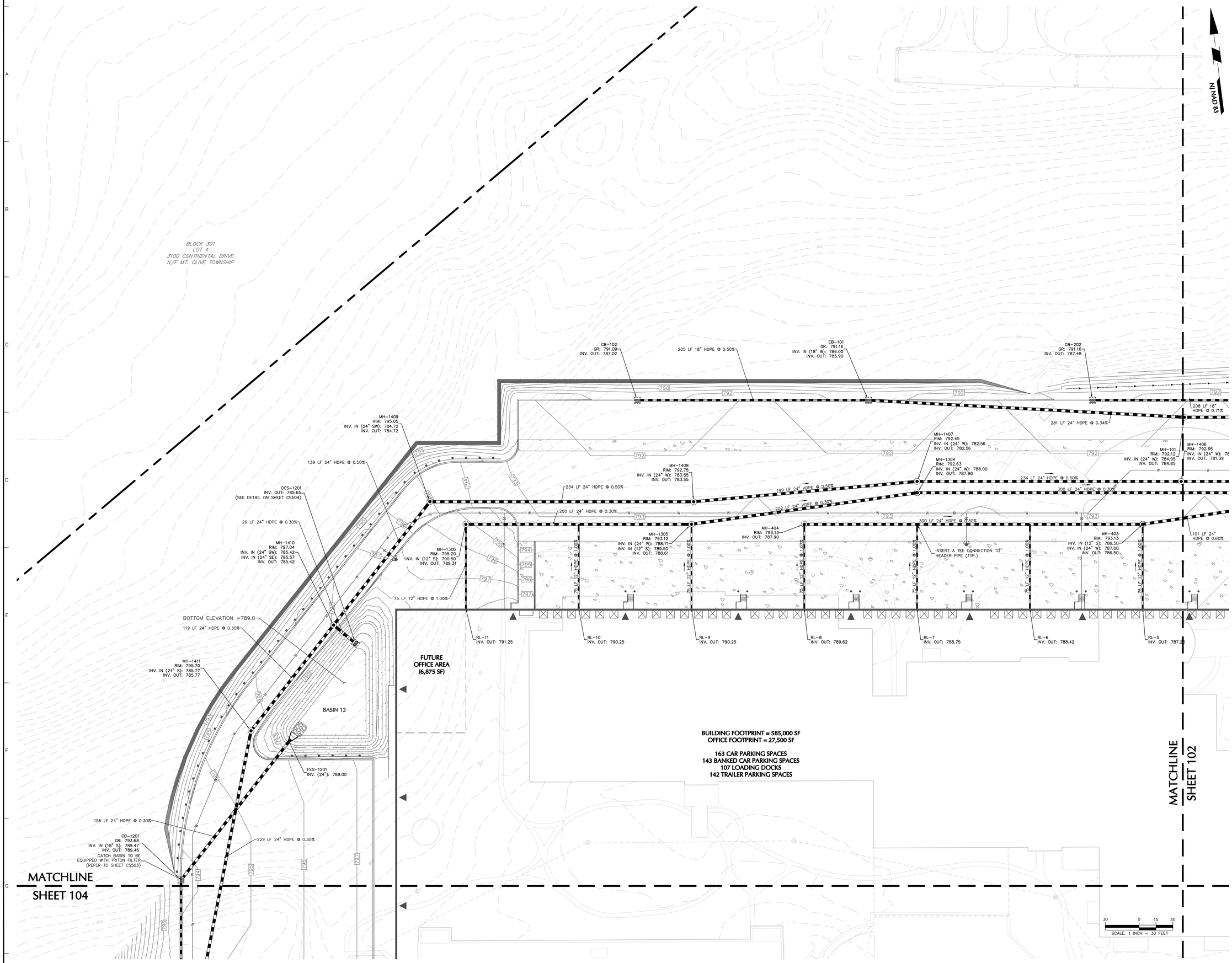
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL DRAINAGE PLAN

Project No.	Drawing No.
100980201	CG200
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 22 of 62

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1. WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022

SIGNATURE DATE SIGNED

RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT

BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title

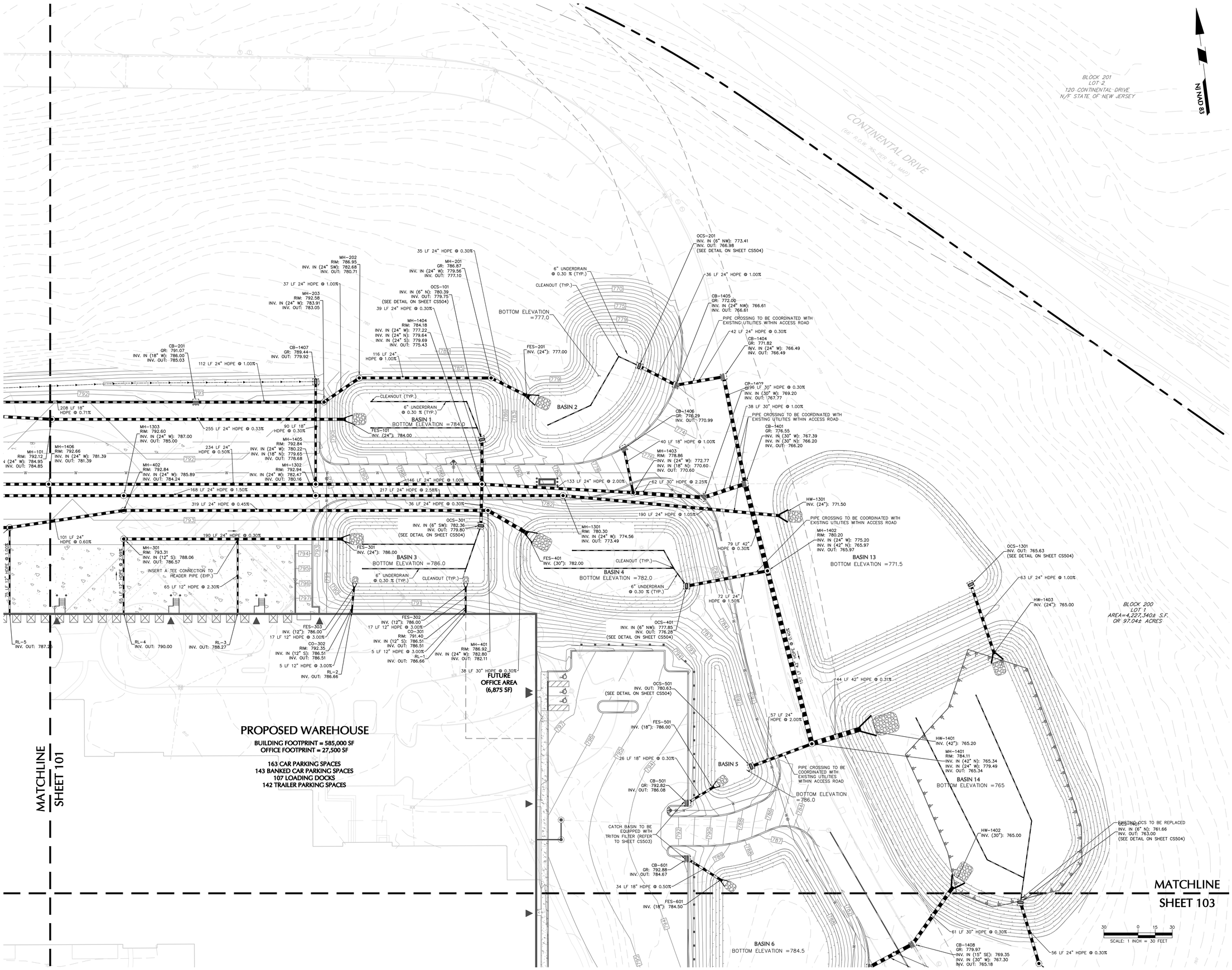
PARTIAL DRAINAGE PLAN 1

Project No.	100980201
Date	11/18/2022
Drawn By	RY
Checked By	KMR /RB

Drawing No. CG201

Sheet 23 of 62

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1, WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022

SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

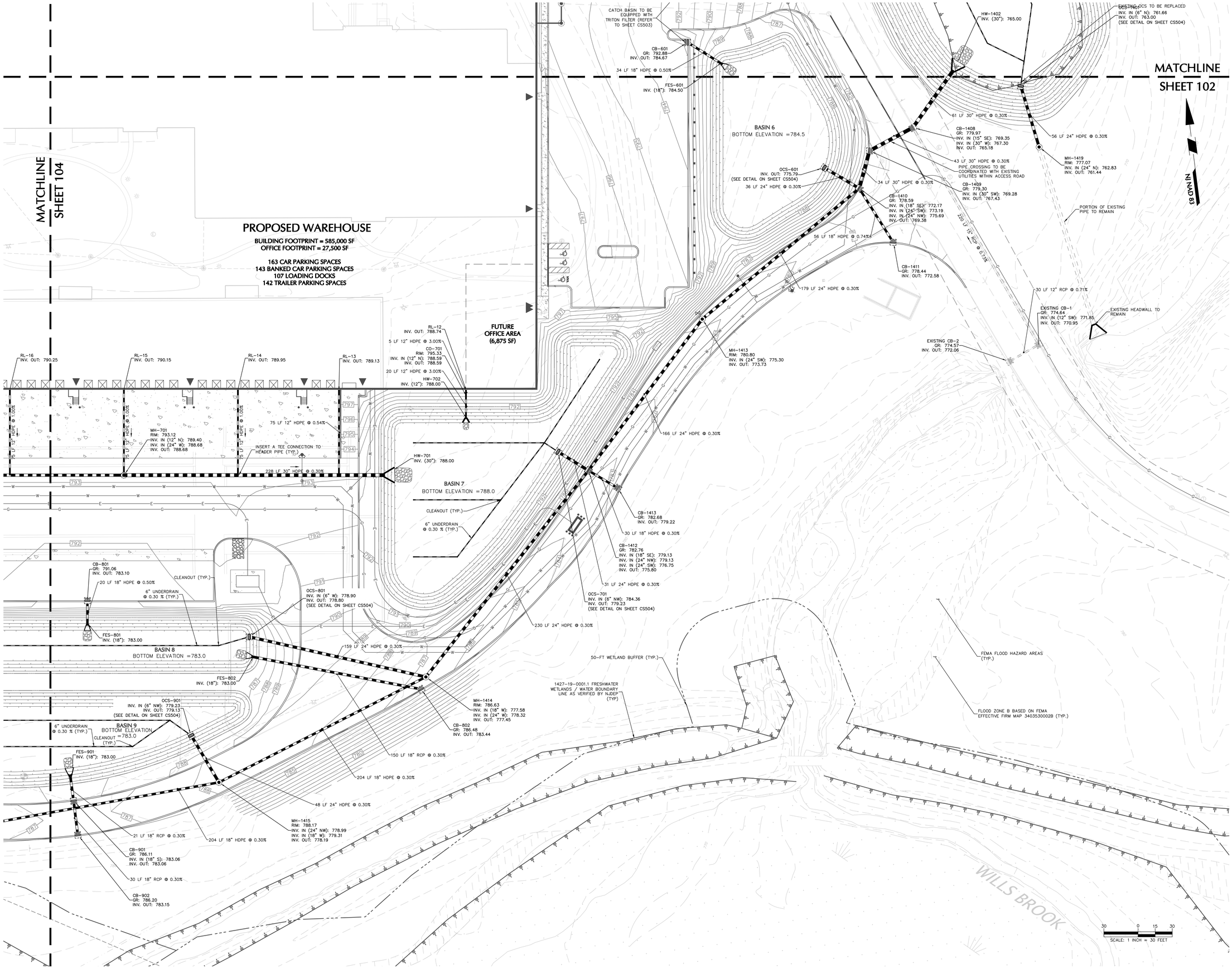
Drawing Title
PARTIAL DRAINAGE PLAN 2

Project No.	100980201
Date	11/18/2022
Drawn By	RY
Checked By	KMR/RB

Drawing No. CG202

Sheet 24 of 62

© 2022 Langan



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1, WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

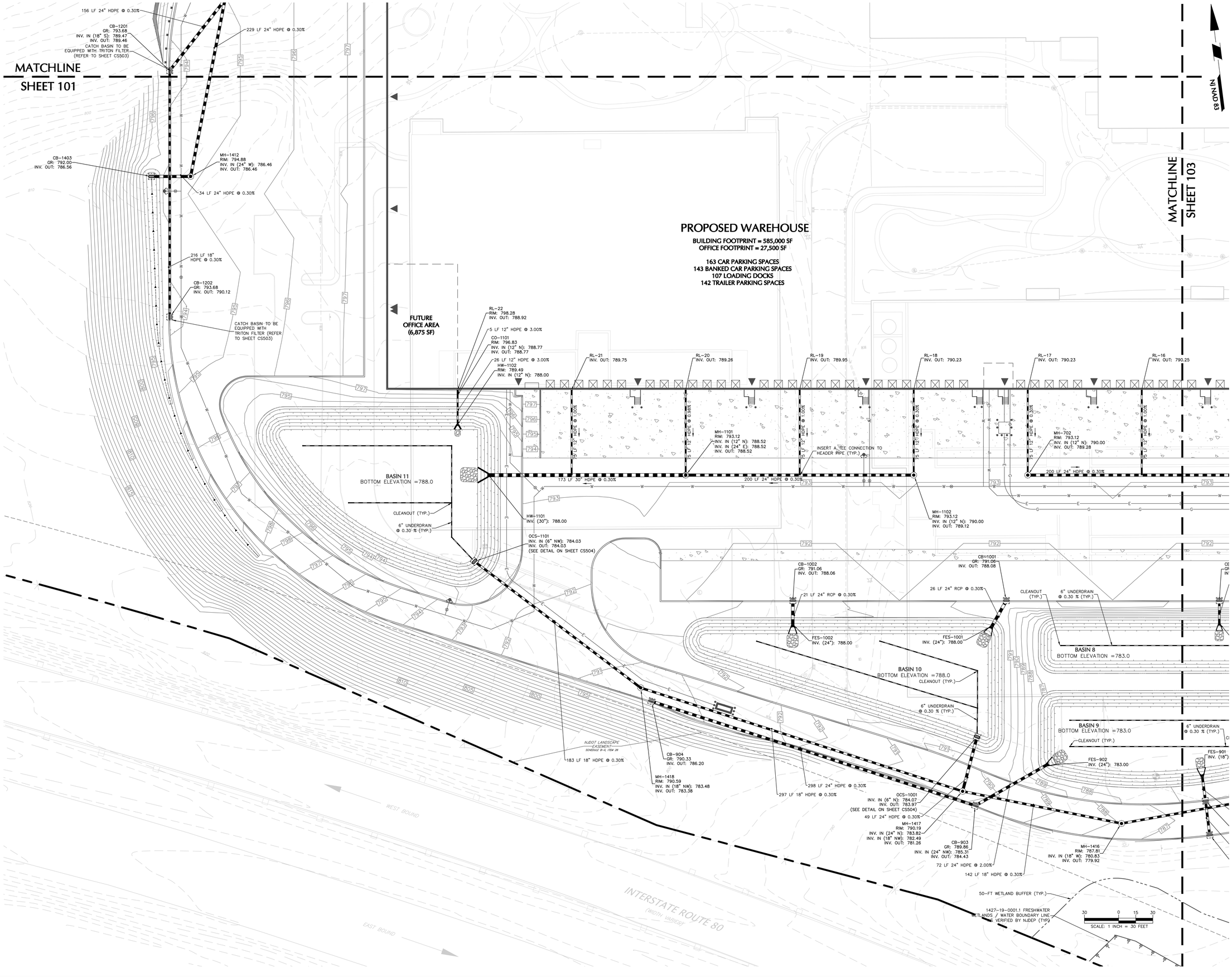
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA2796600

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL DRAINAGE PLAN 3

Project No. 100980201	Drawing No. CG203
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 25 of 62

© 2022 Langan



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FILL MATERIAL, PLACEMENT OF FILL, COMPACTION REQUIREMENTS AND THE COMPACTION TESTING SHALL BE PER THE GEOTECHNICAL REQUIREMENTS FOR THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
5. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
8. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
9. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
10. SPOT GRADES REPRESENT PAVEMENT GRADES OR BOTTOM OF CURB UNLESS OTHERWISE NOTED.
11. ALL AREAS SHALL BE WELL GRADED TO MINIMIZE FLAT AREAS, TO PROVIDE PROPER DRAINAGE, AND TO PREVENT LOCALIZED PONDING.
12. ALL SLOPES SHALL BE EQUAL TO OR LESS THAN 3:1, WHERE SLOPES ARE GREATER THAN 3H:1V, EROSION CONTROL MATTING SHALL BE USED.
13. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.
14. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER O-RING GASKETS.

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

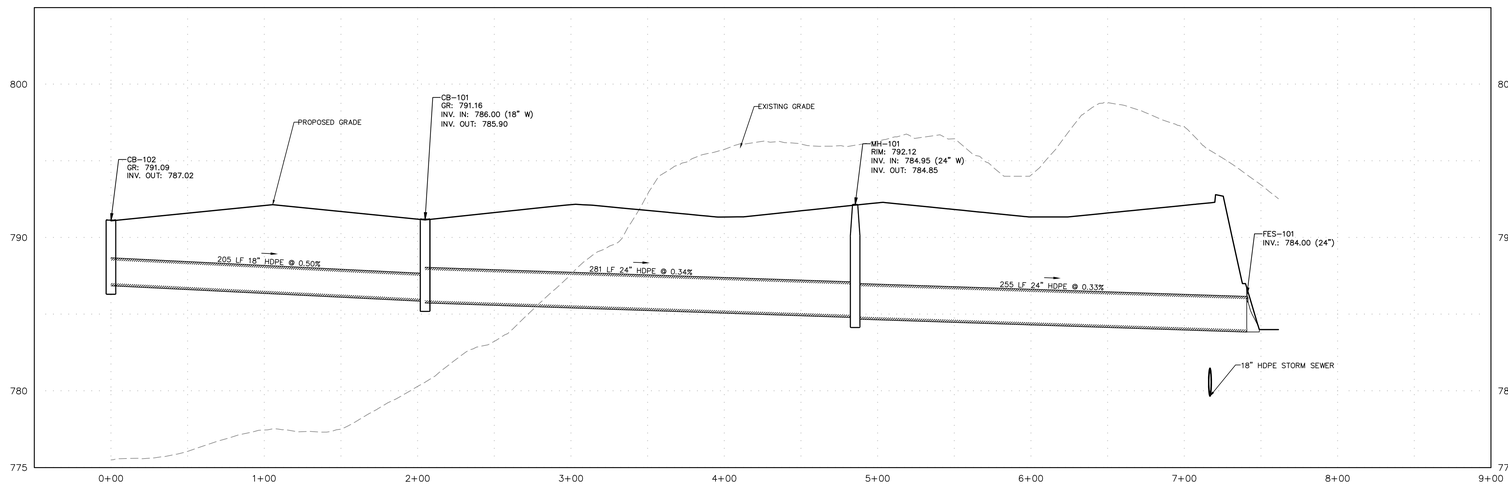
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

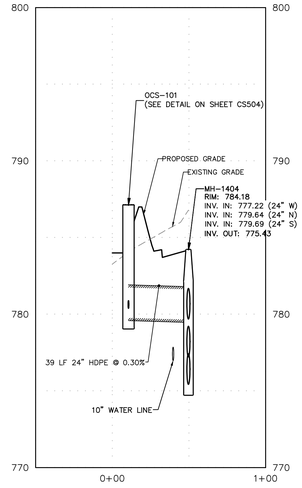
Drawing Title
PARTIAL DRAINAGE PLAN 4

Project No. 100980201	Drawing No. CG204
Date 11/18/2022	
Drawn By RY	
Checked By KMR/RB	Sheet 26 of 62

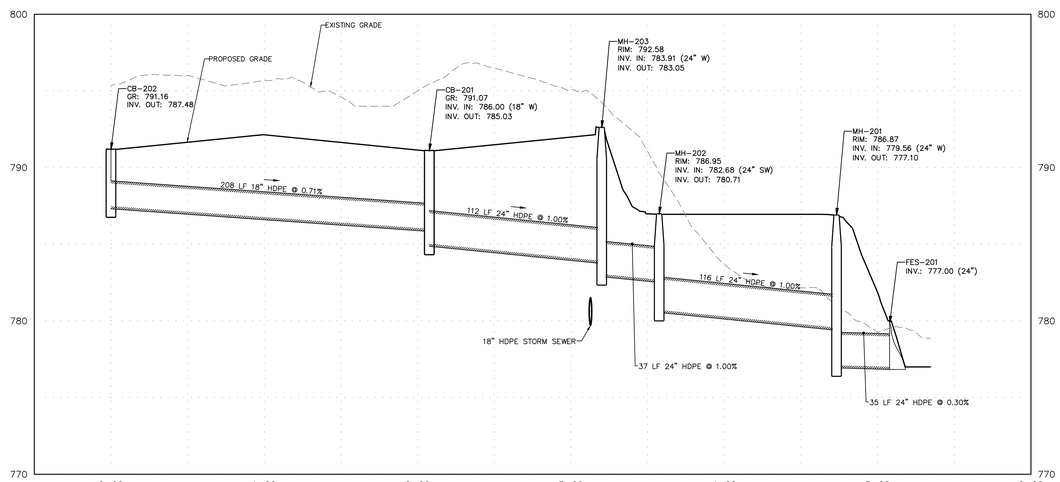
© 2022 Langan



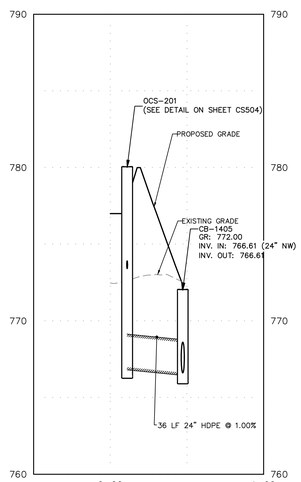
CS-102 TO FES-101 PROFILE



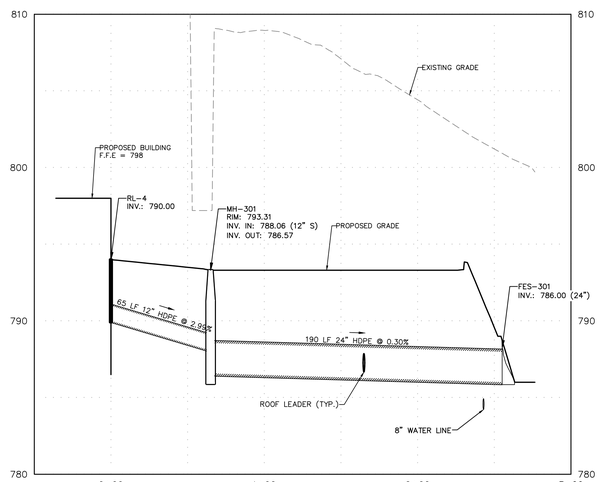
OCS-101 TO MH-1404 PROFILE



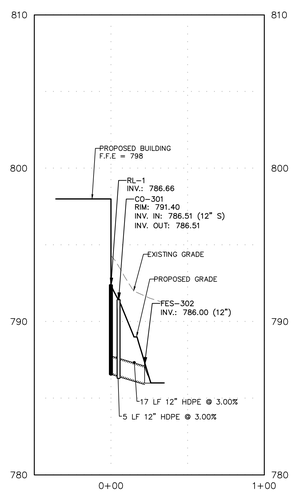
CB-202 TO FES-201 PROFILE



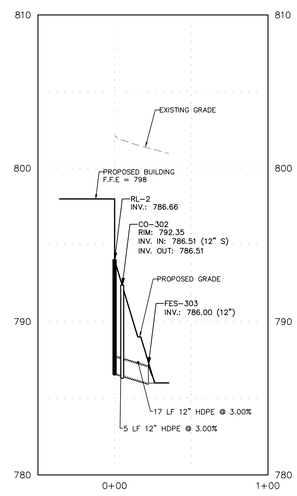
OCS-201 TO CB-1405 PROFILE



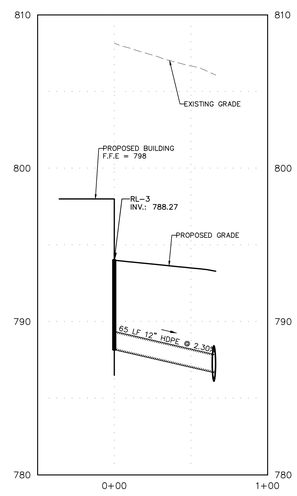
RL-4 TO FES-301 PROFILE



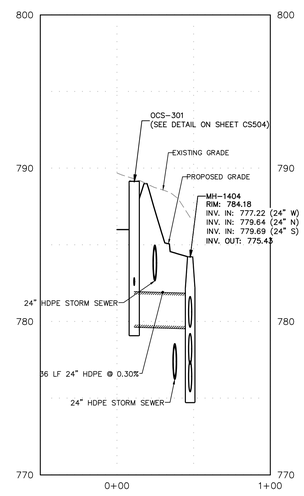
RL-1 TO FES-302 PROFILE



RL-2 TO FES-303 PROFILE



RL-3 TO HEADER PIPE PROFILE



OCS-301 TO MH-1404 PROFILE

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
6. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
7. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
8. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.

4 0 1 2.5 4
VERTICAL SCALE: 1 INCH = 40 FEET

40 0 10 25 40
HORIZONTAL SCALE: 1 INCH = 40 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

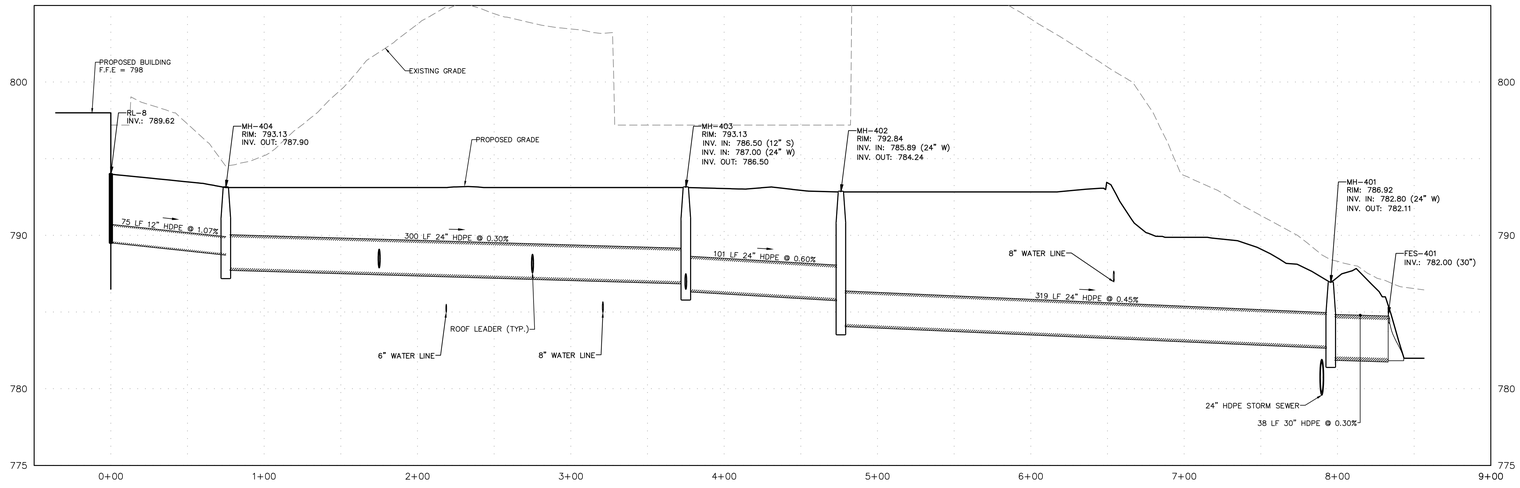
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

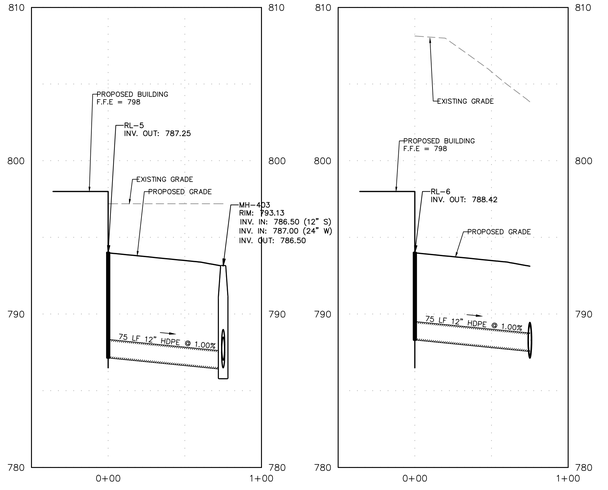
Drawing Title
STORM SEWER PROFILES 1

Project No.	Drawing No.
100980201	CG301
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 27 of 62

© 2022 Langan



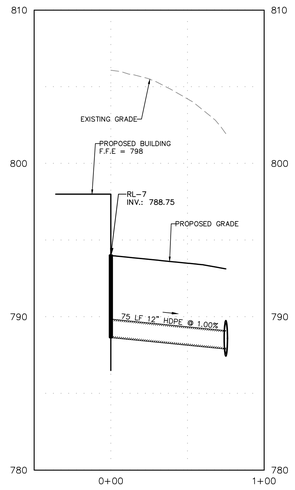
RL-8 TO FES-401 PROFILE



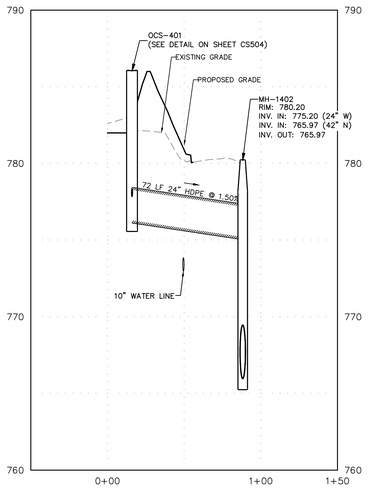
RL-5 TO MH-403 PROFILE

RL-6 TO HEADER PIPE PROFILE

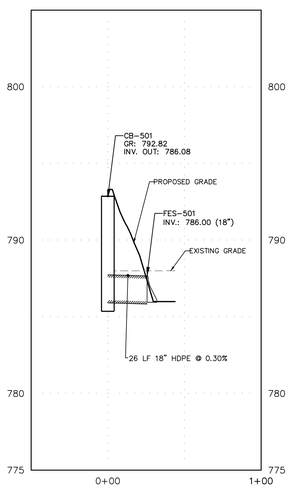
NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
6. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
7. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
8. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.



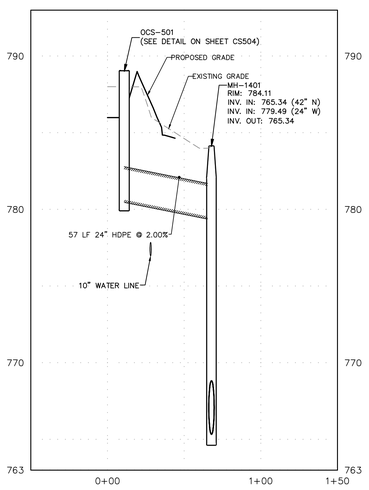
RL-7 TO HEADER PIPE PROFILE



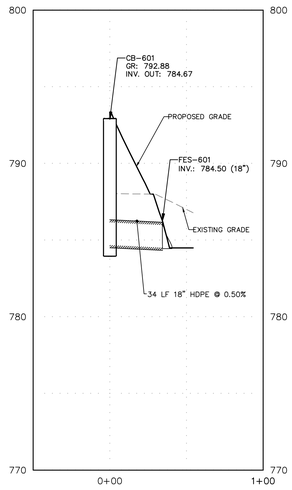
OCS-401 TO MH-1402 PROFILE



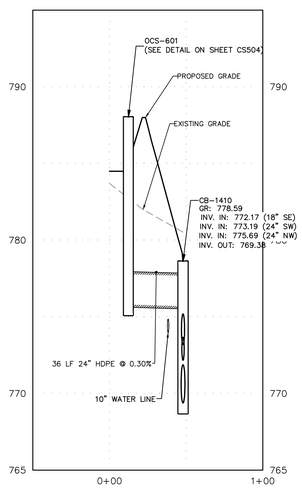
CB-501 TO FES-501 PROFILE



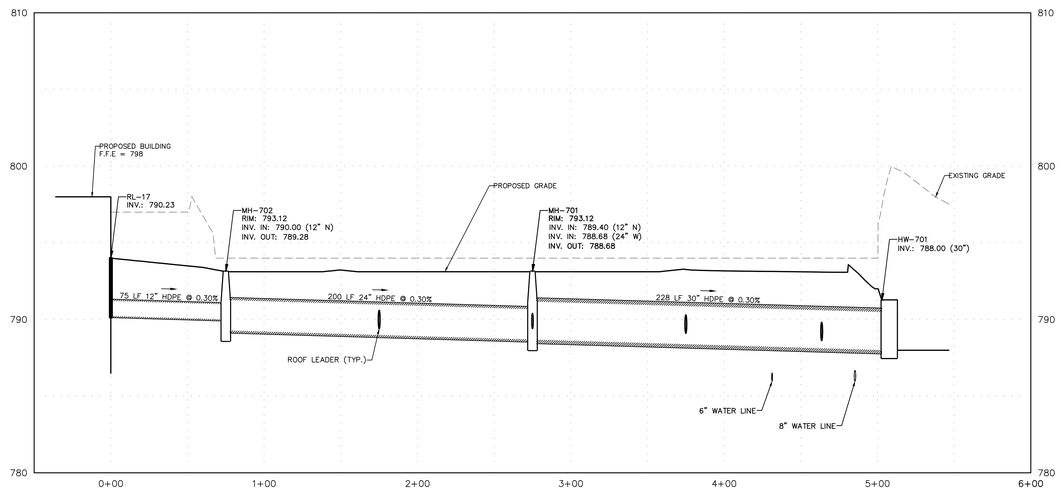
OCS-501 TO MH-1401 PROFILE



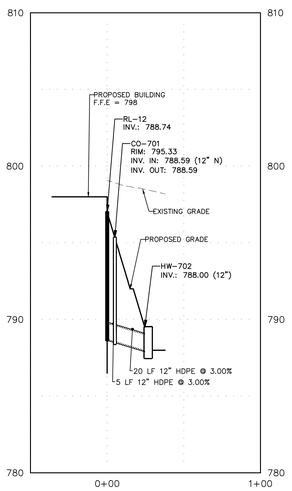
CB-601 TO FES-601 PROFILE



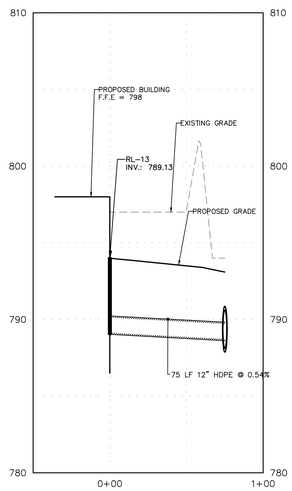
OCS-601 TO CB-1410 PROFILE



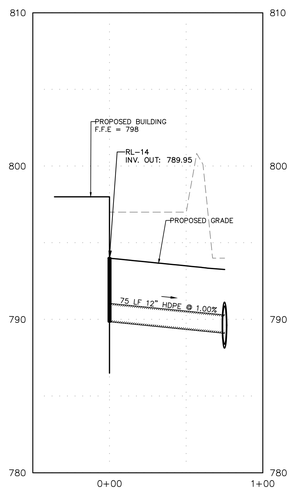
RL-17 TO FES-701 PROFILE



RL-12 TO HW-702 PROFILE



RL-13 TO HEADER PIPE PROFILE



RL-14 TO HEADER PIPE PROFILE

4 0 1 2.5 4
VERTICAL SCALE: 1 INCH = 40 FEET

40 0 10 25 40
HORIZONTAL SCALE: 1 INCH = 40 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

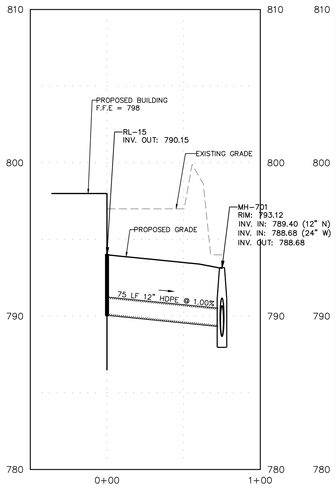
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

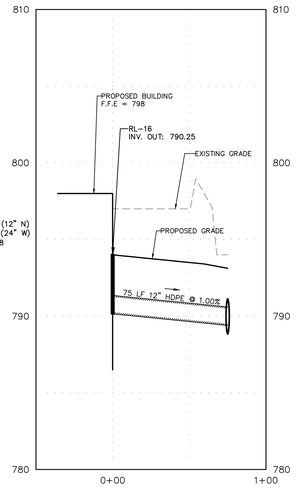
Drawing Title
STORM SEWER PROFILES 2

Project No.	Drawing No.
100980201	CG302
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 28 of 62

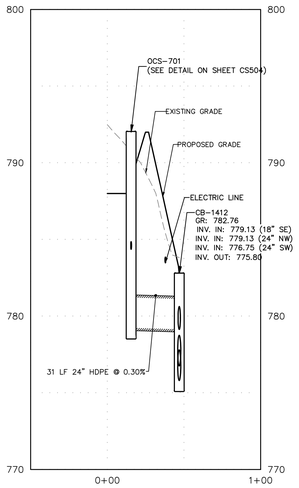
© 2022 Langan



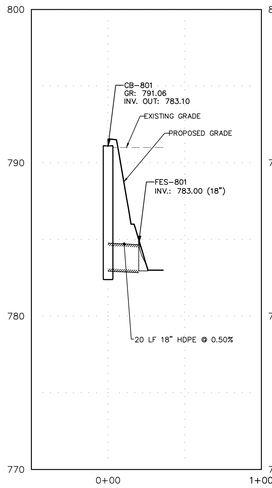
RL-15 TO MH-702 PROFILE



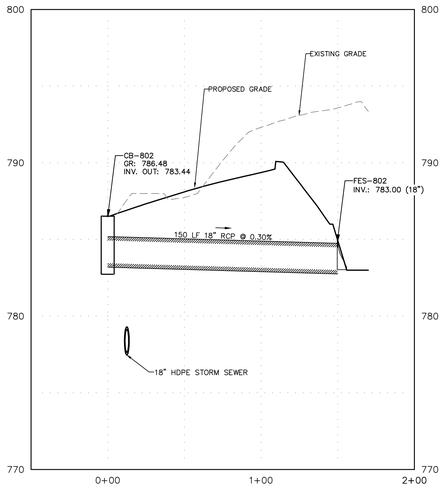
RL-16 TO HEADER PIPE PROFILE



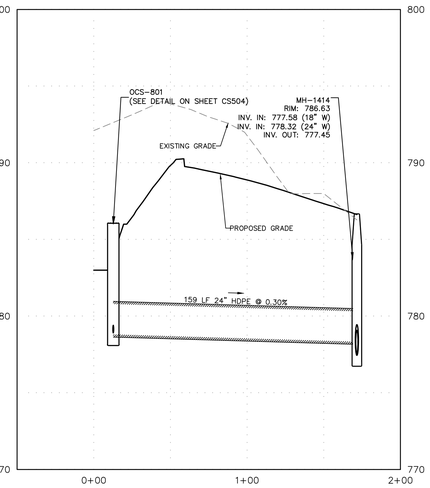
OCS-701 TO CB-1412 PROFILE



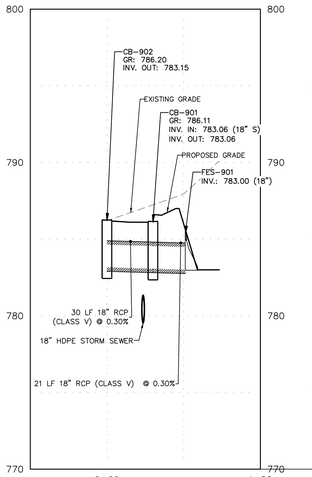
CB-801 TO FES-801 PROFILE



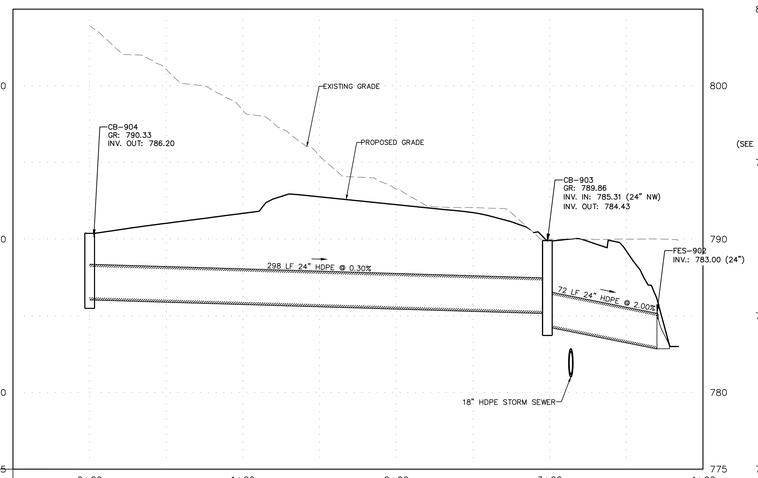
CB-802 TO FES-802 PROFILE



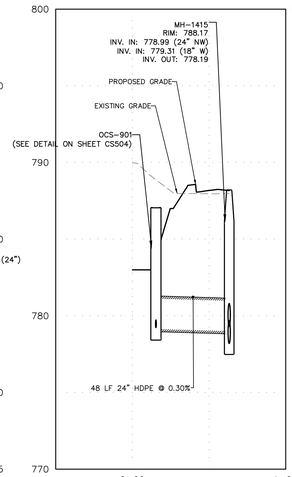
OCS-801 TO MH-1414 PROFILE



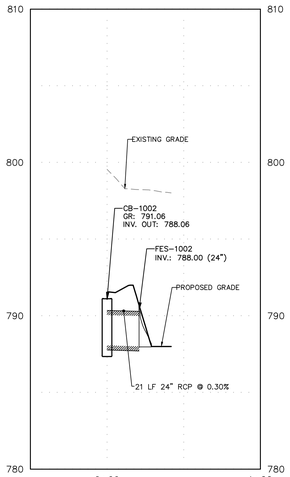
CB-902 TO FES-901 PROFILE



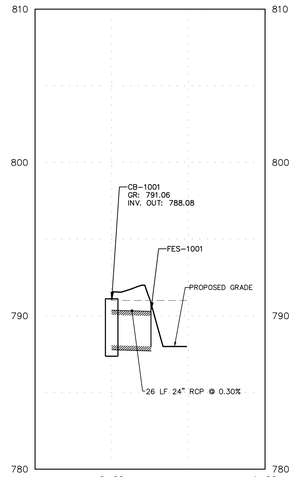
CB-904 TO FES-902 PROFILE



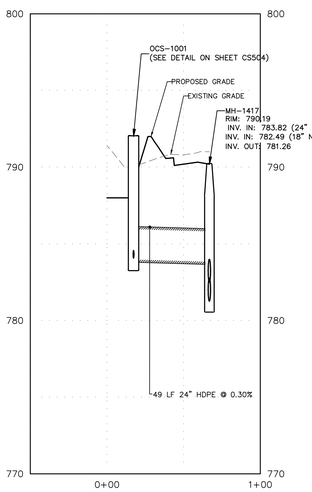
OCS-901 TO MH-1415 PROFILE



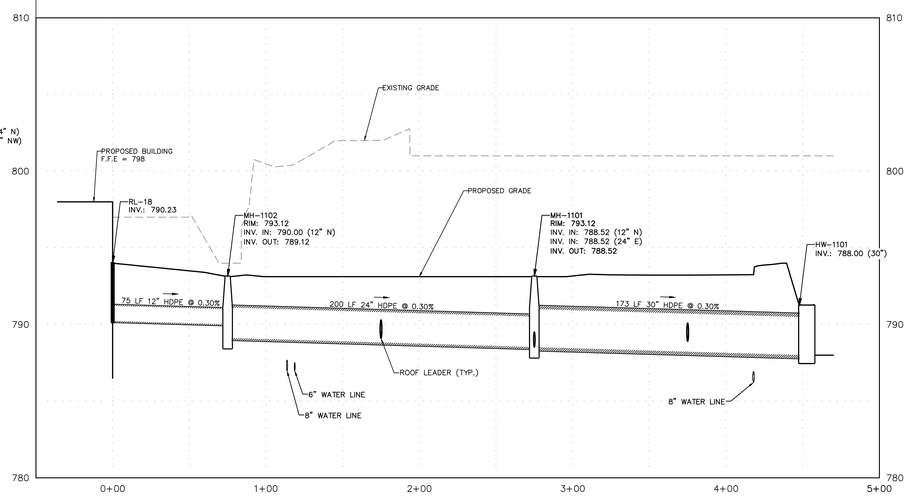
CB-1002 TO FES-1002 PROFILE



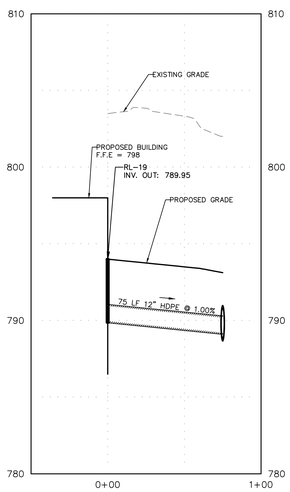
CB-1001 TO FES-1001 PROFILE



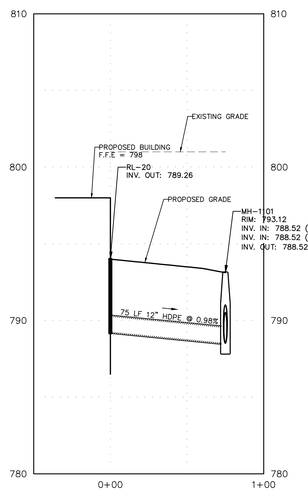
OCS-1001 TO MH-1417 PROFILE



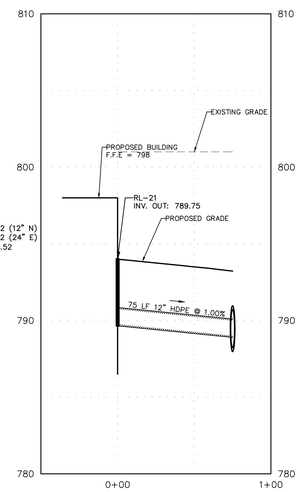
RL-18 TO HW-1101 PROFILE



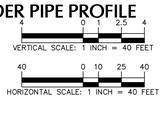
RL-19 TO HEADER PIPE PROFILE



RL-20 TO MH-1102 PROFILE



RL-21 TO HEADER PIPE PROFILE



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
6. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
7. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
8. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

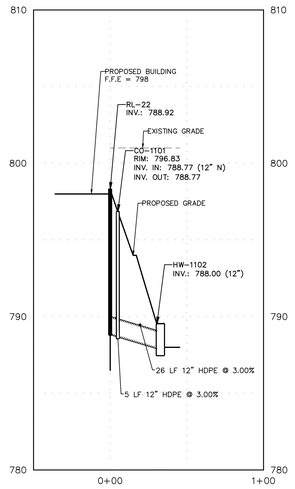
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

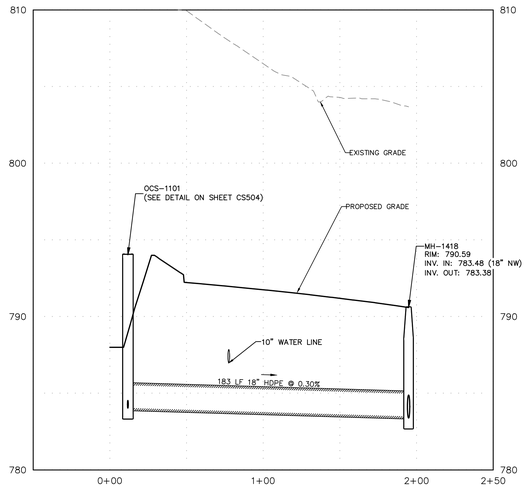
Drawing Title
STORM SEWER PROFILES 3

Project No.	Drawing No.
100980201	CG303
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 29 of 62

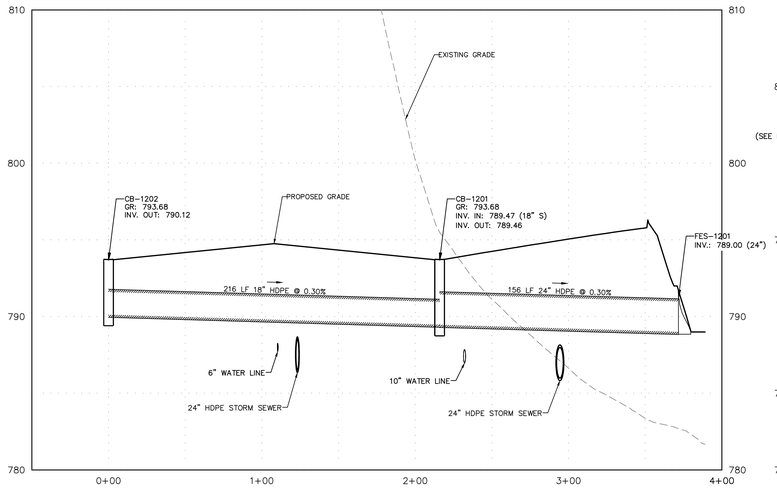
© 2022 Langan



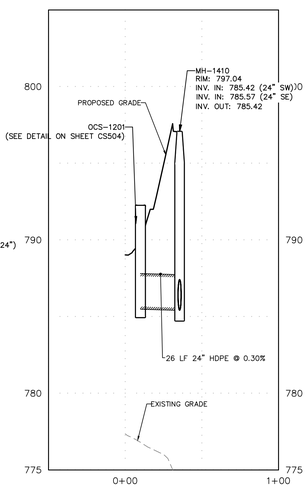
RL-22 TO HW-1102 PROFILE



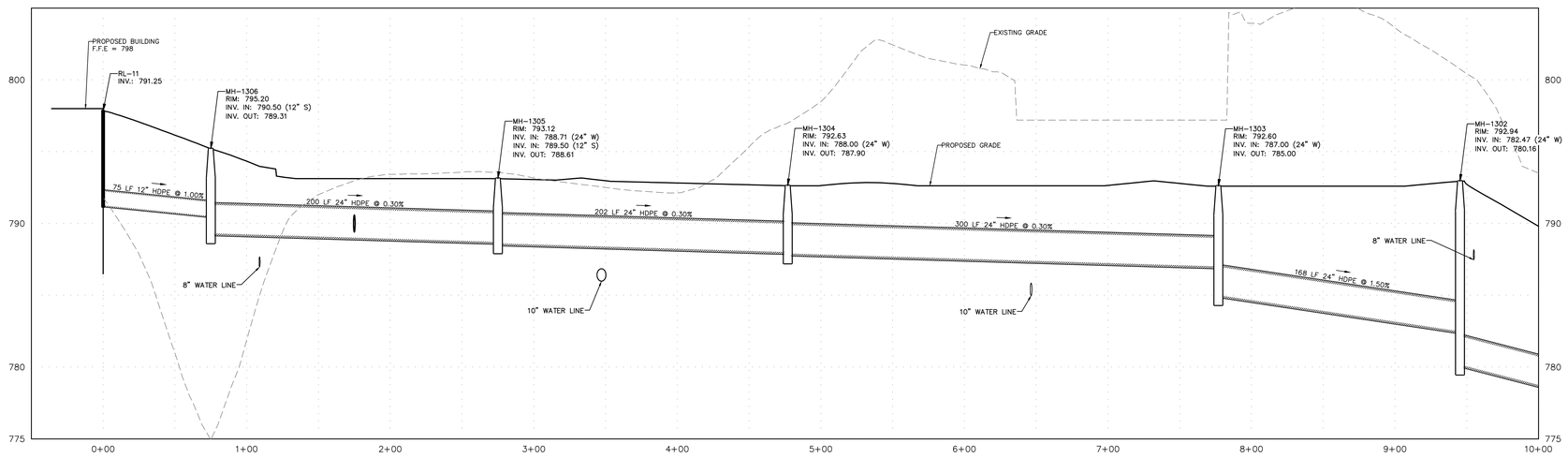
OCS-1101 TO MH-1418 PROFILE



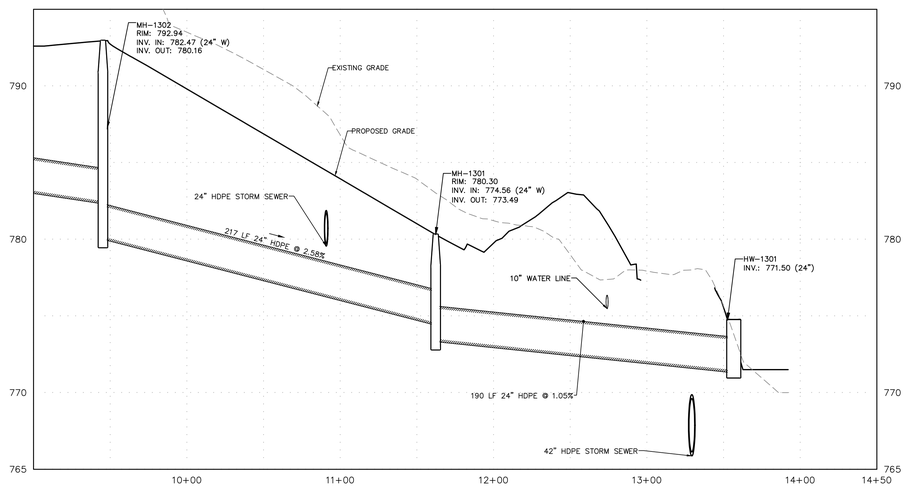
CB-1202 TO FES-1201 PROFILE



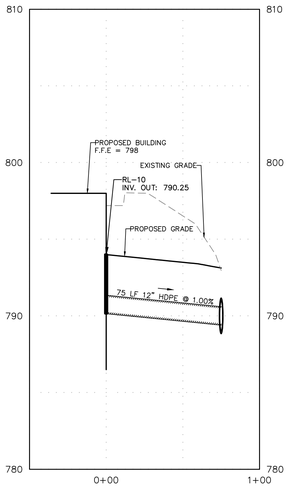
OCS-1201 TO MH-1410 PROFILE



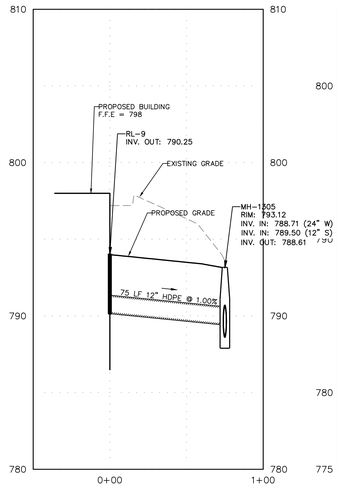
RL-11 TO MH-1302 PROFILE



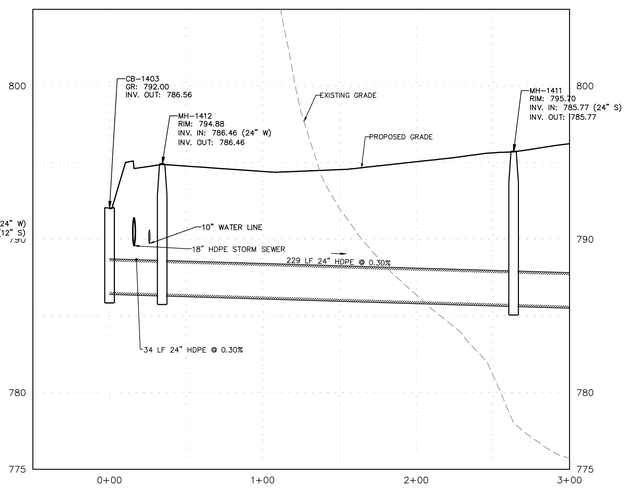
MH-1302 TO HW-1301 PROFILE



RL-10 TO HEADER PIPE PROFILE



RL-9 TO MH-1306 PROFILE



CB-1403 TO MH-1411 PROFILE

4 0 1 2.5 4
VERTICAL SCALE: 1 INCH = 40 FEET

40 0 10 25 40
HORIZONTAL SCALE: 1 INCH = 40 FEET

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
6. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
7. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
8. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

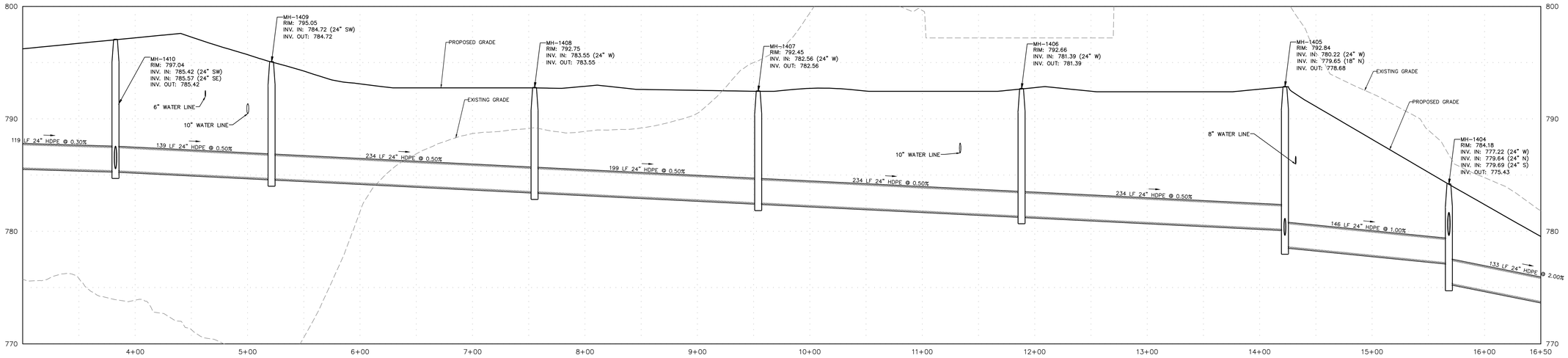
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA2796400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

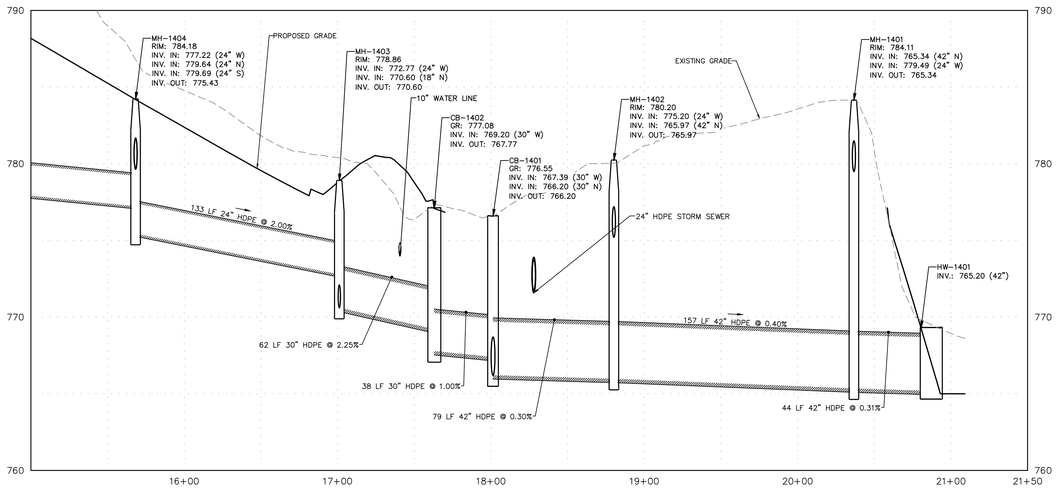
Drawing Title
STORM SEWER PROFILES 4

Project No. 100980201	Drawing No. CG304
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 30 of 62

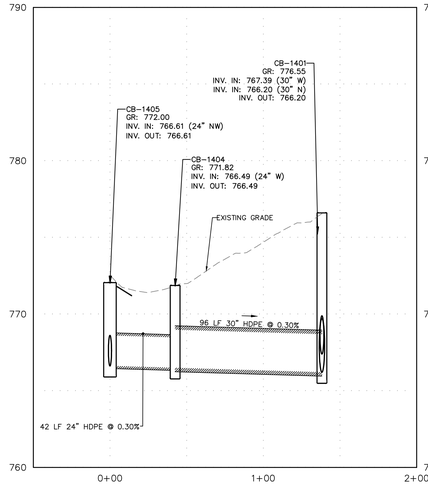
© 2022 Langan



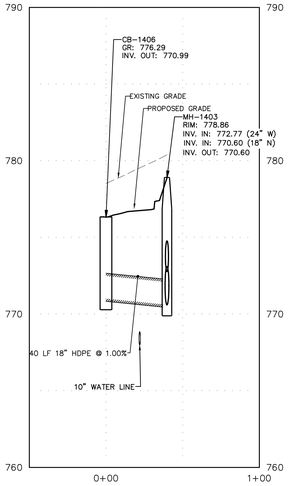
MH-1410 TO MH-1404 PROFILE



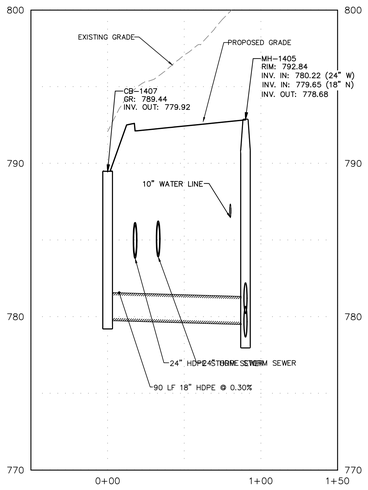
MH-1404 TO HW-1401 PROFILE



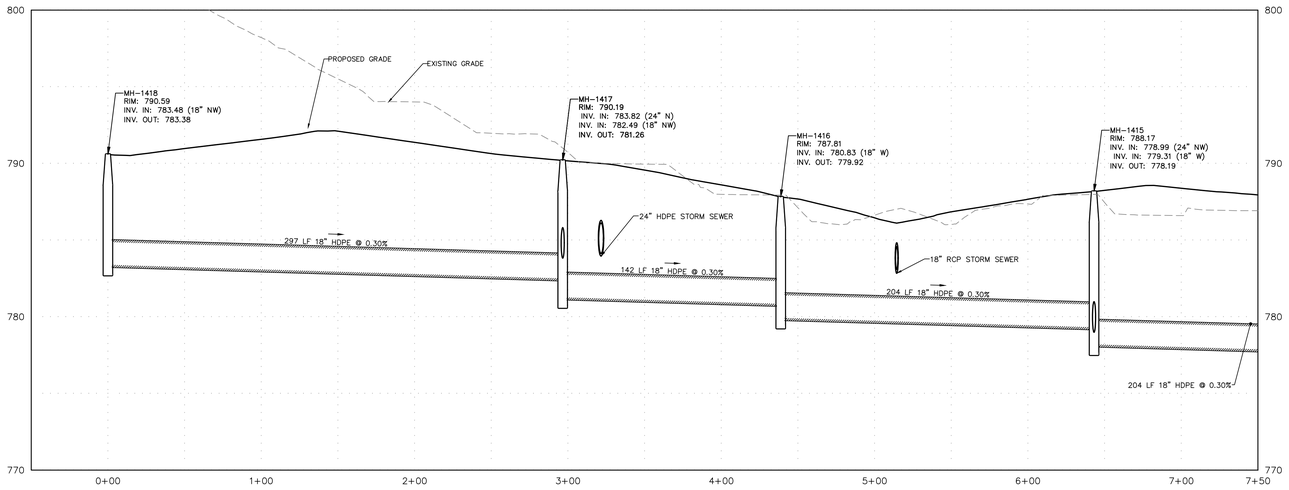
CB-1405 TO CB-1401 PROFILE



CB-1406 TO MH-1403 PROFILE



CB-1407 TO MH-1405 PROFILE



MH-1418 TO MH-1415 PROFILE

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
6. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
7. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
8. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.

4 0 1 2.5 4
VERTICAL SCALE: 1 INCH = 40 FEET

40 0 10 25 40
HORIZONTAL SCALE: 1 INCH = 40 FEET

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

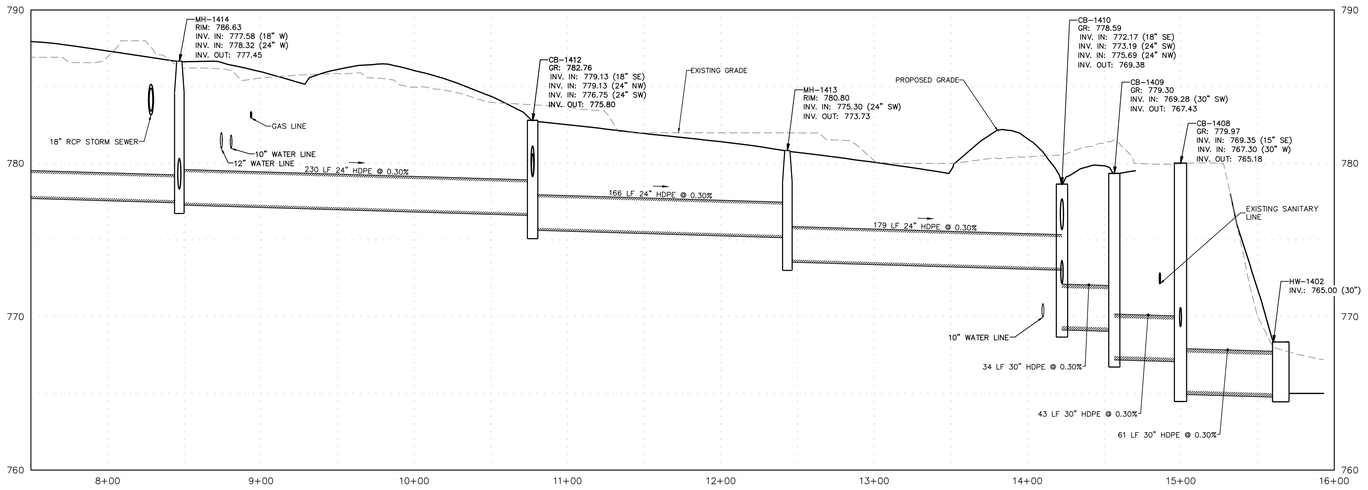
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

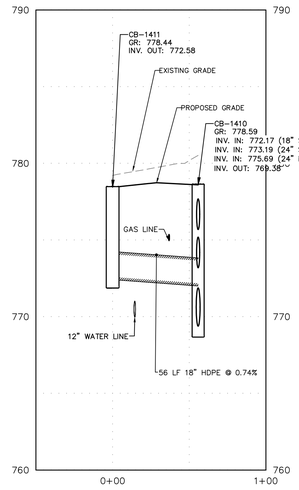
Drawing Title
STORM SEWER PROFILES 5

Project No.	Drawing No.
100980201	CG305
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 31 of 62

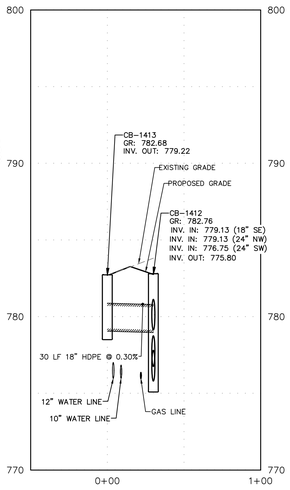
© 2022 Langan



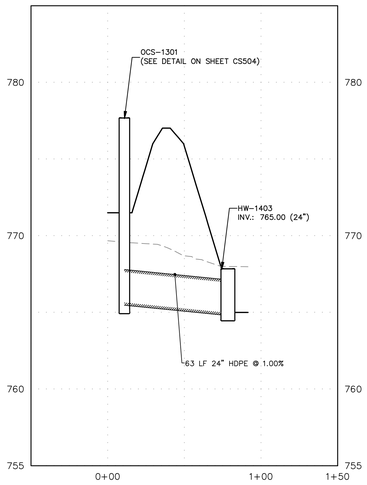
MH-1414 TO HW-1402 PROFILE



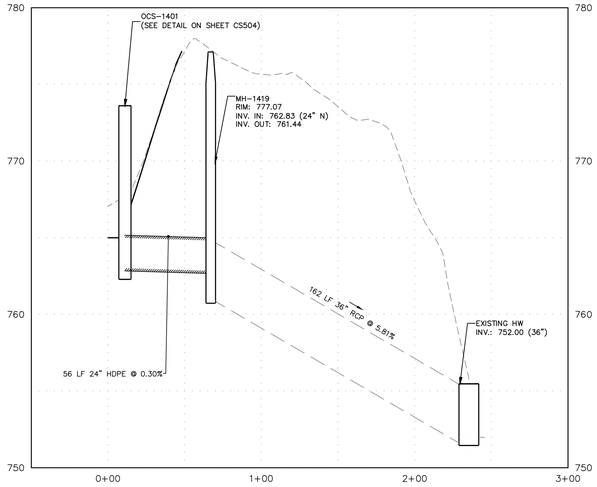
CB-1411 TO CB-1410 PROFILE



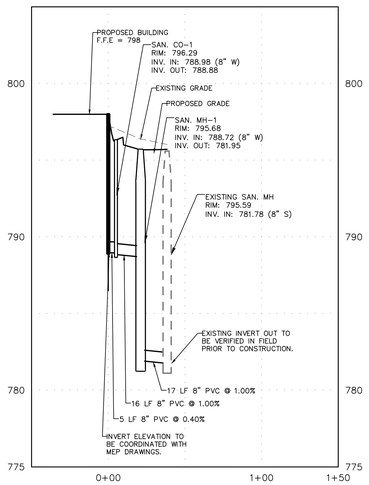
CB-1413 TO CB-1412 PROFILE



OCS-1301 TO HW-1403 PROFILE



OCS-1401 TO EXISTING HW PROFILE



BLDG CONNECTION TO EXISTING SAN. MH PROFILE

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION (DOWNSTREAM) AND BUILD UPSTREAM.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT ROOF LEADER CONNECTION LOCATIONS. WHERE CONFLICTS EXIST BETWEEN THESE PLANS AND ARCHITECTURAL PLANS, CONTRACTOR TO NOTIFY THE ENGINEER BEFORE CONSTRUCTION.
6. ALL PIPES SHALL BE HDPE UNLESS OTHERWISE NOTED.
7. ALL INLETS SHALL BE TYPE B OR TYPE E UNLESS OTHERWISE NOTED.
8. ALL STORMWATER INLETS ON THE PROPERTY AND ALONG ITS FRONTAGES SHALL BE EQUIPPED "N-ECO" GRATES.

4 0 1 2.5 4
VERTICAL SCALE: 1 INCH = 40 FEET

40 0 10 25 40
HORIZONTAL SCALE: 1 INCH = 40 FEET

Date	Description	No.

Revisions

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
STORM SEWER PROFILES 6 AND SANITARY PROFILE

Project No.	Drawing No.
100980201	CG306
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 32 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION AND BUILD UPSTREAM.
5. GAS, ELECTRIC, AND TELECOM SERVICE NETWORKS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER, ARCHITECT, AND MEP ENGINEER TO DETERMINE ACTUAL LOCATION AND SERVICE SIZE. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
6. THERE SHALL BE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN SANITARY SEWERS AND WATER LINES, UNLESS OTHERWISE SPECIFIED. IN AREAS WHERE THIS VERTICAL SEPARATION DISTANCE IS NOT FEASIBLE, SANITARY SEWER SHALL BE CONCRETE ENCASED. ENCASEMENT SHALL EXTEND A MINIMUM OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATER LINES.
7. ALL WATER LINES SHALL HAVE A MINIMUM 4-FT COVER.
8. ALL SANITARY LATERAL CLEANOUTS AND MANHOLES SHALL BE HEAVY DUTY AND TRAFFIC RATED.
9. ALL SANITARY SEWER LATERALS SHALL BE PVC (SDR 35) UNLESS OTHERWISE SPECIFIED.
10. WHERE APPLICABLE, HYDRANTS SHALL BE INSTALLED A MINIMUM OF 2.5 FEET FROM FROM BACK OF CURB.
11. ALL WATER LINES SHALL BE C900 UNLESS OTHERWISE SPECIFIED.
12. PRIVATE FIRE MAINS SHALL CONFORM TO NFPA24.
13. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
14. ALL WATER LINES SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S REQUIREMENTS.
15. FINAL FIRE DESIGN WILL BE BASED ON FIRE PROTECTION DRAWINGS.
16. CONTRACTOR SHALL COORDINATE GAS SERVICE WITH THE GOVERNING AUTHORITY.

NJ NAD 83

SHEET 101

SHEET 102
BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9
BASIN 10
BASIN 11
BASIN 12
BASIN 13
BASIN 14

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF
163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

BLOCK 200.1
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

APPROXIMATE LOCATION KAYS ROAD, 66' ROW; VACATED BY TOWNSHIP ORDINANCE No.:37-87 SCHEDULE B-II, ITEM 27

25' WIDE UTILITY EASEMENT PER DB 3384 PG 255 SCHEDULE B-II, ITEM 18

INSET

FEMA FLOOD HAZARD AREAS (TYP.)
FLOOD ZONE B (TYP.)
50-FT WETLAND BUFFER (TYP.)

NJDOT LANDSCAPE EASEMENT SCHEDULE B-II, ITEM 26

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

WELLS BROOK

WEST BOUND
EAST BOUND

SHEET 104
SHEET 103

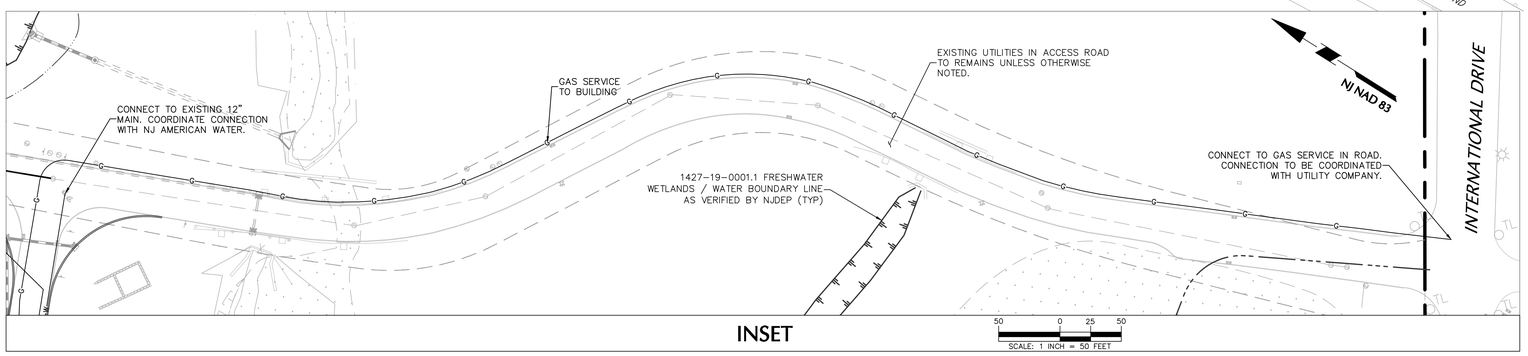
INTERSTATE ROUTE 80
(WIDTH VARIES)

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204
LOT 1

100 0 50 100
SCALE IN FEET



INSET

50 0 25 50
SCALE: 1 INCH = 50 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

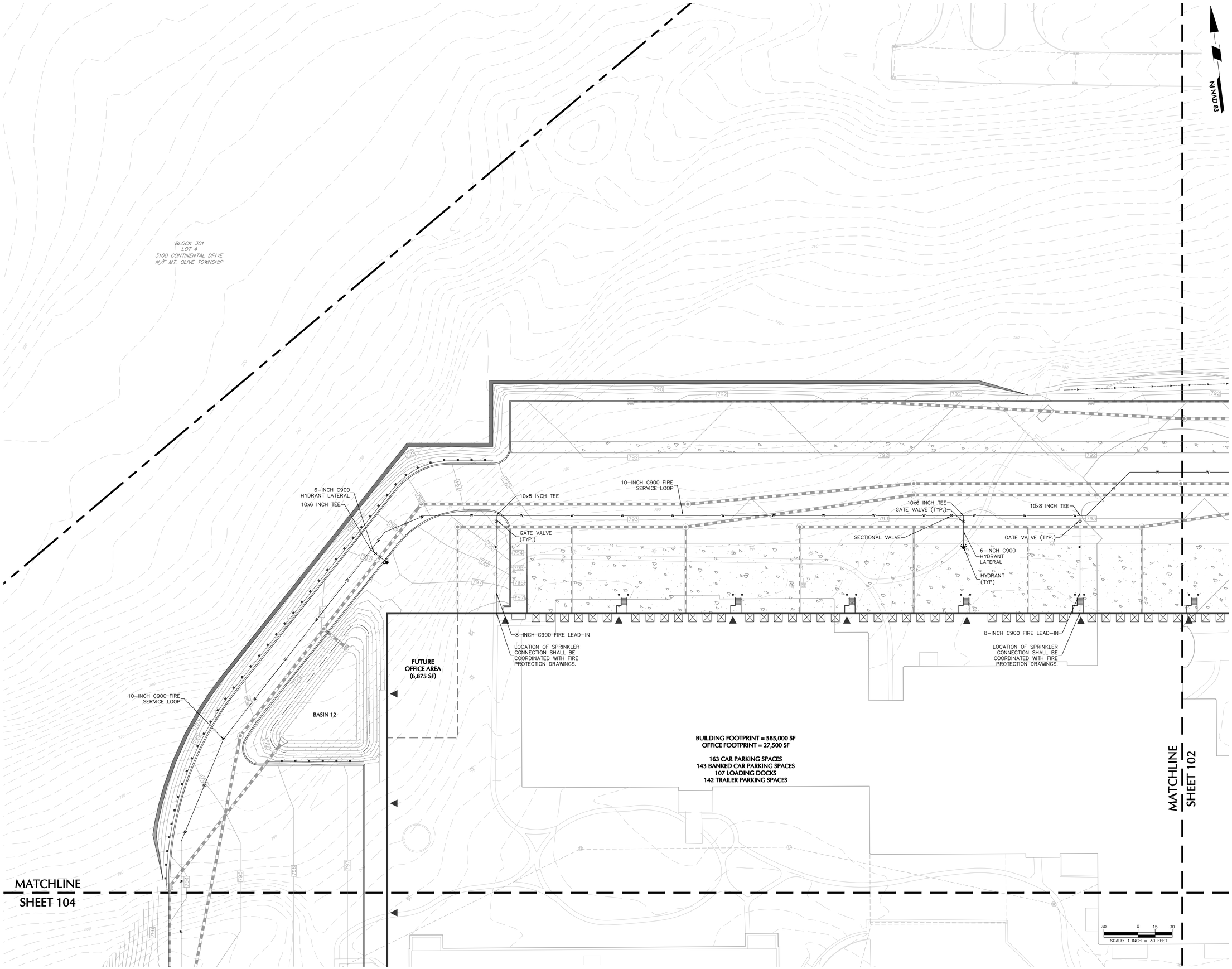
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL UTILITY PLAN

Project No. 100980201	Drawing No. CU100
Date 11/18/2022	
Drawn By RY	
Checked By KMR/RB	Sheet 33 of 62

© 2022 Langan



NOTES:

1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION AND BUILD UPSTREAM.
5. GAS, ELECTRIC, AND TELECOM SERVICE NETWORKS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER, ARCHITECT, AND MEP ENGINEER TO DETERMINE ACTUAL LOCATION AND SERVICE SIZE. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
6. THERE SHALL BE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN SANITARY SEWERS AND WATER LINES, UNLESS OTHERWISE SPECIFIED. IN AREAS WHERE THIS VERTICAL SEPARATION DISTANCE IS NOT FEASIBLE, SANITARY SEWER SHALL BE CONCRETE ENCASED. ENCASEMENT SHALL EXTEND A MINIMUM OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATER LINES.
7. ALL WATER LINES SHALL HAVE A MINIMUM 4-FT COVER.
8. ALL SANITARY LATERAL CLEANOUTS AND MANHOLES SHALL BE HEAVY DUTY AND TRAFFIC RATED.
9. ALL SANITARY SEWER LATERALS SHALL BE PVC (SDR 35) UNLESS OTHERWISE SPECIFIED.
10. WHERE APPLICABLE, HYDRANTS SHALL BE INSTALLED A MINIMUM OF 2.5 FEET FROM FROM BACK OF CURB.
11. ALL WATER LINES SHALL BE C900 UNLESS OTHERWISE SPECIFIED.
12. PRIVATE FIRE MAINS SHALL CONFORM TO NFPA24.
13. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
14. ALL WATER LINES SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S REQUIREMENTS.
15. FINAL FIRE DESIGN WILL BE BASED ON FIRE PROTECTION DRAWINGS.
16. CONTRACTOR SHALL COORDINATE GAS SERVICE WITH THE GOVERNING AUTHORITY.

Date	Description	No.
Revisions		

11-29-2022

SIGNATURE DATE SIGNED

RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT

BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title

PARTIAL UTILITY PLAN 1

Project No.	**100980201**
Date	**11/18/2022**
Drawn By	**RY**
Checked By	**KMR/RB**

Drawing No. **CU101**

Sheet **34** of **62**

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION AND BUILD UPSTREAM.
5. GAS, ELECTRIC, AND TELECOM SERVICE NETWORKS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER, ARCHITECT, AND MEP ENGINEER TO DETERMINE ACTUAL LOCATION AND SERVICE SIZE. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
6. THERE SHALL BE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN SANITARY SEWERS AND WATER LINES, UNLESS OTHERWISE SPECIFIED. IN AREAS WHERE THIS VERTICAL SEPARATION DISTANCE IS NOT FEASIBLE, SANITARY SEWER SHALL BE CONCRETE ENCASED. ENCASEMENT SHALL EXTEND A MINIMUM OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATER LINES.
7. ALL WATER LINES SHALL HAVE A MINIMUM 4-FT COVER.
8. ALL SANITARY LATERAL CLEANOUTS AND MANHOLES SHALL BE HEAVY DUTY AND TRAFFIC RATED.
9. ALL SANITARY SEWER LATERALS SHALL BE PVC (SDR 35) UNLESS OTHERWISE SPECIFIED.
10. WHERE APPLICABLE, HYDRANTS SHALL BE INSTALLED A MINIMUM OF 2.5 FEET FROM FROM BACK OF CURB.
11. ALL WATER LINES SHALL BE C900 UNLESS OTHERWISE SPECIFIED.
12. PRIVATE FIRE MAINS SHALL CONFORM TO NFPA24.
13. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
14. ALL WATER LINES SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S REQUIREMENTS.
15. FINAL FIRE DESIGN WILL BE BASED ON FIRE PROTECTION DRAWINGS.
16. CONTRACTOR SHALL COORDINATE GAS SERVICE WITH THE GOVERNING AUTHORITY.

NJ NAD 83

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

EXISTING UTILITIES IN ACCESS ROAD TO REMAIN UNLESS OTHERWISE NOTED

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 13
BASIN 14

GATE VALVE (TYP.)
6-INCH C900 HYDRANT LATERAL
10x8 INCH TEE
10x6 INCH TEE
10-INCH C900 FIRE SERVICE LOOP
8-INCH C900 FIRE LEAD-IN

LOCATION OF SPRINKLER CONNECTION SHALL BE COORDINATED WITH FIRE PROTECTION DRAWINGS.

FUTURE OFFICE AREA (6,875 SF)

PROPOSED WAREHOUSE
BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

EXISTING SAN. MH
RIM: 795.59
INV. IN (8" S): 781.78
EX. INV. OUT: 781.78
EXISTING INVERT TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION

17 LF 8" PVC @ 1.00%

SAN. MH-1
RIM: 795.68
INV. IN (8" W): 788.72
INV. OUT: 781.95

16 LF 8" PVC @ 1.00%

5 LF 8" PVC @ 0.40%

SAN. CO-1
RIM: 796.29
INV. IN (8" W): 788.98
INV. OUT: 788.88

HYDRANT (TYP)
GATE VALVE (TYP.)
6-INCH C900 HYDRANT LATERAL
10x6 INCH TEE
SECTIONAL VALVE

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

MATCHLINE
SHEET 101

MATCHLINE
SHEET 103

30 0 15 30
SCALE: 1 INCH = 30 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL UTILITY PLAN 2

Project No.	Drawing No.
100980201	CU102
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	
	Sheet 35 of 62

© 2022 Langan

MATCHLINE SHEET 104

MATCHLINE SHEET 102

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

FUTURE OFFICE AREA (6,875 SF)

ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223.

LOCATION OF SPRINKLER CONNECTION SHALL BE COORDINATED WITH FIRE PROTECTION DRAWINGS.

8-INCH C900 FIRE LEAD-IN

HYDRANT (TYP.)

6-INCH C900 HYDRANT LATERAL

GATE VALVE (TYP.)

10x6 INCH TEE

10x8 INCH TEE

10-INCH C900 FIRE SERVICE LOOP

ELECTRICAL EQUIPMENT

12-INCH WATER SERVICE INTO BUILDING

GAS SERVICE INTO BUILDING.

5 LF 8" PVC @ 0.40%
SAN. CO-1
RIM: 796.29
INV. IN (8" W): 788.98
INV. OUT: 788.88

17 LF 8" PVC @ 1.00%

SAN. MH-1
RIM: 795.68
INV. IN (8" W): 788.72
INV. OUT: 781.95

16 LF 8" PVC @ 1.00%

GATE VALVE (TYP.)

6-INCH C900 HYDRANT LATERAL

BASIN 6

BASIN 7

BASIN 8

BASIN 9

CONNECT TO EXISTING 12" MAIN. COORDINATE CONNECTION WITH NJ AMERICAN WATER.

EXISTING UTILITIES IN ACCESS ROAD TO REMAIN UNLESS OTHERWISE NOTED

10x6 INCH TEE

GATE VALVE (TYP.)

HYDRANT (TYP)

FIRE DEPARTMENT CONNECTION

10-INCH C900 FIRE SERVICE LOOP

12-INCH WATER SERVICE INTO BUILDING

ELECTRIC SERVICE TO CONNECT TO EXISTING UNDERGROUND CONDUITS. 48-IN X 96-IN PRECAST CONCRETE HANDHOLD TO BE PROVIDED. CONNECTION TO BE COORDINATED WITH UTILITY PURVEYOR.

ELECTRIC SERVICE FROM BUILDING TO GUARDHOUSE

UNDERGROUND ELECTRIC SERVICE TO TRANSFORMER. COORDINATE LOCATION WITH FINAL MEP PLANS.

10-INCH C900 FIRE SERVICE LOOP

12-INCH WATER SERVICE INTO BUILDING

50-FT WETLAND BUFFER (TYP.)

1427-19-0001.1
FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B (TYP.)

WILLS BROOK

NJ NAD 83

SCALE: 1 INCH = 30 FEET

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION AND BUILD UPSTREAM.
5. GAS, ELECTRIC, AND TELECOM SERVICE NETWORKS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER, ARCHITECT, AND MEP ENGINEER TO DETERMINE ACTUAL LOCATION AND SERVICE SIZE. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
6. THERE SHALL BE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN SANITARY SEWERS AND WATER LINES, UNLESS OTHERWISE SPECIFIED. IN AREAS WHERE THIS VERTICAL SEPARATION DISTANCE IS NOT FEASIBLE, SANITARY SEWER SHALL BE CONCRETE ENCASED. ENCASEMENT SHALL EXTEND A MINIMUM OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATER LINES.
7. ALL WATER LINES SHALL HAVE A MINIMUM 4-FT COVER.
8. ALL SANITARY LATERAL CLEANOUTS AND MANHOLES SHALL BE HEAVY DUTY AND TRAFFIC RATED.
9. ALL SANITARY SEWER LATERALS SHALL BE PVC (SDR 35) UNLESS OTHERWISE SPECIFIED.
10. WHERE APPLICABLE, HYDRANTS SHALL BE INSTALLED A MINIMUM OF 2.5 FEET FROM FROM BACK OF CURB.
11. ALL WATER LINES SHALL BE C900 UNLESS OTHERWISE SPECIFIED.
12. PRIVATE FIRE MAINS SHALL CONFORM TO NFPA24.
13. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
14. ALL WATER LINES SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S REQUIREMENTS.
15. FINAL FIRE DESIGN WILL BE BASED ON FIRE PROTECTION DRAWINGS.
16. CONTRACTOR SHALL COORDINATE GAS SERVICE WITH THE GOVERNING AUTHORITY.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL UTILITY PLAN 3

Project No. 100980201	Drawing No. CU103
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 36 of 62

© 2022 Langan

MATCHLINE
SHEET 101

MATCHLINE
SHEET 103

N1WD 83

HYDRANT (TYP.)
GATE VALVE (TYP.)
6-INCH C900 HYDRANT LATERAL
10-INCH C900 FIRE SERVICE LOOP
10x6 INCH TEE
SECTIONAL VALVE

ELECTRIC VEHICLE CHARGING STATIONS SHALL BE "MAKE READY" / "CHARGER READY" IN ACCORDANCE WITH NEW JERSEY BILL S3223.

FUTURE OFFICE AREA (6,875 SF)

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

12-INCH C900 FIRE SERVICE TO PUMP ROOM. 12-INCH SERVICE TO SPLIT INTO DOMESTIC SERVICE AND FIRE SERVICE. BACKFLOW PREVENTION TO BE COORDINATED WITH MEP DRAWINGS AND NJAW.

10-INCH C900 FIRE LINE FROM PUMP ROOM TO FIRE LOOP

ELECTRIC SERVICE INTO BUILDING. COORDINATE LOCATION WITH FINAL MEP PLANS.

10-ft X 10-FT ELECTRIC TRANSFORMER PAD

GAS SERVICE INTO BUILDING.

LOCATION OF SPRINKLER CONNECTION SHALL BE COORDINATED WITH FIRE PROTECTION DRAWINGS.

8-INCH C900 FIRE LEAD-IN

LOCATION OF SPRINKLER CONNECTION SHALL BE COORDINATED WITH FIRE PROTECTION DRAWINGS.

8-INCH C900 FIRE LEAD-IN

HYDRANT (TYP)
GATE VALVE (TYP.)
6-INCH C900 HYDRANT LATERAL
10x6 INCH TEE
10x8 INCH TEE
SECTIONAL VALVE
10x10 INCH TEE
12-INCH WATER SERVICE INTO BUILDING

10x8 INCH TEE
GATE VALVE (TYP.)
10-INCH C900 FIRE SERVICE LOOP

6-INCH C900 HYDRANT LATERAL
10x6 INCH TEE

ELECTRIC SERVICE FROM BUILDING TO GUARDHOUSE

BASIN 11
BASIN 10
BASIN 8
BASIN 9

NJDOT LANDSCAPE EASEMENT SCHEDULE B-4, ITEM 34

50-FT WETLAND BUFFER (TYP.)
1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

WEST BOUND
EAST BOUND
INTERSTATE ROUTE 80
(WIDTH VARIES)

30 0 15 30
SCALE: 1 INCH = 30 FEET

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. CONTRACTOR TO CONFIRM ALL STRUCTURE INVERTS AND NOTIFY ENGINEER OF ANY INCONSISTENCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO BEGIN PIPE NETWORK CONSTRUCTION AT TIE-IN LOCATION AND BUILD UPSTREAM.
5. GAS, ELECTRIC, AND TELECOM SERVICE NETWORKS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER, ARCHITECT, AND MEP ENGINEER TO DETERMINE ACTUAL LOCATION AND SERVICE SIZE. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
6. THERE SHALL BE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN SANITARY SEWERS AND WATER LINES, UNLESS OTHERWISE SPECIFIED. IN AREAS WHERE THIS VERTICAL SEPARATION DISTANCE IS NOT FEASIBLE, SANITARY SEWER SHALL BE CONCRETE ENCASED. ENCASEMENT SHALL EXTEND A MINIMUM OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATER LINES.
7. ALL WATER LINES SHALL HAVE A MINIMUM 4-FT COVER.
8. ALL SANITARY LATERAL CLEANOUTS AND MANHOLES SHALL BE HEAVY DUTY AND TRAFFIC RATED.
9. ALL SANITARY SEWER LATERALS SHALL BE PVC (SDR 35) UNLESS OTHERWISE SPECIFIED.
10. WHERE APPLICABLE, HYDRANTS SHALL BE INSTALLED A MINIMUM OF 2.5 FEET FROM FROM BACK OF CURB.
11. ALL WATER LINES SHALL BE C900 UNLESS OTHERWISE SPECIFIED.
12. PRIVATE FIRE MAINS SHALL CONFORM TO NFPA24.
13. CONCRETE ENCASEMENT SHALL BE PROVIDED, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY CROSSING DETAILS.
14. ALL WATER LINES SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S REQUIREMENTS.
15. FINAL FIRE DESIGN WILL BE BASED ON FIRE PROTECTION DRAWINGS.
16. CONTRACTOR SHALL COORDINATE GAS SERVICE WITH THE GOVERNING AUTHORITY.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL UTILITY PLAN 4

Project No.	Drawing No.
100980201	CU104
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 37 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. REFER TO SHEET CE501 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
4. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
5. CONTRACTOR TO WASH TRUCK TIRES BEFORE EXITING THE CONSTRUCTION SITE.
6. ALL LANDSCAPED ISLANDS TO BE PERMANENTLY SEEDED.
7. EROSION CONTROL MATTING SHALL BE PROVIDED WHERE SLOPES ARE GREATER THAN 3H:1V.

SOIL DECOMPACTION NOTE:

THIS PROJECT IS EXEMPT FROM SOIL DECOMPACTION TESTING AND REMEDIATION AS IT IS LOCATED IN A METROPOLITAN PLANNING AREA (PA1).

NJ NAD 83

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

INTERSECTION IMPROVEMENTS. REFER TO DRAWING CS105.

CONSTRUCTION ENTRANCE

SHEET 101

SHEET 102
BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

INLET PROTECTION (TYP.)

TEMPORARY STOCKPILE LOCATION

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9
BASIN 10
BASIN 11
BASIN 12
BASIN 13
BASIN 14

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES
LIMIT OF DISTURBANCE = 39 ACRES

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

PROVIDE EROSION CONTROL MATTING WHERE SLOPES ARE GREATER THAN 3H:1V (TYP.)

50-FT WETLAND BUFFER (TYP.)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B (TYP.)

APPROXIMATE LOCATION KAYS ROAD, 66' ROW, VACATED BY TOWNSHIP ORDINANCE No. 37-87 SCHEDULE B-II, ITEM 27

25' WIDE UTILITY EASEMENT PER DB 1384 PG 255 SCHEDULE B-II, ITEM 18

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

WILLS BROOK

SHEET 103

SHEET 104

WEST BOUND
EAST BOUND

INTERSTATE ROUTE 80
(WIDTH VARIES)

INTERNATIONAL DRIVE
(WIDTH VARIES)

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA HOSPITALITY
C/O HOLIDAY INN

ACCESS TO INTERNATIONAL DRIVE

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

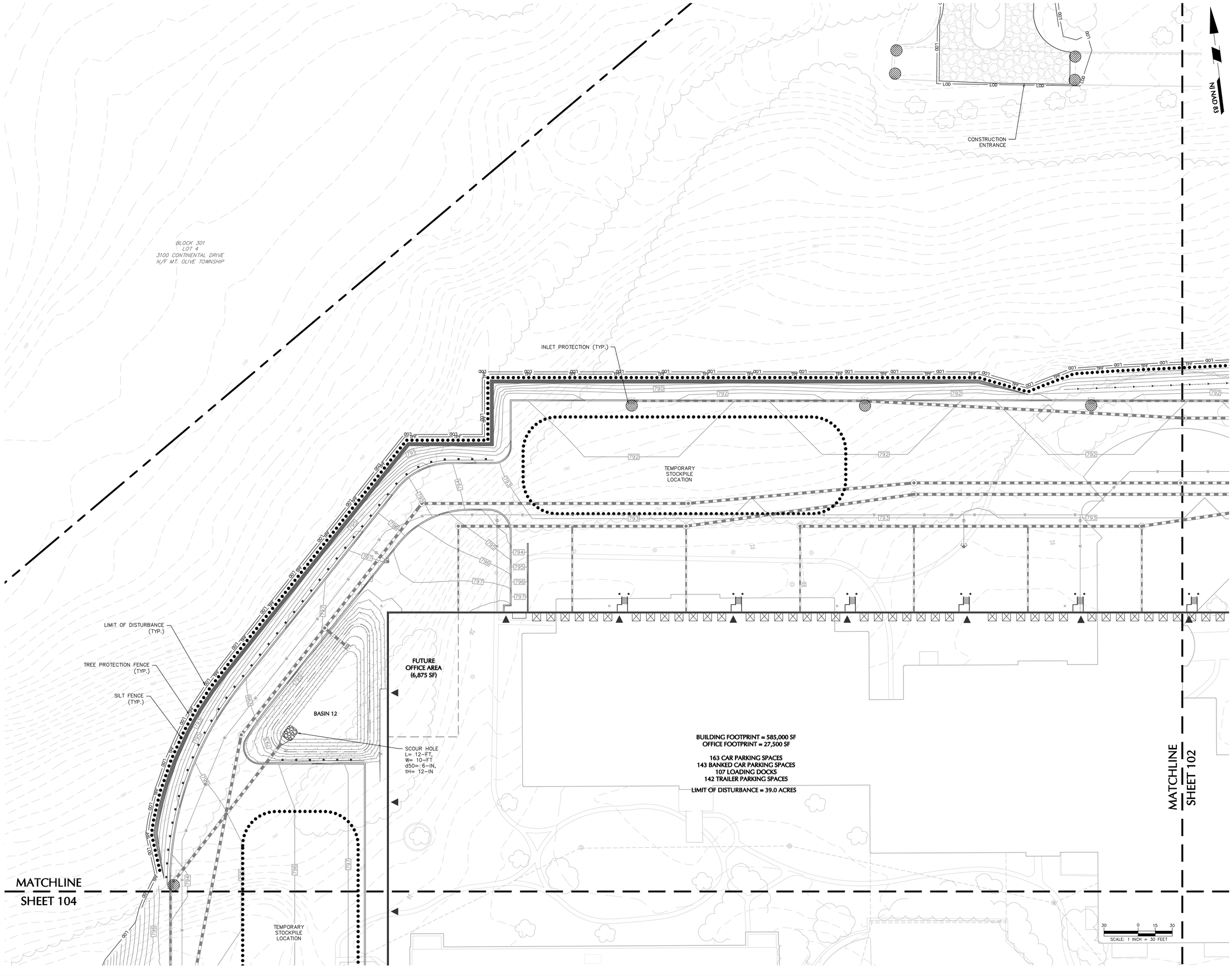
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL SOIL EROSION AND SEDIMENT CONTROL PLAN

Project No.	Drawing No.
100980201	CE100
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 38 of 62

© 2022 Langan

Date: 11/23/2022 Time: 15:03 User: ryemerou Style Table: Langan.stb Layout: CE100 Document Code: 100980201-0302-CE101-0101



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. REFER TO SHEET CE501 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
4. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
5. CONTRACTOR TO WASH TRUCK TIRES BEFORE EXITING THE CONSTRUCTION SITE.
6. ALL LANDSCAPED ISLANDS TO BE PERMANENTLY SEEDED.
7. EROSION CONTROL MATTING SHALL BE PROVIDED WHERE SLOPES ARE GREATER THAN 3H:1V.

SOIL DECOMPACTION NOTE:

THIS PROJECT IS EXEMPT FROM SOIL DECOMPACTION TESTING AND REMEDIATION AS IT IS LOCATED IN A METROPOLITAN PLANNING AREA (PA1).

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 1

Project No. 100980201	Drawing No. CE101
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 39 of 62

© 2022 Langan

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. REFER TO SHEET CE501 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
4. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
5. CONTRACTOR TO WASH TRUCK TIRES BEFORE EXITING THE CONSTRUCTION SITE.
6. ALL LANDSCAPED ISLANDS TO BE PERMANENTLY SEEDED.
7. EROSION CONTROL MATTING SHALL BE PROVIDED WHERE SLOPES ARE GREATER THAN 3H:1V.

SOIL DECOMPACTION NOTE:

THIS PROJECT IS EXEMPT FROM SOIL DECOMPACTION TESTING AND REMEDIATION AS IT IS LOCATED IN A METROPOLITAN PLANNING AREA (PA1).

NJ NAD 83

BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

PROVIDE EROSION MATTING ALONG BOTTOM OF GRASSED SWALE

LIMIT OF DISTURBANCE (TYP.)

TREE PROTECTION FENCE (TYP.)

SILT FENCE (TYP.)

INLET PROTECTION (TYP.)

SCOUR HOLE
L= 12-FT,
W= 10-FT
d50= 6-IN,
tH= 12-IN

SCOUR HOLE
L= 12-FT,
W= 10-FT
d50= 4-IN,
tH= 8-IN

BASIN 1

BASIN 2

PROVIDE EROSION CONTROL MATTING WHERE SLOPES ARE GREATER THAN 3H:1V. (TYP.)

BASIN 3

BASIN 4

SCOUR HOLE
L= 12-FT,
W= 10-FT
d50= 4-IN,
tH= 8-IN

SCOUR HOLE
L= 6-FT,
W= 5-FT
d50= 6-IN,
tH= 12-IN

SCOUR HOLE
L= 15-FT,
W= 12.5-FT
d50= 4-IN,
tH= 8-IN

FUTURE
OFFICE AREA
(6,875 SF)

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

LIMIT OF DISTURBANCE = 39.0 ACRES

MATCHLINE
SHEET 101

SCOUR HOLE
L= 9-FT,
W= 7.5-FT
d50= 4-IN,
tH= 8-IN

BASIN 5

TEMPORARY
STOCKPILE
LOCATION

SCOUR HOLE
L= 9-FT,
W= 7.5-FT
d50= 4-IN,
tH= 8-IN

BASIN 6

INLET PROTECTION (TYP.)

LIMIT OF DISTURBANCE (TYP.)

TREE PROTECTION FENCE (TYP.)

SILT FENCE (TYP.)

SCOUR HOLE
L= 12-FT,
W= 10-FT
d50= 4-IN,
tH= 8-IN

BASIN 13

BLOCK 200
LOT 1
AREA=4,227,340± S.F.
OR 97.04± ACRES

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

SCOUR HOLE
L= 12-FT,
W= 10-FT
d50= 4-IN,
tH= 8-IN

SCOUR HOLE
L= 21-FT,
W= 17.5-FT
d50= 10-IN,
tH= 20-IN

BASIN 14

SCOUR HOLE
L= 15-FT,
W= 12.5-FT
d50= 4-IN,
tH= 8-IN

MATCHLINE
SHEET 103

SCALE: 1 INCH = 30 FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No.
24GE04459300

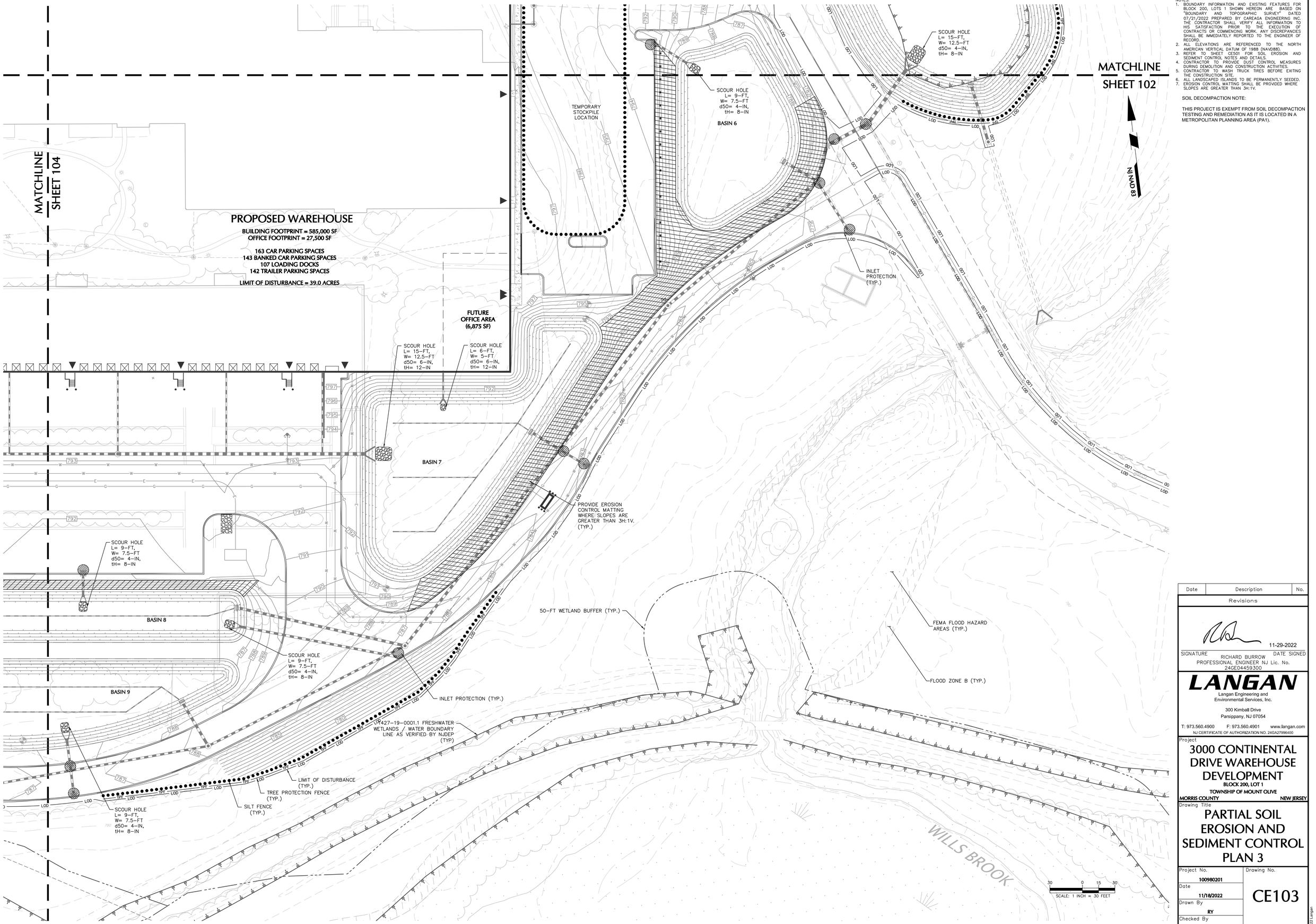
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA2796400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 2

Project No. 100980201	Drawing No. CE102
Date 11/18/2022	
Drawn By RY	
Checked By KMR /RB	Sheet 40 of 62

© 2022 Langan



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. REFER TO SHEET CE501 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
4. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
5. CONTRACTOR TO WASH TRUCK TIRES BEFORE EXITING THE CONSTRUCTION SITE.
6. ALL LANDSCAPED ISLANDS TO BE PERMANENTLY SEEDED.
7. EROSION CONTROL MATTING SHALL BE PROVIDED WHERE SLOPES ARE GREATER THAN 3H:1V.

SOIL DECOMPACTION NOTE:

THIS PROJECT IS EXEMPT FROM SOIL DECOMPACTION TESTING AND REMEDIATION AS IT IS LOCATED IN A METROPOLITAN PLANNING AREA (PA1).

Date	Description	No.

Revisions

11-29-2022

SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

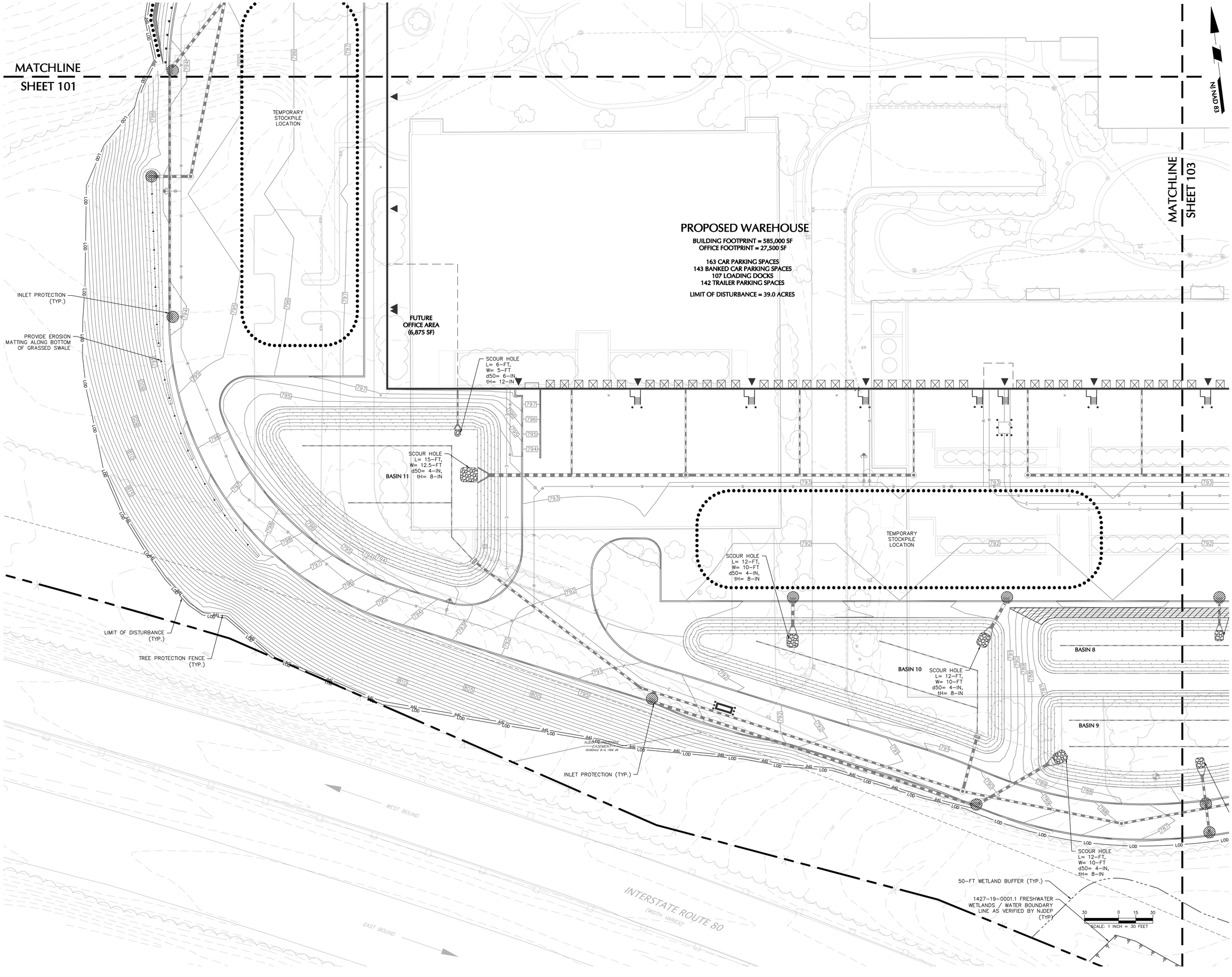
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 3

Project No.	Drawing No.
100980201	CE103
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 41 of 62

© 2022 Langan



NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. REFER TO SHEET CE501 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
4. CONTRACTOR TO PROVIDE DUST CONTROL MEASURES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
5. CONTRACTOR TO WASH TRUCK TIRES BEFORE EXITING THE CONSTRUCTION SITE.
6. ALL LANDSCAPED ISLANDS TO BE PERMANENTLY SEEDED.
7. EROSION CONTROL MATTING SHALL BE PROVIDED WHERE SLOPES ARE GREATER THAN 3H:1V.

SOIL DECOMPACTION NOTE:

THIS PROJECT IS EXEMPT FROM SOIL DECOMPACTION TESTING AND REMEDIATION AS IT IS LOCATED IN A METROPOLITAN PLANNING AREA (PA1).

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL SOIL EROSION AND SEDIMENT CONTROL PLAN 4

Project No. 100980201	Drawing No. CE104
Date 11/18/2022	
Drawn By RY	
Checked By KMR/RB	Sheet 42 of 62

© 2022 Langan

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR EROSION AND SEDIMENT CONTROL IN NEW JERSEY, AND ARE TO BE IN PLACE PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS SHALL BE MULCHED WITH STRAW OR HAY AND TACKED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. SEE NOTE 22 BELOW.
3. PERMANENT VEGETATION TO BE ESTABLISHED ON EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH TO BE USED FOR PROTECTION UNTIL VEGETATION IS ESTABLISHED. SEE NOTE 23 BELOW.
4. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS (STEEP SLOPES, SANDY SOILS, WET CONDITIONS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN ACCORDANCE WITH NOTE 22.
5. TEMPORARY DIVERSION BERMS ARE TO BE INSTALLED ON ALL CLEARED ROADWAYS AND EASEMENT AREAS.
6. PERMANENT SEEDING AND STABILIZATION TO BE IN ACCORDANCE WITH THE "STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION". SPECIFIED RATES AND LOCATIONS SHALL BE ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN.
7. THE SITE SHALL, AT ALL TIMES, BE GRADED AND MAINTAINED SO THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
8. ALL SEDIMENTATION STRUCTURES (SILT FENCE, INLET FILTERS, AND SEDIMENT BASINS) TO BE INSPECTED AND MAINTAINED DAILY.
9. STOCKPILES SHALL NOT BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, DRAINAGE FACILITY, OR ROADWAY. ALL STOCKPILES BASES SHALL HAVE A SILT FENCE PROPERLY ENTRENCHED AT THE TOE OF SLOPE.
10. A STABILIZED CONSTRUCTION ACCESS TO BE INSTALLED, WHENEVER AN EARTHEN ROAD INTERSECTS WITH A PAVED ROAD. SEE THE STABILIZED CONSTRUCTION ACCESS DETAIL AND CHART FOR DIMENSIONS.
11. ALL NEW ROADWAYS TO BE TREATED WITH SUITABLE SUB BASE UPON ESTABLISHMENT OF FINAL GRADE ELEVATIONS.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
13. BEFORE DISCHARGE POINTS BECOME OPTIONAL, ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AS REQUIRED.
14. ALL DEWATERING OPERATIONS MUST BE DISCHARGED DIRECTLY INTO A SEDIMENT FILTER AREA. THE FILTER TO BE COMPOSED OF A FABRIC OR APPROVED MATERIAL.
15. ALL SEDIMENT BASINS ARE TO BE CLEANED WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. A CLEAN OUT ELEVATION WILL BE IDENTIFIED ON THE PLAN AND A MARKER INSTALLED ON THE SITE.
16. DURING AND AFTER CONSTRUCTION, THE APPLICANT WILL BE RESPONSIBLE FOR THE MAINTENANCE AND UPKEEP OF THE DRAINAGE STRUCTURES, VEGETATION COVER, AND ANY OTHER MEASURES DEEMED APPROPRIATE BY THE DISTRICT. SAID RESPONSIBILITY TO END WHEN COMPLETED WORK IS APPROVED BY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT.
17. ALL TREES OUTSIDE THE DISTURBANCE LIMIT INDICATED ON THE SUBJECT PLAN OR THOSE TREES WITHIN THE DISTURBANCE AREA WHICH ARE DESIGNATED TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH TREE PROTECTION DEVICES.
18. THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON SITE OR OFF SITE EROSION PROBLEMS DURING CONSTRUCTION.
19. THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCES, AND A PRE-CONSTRUCTION MEETING HELD.
20. CONTRACTOR TO SET UP A MEETING WITH THE INSPECTOR FOR PERIODIC INSPECTIONS OF THE TEMPORARY SEDIMENT BASIN PRIOR TO AND DURING ITS CONSTRUCTION.
21. TOPSOIL STOCKPILE PROTECTION:
    A. APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 100 SQ. FT.
    B. APPLY FERTILIZER (10–20–10) AT A RATE OF 11 LBS., PER 1000 SQ. FT.
    C. APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT.
    D. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90LBS. PER 1000 SQ. FT.
    E. APPLY LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
    F. PROPERTY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.
22. TEMPORARY STABILIZATION SPECIFICATIONS:
    A. APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
    B. APPLY FERTILIZER (10–20–10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
    C. APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT.
    D. MULCH DISTURBED SOIL WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
    E. APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
23. PERMANENT STABILIZATION SPECIFICATIONS:
    A. APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED).
    B. APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT. AND WORK FOUR INCHES INTO SOIL.
    C. APPLY FERTILIZER (10–20–10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
    D. APPLY HARD FESCUE SEED AT 2.7 LBS. PER 1000 SQ. FT. AND CREEPING RED FESCUE SEED AT 0.7 LBS PER 1000 SQ. FT. AND PERENNIAL RYEGRASS SEED AT 0.25 LBS PER 1000 SQ. FT.
    E. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
    F. APPLY LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

DUST CONTROL

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) – SPRAY ON	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS		
POLYACRYLAMIDE (PAM) – DRY SPREAD	AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD, P. 26–1		
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

TILLAGE – TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL–TYPE PLOWS SPACED ABOUT 12 INCHES APART AND SPRING–TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

SPRINKLING – SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

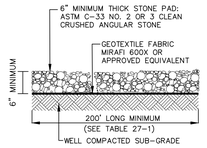
BARRIERS – SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE – SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.

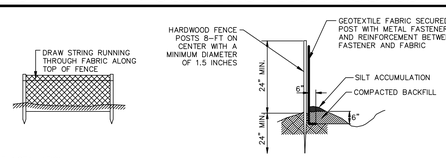
STONE – COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL

TABLE 27–1: LENGTHS OF CONSTRUCTION EXITS ON SLOPING ROADBEDS

Percent Slope of Roadway	Length of Stone Required	
	Coarse–Grained Soils	Fine–Grained Soils
0 to 2%	50 ft.	100 ft.
2 to 5%	100 ft.	200 ft.
>5%	ENTIRE SURFACE STABILIZED WITH HOT MIX ASPHALT BASE COURSE, MIX I–2	



STABILIZED CONSTRUCTION ACCESS



METHOD OF INSTALLATION

1. CONTRACTOR TO DIG 6" MIN. TRENCH AND LINE TRENCH WITH FILTER FABRIC PRIOR TO BACK FILL.
2. EXCEPT FOR THE END POST, DRIVE ALL POSTS INTO THE GROUND AT BACK SIDE OF TRENCH SPACED A MAXIMUM OF 8 FT O.C.
3. ATTACH FILTER FABRIC TO POST AND STRETCH BETWEEN POSTS. SECURE FABRIC TO POST WITH METAL FASTENER AND REINFORCEMENT MATERIAL PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC.
4. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1–1/2 INCHES.

SLIT FENCE

STABILIZATION NOTES

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY"

THE FOLLOWING SEEDING SCHEDULE SHOULD BE USED FOR PERMANENT SEEDING (UNLESS OTHERWISE NOTED):

A. APPLY TOPSOIL TO A DEPTH OF 5".

B. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO–OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10–10–10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE–HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE–HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

D. SEED – LAWN AREAS – STANDARD SEED MIX 15
HARD FESCUE – 2.70 lbs/1,000 sf
PERENNIAL RYEGRASS – 0.70 lbs/1,000 sf
KENTUCKY BLUEGRASS – 0.90 lbs/1,000 sf
OPTIMAL PLANTING PERIOD BETWEEN MARCH 1 AND MAY 31

E. SEED – MEADOW AREAS – STANDARD SEED MIX 5
SWITCHGRASS – 0.35 lbs/1,000 sf
BIG BLUESTEM – 0.10 lbs/1,000 sf
LITTLE BLUESTEM – 0.10 lbs/1,000 sf
SAND LOVEGRASS – 0.10 lbs/1,000 sf
COASTAL PANICGRASS – 0.25 lbs/1,000 sf
& WILDFLOWER MIX 605 BY APPLEWOOD OR APPROVED EQUAL.
WILDFLOWER MIX 605 – 10 lbs/acre

F. SEED – DETENTION BASINS & SPILLWAYS – STANDARD SEED MIX 9
STRONG CREEPING RED FESCUE – 2.8 lbs/1,000 sf
KENTUCKY BLUEGRASS – 1.8 lbs/1,000 sf
PERENNIAL RYEGRASS – 0.5 lbs/1,000 sf
OR
REDTOP– 0.25 lbs/1,000 sf
PLUS WHITE CLOVER – 0.25 lbs/1,000 sf
OPTIMAL PLANTING PERIOD BETWEEN MARCH 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND NOVEMBER 15. ACCEPTABLE PLANTING PERIOD BETWEEN MAY 1 AND AUGUST 14

G. MULCH – SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 lbs/1,000 sf; TO BE APPLIED ACCORDING TO NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDING).

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

DISTURBED AREAS SHALL BE MAINTAINED IN A ROUGH GRADED CONDITION AND TEMPORARILY SEEDED AND HAY MULCHED (OR HYDROSEEDED) UNTIL PROPER WEATHER EXISTS FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. THE FOLLOWING SEEDING SCHEDULE SHALL BE USED FOR TEMPORARILY SEEDING:

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO–OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10–20–10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS SOIL TESTING INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. SEED – PERENNIAL RYEGRASS – 100 lbs/acre;
PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.

D. MULCH – SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 lbs/1,000 sf; TO BE APPLIED ACCORDING TO NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDING).

STABILIZATION WITH MULCH ONLY

NON–GROWING STABILIZATION MEASURES SHALL BE USED WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN BE APPLIED.

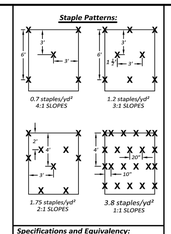
SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 90 TO 115 lbs/1,000 sf TO BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, LIQUID MULCH BINDER, OR MULCH NETTING).

Slope Installation Guidelines:

These guidelines are recommendations only. Any questions with the installation should be confirmed with your local distributor.

1. *Dig a 6" by 6" trench both up–slope and down–slope of the area the matting is to be applied. Prepare the slope soil surface (raking, seeding and fertilizing).*
2. *Begin by placing the blanket a minimum of 12" down–slope of the up–slope trench. Secure the blanket at the bottom of the trench with staples placed 12" apart. Backfill and compact the trench. Apply seed, and fold the blanket over soil, secure with a row of staples placed 12" apart across the width of the blanket. (See Diagram A)*
3. *Roll the blanket vertically down the slope. Secure using the appropriate staple pattern below, specified by slope. (See Staple Patterns)*
4. *Parallel blankets must be overlapped by a minimum of 4", and secured with a row of staples placed approximately 3'–0" apart. (See Diagram B)*
5. *Additional vertical blankets can be joined using a minimum 4" overlapping or shingle style (See Diagrams C) in the direction of water flow. Connect the blankets by placing staples approximately 12" apart across the width of the blankets.*
6. *For maximum performance a check slot should be placed at 25'–40' intervals. Place a row of staples 4" apart along the entire width of the slope. A second row should be placed 4" below in a staggered pattern. Then continue with general installation. (See Diagrams D)*
7. *The end of blanket must be secured in a 6" x 6" trench with a row of staples placed at 12" intervals. (Diagram E)*

Staple Patterns:



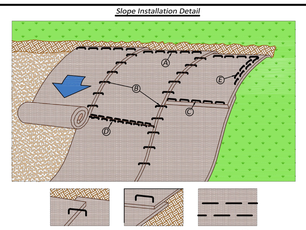
Specifications and Equivalency:

All product material and performance specifications are available from East Coast Erosion Blankets via the product specification sheet. Utilization of a 11 gauge staple, a minimum 1" long by 1" crown, is recommended. The tightly compressed blankets are wrapped and include a product label, code and installation guide.

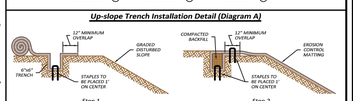
In addition to meeting all data available on the specification sheet, equivalent products shall meet the following requirements:

- *The product must be listed with the NTPEP database.*
- *The product must meet the Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC).*
- *The product must meet the Federal Highway Administration's (FHWA) FP–03 Section 713.17 specification.*

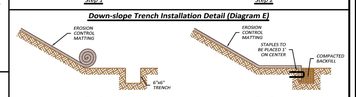
Slope Installation Detail



Up–slope Trench Installation Detail (Diagram A)



Down–slope Trench Installation Detail (Diagram E)



443 Bricker Road Bernville, PA 19506
Toll Free: 1-800-582-4005 * Phone: +1-610-488-8496 * Fax: +1-610-488-8494

Proud Member of:

DRAWN BY: MR	DRAWING #: EC-SLOPE	REV. # 1	DATE: 1/2/09

EROSION CONTROL BLANKET

SCHEDULE OF OPERATIONS

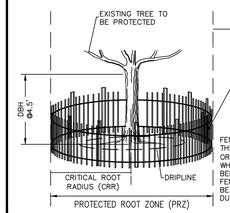
	ACTIVITY DURATION
1. NOTIFY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT IN WRITING AT LEAST 72 HOURS PRIOR TO ANY PROJECT PRE CONSTRUCTION MEETING OR SITE DISTURBANCES.	---
2. INSTALL A CRUSHED STONE, VEHICLE WHEEL–CLEANING BLANKET OF 1 IN. TO 21/2 IN. WASHED STONE 6 IN. DEEP AT THE CONSTRUCTION ENTRANCE(S) IMMEDIATELY AFTER INITIAL DISTURBANCES AS PER STANDARDS ON DRAWINGS. SITE TRAFFIC SHOULD USE ONLY THESE AREAS FOR INGRESS AND EGRESS. INSTALL SILT FENCE AND BARRIERS. EQUIP ALL EXISTING CATCH BASINS WITH FILTER FABRIC INLET PROTECTION IMMEDIATELY UPON START OF CONSTRUCTION. CLEAR AND GRUB AREAS CONTAINING VEGETATION AS REQUIRED TO COMMENCE CONSTRUCTION.	1 WEEK
3. INSTALL REMAINDER OF TEMPORARY SOIL EROSION & SEDIMENT CONTROL MEASURES, IMMEDIATELY AFTER INITIAL DISTURBANCES. TRAFFIC SHOULD USE ONLY THIS AREA FOR INGRESS AND EGRESS. PLACE AND MAINTAIN SEDIMENT BARRIERS AS SHOWN ON THE PLAN.	2 WEEKS
4. CONSTRUCT STOCKPILE AND STABILIZE.	---
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN THIRTY (30) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 ½ TONS PER ACRE, ACCORDING TO STATE STANDARD FOR STABILIZATION WITH MULCH ONLY.	---
6. PROPOSED SITE IMPROVEMENTS SHALL ONLY BE STARTED AFTER RECEIVING SITE PLAN APPROVAL FROM THE REGULATORY AGENCIES HAVING JURISDICTION AND CERTIFICATION OF THE SITE CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL PLAN FROM THE MORRIS COUNTY SOIL CONSERVATION DISTRICT.	---
7. ALL SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL IMPROVEMENTS TO THE SITE ARE COMPLETE, THE ROADS AND PARKING AREAS ARE PAVED, AND THE VEGETATIVE COVER IS 70% OR GREATER IN NON–PAVED AREAS.	---
8. COMPLETE DEMOLITION OF SITE FEATURES.	3 MONTHS
9. COMPLETE CONSTRUCTION OF ROUGH GRADING, STORM IMPROVEMENTS, BELOW–GRADE UTILITIES AND FOUNDATION.	8 MONTHS
10. AFTER STORM DRAINAGE SYSTEM AND CATCH BASINS ARE CONSTRUCTED PLACE FILTER FABRIC INLET PROTECTION ON EACH CATCH BASIN WHICH SHALL REMAIN UNTIL THE SITE IS PAVED. REPLACE AS NECESSARY.	---
11. BUILDING CONSTRUCTION.	10 MONTHS
12. COMPLETE FINAL SITE GRADING, CURB, ASPHALT PAVING AND SIDEWALK INSTALLATION.	2 MONTHS
13. ALL SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL PERMANENT IMPROVEMENTS TO THE SITE ARE COMPLETE AND THE ROADS ARE PAVED.	---
14. LANDSCAPE ALL APPROPRIATE AREAS AS INDICATED ON THE LANDSCAPE PLAN AND REMOVE ALL TEMPORARY SEDIMENT CONTROL STRUCTURES AND MEASURES. PERMANENTLY STABILIZE ALL AREAS.	1 MONTHS
15. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5", MINIMUM OF 4" FIRMED IN PLACE IS REQUIRED. SHOULD ENVIRONMENTAL REQUIREMENTS FOR THE SITE SPECIFY MORE THAN A MINIMUM OF 4", ENVIRONMENTAL REQUIREMENTS SHALL DICTATE.	1 WEEK
16. CLEAN ALL SITE DRAINAGE STRUCTURES AND PIPES OF SILT AND DEBRIS. DOWNSTREAM/OFF–SITE DRAINAGE FACILITIES SHALL BE INSPECTED AND CLEANED OF SILT AND DEBRIS RESULTING FROM SITE CONSTRUCTION PRIOR TO FINAL TURNOVER.	2 WEEKS
17. NOTIFY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AT THE COMPLETION OF CONSTRUCTION.	---

CONSTRUCTION NOTES

1. CONTRACTOR TO COORDINATE STAGING AREAS WITH OWNER.
2. VEHICLE WASH DOWN PADS TO BE PROVIDED THROUGHOUT THE DURATION OF THE PROJECT.
3. INLET PROTECTION REQUIREMENTS SHALL NOT BE LIMITED TO STRUCTURES LOCATED WITHIN THE PHASE LIMITS OF WORK. ANY AND ALL INLETS WHICH COULD BE AFFECTED BY RUNOFF SHALL BE PROTECTED.
4. CONTRACTOR MAY ELECT TO PROVIDE HAY BALES OR ALTERNATIVE MEANS OF INLET PROTECTION TO EXISTING INLETS. ALL ALTERNATIVES MUST BE APPROVED BY THE BERGEN COUNTY SOIL CONSERVATION DISTRICT. COPIES OF DETAIL AND APPROVAL TO BE PROVIDED TO THE OWNER AND OWNER'S REPRESENTATIVE.
5. CONTRACTOR MUST PROTECT WORK, EXISTING PREMISES AND OWNER'S OPERATION FROM THEFT, VANDALISM AND UNAUTHORIZED ENTRY.
6. CONTRACTOR MUST RESTRICT ENTRANCE OF PERSONS AND VEHICLES INTO PROJECT SITE. ALLOW ENTRANCE TO AUTHORIZED PERSONS WITH PROPER IDENTIFICATION ONLY. MAINTAIN A LOG OF WORKERS AND VISITORS TO BE AVAILABLE TO OWNER ON REQUEST.

CONSTRUCTION NOTES

SOIL DECOMPACTION AND TESTING REQUIREMENTS IN ACCORDANCE WITH STANDARD FOR LAND GRADING, CHAPTER 19, REQUIRE THAT SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL SHALL BE FREE OF EXCESSIVE COMPACTION TO DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATION COVER. SOIL DECOMPACTION AND TESTING IS NOT REQUIRED FOR THIS SITE, AS IT IS LOCATED IN A METROPOLITAN PLANNING AREA (PA1).



ELEVATION

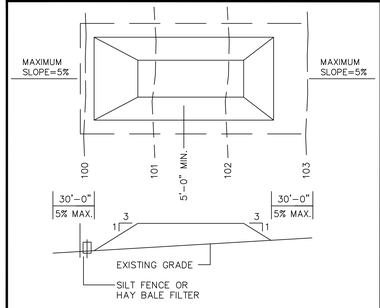
ESTIMATE A TREE'S PROTECTED ROOT ZONE (PRZ) BY CALCULATING THE CRITICAL ROOT RADIUS (CRR).

1. MEASURE THE DBH (DIAMETER OF TREE AT BREAST HEIGHT, 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE OF TREE) IN INCHES.
2. MULTIPLY MEASURED DBH BY 1.5 OR 1.0. EXPRESS THE RESULT IN FEET.
   CRR = DBH x 1.5: CRITICAL ROOT RADIUS FOR OLDER, UNHEALTHY, OR SENSITIVE SPECIES.
   CRR = DBH x 1.0: CRITICAL ROOT RADIUS FOR YOUNGER, HEALTHY, OR TOLERANT SPECIES.

NOTES:

1. CONTRACTOR SHALL NOT CUT AND ROOTS AND/OR BRANCHES.
2. TREE PROTECTION FENCE SHALL BE REMOVED AFTER CONSTRUCTION.
3. ALL EXPOSED ROOT STUBS AND ROOTS ARE TO BE BACK FILLED WITH APPROVED TOPSOIL.
4. REFER TO STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY – TABLE 9–1 FOR POTENTIAL CONSTRUCTION IMPACTS TO TREES.

TREE PROTECTION FENCE

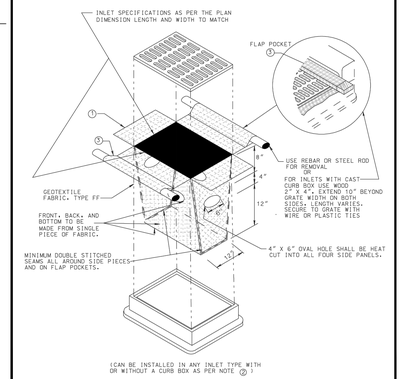


NOTES:

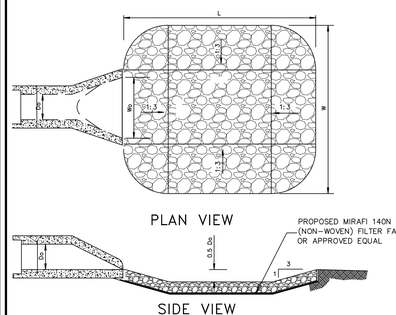
1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECIEVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQ.
4. SILT FENCE OR HAY BALE FILTER SHALL BE INSTALLED AS DETAILED HEREON.

NOT TO SCALE

TEMPORARY STOCKPILE



INLET PROTECTION



N.T.S.

NOTE:

1. THE TOP OF THE SCOUR HOLE SHALL BE AT THE SAME ELEVATION AT THE UP AND DOWNSTREAM ENDS AND THE BOTTOM OF THE SCOUR HOLE SHALL BE AT 0% SLOPE.

SCOUR HOLE

	Do	TOTAL L	TOTAL W	BOTTOM L	BOTTOM W	d50	THICKNESS
FES–101	24" HDPE	12 FT.	10 FT.	6 FT.	4 FT.	6 IN.	12 IN.*
FES–201	24" HDPE	12 FT.	10 FT.	6 FT.	4 FT.	4 IN.	8 IN.*
FES–301	24" HDPE	12 FT.	10 FT.	6 FT.	4 FT.	4 IN.	8 IN.*
FES–302	12" HDPE	6 FT.	5 FT.	3 FT.	2 FT.	6 IN.	12 IN.*
FES–303	12" HDPE	6 FT.	5 FT.	3 FT.	2 FT.	6 IN.	12 IN.*
FES–401	30" HDPE	15 FT.	12.5 FT.	7.5 FT.	5 FT.	4 IN.	8 IN.*
FES–501	18" HDPE	9 FT.	7.5 FT.	4.5 FT.	3 FT.	4 IN.	8 IN.*
FES–601	18" HDPE	9 FT.	7.5 FT.	4.5 FT.	3 FT.	4 IN.	8 IN.*
HW–701	30" HDPE	15 FT.	12.5 FT.	7.5 FT.	5 FT.	6 IN.	12 IN.*
HW–702	12" HDPE	6 FT.	5 FT.

SLOPES TABLE						
MIN. SLOPE	MAX. SLOPE	TOTAL MODERATE AREA (SF)	MODERATE AREA TO BE DISTURBED (SF)	ALLOWABLE % OF MODERATE AREA TO BE REMOVED	PROPOSED % OF MODERATE AREA TO BE REMOVED	COLOR
15.0%	25.0%	651,910	151,027	35	23	

NOTES:
1. The table is presented to show compliance with the critical areas section of the Township of Mount Olive Zoning Ordinance.
2. Within moderate slope areas, no more than 50% of the rate of coverage for each developable lot(s), pursuant to the applicable zone district standards, may be utilized for structures and/or impervious coverage.

SLOPES TABLE						
MIN. SLOPE	MAX. SLOPE	TOTAL CRITICAL AREA (SF)	CRITICAL AREA TO BE DISTURBED (SF)	ALLOWABLE % OF CRITICAL AREA TO BE REMOVED	PROPOSED % OF CRITICAL AREA TO BE REMOVED	COLOR
25.0%	---	500,336	103,459	0	21	

NOTES:
1. The table is presented to show compliance with the critical areas section of the Township of Mount Olive Zoning Ordinance.
2. There shall be no site disturbance, no structures and no impervious coverage permitted within critical slope areas except for driveways and roads, both public and private.

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

NJ NAD 83

BLOCK 201
LOT 1
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

BLOCK 201
LOT 2
120 CONTINENTAL DRIVE
N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE
(66' R.O.W. AS PER TAX MAP)

BLOCK 301
LOT 4
3100 CONTINENTAL DRIVE
N/F MT. OLIVE TOWNSHIP

LIMIT OF DISTURBANCE (TYP.)

AREA OF PRIOR DEVELOPMENT (TYP.)

CRITICAL AREA SLOPE = >25%

MODERATE AREA SLOPE = 14%-25%

1427-19-0001.1 FRESHWATER WETLANDS / WATER BOUNDARY LINE AS VERIFIED BY NJDEP (TYP)

50-FT WETLAND BUFFER (TYP.)

FEMA FLOOD HAZARD AREAS (TYP.)

FLOOD ZONE B (TYP.)

WELLS BROOK

WEST BOUND

EAST BOUND

INTERSTATE ROUTE 80
(WIDTH VARIES)

INTERNATIONAL DRIVE
(WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204
LOT 1
1000 INTERNATIONAL DRIVE
N/F SREEKRISHNA HOSPITALITY
C/O HOLIDAY INN

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
STEEP SLOPES PLAN

Project No.	Drawing No.
100980201	EN100
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 44 of 62

© 2022 Langan

Date: 11/23/2022 Time: 15:25 User: ryemerou Style Table: Langan.stb Layout: EN100 Document Code: 100980201-0302-CE101-0103

NOTES:
1. BOUNDARY INFORMATION AND EXISTING FEATURES FOR BLOCK 200, LOTS 1 SHOWN HEREON ARE BASED ON "BOUNDARY AND TOPOGRAPHIC SURVEY" DATED 07/21/2022 PREPARED BY CAREAGA ENGINEERING INC. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO THE EXECUTION OF CONTRACTS OR COMMENCING WORK. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD.

TREE REMOVAL / REPLACEMENT CALCULATIONS

Average Wooded Acre

Tree (Diameter at Breast Height)	Area (SF)	Area (AC)	6" - 10"	11" - 18"	19" - 24"	25" - 30"	31" - 35"	36" and above	TOTAL
Site 1	10,000	0.23	21	11	3	0	0	0	35
Site 2	10,000	0.23	16	8	5	0	0	0	29
Site 3	10,000	0.23	6	4	4	1	0	0	15
Site 4	10,000	0.23	23	11	2	1	0	0	37
Average	10,000	0.23	17	9	4	1	0	0	31
Count per 1 AC	43,560	1.00	74	39	17	4	0	0	135
Tree count per disturbed area	**378,514**	8.69	**644**	**341**	**152**	**38**	**0**	**0**	**1,175**
Number of new trees required for every one tree removed			3	4	5	7	10	DBH of removed tree divided by 3	---
Total Tree Replacement Required			**1932**	**1364**	**760**	**266**	**0**	**0**	**4,322**

LEGEND

- TREES AND BRUSH TO BE REMOVED
- TPF — TREE PROTECTION FENCE
- LOD — LIMIT OF DISTURBANCE

N (NAD 83)

BLOCK 201 LOT 1 120 CONTINENTAL DRIVE N/F STATE OF NEW JERSEY

BLOCK 201 LOT 2 120 CONTINENTAL DRIVE N/F STATE OF NEW JERSEY

CONTINENTAL DRIVE (66' R.O.W. AS PER TAX MAP)

BLOCK 301 LOT 4 3100 CONTINENTAL DRIVE N/F MT. OLIVE TOWNSHIP

TREE PROTECTION FENCE (TYP.)

LIMIT OF DISTURBANCE (TYP.)

SAMPLE AREA (TYP.)

BASIN 1 BASIN 2 BASIN 3 BASIN 4 BASIN 5 BASIN 6 BASIN 7 BASIN 8 BASIN 9 BASIN 10 BASIN 11 BASIN 12 BASIN 13 BASIN 14

LIMIT OF TREE REMOVAL = 8.69 ACRES

BLOCK 200 LOT 1 AREA=4,227,340± S.F. OR 97.04± ACRES

APPROXIMATE LOCATION KAYS ROAD, 66' ROW, VACATED BY TOWNSHIP ORDINANCE No.:37-87 SCHEDULE B-II, ITEM 27

25' WIDE UTILITY EASEMENT PER DB 3384 PG 255 SCHEDULE B-II, ITEM 18

WILLS BROOK

WEST BOUND

EAST BOUND

INTERSTATE ROUTE 80 (WIDTH VARIES)

INTERNATIONAL DRIVE (WIDTH VARIES)

ACCESS TO INTERNATIONAL DRIVE

BLOCK 204 LOT 1 1000 INTERNATIONAL DRIVE N/F SREEKRISHNA HOSPITALITY C/O HOLIDAY INN

100 0 50 100
SCALE IN FEET

Date	Description	No.
	Revisions	

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
TREE REMOVAL PLAN

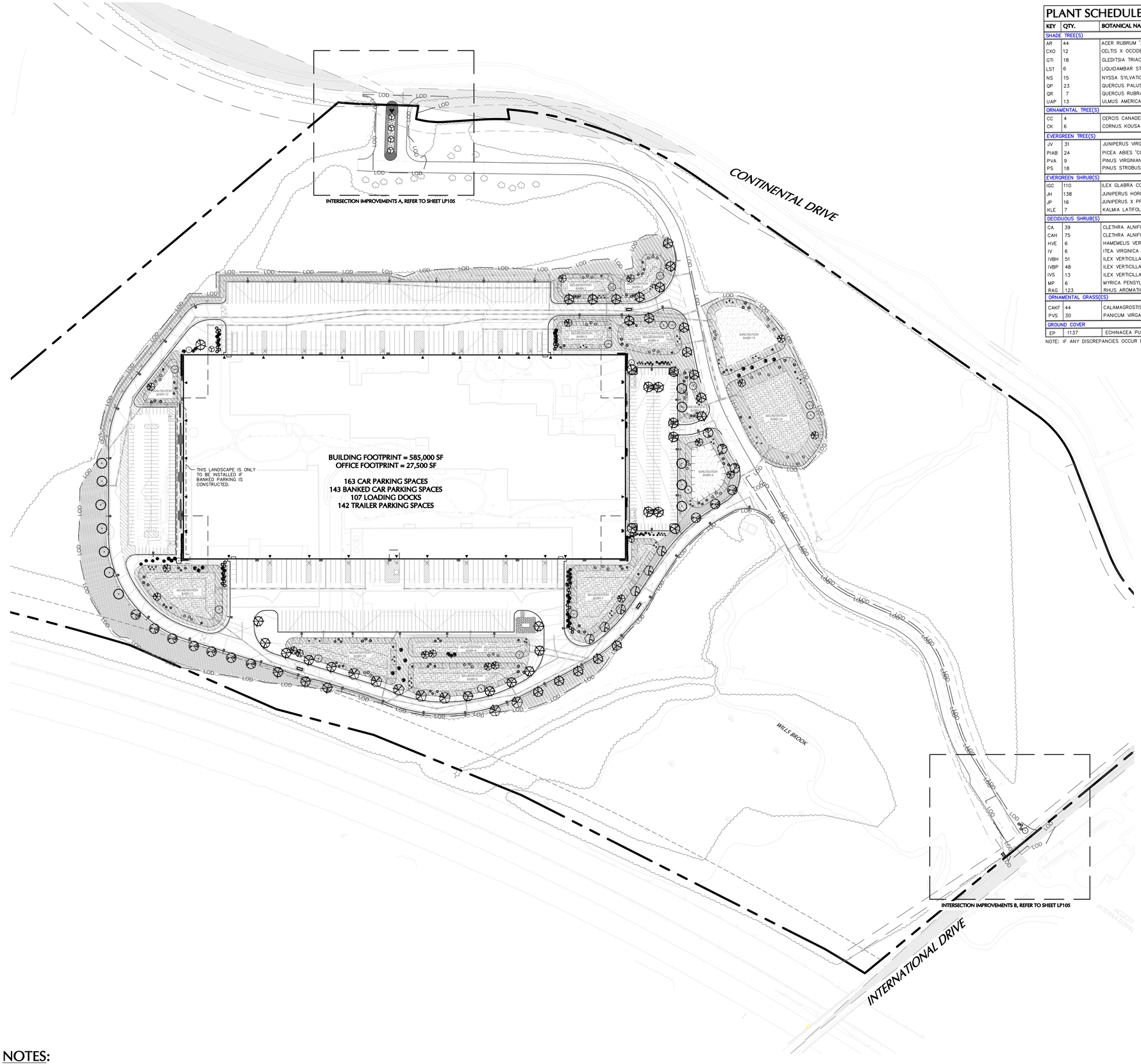
Project No.	**100980201**
Date	**11/18/2022**
Drawn By	**NC**
Checked By	**KMR/RB**

Drawing No. **LD101**

Sheet **45** of **62**

© 2022 Langan

Date: 11/23/2022 Time: 15:23 User: ryemerou Style Table: Langan.stb Layout: LD101 Document Code: 100980201-0302-LD101-0101



PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREE(S)						
AR	44	ACER RUBRUM 'ARMSTRONG'	RED MAPLE	1–1 1/2" CAL.	B+B	–
CXO	12	CELTIS X OCCIDENTALIS 'PRAIRIE PRIDE'	HACKBERRY	1–1 1/2" CAL.	B+B	–
GTI	18	GLEDITSIA TRIACANTHOS VAR. INERMIS 'SHADEMASTER'	THORNLESS HONEYLOCUST	1–1 1/2" CAL.	B+B	AT WET PONDS
LST	6	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	1–1 1/2" CAL.	B+B	AT WET PONDS
NS	15	NYSSA SYLVATICA	SOURGUM OR TUPELO	1–1 1/2" CAL.	B+B	AT WET PONDS
QP	23	QUERCUS PALUSTRIS	PIN OAK	1–1 1/2" CAL.	B+B	–
QR	7	QUERCUS RUBRA	RED OAK	1–1 1/2" CAL.	B+B	–
UAP	13	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	1–1 1/2" CAL.	B+B	–
ORNAMENTAL TREE(S)						
CC	4	CERCIS CANADENSIS	EASTERN REDBUD	1–1 1/2" CAL.	B+B	–
CK	6	CORNUS KOUSA	KOUSA DOGWOOD	1–1 1/2" CAL.	B+B	–
EVERGREEN TREE(S)						
JV	31	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	7–8'	B+B	–
PIAB	24	PICEA ABIES 'COLUMNAR'	COLUMNAR NORWAY SPRUCE	7–8'	B+B	–
PVA	9	PINUS VIRGINIANA	VIRGINIA PINE	7–8'	B+B	–
PS	18	PINUS STROBUS	EASTERN WHITE PINE	7–8'	B+B	–
EVERGREEN SHRUB(S)						
IGC	110	ILEX GLABRA COMPACTA	DWARF INKBERRY HOLLY	24–30"	CONTAINER	–
JH	138	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	18–24" SPRD.	CONTAINER	spaced @ 36" o.c.
JP	16	JUNIPERUS X PFITZERIANA 'ARMSTRONG'	ARMSTRONG JUNIPER	30–36"	CONTAINER	–
KLE	7	KALMIA LATIFOLIA 'ELF'	ELF MOUNTAIN LAUREL	24–30"	CONTAINER	–
DECIDUOUS SHRUB(S)						
CA	39	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	24–30"	CONTAINER	–
CAH	75	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	SWEET PEPPERBUSH	18–24"	CONTAINER	–
HVE	6	HAMEMELIS VERNALIS	VERNAL WITCH HAZEL	36–48"	CONTAINER	–
IV	6	ITEA VIRGINICA 'HENRY'S GARNET'	GARNET SWEETSPIRE	24–30"	CONTAINER	–
IVBH	51	ILEX VERTICILLATA "BERRY HEAVY"	WINTERBERRY HOLLY	24–30"	CONTAINER	–
IVBP	48	ILEX VERTICILLATA 'BERRY POPPINS'	WINTERBERRY HOLLY	24–30"	CONTAINER	–
IVS	13	ILEX VERTICILLATA 'SOUTHERN GENTLEMAN'	WINTERBERRY HOLLY	30–36"	CONTAINER	MALE
MP	6	MYRICA PENSYLVANICA 'MORTON'	NORTHERN BAYBERRY	30–36"	CONTAINER	–
RAG	123	RHUS AROMATICA 'GRO LOW'	GRO LOW FRAGRANT SUMAC	18–24" SPRD.	CONTAINER	spaced @ 36" o.c.
ORNAMENTAL GRASS(ES)						
CAKF	44	CALAMAGROSTIS ARUNDINACEA 'KARL FOERSTER'	FEATHER REED GRASS	2 GAL.	CONTAINER	–
PVS	30	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	2 GAL.	CONTAINER	–
GROUND COVER						
EP	1137	ECHINACEA PURPUREA 'KIM'S KNEE HIGH'	PURPLE CONEFLOWER	2 GAL.	CONTAINER	spaced @ 18" o.c.

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.

ORDINANCE COMPLIANCE CHART - TOWNSHIP OF MOUNT OLIVE

SECTION	REQUIREMENTS	PROPOSED	VARIANCE/ WAIVER REQUIRED
§ 550–36. BUFFERS.	A. BUFFER AREAS SHALL REQUIRE SITE PLAN APPROVAL AND ARE REQUIRED ALONG ALL LOT AND STREET LINES SEPARATING A NONRESIDENTIAL USE FROM EITHER A RESIDENTIAL USE OR RESIDENTIAL ZONING DISTRICT LINE AND ALONG ALL STREET LINES WHERE LOADING AND STORAGE AREAS CAN BE SEEN FROM THE STREET.	N/A	COMPLIES.
	B. A MINIMUM OF 1/2 THE LENGTH OF A REQUIRED BUFFER SHALL BE AT LEAST 25 FEET WIDE, NOT MORE THAN 1/2 OF THE REQUIRED BUFFER SHALL CONSIST OF AT LEAST TWO OF THE FOLLOWING: - LANDSCAPED FENCING OR WALLS AT LEAST 10' WIDE; - LANDSCAPED BERM AT LEAST 6' HIGH; - A BUILDING SETBACK OF AT LEAST 200' WITH A GRADE OF LESS THAN 20%, WITH GROUPS OF PLANTINGS AND TREES LOCATED TO ENHANCE THE ARCHITECTURAL FEATURE(S) OF THE STRUCTURE, AND OFFER A BREAK TO LARGE OPEN AREAS BUT WITH NO OTHER USE PERMITTED IN THIS YARD AREA; AND A PARKING AREA SET BACK AT LEAST 100' AND SCREENED AS REQUIRED UNDER THE OFF–STREET PARKING PROVISIONS.	N/A	COMPLIES.
	C. ALL BUFFER AREAS SHALL BE PLANTED AND MAINTAINED WITH EITHER GRASS OR GROUND COVER, TOGETHER WITH A SCREEN OF SHRUBS OR A SCATTERED PLANTING OF TREES, SHRUBS OR THE PLANT MATERIAL MEETING THE FOLLOWING REQUIREMENTS: (1) PRESERVE THE EXISTING VEGETATION; (2) PLANT MATERIALS SHALL BE AT LEAST 3' HIGH; (3) THE SCREEN PLANTING SHALL BE SO PLACED THAT AT MATURITY IT WILL NOT BE CLOSER THAN 3' FROM ANY STREET OR PROPERTY LINE. (4) TREES SHALL BE AT LEAST 8' IN HEIGHT AT PLANT; (5) ANY PLANT MATERIAL WHICH DOES NOT LIVE SHALL BE REPLACED WITHIN ONE YEAR OR ONE GROWING SEASON. (6) SCREEN PLANTINGS AND LANDSCAPING SHALL BE BROKEN AT POINTS OF VEHICULAR AND PEDESTRIAN ACCESS TO ASSURE A CLEAR SIGHT TRIANGLE.	N/A	COMPLIES.
	C. BUFFERS. ALL LOADING AREAS AND PARKING LOTS WITH MORE THAN 10 SPACES SHALL BE BUFFERED FROM ADJOINING STREETS, EXISTING RESIDENTIAL USES AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 550–36 BUFFERS.	SEE LANDSCAPE PLANS AND PLANT SCHEDULE.	COMPLIES.
§ 550–56. OFF–STREET PARKING & LOADING.	H. LANDSCAPING. LANDSCAPING IN ALL LOADING AREAS AND IN AND AROUND PARKING LOTS FOR 10 OR MORE VEHICLES SHALL BE SHOWN ON A LANDSCAPING PLAN. TREES SHALL BE STAGGERED AND/OR SPACED SO AS NOT TO INTERFERE WITH DRIVER VISION AT INTERSECTIONS OF DRIVEWAYS AND STREETS AND AT THE ENDS OF PARKING ROWS, SHALL HAVE BRANCHES NO LOWER THAN 6' AND SHALL NUMBER AT LEAST ONE TREE FOR EVERY 20 PARKING SPACES. ALL AREAS BETWEEN THE PARKING AREA AND THE BUILDING SHALL BE LANDSCAPED.	N/A	WAIVER.
§ 550–62. SIGHT TRIANGLES.	WITHIN A SIGHT TRIANGLE, NO GRADING, PLANTING OR STRUCTURE SHALL BE ERECTED OR MAINTAINED MORE THAN 30" ABOVE THE CENTER–LINE GRADE OF EITHER INTERSECTING STREET OR DRIVEWAY OR LOWER THAN 8' ABOVE THEIR CENTER LINES, INCLUDING UTILITY POLES BUT EXCLUDING STREET NAME SIGNS AND OFFICIAL TRAFFIC REGULATION SIGN.	SEE LANDSCAPE PLANS AND PLANT SCHEDULE.	COMPLIES.
§ 550–71. STREET TREES.	ALL STREET TREES SHALL HAVE A MINIMUM DIAMETER OF 2.5" MEASURED 3' ABOVE THE GROUND AND BE OF SPECIES APPROVED BY THE APPROVING AUTHORITY. TREES SHALL BE PLANTED 40' TO 60' APART AND PARALLEL TO BUT NO MORE THAN 20' FROM THE CURBLINE AND SHALL BE B+B, NURSERY GROWN, FREE FROM INSECTS AND DISEASE AND WILL BE HARDY AND THRIVE IN THE AREA AND BE TRUE TO SPECIES AND VARIETY.	N/A	WAIVER.

Date	Description	No.
Revisions		

SIGNATURE MICHAEL SZURA 11-29-2022 DATE SIGNED
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL LANDSCAPE PLAN

Project No. 100980201	DRAWING NO. LP100
Date 11/18/2022	
Drawn By IZ	
Checked By DB/JC	Sheet 46 of 62

100 0 50 100
SCALE: 1 INCH = 100 FEET
NJ NAD 83

NOTES:
1. REFER TO SHEETS LP101 TO LP105 FOR PARTIAL LANDSCAPE PLANS AND INTERSECTION IMPROVEMENTS.
2. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

© 2022 Langan

EXISTING TREE TO BE PRESERVED (TYP.).

INTERSECTION IMPROVEMENTS A, REFER TO SHEET LP105

EXISTING TREE LINE TO BE PRESERVED (TYP.).

LOD

LAWN (TYP.)

3 PIAB
2 PVA
3 JV
3 PIAB

1 CC
1 JV

2 JV

1 CK
1 AR

1 NS
1 IVS

5 PVS
5 CAKF
3 PVS

FUTURE OFFICE AREA (6,875 SF)

4 IGC

3 IVBH
1 GTI

MEADOW MIX A (TYP.)

SAND BOTTOM (DO NOT PLANT)

INFILTRATION BASIN 12

3 IVBP
6 CAH
4 IGC

3 CA

THIS LANDSCAPE IS ONLY TO BE INSTALLED IF BANKED PARKING IS CONSTRUCTED.

3 IGC
12" GRAVEL STRIP (TYP.)
5 CAH
86 EP
5 CAH
3 IGC
3 IGC
5 CAH

7 CXO

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

MATCHLINE SHEET 102

MATCHLINE SHEET 104

SCALE: 1 INCH = 30 FEET

NAD 83

NOTES:
1. REFER TO SHEET LP100 FOR OVERALL LANDSCAPE PLAN, COMPLIANCE CHART, AND PLANT SCHEDULE.
2. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

Date	Description	No.
Revisions		

SIGNATURE MICHAEL SZWEDA DATE SIGNED 11-29-2022
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL LANDSCAPE PLAN 1

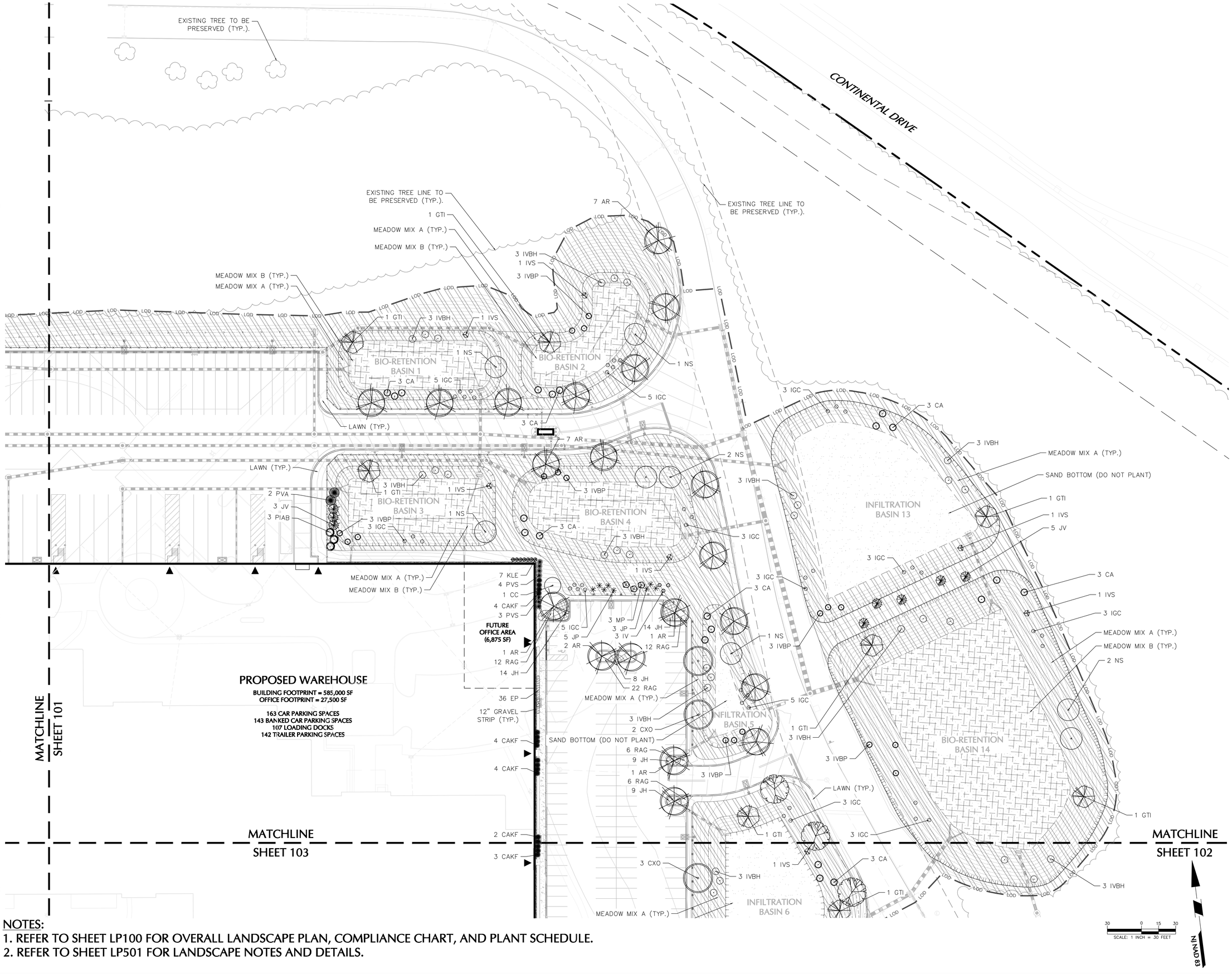
Project No.	100980201
Date	11/18/2022
Drawn By	IZ
Checked By	DB/JC

LP101

Sheet 47 of 62

© 2022 Langan

Date: 11/29/2022 Time: 09:03 User: izhao Style Table: Langan.stb Layout: LP101 Document Code: 100980201-0302-LP401-0101



NOTES:

1. REFER TO SHEET LP100 FOR OVERALL LANDSCAPE PLAN, COMPLIANCE CHART, AND PLANT SCHEDULE.
2. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

Date	Description	No.
Revisions		

SIGNATURE MICHAEL SZWARA DATE SIGNED 11-29-2022
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

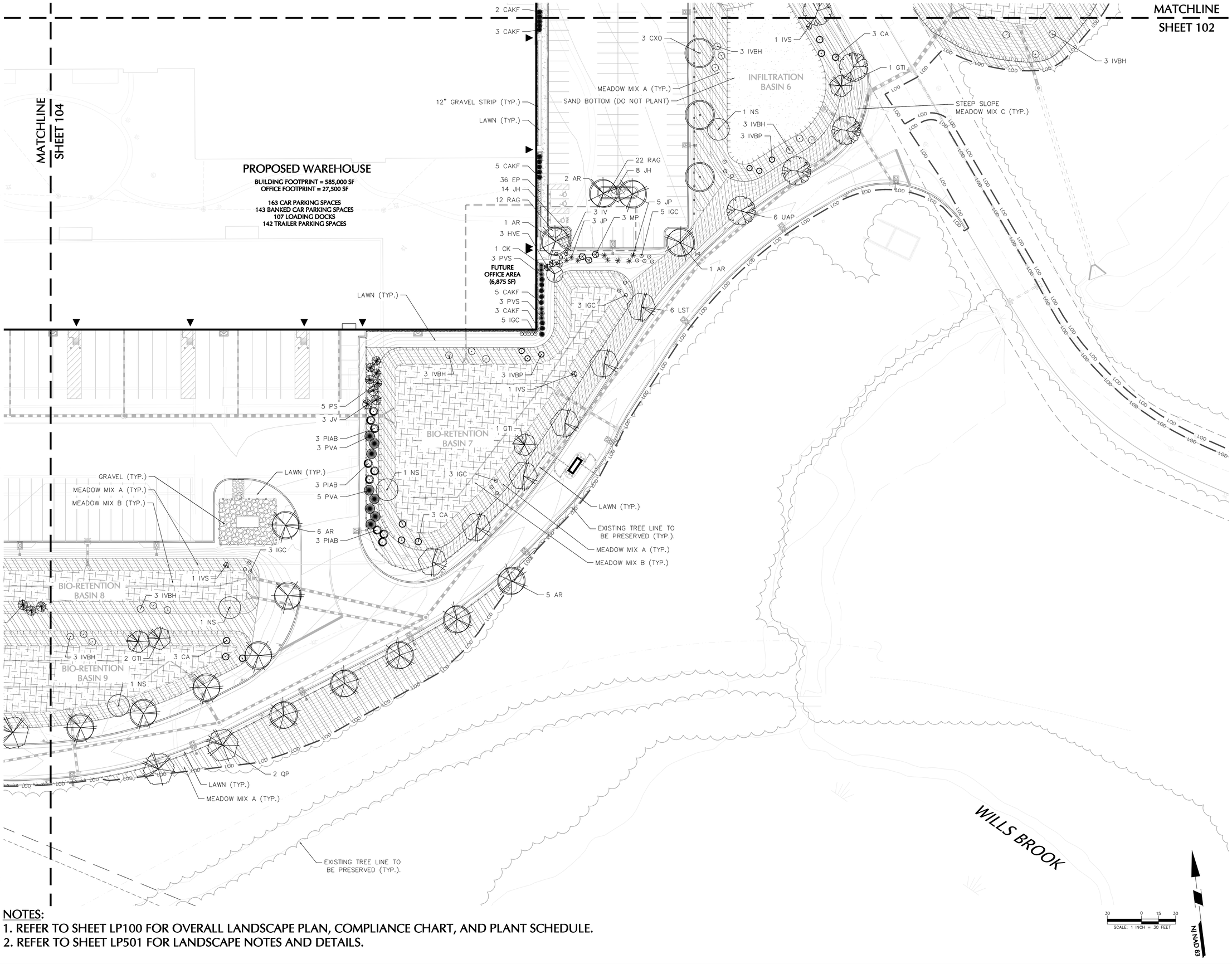
Drawing Title
PARTIAL LANDSCAPE PLAN 2

Project No.	100980201
Date	11/18/2022
Drawn By	IZ
Checked By	DB/JC

LP102

Sheet 48 of 62

© 2022 Langan



NOTES:
1. REFER TO SHEET LP100 FOR OVERALL LANDSCAPE PLAN, COMPLIANCE CHART, AND PLANT SCHEDULE.
2. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

SCALE: 1 INCH = 30 FEET

NJ NAD 83

Date	Description	No.
Revisions		

SIGNATURE MICHAEL SZWARA DATE SIGNED 11-29-2022
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

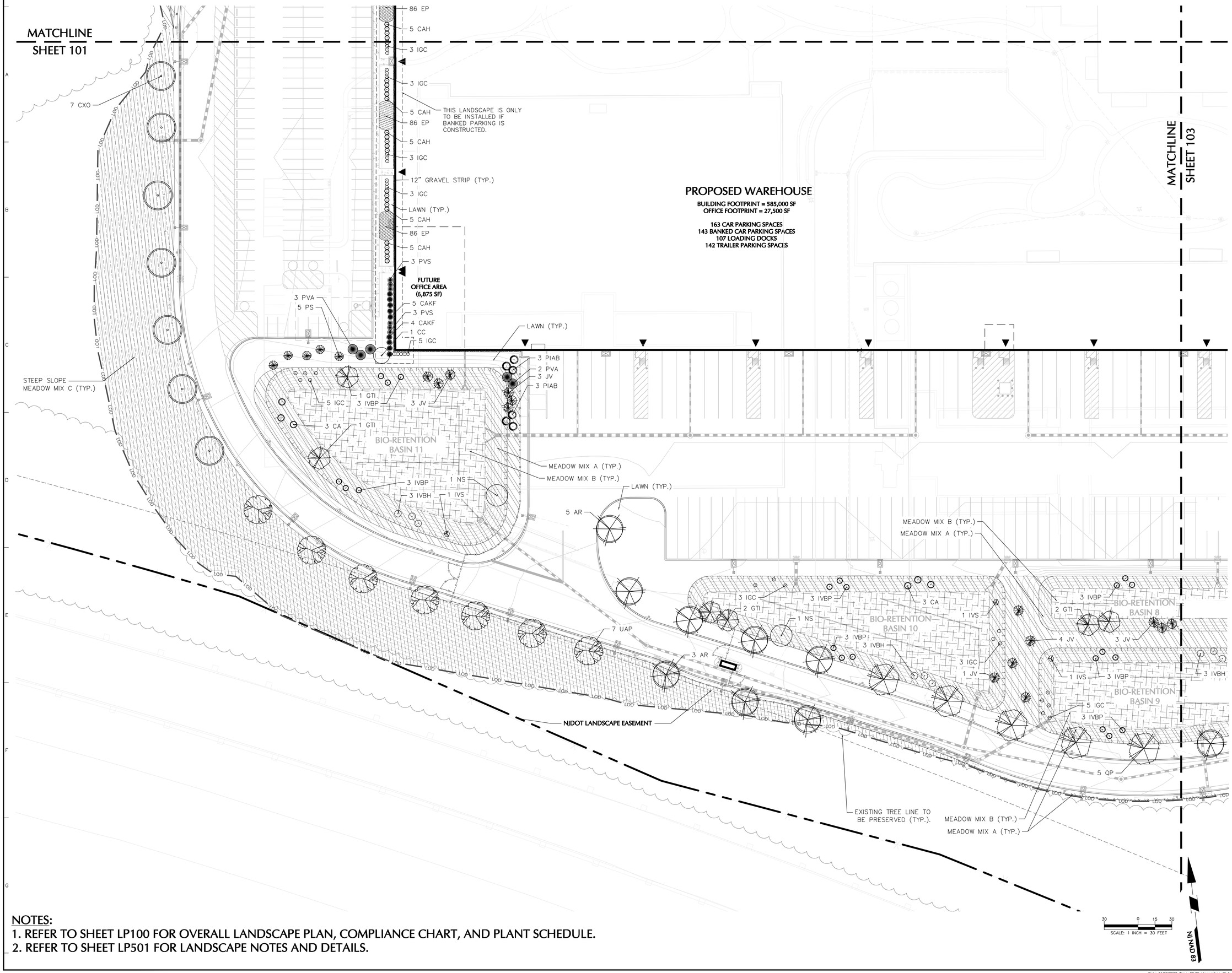
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL LANDSCAPE PLAN 3

Project No. 100980201	LP103
Date 11/18/2022	
Drawn By IZ	
Checked By DB/JC	Sheet 49 of 62

© 2022 Langan



NOTES:
1. REFER TO SHEET LP100 FOR OVERALL LANDSCAPE PLAN, COMPLIANCE CHART, AND PLANT SCHEDULE.
2. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

Date	Description	No.

Revisions

11-29-2022
SIGNATURE — DATE SIGNED
MICHAEL SZURA
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and
Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

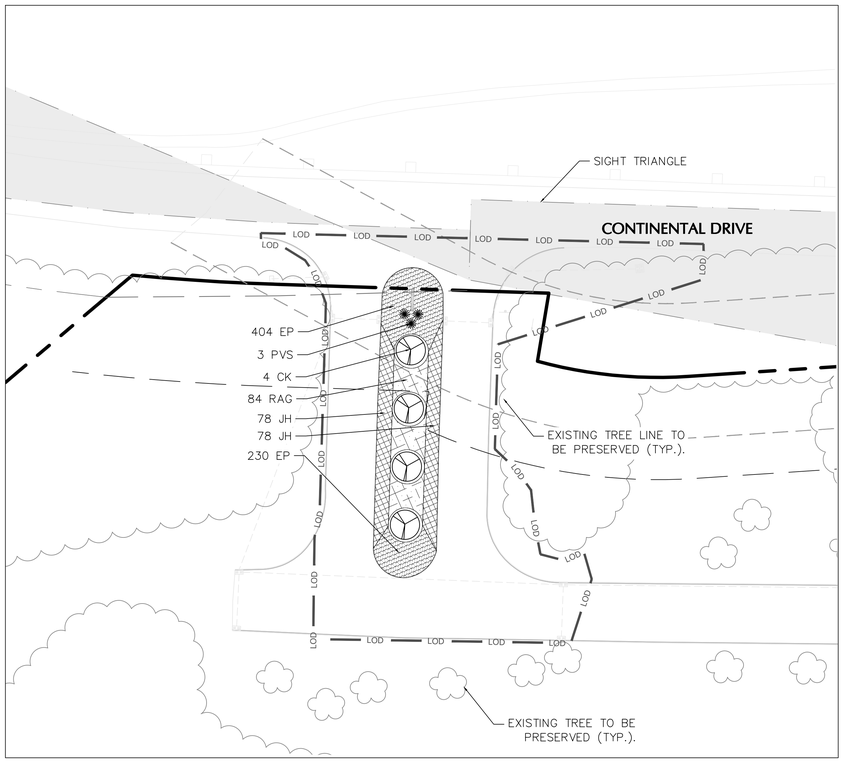
Drawing Title
PARTIAL LANDSCAPE PLAN 4

Project No.	100980201
Date	11/18/2022
Drawn By	IZ
Checked By	DB/JC

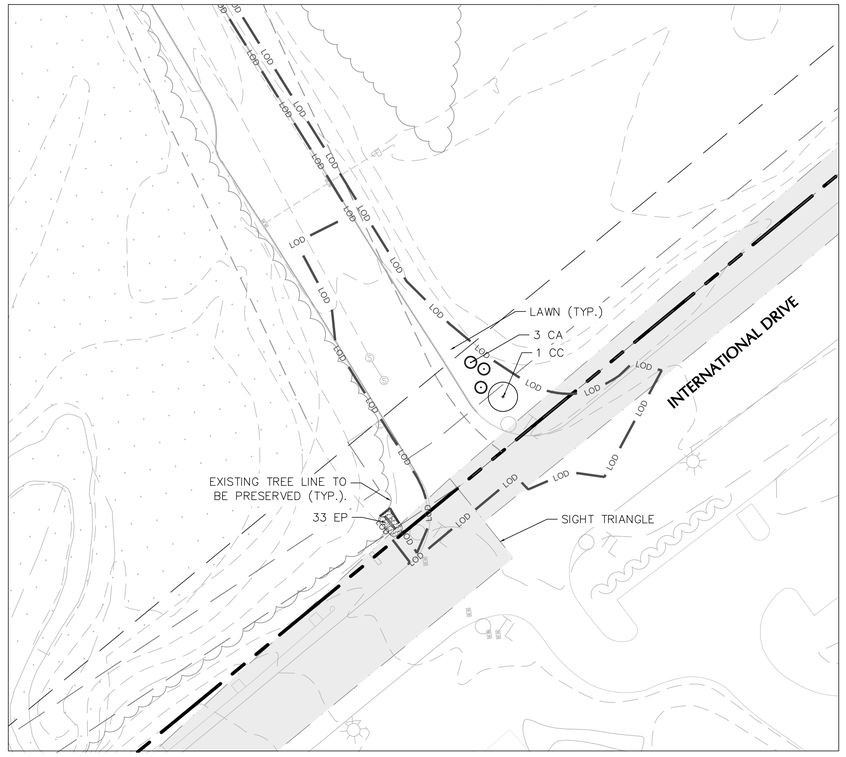
LP104

Sheet 50 of 62

© 2022 Langan



INTERSECTION IMPROVEMENTS A



INTERSECTION IMPROVEMENTS B

NOTES:
1. REFER TO SHEET LP100 FOR OVERALL LANDSCAPE PLAN, COMPLIANCE CHART, AND PLANT SCHEDULE.
2. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

30 0 15 30
SCALE: 1 INCH = 30 FEET

NJ NAD 83

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE MICHAEL SZURA DATE SIGNED
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
INTERSECTION LANDSCAPE IMPROVEMENTS

Project No.	100980201
Date	11/18/2022
Drawn By	IZ
Checked By	DB/JC

LP105

Sheet 51 of 62

© 2022 Langan

GENERAL LANDSCAPE PLANTING NOTES

1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION, PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
2. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
3. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED. ANY TREE THAT LOSES THE MAIN LEADER SHALL BE REPLACED.
4. THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS.
5. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND SUBGRADE DRAINAGE OR PERCOLATION CHARACTERISTICS, WHETHER THE SUBGRADE SOILS ARE EXISTING TO REMAIN OR IMPORTED AND PLACED. CONTRACTOR TO ENSURE POSITIVE VERTICAL DRAINAGE THROUGHOUT PLANTED AREAS. DISCREPANCIES SHALL BE ADDRESSED WITH THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANT MATERIALS.
6. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE FINISH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
7. ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 – JUNE 15 OR AUGUST 15 – NOVEMBER 1, UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT. SEE LAWN SEEDING DATES IN SEEDING NOTES.
8. ALL FENCE AND GUIDE RAIL INSTALLATIONS SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING, LAWN AND GRASSES, OR IRRIGATION WORK.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF CONSTRUCTION. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.
10. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
11. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
12. LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
13. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
14. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, MISSING, 25% OR MORE DEAD, WHICH DO NOT DEVELOP FROM PLANTING STOCK, THAT APPEAR UNHEALTHY OR UNSIGHTLY AND/OR HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES DEAD, OR REJECTED FOR ANY OTHER REASON (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
16. DELIVERY, STORAGE, AND HANDLING
   A. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
   B. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP BALLED AND BURLAPPED STOCK DURING DELIVERY OR HANDLING.
   C. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOTBALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8 INCHES INTO THE PLANTING HOLE. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
   D. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.
17. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
18. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
19. CONTRACTOR'S GUARANTEE: ALL PLANTINGS AND PLANTING AREAS SHALL BE PERMANENTLY MAINTAINED. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF TWO YEARS FOLLOWING ACCEPTANCE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, PRUNING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE DURATION OF THE GUARANTEED PERIOD. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
20. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
21. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24– HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
22. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
23. ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST. MULCH SHALL BE A FIBROUS SHREDDED HARDWOOD MULCH. MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY SHOWN SHALL GOVERN.
25. LANDSCAPE PUNCH LIST SITE VISITS TO BE PERFORMED BY THE PROJECT LANDSCAPE ARCHITECT, IF UNDER CONTRACT FOR SUCH WORK, WILL NOT BE SCHEDULED UNTIL CONFIRMATION IS RECEIVED THAT ALL PROPOSED LANDSCAPE ITEMS HAVE BEEN INSTALLED, OR DEFICIENCIES NOTED IN THE PRIOR PUNCH LIST REPORT HAVE BEEN CORRECTED. THE PUNCH LIST SITE VISIT WILL THEN BE PERFORMED WITHIN 10 BUSINESS DAYS.
26. CONTRACTOR SHALL ASSESS THE NEED FOR DEER PROTECTION ON SITE. IF DEEMED NECESSARY, SHADE AND ORNAMENTAL TREES SHALL BE PROTECTED THROUGH WINTER WITH SPIRAL WRAP TREE GUARDS, OR APPROVED EQUAL. PROTECTION LENGTH TO BE FROM BELOW THE LOWEST BRANCH AND DOWN TO WITHIN A FEW INCHES OF THE GROUND. THE GUARDS CAN BE REMOVED IN SPRING AND SAVED FOR RE-INSTALLATION DURING FOLLOWING WINTERS AS PART OF A MAINTENANCE PROGRAM. ANY TREE REPLACEMENT REQUIRED BASED ON ANIMAL DAMAGE WILL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
27. CONTRACTOR SHALL ASSESS THE NEED FOR DEER PROTECTION ON SITE. IF DEEMED NECESSARY, SHADE AND ORNAMENTAL TREES SHALL BE PROTECTED THROUGH WINTER WITH BREATHABLE SPIRAL WRAP TREE GUARDS, OR APPROVED EQUAL. PROTECTION LENGTH TO BE FROM BELOW THE LOWEST BRANCH AND DOWN TO WITHIN A FEW INCHES OF THE GROUND. THE GUARDS CAN BE REMOVED IN SPRING AND SAVED FOR RE-INSTALLATION DURING FOLLOWING WINTERS AS PART OF A MAINTENANCE PROGRAM.
28. ALL SLOPES 3:1 OR GREATER AND ALL SIDE SLOPES OF BASINS SHALL REQUIRE AN EROSION CONTROL BLANKET: ERONET SC150 BY NORTH AMERICAN GREEN, OR APPROVED EQUAL.

LANDSCAPE MAINTENANCE NOTES

1. MAINTENANCE OPERATIONS BEFORE APPROVAL:
   A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
   B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
   C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.
2. MAINTENANCE DURING CONSTRUCTION:
   A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
   B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
   C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
   D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.
   E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.
3. LAWN MAINTENANCE:
   A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
   B. WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING; MOW TO 2 1/2 – 3 INCHES AFTER GRASS REACHES 3 1/2 INCHES IN HEIGHT, AND MOW FREQUENTLY ENOUGH TO KEEP GRASS FROM EXCEEDING 3 1/2 INCHES. WEED BY LOCAL SPOT APPLICATION OF SELECTIVE HERBICIDE ONLY AFTER GRASS IS WELL-ESTABLISHED.

PLANTING SOIL SPECIFICATIONS

1. PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODORS.
2. PLANTING SOIL:
   REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.
   SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.
   AT A MINIMUM, PLANTING SOILS MEETING THESE SPECIFICATIONS MAY BE OBTAINED FROM WECARE DENALI, P:888-325-1522, OR APPROVED EQUAL.
   CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN UNTIL TIME OF ACTUAL USE.
   ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
   THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE INSTALLATION AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH
   A. WHERE A PERMANENT IRRIGATION SYSTEM IS PLANNED:
      a. PARTICLE SIZE ANALYSIS – LOAMY SAND: 60–75% SAND, 25–40% SILT, AND 5–15% CLAY.
      b. GRAVEL CONTENT (2mm): LESS THAN 10%
      c. FERTILITY ANALYSIS: pH (5.5–6.5), SOLUBLE SALTS (0.2 to 1.5 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
      d. ORGANIC MATTER CONTENT: 2.5–5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
      e. TOXIC SUBSTANCE ANALYSIS
      f. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED
      g. NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE
   B. WHERE NO PERMANENT IRRIGATION IS PLANNED:
      a. PARTICLE SIZE ANALYSIS – LOAM: 50–65% SAND, 25–60% SILT, AND 5–20% CLAY.
      b. GRAVEL CONTENT (2mm): LESS THAN 10%
      c. FERTILITY ANALYSIS: pH (5.5–6.5), SOLUBLE SALTS (0.2 to 1.5 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
      d. ORGANIC MATTER CONTENT: 2.5–5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
      e. TOXIC SUBSTANCE ANALYSIS
      f. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED
      g. NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE
3. SOIL AMENDMENT FOR PLANT MATERIAL:
   IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC AMENDMENT. BLEND AMENDMENTS INTO SOIL BY WELL COMPLETED PASS RANGE OF 6–8% MOISTURE CONTENT 35–55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE; SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL.
   A. ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOULD WITH 60–90% ORGANIC CONTENT BY WEIGHT. SHREDDED LEAF LITTER, COMPOSTED TO A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD CHIPS OVER 1".
   B. SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TRASH.
   C. AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS:
      a. GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS.
      – BRING pH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERICACEOUS PLANTS
      – BRING pH LEVELS TO 4.5 MIN. TO 5.5 FOR ERICACEOUS PLANTS
      b. TERRA-SORB BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS.
      c. MYCOR-ROOT SAVER BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.
4. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
5. CLEAN SOIL FILL IN LANDSCAPE AREAS:
   LANDSCAPE FILL MATERIAL BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 – 7.
6. SOIL PLACEMENT:
   A. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.
   B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12–18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.
   C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.
7. SOIL CONDITIONING:
   A. ADJUST pH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM. LOWER pH USING ELEMENTAL SULFUR ONLY. PEAT MOSS OR COPPER SULFATE MAY NOT BE USED. GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED PENDING RESULTS OF SOIL ANALYSIS. PROVIDE WITH MINIMUM 88% CALCIUM AND MAGNESIUM CARBONATES AND SHALL HAVE TOTAL 100% PASSING THE 10 MESH SIEVE, MINIMUM 90% PASSING 20 MESH SIEVE, AND MINIMUM 60% PASSING 100 MESH SIEVE.
   B. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
   C. SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS):
      a. THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A pH HIGHER THAN 7.0. PEAT MOSS MAY NOT BE USED AS ORGANIC MATTER AMENDMENT.
      b. MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE DRAINAGE LINES.
      c. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

SEEDING NOTES

LAWN AREAS

1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 1/2" DIAMETER.
2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
3. SCD SEED MIX #14 SEEDING RATE AT 305 POUNDS PER ACRE:
   - 10% DEEPBLUE KENTUCKY BLUEGRASS
   - 40% DAKOTA TALL FESCUE
   - 40% TAOS TALL FESCUE
   - 10% FRONTIER PERENNIAL RYEGRASS
4. SEEDING DATES FOR THIS MIXTURE SHALL BE BETWEEN APRIL 1ST TO JUNE 1ST OR SEPTEMBER 1ST TO NOVEMBER 1ST.
5. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL A STAND OF COVER IS ESTABLISHED AND FOUND ACCEPTABLE TO THE OWNER. SEE LAWN WATERING SCHEDULE NOTES.

MEADOW SEED MIX A ERNST SEED MIX ERNMX-168 "NORTHEAST PERENNIAL & ANNUAL WILDFLOWER MIX"

COSMOS BIPINNATUS	COSMOS
CENTAUREA CYANUS, TALL MIXED	BACHELOR'S BUTTON TALL MIXED/CORNFLOWER
ECHINACEA PURPUREA	PURPLE CONEFLOWER
LINUM GRANDIFLORUM RUBRUM	SCARLET FLAX
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS
DELPHINIUM AJACIS	ROCKET LARKSPUR
RUDBECKIA HIRTA	BLACKEYED SUSAN
LUPINUS PERENNIS	PERENNIAL BLUE LUPINE, COMMON COMMERCIAL
CALENDULA OFFICINALIS	CALENDULA
LAVATERA TRIMESTRIS	TREE MALLOW
LINUM PERENNE	PERENNIAL BLUE FLAX
TRIFOLIUM INCARNATUM, VARIETY NOT STATED	CRIMSON CLOVER, VARIETY NOT STATED
ESCHSCHOLZIA CALIFORNICA	CALIFORNIA ORANGE POPPY
HELIOPSIS HELIANTHOIDES, PA ECOTYPE	OXEYE SUNFLOWER, PA ECOTYPE
CHRYSANTHEMUM MAXIMUM	SHASTA DAISY
CHEIRANTHUS ALLIONI	WALLFLOWER
RATIBIDA COLUMNARIS	RED PRAIRIE CONEFLOWER (MEXICAN RED HAT)
ACHILLEA MILLEFOLIUM	COMMON YARROW
LIATRIS SPICATA	MARSH BLAZING STAR
PYCNANTHEMUM TENUIFOLIUM	NARROWLEAF MOUNTAINMINT
LOBULARIA MARITIMA	SWEET ALYSSUM
PENSTEMON DIGITALIS	TALL WHITE BEARDTONGUE
TRADESCANTIA OHIENSIS, PA ECOTYPE	OHIO SPIDERWORT, PA ECOTYPE
MONARDA FISTULOSA, FORT INDIANTOWN GAP–PA ECOTYPE	WILD BERGAMO

ORDINANCE COMPLIANCE CHART

ORDINANCE SECTION NO.	ORDINANCE REQUIREMENT	PROPOSED	COMPLIANCE
ZONING REGULATIONS FOR MOUNT OLIVE TOWNSHIP			
550-53	THE LIGHT INTENSITY PROVIDED AT GROUND LEVEL SHALL BE A MINIMUM OF 0.3 FOOTCANDLE ANYWHERE AND SHALL AVERAGE A MAXIMUM OF 0.5 FOOTCANDLE OVER THE ENTIRE AREA. NO LIGHT SOURCE SHALL EXCEED A HEIGHT OF 18 FEET.	1. THE LIGHT INTENSITY PROVIDED AT GROUND LEVEL IS MINIMUM 0.5 FOOTCANDLE. 2. THE AVERAGE LIGHT INTENSITY IS 1.4 FOOTCANDLE OVER THE ENTIRE AREA. 3. MAXIMUM HEIGHT FOR LIGHT SOURCE IS MORE THAN 18 FEET.	1. COMPLIES 2. WAIVER 3. WAIVER

SITE LIGHTING SCHEDULE

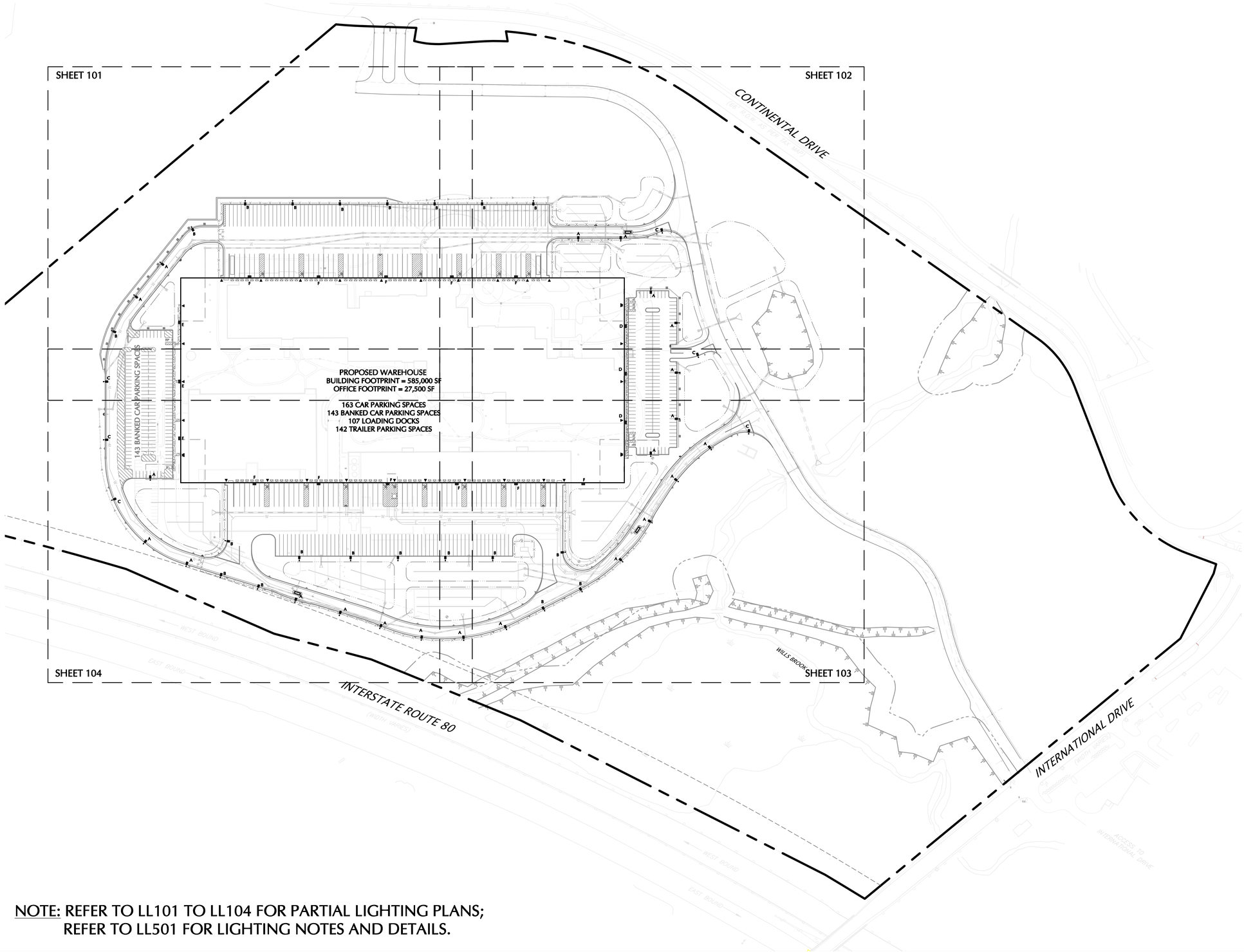
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS PER LAMP	LLF	COLOR TEMPERATURE	IES FILE	FIXTURE CATALOGUE NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOGUE NO.
	A	22	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON	GALN-GALLEON II	SINGLE-POLE MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	30'-0"	57W LED	TYPE SL2 W/ HOUSE SIDE SHIELD	5,301	0.90	3000K	GALN-SA1C-730-U-SL2-HSS.IES	GALN-SA1-C-730-VOLTS-SL2-BK-HSS	COOPER LIGHTING	SQUARE STRAIGHT STEEL POLE; COLOR – BLACK	27'-0"	SSS-5-M-27-5-T-N-1-X-G-V
	B	20	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON	GALN-GALLEON II	SINGLE-POLE MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	30'-0"	108W LED	TYPE T4FT W/ HOUSE SIDE SHIELD	9,272	0.90	3000K	GALN-SA2C-730-U-T4FT-HSS.IES	GALN-SA2-C-730-VOLTS-T4FT-BK-HSS	COOPER LIGHTING	SQUARE STRAIGHT STEEL POLE; COLOR – BLACK	27'-0"	SSS-5-M-27-5-T-N-1-X-G-V
	C	6	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON	GALN-GALLEON II	SINGLE-POLE MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	30'-0"	166W LED	TYPE T4FT W/ HOUSE SIDE SHIELD	15,961	0.90	3000K	GALN-SA3C-730-U-T4FT-HSS.IES	GALN-SA3-C-730-VOLTS-T4FT-BK-HSS	COOPER LIGHTING	SQUARE STRAIGHT STEEL POLE; COLOR – BLACK	27'-0"	SSS-5-M-27-5-T-N-1-X-G-V
	D	3	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON	GALN-GALLEON II	WALL-MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	31'-0" ABOVE FFE	160W LED	TYPE T4FT	19,072	0.90	3000K	GALN-SA3C-730-U-T4FT.IES	GALN-SA3-C-730-VOLTS-T4FT-WM-BK	N/A	N/A	N/A	N/A
	E	3	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON	GALN-GALLEON II	WALL-MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	31'-0" ABOVE FFE	377W LED	TYPE T4FT	44,500	0.90	3000K	GALN-SA7C-730-U-T4FT.IES	GALN-SA7-C-730-VOLTS-T4FT-WM-BK	N/A	N/A	N/A	N/A
	F	11	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON	GALN-GALLEON II	WALL-MOUNTED AREA LIGHT FIXTURE; COLOR – BLACK	31'-0" ABOVE FFE	481W LED	TYPE T4FT	57,919	0.90	3000K	GALN-SA9C-730-U-T4FT.IES	GALN-SA9-C-730-VOLTS-T4FT-WM-BK	N/A	N/A	N/A	N/A

NOTES:
1. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES AND ELECTRICAL LAYOUTS.
2. CONTRACTOR TO CONFIRM CONTROLS SYSTEM REQUIRED BY THE DIMER AND PER CODE. BID PRICING SHALL INCLUDE CONTROL SYSTEM.
3. ALL POLES SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX/MIN.	AVG/MIN.
CAR PARKING	1.1 FC	2.4 FC	0.6 FC	4.0:1	1.8:1
LOADING	2.7 FC	6.2 FC	1.0 FC	6.2:1	2.7:1
TRAILER STORAGE & DRIVE	1.1 FC	3.4 FC	0.5 FC	6.8:1	2.2:1

NOTE:
LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



NOTE: REFER TO LL101 TO LL104 FOR PARTIAL LIGHTING PLANS; REFER TO LL501 FOR LIGHTING NOTES AND DETAILS.

NAD 83

100 0 50 100
SCALE IN FEET

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE MICHAEL SZURA DATE SIGNED
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

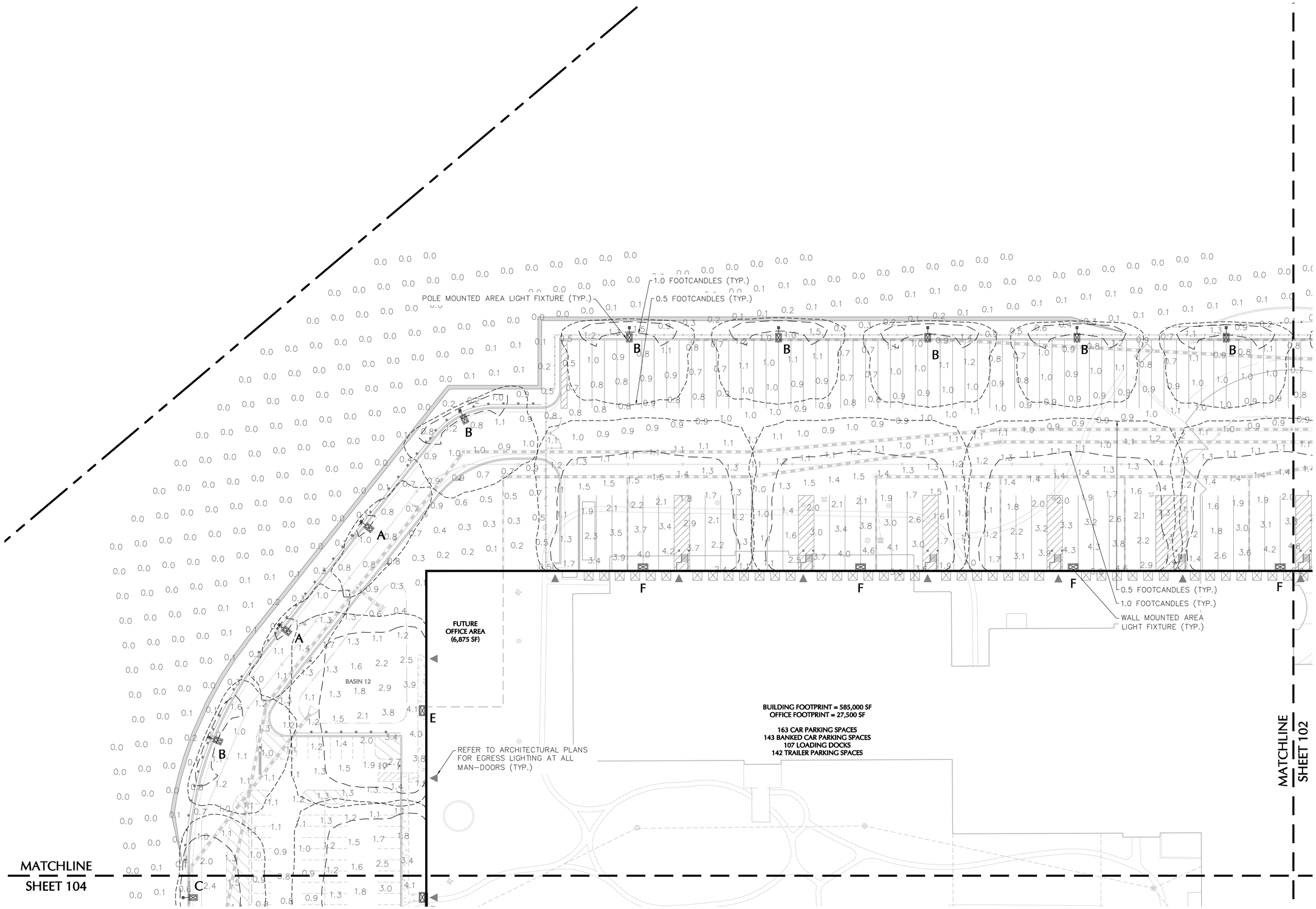
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
OVERALL LIGHTING PLAN

Project No.	Drawing No.
100980201	LL100
Date: 11/18/2022	
Drawn By: GR	
Checked By: DB/JC	Sheet 53 of 62

© 2022 Langan



NOTE: REFER TO LL100 FOR OVERALL LIGHTING PLAN, SITE LIGHTING SCHEDULE, COMPLIANCE CHART, AND STATISTICS; REFER TO LL501 FOR LIGHTING NOTES AND DETAILS.

Date	Description	No.
Revisions		

SIGNATURE 11-29-2022 DATE SIGNED
MICHAEL SZURA
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

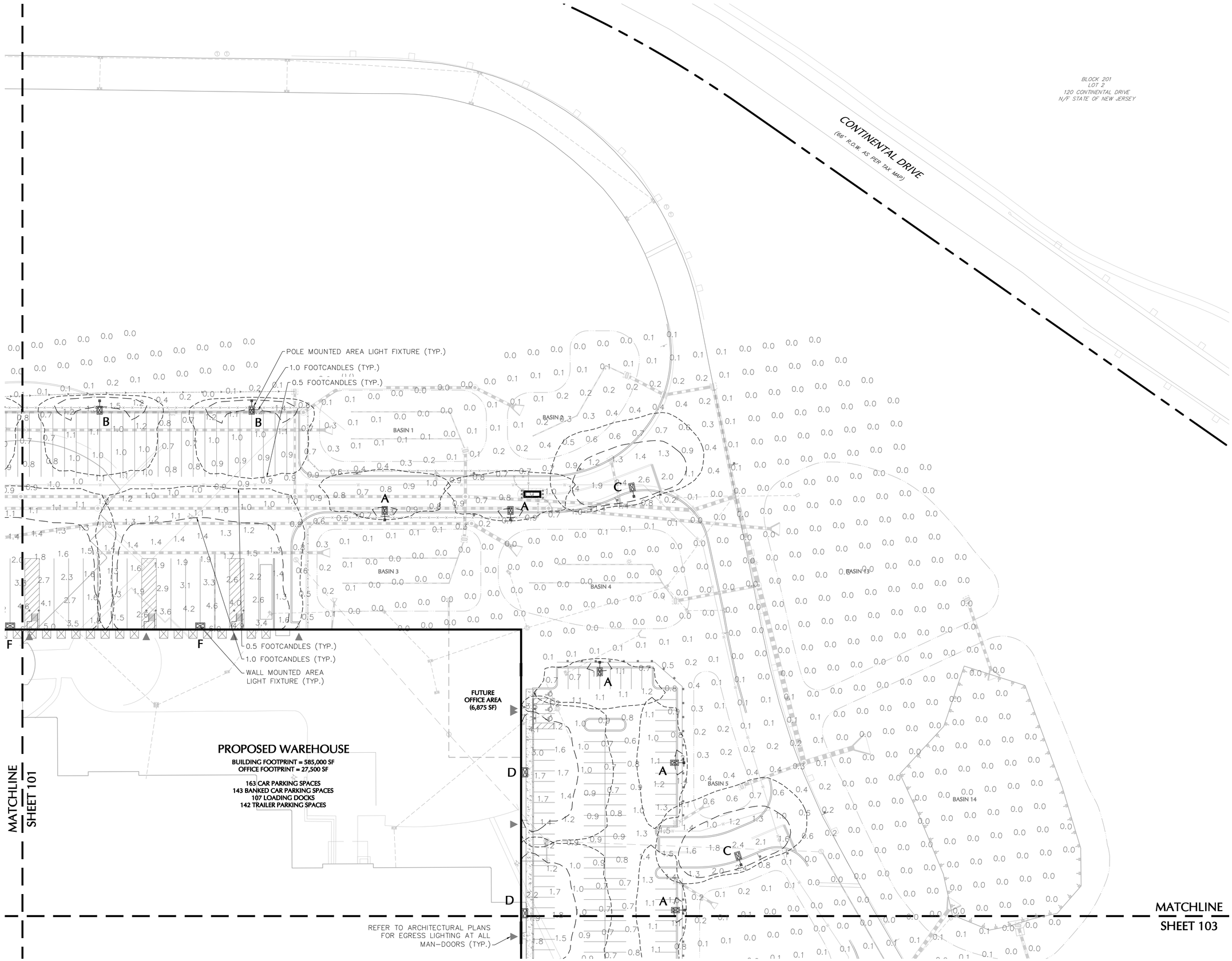
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL LIGHTING PLAN 1

Project No.	Drawing No.
100980201	LL101
Date: 11/18/2022	
Drawn By: GR	
Checked By: DB/JC	

Sheet 54 of 62

© 2022 Langan



NOTE: REFER TO LL100 FOR OVERALL LIGHTING PLAN, SITE LIGHTING SCHEDULE, COMPLIANCE CHART, AND STATISTICS; REFER TO LL501 FOR LIGHTING NOTES AND DETAILS.

Date	Description	No.

Revisions

SIGNATURE — MICHAEL SZURA — DATE SIGNED 11-29-2022
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

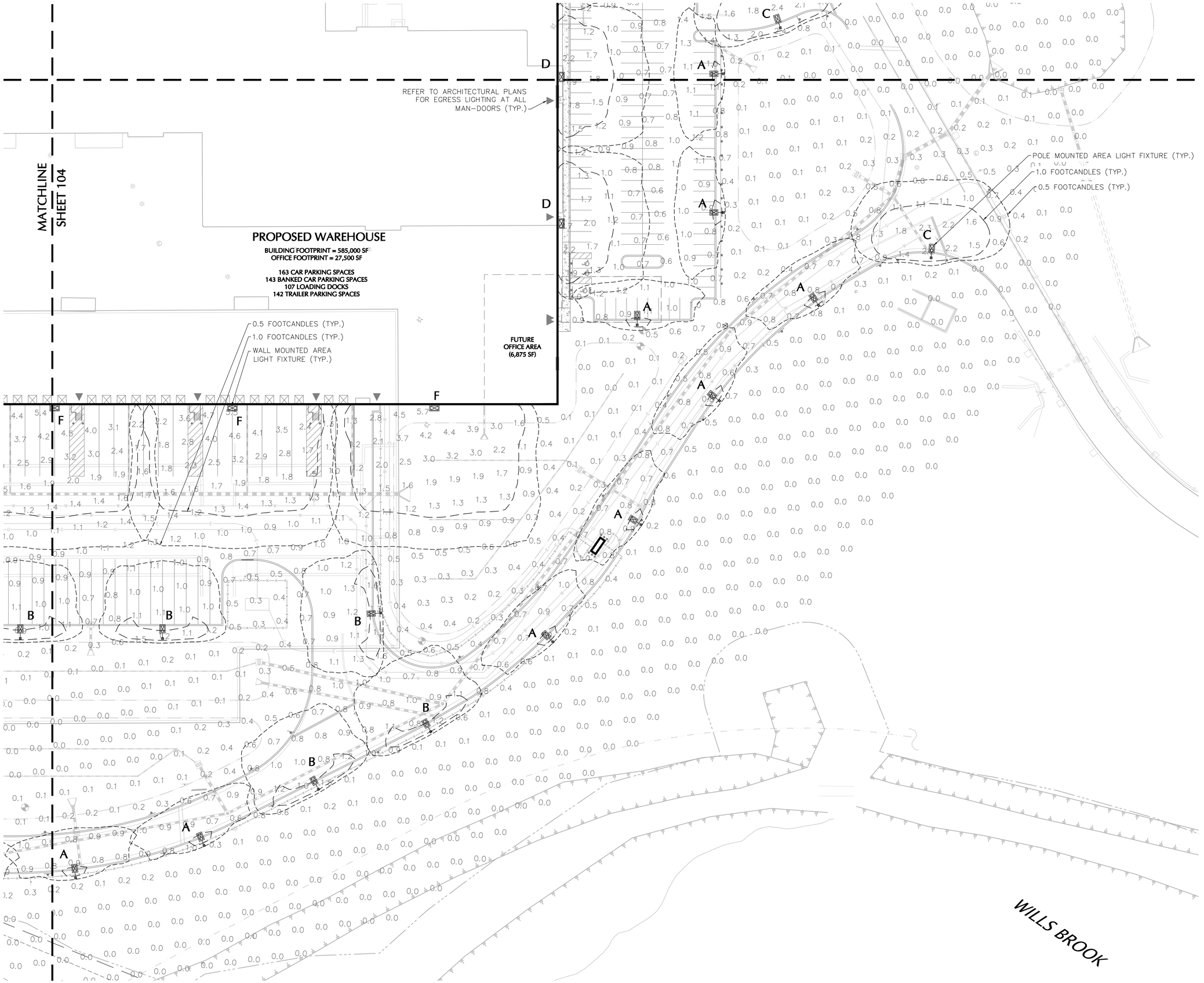
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL LIGHTING PLAN 2

Project No. 100980201	Drawing No. LL102
Date 11/18/2022	
Drawn By GR	
Checked By DB/JC	Sheet 55 of 62

© 2022 Langan

Date: 11/23/2022 Time: 12:34 User: grumao Style Table: Langan.stb Layout: LL102 Document Code: 100980201-0302-LL101-0102



NOTE: REFER TO LL100 FOR OVERALL LIGHTING PLAN, SITE LIGHTING SCHEDULE, COMPLIANCE CHART, AND STATISTICS; REFER TO LL501 FOR LIGHTING NOTES AND DETAILS.

Date	Description	No.
Revisions		

SIGNATURE MICHAEL SZURA DATE SIGNED 11-29-2022
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
PARTIAL LIGHTING PLAN 3

Project No.	Drawing No.
100980201	LL103
Date: 11/18/2022	
Drawn By: GR	
Checked By: DB/JC	Sheet 56 of 62

© 2022 Langan

Date: 11/23/2022 Time: 12:30 User: grumao Style Table: Langan.stb Layout: LL103 Document Code: 100980201-0302-LL101-0102

MATCHLINE
SHEET 101

MATCHLINE
SHEET 103

PROPOSED WAREHOUSE

BUILDING FOOTPRINT = 585,000 SF
OFFICE FOOTPRINT = 27,500 SF

163 CAR PARKING SPACES
143 BANKED CAR PARKING SPACES
107 LOADING DOCKS
142 TRAILER PARKING SPACES

FUTURE OFFICE AREA (6,875 SF)

REFER TO ARCHITECTURAL PLANS FOR EGRESS LIGHTING AT ALL MAN-DOORS (TYP.)

0.5 FOOTCANDLES (TYP.)
1.0 FOOTCANDLES (TYP.)
WALL MOUNTED AREA LIGHT FIXTURE (TYP.)

POLE MOUNTED AREA LIGHT FIXTURE (TYP.)
1.0 FOOTCANDLES (TYP.)
0.5 FOOTCANDLES (TYP.)

WEST BOUND

INTERSTATE ROUTE 80
(WIDTH VARIES)

EAST BOUND

NJ NAD 83

SCALE: 1 INCH = 30 FEET

NOTE: REFER TO LL100 FOR OVERALL LIGHTING PLAN, SITE LIGHTING SCHEDULE, COMPLIANCE CHART, AND STATISTICS; REFER TO LL501 FOR LIGHTING NOTES AND DETAILS.

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE MICHAEL SZURA DATE SIGNED
N.J. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. AS00815

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
PARTIAL LIGHTING PLAN 4

Project No.	Drawing No.
100980201	LL104
Date: 11/18/2022	
Drawn By: GR	
Checked By: DB/JC	Sheet 57 of 62

© 2022 Langan

Date: 11/23/2022 Time: 12:29 User: grumao Style Table: Langan.stb Layout: LL104 Document Code: 100980201-0302-LL101-0102

LIGHTING NOTES:

GENERAL

1. POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS; THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY STANDARD LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP/ DIRT DEGRADATION ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY STANDARD LLF IN ACCORDANCE WITH GUIDANCE AS PROVIDED BY IESNA. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.NO GUARANTEE OF LIGHT LEVELS IS EXPRESSED OR IMPLIED BY THE POINT BY POINT CALCULATIONS SHOWN ON THESE PLANS.

2. LIGHT LEVEL POINT SPACING IS 20 FT. LEFT TO RIGHT AND 20 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON THE LIGHT LOSS FACTOR AS STATED IN THE LIGHTING SCHEDULE.

COMPLIANCE

3. ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.

4. LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.

COORDINATION

5. CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.

6. REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.

7. CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.

8. INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.

9. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.

POLES AND FOOTINGS

10. PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND/OR IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE. THE USE OF ALTERNATE LIGHTING FOUNDATIONS, SUCH AS PRECAST, MAY CHANGE THE SIZING AND REINFORCEMENT REQUIREMENTS FROM THOSE SHOWN ON THESE PLANS. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING ANY SUBSTITUTED PRODUCTS.

11. CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.

12. POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.

13. ALL POLES 25 FT. OR GREATER SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

WALL MOUNTED FIXTURES

14. CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.

15. INSTALLATION AND ELECTRICAL CONNECTIONS FOR WALL MOUNTED FIXTURES TO BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, UTILITY AND SITE PLANS AND TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES.

ADJUSTMENT AND INSPECTION

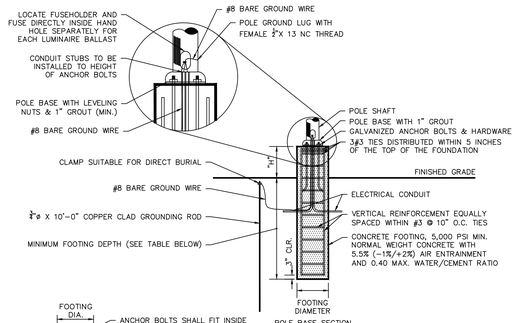
16. CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.

17. CONTRACTOR TO AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.

18. CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE PLANS.

REQUIREMENTS FOR ALTERNATES

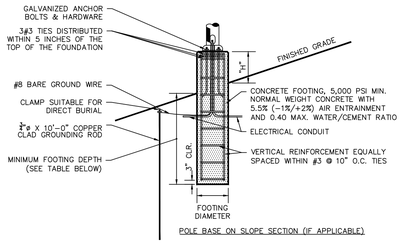
19. ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
   A. ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR
   B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.
   C. A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION.
   D. POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
   E. THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
   F. A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.



MOUNTING HEIGHT	FOOTING DEPTH	FOOTING DIAMETER	EXPOSED HEIGHT "H"	VERTICAL REINFORCEMENT
30'-0"	5'-6"	2'-0"	3'-0"	6#5 BARS

NOTES:

EXPOSED HEIGHT OF POLE BASE (H) SHALL BE MEASURED ON THE UPHILL SIDE OF A SLOPE. FOOTING DEPTH (D) SHALL BE MEASURED ON THE DOWNHILL SIDE OF A SLOPE. AN ADDITIONAL VARIABLE HEIGHT (V) WILL BE BASED ON THE SLOPE ON WHICH THE POLE BASE IS LOCATED. CONTRACTOR TO CALCULATE FULL LENGTH OF EACH POLE BASE REQUIRED ON SLOPES (H+D+V = TOTAL BASE LENGTH)

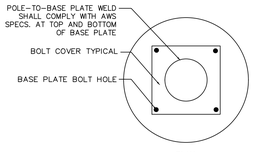


NOTES:

1. SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS, HANDHOLE COVER, AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER.
2. EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL BE BONDED PER SECTION NUMBER 250-86, N.E.C.
3. CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENT OF ACI 318. CAST-IN-PLACE SHALL HAVE UNCONFINED COMPRESSIVE STRENGTH OF AT LEAST 5,000 PSI AT 28-DAYS. DEFORMED REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
4. CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL.
5. IF POLE BASE IS CAST-IN-PLACE, POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTION OF BASE SHALL BE HAND-RUBBED SMOOTH.
6. CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE PER EARTHWORK SPECIFICATIONS / GEOTECH REPORT.
7. CONTRACTOR TO CONFIRM GROUNDING DESIGN WITH MEP.

THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURERS RECOMMENDATIONS.

LIGHT POLE BASE — NTS



NOTES:

1. LIGHT POLES 25 FEET OR GREATER SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.
2. CURB LOCATION IS SHOWN FOR SCHEMATIC PURPOSE. LIGHT POLES SHALL BE LOCATED PER THE LIGHTING PLANS IF THERE IS A CONFLICT.

LIGHT POLE FIXTURE — NTS

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Light Attishield™

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

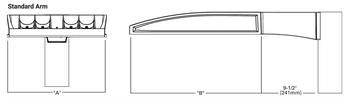
Product Certifications

Connected Systems

- WaveLinx Lite
- WaveLinx

Dimensional Details

Standard Arm



Pole Drilling Patterns

Type "N"

Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or Old Arm	EPA with Standard or Old Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. DA Certified (5000K CCT and warmer only, fixed mounting options)

COOPER Lighting Solutions

PS50005EN page 1
July 15, 2022 4:49 PM

AREA LIGHT FIXTURE — NTS

Steel Poles

SSS SQUARE STRAIGHT STEEL

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on 5" and 6" pole; and 2" x 4" on 4" pole
- 10'-39' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Cooper Lighting Solutions' Light Pole White Paper for risk factors and design considerations. Learn more.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Cooper Lighting Solutions or visit www.eaton.com/lighting for available options, accessories and ordering information.

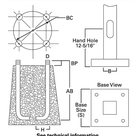
ORDERING INFORMATION

SAMPLE NUMBER: SSA5A20SFM1XG

Product Family	Shaft Size (inches)[1]	Wall Thickness (inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
SSS=Square Straight Steel	**4**=4" **5**=5" **6**=6"	**A**=0.120" **M**=0.188" **X**=0.250"	**10**=10' **15**=15' **20**=20' **25**=25' **30**=30' **35**=35' **39**=39'	**S**=Square Steel Base	**F**=Dark Bronze **G**=Galvanized Steel **J**=Summit White **K**=Carbon Bronze **L**=Dark Platinum **R**=Hartford Green **S**=Silver **T**=Graphite Metallic **V**=Black **W**=White **X**=Custom Color **Y**=Black	**1**=2-3/8" O.D. Tenon (4" Long) **2**=3-1/2" O.D. Tenon (5" Long) **4**=4" O.D. Tenon (8" Long) **9**=3" O.D. Tenon (4" Long) **6**=2-3/8" O.D. Tenon (8" Long) **7**=4" O.D. Tenon (10" Long) **A**=Type A Drilling **C**=Type C Drilling **D**=Type D Drilling **F**=Type F Drilling **G**=Type G Drilling **J**=Type J Drilling **K**=Type K Drilling **M**=Type M Drilling **N**=Type N Drilling **R**=Type R Drilling **S**=Standard Upsweep Arm[4] **Z**=Type Z Drilling	**1**=Single **2**=2 at 180° **3**=Triple[4] **4**=4 at 90° **5**=2 at 90° **X**=None	**X**=None **2**=2' **3**=3' **4**=4' **6**=6' **8**=8'	**A**=13" Tapped Hub[5] **B**=5/8" Tapped Hub[5] **C**=Convenience Outlet[6] **E**=GFCI Convenience Outlet[6] **G**=Ground Lug **H**=Additional Hand Hole **V**=Vibration Dampener

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 3 at 120°. 3. Tapped Hub is located 9" below the pole top and on the same side of pole as hand hole, unless specified otherwise. 4. Outlet is located 4" above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 5. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified. 6. Arm must be ordered separately.

ANCHORAGE DATA



See technical information.

Pole	Template Number	Bolt Number	Bolt Circle (inches)	Number of Bolts	Bolt Size (inches)
SSS4	TMP1	AB1	8.5 - 11.0	4	3/4 x 25 x 3
SSS5	TMP1	AB1	11.0	4	3/4 x 25 x 3
SSS6	TMP2	AB3	12.5	4	1 x 36 x 4

COOPER Lighting Solutions

TD513013EN
February 24, 2020 11:36 AM

AREA LIGHT POLE — NTS

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED

RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

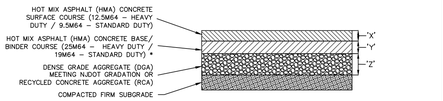
Drawing Title
LIGHTING NOTES & DETAILS

Project No.	Drawing No.
100980201	LL501
Date: 11/18/2022	
Drawn By: GR	
Checked By: DB	Sheet 58 of 62

© 2022 Langan

100712101

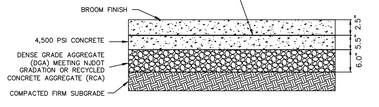
ASPHALT SECTION	SURFACE COURSE - "X"	BASE COURSE - "Y"	SUBBASE - "Z"
STANDARD DUTY	1.5 INCHES	2.5 INCHES	6 INCHES
HEAVY DUTY	2 INCHES	4 INCHES	8 INCHES



* BITUMINOUS CONCRETE BASE COURSE (25M64) TO BE USED FOR HEAVY DUTY. ALL OTHER PAVEMENT AREAS TO USE BITUMINOUS CONCRETE BINDER COURSE (19M64).

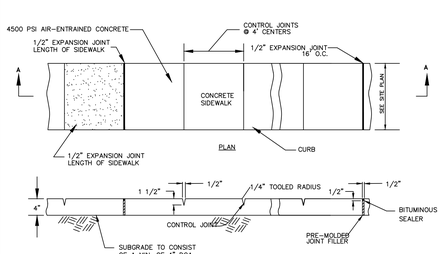
NOTES:
1. PRIOR TO ANY ASPHALT PAVING ACTIVITIES, THE CONTRACTOR SHALL PROVIDE ASPHALT DESIGN MIX SUBMITTAL TO THE OWNER'S ENGINEER FOR REVIEW AND APPROVAL.
2. PRIOR TO ANY ASPHALT PAVING ACTIVITIES, THE PAVEMENT SUBGRADE AND SUBBASE SHALL BE PROPERLY PREPARED AND ADEQUATELY COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
3. ALL AREAS TO BE PAVED SHALL BE PROOFROLLED WITH A SMOOTH ROLLER HAVING A MINIMUM STATIC DRUM WEIGHT OF 5-TONS AND A FULLY LOADED TRI-AXLE DUMP TRUCK. ANY SOFT AREAS SHALL BE REMOVED AND REPLACED WITH APPROVED, COMPACTED FILL. FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 12-INCHES AND SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.
4. THE ASPHALT MIXTURE, AFTER BEING SPREAD, SHALL BE THOROUGHLY COMPACTED BY ROLLING AS SOON AS IT WILL BEAR THE WEIGHT OF THE ROLLERS WITHOUT UNDUE DISPLACEMENT. THE NUMBER, WEIGHT, AND TYPES OF ROLLERS AND SEQUENCES OF ROLLING OPERATIONS SHALL BE SUCH THAT THE REQUIRED DENSITY AND SURFACE ARE CONSISTENTLY ATTAINED WHILE THE MIXTURE IS IN A WORKABLE CONDITION.
5. ASPHALT SHALL BE COMPACTED TO A MINIMUM OF 93% OF THE MAXIMUM THEORETICAL DENSITY ACCORDING TO ASTM D2041 FOR THE 9.5M64 AND 19M64 COURSES. FOR THE 25M64 COURSE, THE ASPHALT SHALL BE COMPACTED TO A MINIMUM OF 92% OF THE MAXIMUM THEORETICAL DENSITY, OR IN ACCORDANCE TO THE GEOTECHNICAL REPORT.
6. A TESTING AGENCY SHALL PERFORM IN PLACE DENSITY TESTS AS PART OF THE CONSTRUCTION TESTING REQUIREMENTS USING THE NUCLEAR METHOD IN ACCORDANCE WITH ASTM D-2922 METHOD B DIRECT TRANSMISSION.
7. APPLY TACK COAT TO ASPHALTIC CONCRETE BASE COURSE PRIOR TO PLACING SURFACE COURSE. APPLY EMULSIFIED ASPHALT TACK COAT BETWEEN EACH LIFT OR LAYER OF FULL DEPTH ASPHALTIC CONCRETE BASES, WHERE APPLICABLE.
8. ASPHALT PAVING OPERATIONS SHALL ONLY OCCUR WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40°F. DO NOT PLACE ASPHALT ON FROZEN GROUND OR IN STANDING WATER. DO NOT PAVE IN THE RAIN.

ASPHALT PAVEMENT



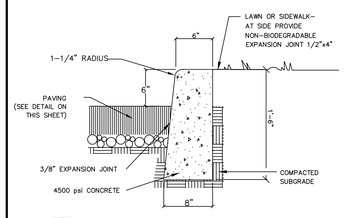
NOTES:
1. PRIOR TO ANY PAVING ACTIVITIES, THE PAVEMENT SUBGRADE ANS SUBBASE SHALL BE PROPERLY PREPARED AND ADEQUATELY COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THIS PROJECT.
2. PRIOR TO INSTALLATION OF PAVEMENT, THE SUBGRADE SHOULD BE SURFACE COMPACTED WITH A MINIMUM OF 6 PASSES WITH A VIBRATORY ROLLER HAVING A MINIMUM STATIC WEIGHT OF 5-TONS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
3. ALL AREAS TO BE PAVED SHALL BE PROOFROLLED WITH A SMOOTH ROLLER HAVING A MINIMUM STATIC DRUM WEIGHT OF 5-TONS AND A FULLY LOADED TRI-AXLE DUMP TRUCK. ANY SOFT AREAS SHALL BE REMOVED AND REPLACED WITH APPROVED, COMPACTED FILL. FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 12-INCHES AND SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.
4. TRANSVERSE AND LONGITUDINAL CONTROL JOINTS SHALL BE SAW CUT AT 15 FT MAXIMUM SPACING.
5. DOWEL BARS SHALL BE PLACED AT ALL CONSTRUCTION JOINTS.
6. AS AN ALTERNATIVE TO STEEL REINFORCEMENT, FIBER REINFORCEMENT MAY BE UTILIZED, AT OWNER'S DIRECTION.

CONCRETE APRON



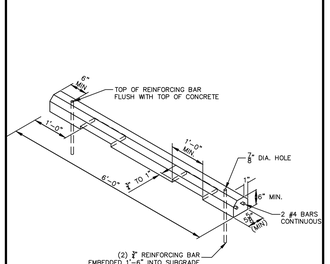
NOTES:
1. ALL SIDEWALKS SHALL BE FLOATED, TOOLED, AND SOFT BROOM BRUSHED.
2. SIDEWALKS SHALL BE INSTALLED ON AN APPROVED, COMPACTED SUBGRADE.
3. MAXIMUM CROSS SLOPE OF 1/4" PER FOOT.

CONCRETE SIDEWALK

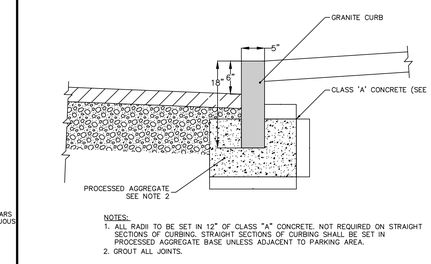


NOTES:
1. CONCRETE TO TEST 4,500 P.S.I. MINIMUM ON 28 DAY TEST. AIR ENTRAINMENT 4% TO 7% SLUMP TO BE 3" MAXIMUM.
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20'-0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS JOINT FILLER. RECESSED 1/4" FROM THE FRONT FACE AND TOP OF THE CURB. EXPANSION JOINTS ALSO BE INSTALLED WHERE THE CURB IS ADJACENT TO SIDEWALKS AND CATCH BASINS.
3. EXPOSED CONCRETE SURFACE IS TO BE RUBBED TO PROVIDE SMOOTH FINISHED SURFACE.
4. BELGIUM BLOCK CURBING CAN BE SUBSTITUTED FOR CONCRETE CURB, IF REQUIRED BY OWNER

6-INCH CONCRETE CURB

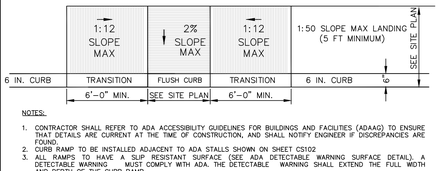


WHEEL STOP



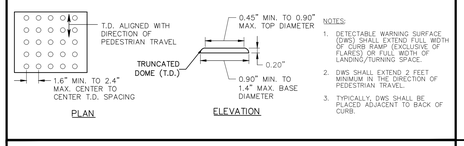
NOTES:
1. ALL RADII TO BE SET IN 12" OF CLASS "A" CONCRETE, NOT REQUIRED ON STRAIGHT SECTIONS OF CURBING. STRAIGHT SECTIONS OF CURBING SHALL BE SET IN PROCESSED AGGREGATE BASE UNLESS ADJACENT TO PARKING AREA.
2. GROUT ALL JOINTS.

GRANITE CURB



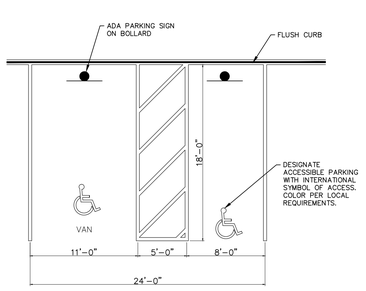
NOTES:
1. CONTRACTOR SHALL REFER TO ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG) TO ENSURE THAT DETAILS ARE CURRENT AT THE TIME OF CONSTRUCTION, AND SHALL NOTIFY ENGINEER IF DISCREPANCIES ARE FOUND.
2. CURB RAMP TO BE INSTALLED ADJACENT TO ADA STALLS SHOWN ON SHEET CS102
3. ALL RAMPS TO HAVE A SLIP RESISTANT SURFACE (SEE ADA DETECTABLE WARNING SURFACE DETAIL). A DETECTABLE WARNING MUST COMPLY WITH ADA. THE DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH AND DEPTH OF THE CURB RAMP.
4. ALL RAMPS SHALL HAVE A BROOM FINISH IN ACCORDANCE WITH ADA REQUIREMENTS.

ACCESSIBLE RAMP



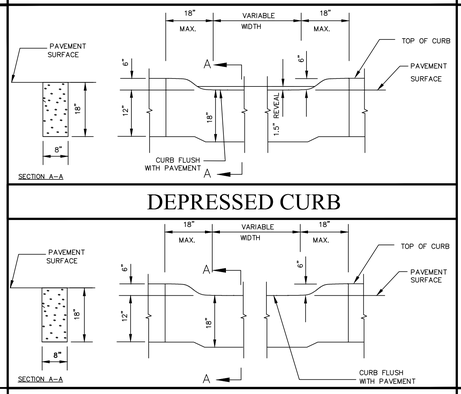
NOTES:
1. DETECTABLE WARNING SURFACE (DWS) SHALL EXTEND FULL WIDTH OF CURB RAMP (EXCLUSIVE OF FLARES) OR FULL WIDTH OF LANDING/TURNING SPACE.
2. DWS SHALL EXTEND 2 FEET MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL.
3. TYPICALLY, DWS SHALL BE PLACED ADJACENT TO BACK OF CURB.

DETECTABLE WARNING SURFACE



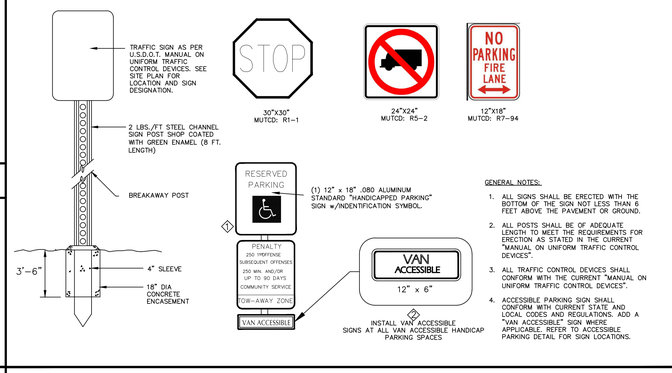
NOTE: REFER TO ACCESSIBLE RAMP DETAIL FOR SIGN LOCATIONS

ACCESSIBLE PARKING DETAIL



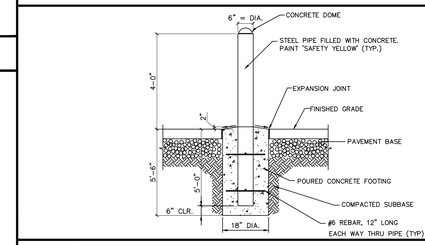
DEPRESSED CURB

FLUSH CURB

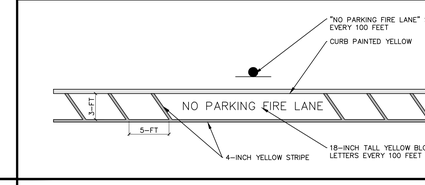


GENERAL NOTES:
1. ALL SIGNS SHALL BE ERECTED WITH THE BOTTOM OF THE SIGN NOT LESS THAN 6 FEET ABOVE THE PAVEMENT OR GROUND.
2. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
3. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM WITH THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
4. ACCESSIBLE PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS. ADD A "VAN ACCESSIBLE" SIGN WHERE APPLICABLE. REFER TO ACCESSIBLE PARKING DETAIL FOR SIGN LOCATIONS.

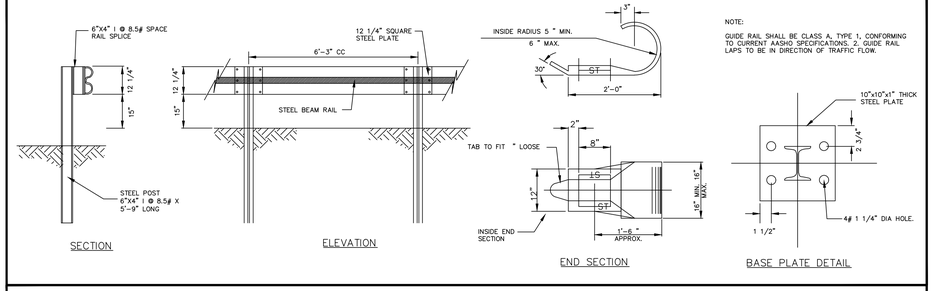
STANDARD SIGN DETAIL



STEEL BOLLARD

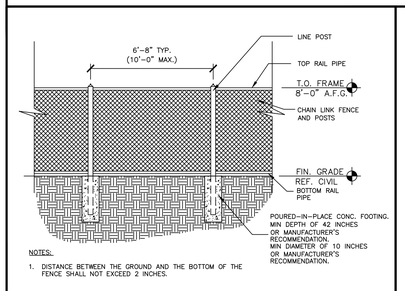


FIRE LANE STRIPING



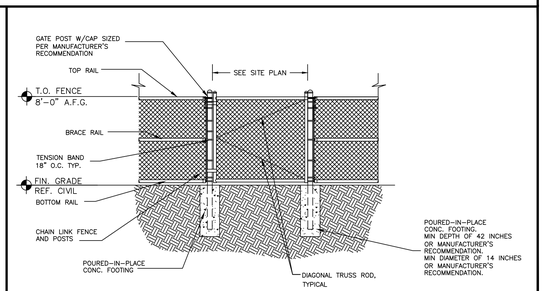
NOTE:
GUIDE RAIL SHALL BE CLASS A, TYPE 1, CONFORMING TO CURRENT AASHO SPECIFICATIONS. 2. GUIDE RAIL LAPS TO BE IN DIRECTION OF TRAFFIC FLOW.

GUIDERAIL

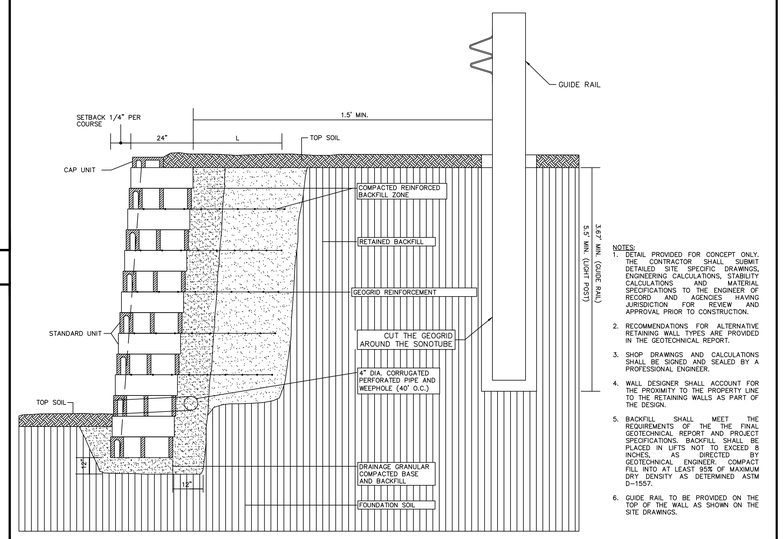


NOTES:
1. DISTANCE BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE SHALL NOT EXCEED 2 INCHES.

CHAIN LINK FENCE



SWING GATE



NOTES:
1. DETAIL PROVIDED FOR CONCEPT ONLY. THE CONTRACTOR SHALL SUBMIT DETAILED SITE SPECIFIC DRAWINGS, ENGINEERING CALCULATIONS, STABILITY CALCULATIONS AND MATERIAL SPECIFICATIONS TO THE ENGINEER OF RECORD AND AGENCIES HAVING JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
2. RECOMMENDATIONS FOR ALTERNATIVE RETAINING WALL TYPES ARE PROVIDED IN THE GEOTECHNICAL REPORT.
3. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
4. WALL DESIGNER SHALL ACCOUNT FOR THE PROXIMITY TO THE PROPERTY LINE TO THE RETAINING WALLS AS PART OF THE DESIGN.
5. BACKFILL SHALL MEET THE REQUIREMENTS OF THE THE FINAL GEOTECHNICAL REPORT AND PROJECT SPECIFICATIONS. BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES, AS DIRECTED BY GEOTECHNICAL ENGINEER, COMPACT FILL INTO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED ASTM D-1557.
6. GUIDE RAIL TO BE PROVIDED ON THE TOP OF THE WALL AS SHOWN ON THE SITE DRAWINGS.

CONCRETE BLOCK RETAINING WALL

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

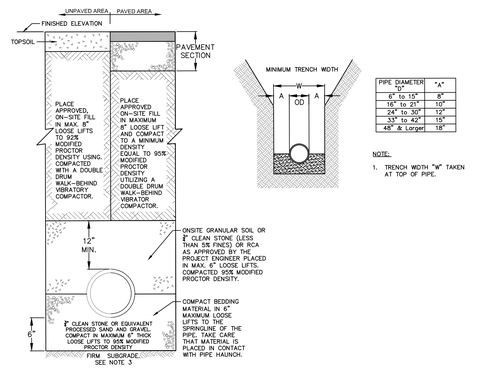
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

Drawing Title
SITE DETAILS 1

Project No.	Drawing No.
100980201	CS501
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	Sheet 59 of 62

© 2022 Langan

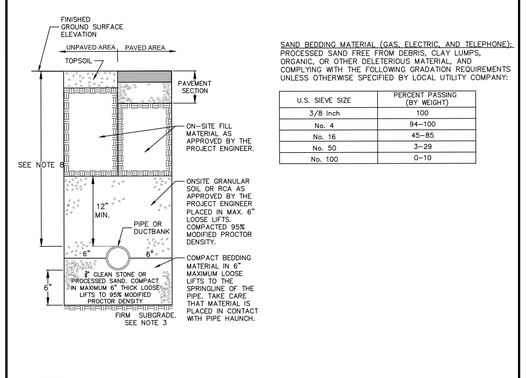


PIPE DIAMETER "D"	"A"
6" to 15"	8"
16" to 21"	10"
24" to 30"	12"
33" to 42"	15"
48" & Larger	18"

NOTE:
1. TRENCH WIDTH "W" TAKEN AT TOP OF PIPE.

NOTES:
1. ALL TRENCH EXCAVATIONS ARE TO BE DONE IN COMPLIANCE WITH OSHA REGULATIONS.
2. MINIMUM TRENCH WIDTHS TO BE IN ACCORDANCE WITH THE CHART ABOVE.
3. IF SOFT SOIL IS ENCOUNTERED AT BEDDING SUBGRADE, THE SOFT SOIL IS TO BE REMOVED (TO A MAXIMUM DEPTH OF 2 FT) AND REPLACED WITH SUITABLE FILL OR ¾" CLEAN CRUSHED STONE.
4. TRENCH BACKFILL SHALL BE PREDOMINANTLY GRANULAR FILL MATERIAL AS APPROVED BY THE PROJECT ENGINEER. MATERIAL EXCAVATED FROM THE TRENCH MAY BE USED FOR BACKFILL PROVIDED IT IS PREDOMINATELY SAND AND IS AT WATER CONTENT THAT THE MATERIAL CAN BE READILY COMPACTED TO THE DENSITY REQUIRED.
5. WITHIN PUBLIC RIGHT OF WAY BENEATH PAVEMENT, THE BACKFILL MATERIAL SHALL BE CLEAN CRUSHED STONE EQUIVALENT TO AASHTO NO. 67 OR ¾" STONE, UNLESS AUTHORITY HAVING JURISDICTION REQUIRES OTHERWISE.
6. MAGNETIC UNDERGROUND MARKING TAPE TO BE PROVIDED FOR PLASTIC WATER, AND SANITARY FORCE MAINS. BURY 18" FROM FINISHED GRADE.
7. IN AREAS WHERE THERE IS NOT SUFFICIENT WIDTH FOR A DOUBLE DRUM WALK BEHIND VIBRATORY COMPACTOR THE LIFT THICKNESS SHALL BE DECREASED AS NECESSARY TO ACHIEVE COMPACTION WITH APPROPRIATE EQUIPMENT.
8. MAXIMUM PARTICLE SIZE FOR TRENCH BACKFILL SHALL BE 6 INCHES UNLESS APPROVED OTHERWISE BY PROJECT ENGINEER.

TRENCH DETAIL FOR SANITARY SEWER, WATER, AND STROM SEWER PIPE

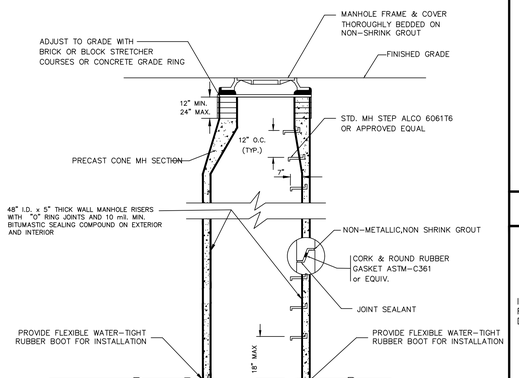


SAND BEDDING MATERIAL (GAS, ELECTRIC, AND TELEPHONE): PROCESSED SAND FREE FROM DEBRIS, CLAY LUMPS, ORGANIC, OR OTHER DELETERIOUS MATERIAL, AND COMPLYING WITH THE FOLLOWING GRADATION REQUIREMENTS UNLESS OTHERWISE SPECIFIED BY LOCAL UTILITY COMPANY:

U.S. SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
3/8 Inch	100
No. 4	94–100
No. 16	45–85
No. 50	3–29
No. 100	0–10

NOTES:
1. ALL TRENCH EXCAVATIONS ARE TO BE DONE IN COMPLIANCE WITH OSHA REGULATIONS.
2. MINIMUM TRENCH WIDTH TO BE AT LEAST 6 INCHES FROM EDGE OF PIPE OUTER EDGE OF MULTIPLE PIPES IN TRENCH OR DUCT BANK TO EDGE OF TRENCH WALL.
3. IF SOFT SOIL IS ENCOUNTERED AT BEDDING SUBGRADE, THE SOFT SOIL IS TO BE REMOVED (TO A MAXIMUM DEPTH OF 2 FT) AND REPLACED WITH SUITABLE FILL OR ¾" CLEAN CRUSHED STONE.
4. MATERIAL EXCAVATED FROM THE TRENCH MAY BE USED FOR BACKFILL PROVIDED IT IS PREDOMINATELY SAND AND IS AT WATER CONTENT THAT THE MATERIAL CAN BE READILY COMPACTED TO DENSITY REQUIRED.
5. WITHIN PUBLIC RIGHT OF WAY BENEATH PAVEMENT, THE BACKFILL MATERIAL SHALL BE CLEAN CRUSHED STONE EQUIVALENT TO AASHTO NO. 67 OR ¾" STONE, UNLESS AUTHORITY HAVING JURISDICTION REQUIRES OTHERWISE.
6. BACKFILL SHALL BE PLACED IN MAXIMUM 8" LOOSE LIFTS COMPACTED UTILIZING A WALK BEHIND VIBRATING ROLLER TO A MINIMUM DENSITY EQUAL TO 95% MODIFIED PROCTOR DENSITY IN PAVED AREAS AND 92% IN UNPAVED AREAS.
7. IN AREAS WHERE THERE IS NOT SUFFICIENT WIDTH FOR A DOUBLE DRUM WALK BEHIND COMPACTOR THE LIFT THICKNESS SHALL BE ADJUSTED AS NECESSARY TO ACHIEVE COMPACTION WITH APPROPRIATE EQUIPMENT.
8. THE MINIMUM DEPTH OF COVER SHALL BE THAT REQUIRED BY UTILITY PROVIDER.

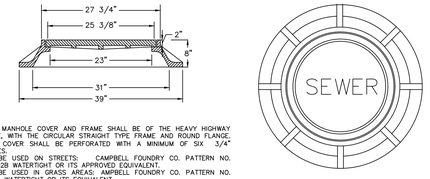
TRENCH DETAIL FOR GAS, ELECTRIC, CABLE, AND TELEPHONE



MANHOLE SCHEDULE		
"A" (DIA)	"B"	"C"
4'-0" (STD)	5"	5"
5'-0"	6"	6"
6'-0"	8"	8"

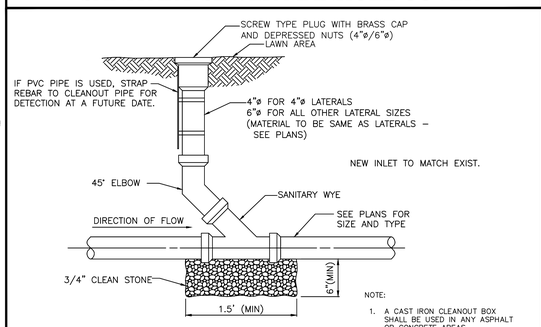
NOTES:
1. PROVIDE EXTERIOR DROP WHEN INVERTS IN AND OUT EXCEED 2 FEET.
2. DESIGNED TO AASHTO HS-20 LOADING.
3. TWO (2) COATS BITUMASTIC PROTECTIVE COATING, EACH EIGHT (8) MILS THICK SHALL BE APPLIED TO THE ENTIRE OUTER SURFACE OF THE MANHOLE. AND TWO (2) COATS WHITE EPOXY PROTECTIVE COATING, EACH SIX (8) MILS THICK SHALL BE APPLIED TO THE ENTIRE INTERIOR CONCRETE SURFACE.

SANITARY MANHOLE



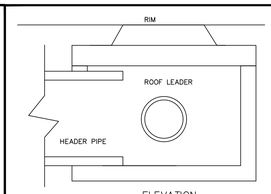
NOTES:
1. THE MANHOLE COVER AND FRAME SHALL BE OF THE HEAVY HIGHWAY TYPE, WITH THE CIRCULAR STRAIGHT TYPE FRAME AND ROUND FLANGE. THE COVER SHALL BE PERFORATED WITH A MINIMUM OF SIX 3/4" HOLES.
2. TO BE USED ON STREETS: CAMPBELL FOUNDRY CO. PATTERN NO. #12028 WATERTIGHT OR ITS APPROVED EQUIVALENT.
3. TO BE USED IN GRASS AREAS: AMPBELL FOUNDRY CO. PATTERN NO. 6541 WATERTIGHT OR ITS EQUIVALENT.

SANITARY SEWER MANHOLE COVER



NOTE:
1. A CAST IRON CLEANOUT BOX SHALL BE USED IN ANY ASPHALT OR CONCRETE AREAS.

SANITARY CLEANOUT



GENERAL NOTES:
1. PROVIDE WHEN ROOF LEADER CONNECTS TO END OF HEADER PIPE.

ROOF LEADER CONNECTION TO STORM MANHOLE

THRUST BLOCK SCHEDULE									
PIPE SIZE	TEE		22 1/2		45		90		W
	L	D	L	D	L	D	L	D	
6"	18"	15"	15"	12"	15"	12"	15"	15"	21"
8"	2'	18"	18"	12"	18"	12"	2'	18"	2'
12"	3'	2'	2'	12"	2'	12"	3'	2'	28"
16"	4'	2.5'	2'	12"	2.33'	15"	4'	2.5'	31"
20"	5.25'	3'	2'	18"	3'	2'	5.25'	3'	33"
24"	7.5'	3'	3'	18"	4'	2.5'	7.5'	3'	3'

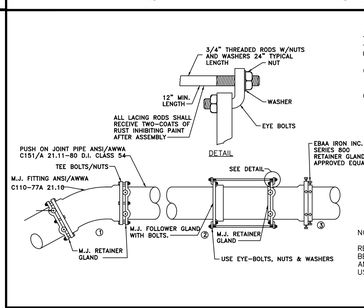
BASIS:
2,000 LB/SQ.FT. SOIL RESISTANCE 250 PSI WATER PRESSURE CORRECTION FACTORS FOR OTHER SOILS:
SOFT CLAY 4
SAND 2
SAND & GRAVEL 1.33
SHALE 0.4

NOTE:
1. IF SOFT MATERIALS ARE ENCOUNTERED, THE THRUST BLOCKS SIZES SHALL BE ADJUSTED ACCORDINGLY.
2. CONCRETE TO BE 4000 PSI.

THRUST BLOCKS

NOTE:
1. EXISTING INVERT TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION.

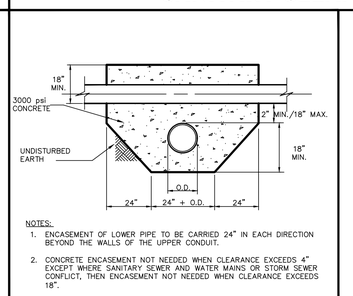
SANITARY DROP CONNECTION TO EXISTING SANITARY MANHOLE



THRUST RESTRAINT-RESTRAINED JOINT METHODS
① MECHANICAL JOINT RETAINER GLANDS
② PUSH-ON JOINT RESTRAINT USING MECHANICAL JOINT RETAINER GLANDS AND LACING
③ PUSH-ON JOINT RETAINER GLANDS

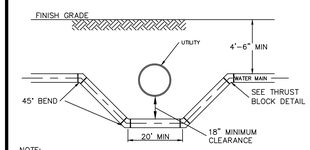
NOTES:
RESTRAINED JOINTS TO BE USED ON ALL BENDS AND TEES OF THE WATER MAIN AND LATERALS. THRUST BLOCKS TO BE USED ON SITE FIRE LOOP.

TYPICAL RESTRAINED JOINTS



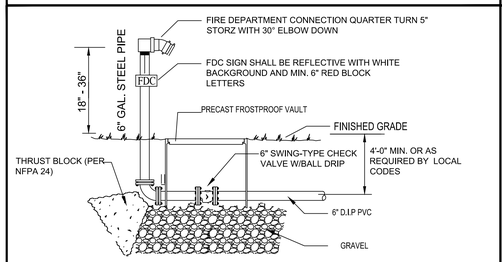
NOTES:
1. ENCASEMENT OF LOWER PIPE TO BE CARRIED 24" IN EACH DIRECTION BEYOND THE WALLS OF THE UPPER CONDUIT.
2. CONCRETE ENCASEMENT NOT NEEDED WHEN CLEARANCE EXCEEDS 4" EXCEPT WHERE SANITARY SEWER AND WATER MAINS OR STORM SEWER CONFLICT, THEN ENCASEMENT NOT NEEDED WHEN CLEARANCE EXCEEDS 18".

UTILITY CROSSING



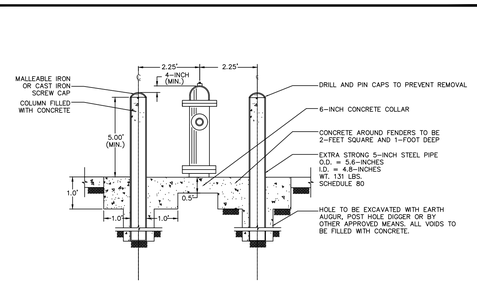
NOTE:
WATER MAIN SHALL BE CONSTRUCTED OF CEMENT LINED CLASS 52 DUCTILE IRON PIPE OR BETTER. ONE FULL LENGTH OF WATER MAIN SHOULD BE CENTERED UNDER THE CROSS PIPE SO THAT BOTH JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE.

WATER MAIN DROP

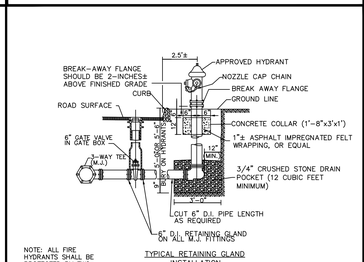


NOTE: A RED COLORED LIGHT SHALL BE INSTALLED ADJACENT TO THE FIRE DEPARTMENT CONNECTION FOR NIGHTIME IDENTIFICATION

FIRE DEPARTMENT CONNECTION



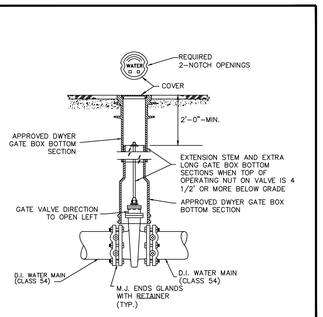
HYDRANT BOLLARDS



NOTE: ALL FIRE HYDRANTS SHALL BE PROTECTED BY TWO BOLLARDS. SEE BOLLARD DETAIL ON THIS SHEET.

TYPICAL RETAINING GLAND INSTALLATION

FIRE HYDRANT ASSEMBLY



GATE VALVE INSTALLATION

Date	Description	No.
Revisions		

11-29-2022
SIGNATURE DATE SIGNED
RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

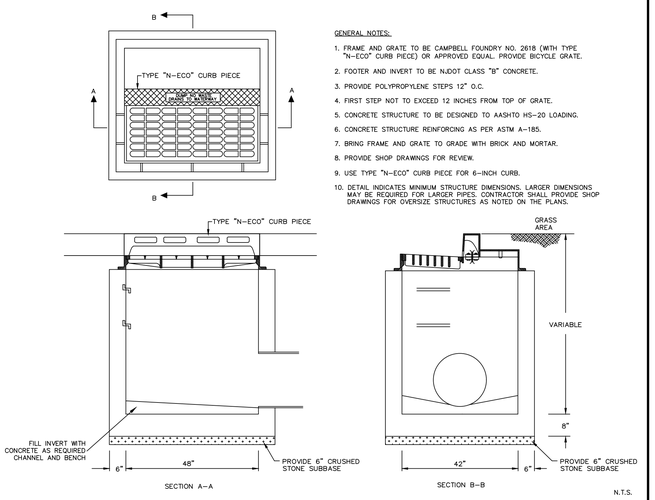
LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
SITE DETAILS 2

Project No.	Drawing No.
100980201	CS502
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 60 of 62

© 2022 Langan



SECTION A–A

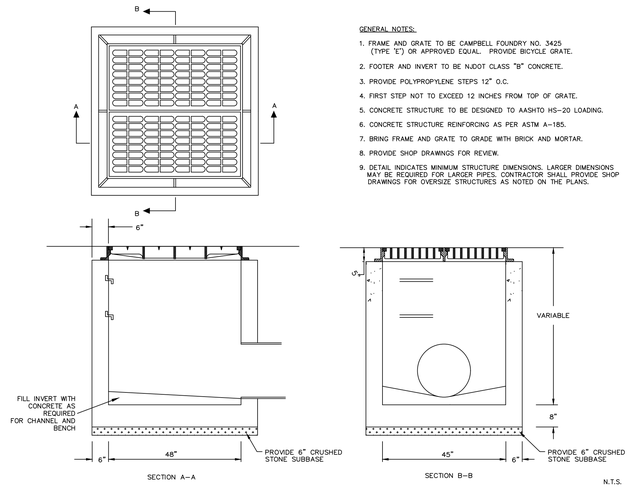
SECTION B–B

N.T.S.

GENERAL NOTES:

1. FRAME AND GRATE TO BE CAMPBELL FOUNDRY NO. 2618 (WITH TYPE "N-ECO" CURB PIECE) OR APPROVED EQUAL. PROVIDE BICYCLE GRATE.
2. FOOTER AND INVERT TO BE NJDOT CLASS "B" CONCRETE.
3. PROVIDE POLYPROPYLENE STEPS 12" O.C.
4. FIRST STEP NOT TO EXCEED 12 INCHES FROM TOP OF GRATE.
5. CONCRETE STRUCTURE TO BE DESIGNED TO AASHTO HS–20 LOADING.
6. CONCRETE STRUCTURE REINFORCING AS PER ASTM A–185.
7. BRING FRAME AND GRATE TO GRADE WITH BRICK AND MORTAR.
8. PROVIDE SHOP DRAWINGS FOR REVIEW.
9. USE TYPE "N-ECO" CURB PIECE FOR 6–INCH CURB.
10. DETAIL INDICATES MINIMUM STRUCTURE DIMENSIONS. LARGER DIMENSIONS MAY BE REQUIRED FOR LARGER PIPES. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OVERSIZE STRUCTURES AS NOTED ON THE PLANS.

TYPE "B" INLET DETAIL



SECTION A–A

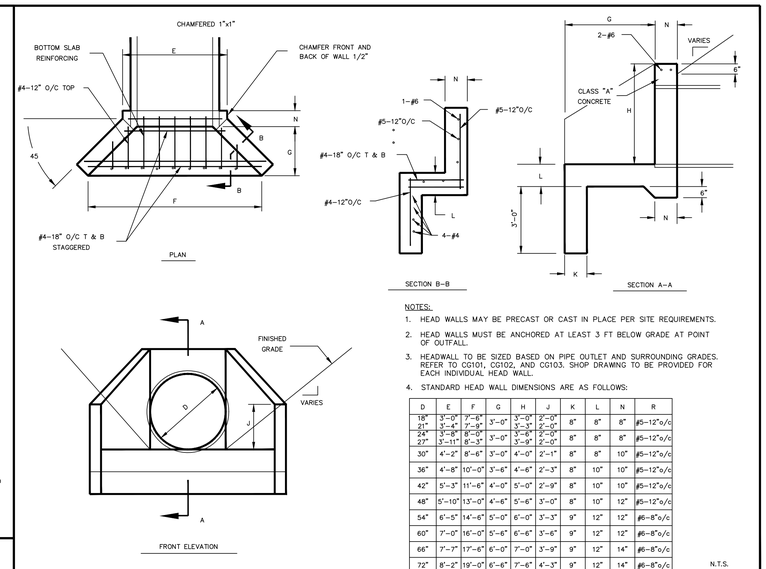
SECTION B–B

N.T.S.

GENERAL NOTES:

1. FRAME AND GRATE TO BE CAMPBELL FOUNDRY NO. 3425 (TYPE "E") OR APPROVED EQUAL. PROVIDE BICYCLE GRATE.
2. FOOTER AND INVERT TO BE NJDOT CLASS "B" CONCRETE.
3. PROVIDE POLYPROPYLENE STEPS 12" O.C.
4. FIRST STEP NOT TO EXCEED 12 INCHES FROM TOP OF GRATE.
5. CONCRETE STRUCTURE TO BE DESIGNED TO AASHTO HS–20 LOADING.
6. CONCRETE STRUCTURE REINFORCING AS PER ASTM A–185.
7. BRING FRAME AND GRATE TO GRADE WITH BRICK AND MORTAR.
8. PROVIDE SHOP DRAWINGS FOR REVIEW.
9. DETAIL INDICATES MINIMUM STRUCTURE DIMENSIONS. LARGER DIMENSIONS MAY BE REQUIRED FOR LARGER PIPES. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OVERSIZE STRUCTURES AS NOTED ON THE PLANS.

TYPE "E" INLET DETAIL



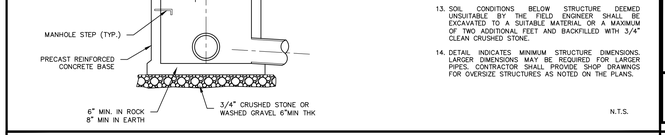
NOTES:

1. HEAD WALLS MAY BE PRECAST OR CAST IN PLACE PER SITE REQUIREMENTS.
2. HEAD WALLS MUST BE ANCHORED AT LEAST 3 FT BELOW GRADE AT POINT OF OUTFALL.
3. HEADWALL TO BE SIZED BASED ON PIPE OUTLET AND SURROUNDING GRADES. REFER TO CG101, CG102, AND CG103. SHOP DRAWING TO BE PROVIDED FOR EACH INDIVIDUAL HEAD WALL.
4. STANDARD HEAD WALL DIMENSIONS ARE AS FOLLOWS:

D	E	F	G	H	J	K	L	N	R
18"	3'–0"	7'–3"	3'–0"	3'–0"	2'–0"	8"	8"	8"	#5–12"o/c
21"	3'–4"	7'–9"		3'–3"	2'–0"				
24"	3'–8"	8'–0"	3'–0"	3'–6"	2'–0"	8"	8"	8"	#5–12"o/c
27"	3'–11"	8'–3"		3'–9"	2'–0"				
30"	4'–2"	8'–6"	3'–0"	4'–0"	2'–1"	8"	10"	8"	#5–12"o/c
36"	4'–8"	10'–0"	3'–6"	4'–6"	2'–3"	8"	10"	10"	#5–12"o/c
42"	5'–3"	11'–6"	4'–0"	5'–0"	2'–9"	8"	10"	10"	#5–12"o/c
48"	5'–10"	13'–0"	4'–6"	5'–6"	3'–0"	8"	10"	12"	#5–12"o/c
54"	6'–5"	14'–6"	5'–0"	6'–0"	3'–3"	9"	12"	12"	#6–8"o/c
60"	7'–0"	16'–0"	5'–6"	6'–6"	3'–6"	9"	12"	12"	#6–8"o/c
66"	7'–7"	17'–6"	6'–0"	7'–0"	3'–9"	9"	12"	14"	#6–8"o/c
72"	8'–2"	19'–0"	6'–6"	7'–6"	4'–3"	9"	12"	14"	#6–8"o/c

N.T.S.

HEAD WALL

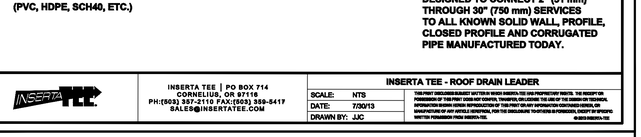


STORMWATER MANHOLE NOTES:

1. FOR MANHOLES HAVING 5' DIA. AND 6' DIA. BASE, REDUCTION IN DIA. TO 4' SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL WHERE DEPTH IS SUFFICIENT.
2. ALL MANHOLE FRAMES SHALL BE BOLTED TO THE CONE SECTION WITH 2–3/4" DIA. BOLTS WITH WASHERS AND NUTS. BOLTS TO BE AT 180° ON BOLT CIRCLE.
3. ALL CONCRETE SHALL BE 4500 PSI MINIMUM.
4. CONCRETE STRUCTURE TO BE DESIGNED TO AASHTO HS–20 LOADING.
5. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE TWO COATS OF BITUMINOUS COATING, COOPERS CREEK 'SEALER SP WATERPROOFER', OR APPROVED EQUAL.
6. INSTALL 2 LAYERS OF PLASTIC PREFORMED JOINT SEALANT BETWEEN ALL SECTIONS & UNDER FRAME.
7. MANHOLE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ATSM C478.
8. CONCRETE STRUCTURE TO BE DESIGNED TO AASHTO HS–20 LOADING.
9. STEPS TO ALUMINUM ALLOY WITH DEPRESSED TREAD. STEEL REINFORCED POLYPROPYLENE IS OPTIONAL. (SEE DETAIL–ALUMINUM MANHOLE STEP AND POLYPROPYLENE MANHOLE STEP)
10. WHEN TWO OR MORE GRADE ADJUSTMENT RINGS ARE USED, A WATERTIGHT PVC CONNECTOR SHALL BE INSTALLED BETWEEN THE FRAME AND THE CONE. CONNECTOR SHALL BE WATER–LOK CONNECTOR BFA ANTI–FLOATING BY A–LOK PRODUCTS INC. OR APPROVED EQUAL.
11. THE CONTRACTOR AND PRE–CASTER SHALL CONFIRM THE DIAMETER REQUIRED, IN PARTICULAR FOR MANHOLES WITH 3 OR MORE PIPES.
12. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER'S REVIEW.
13. SOIL CONDITIONS BELOW STRUCTURE DEEMED UNSUITABLE BY THE FIELD ENGINEER SHALL BE EXCAVATED TO A SUITABLE MATERIAL OR A MAXIMUM OF TWO ADDITIONAL FEET AND BACKFILLED WITH 3/4" CLEAN CRUSHED STONE.
14. DETAIL INDICATES MINIMUM STRUCTURE DIMENSIONS. LARGER DIMENSIONS MAY BE REQUIRED FOR LARGER PIPES. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OVERSIZE STRUCTURES AS NOTED ON THE PLANS.

N.T.S.

STORM MANHOLE



INSERTA TEE FITTINGS MEET THE FOLLOWING ASTM SPECIFICATIONS:

FIELD PERFORMANCE - C969, F1417, F2487, F2946
WATERTIGHT CONNECTION - D3212 (10.8 psig)
RUBBER SLEEVE AND GASKETS - F477

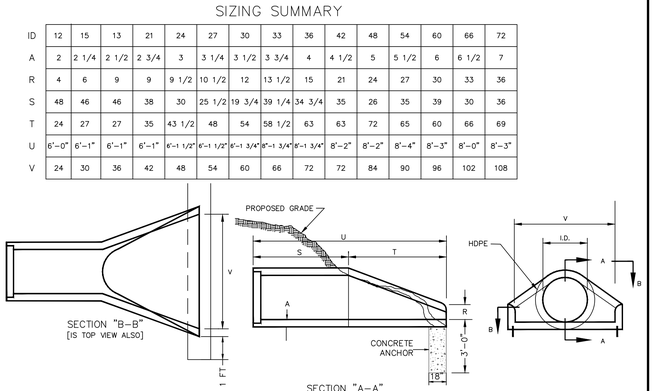
INSERTA TEE | PO BOX 714 CORNELIUS, OR 97116 PH:(503) 357-2110 FAX:(503) 359-5417 SALES@INSERTATEE.COM

INSERTA TEE - ROOF DRAIN LEADER

SCALE: NTS
DATE: 7/30/13
DRAWN BY: JJC

THIS PRINT DISCLOSED SUBJECT MATTER IN WHICH INSERTA TEE HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONVEY, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREON. ACCEPTANCE OF THE PRINT OR ANY INFORMATION CONTAINED THEREIN, OR THE MANUFACTURE OF ANY ARTICLE DESCRIBED, FOR THE DISCLOSURE TO OTHERS IS EXPRESSLY PROHIBITED WITHOUT WRITTEN PERMISSION FROM INSERTA TEE. ©2013 INSERTA TEE

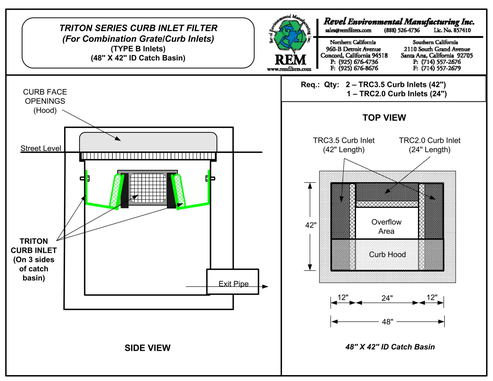
INSERT TEE CONNECTION



NOTE:
1. FLARED END SECTION MUST BE ANCHORED AT LEAST 3 FT BELOW GRADE AT POINT OF OUTFALL.

N.T.S.

CONCRETE FLARED END SECTION



NOTE:
TRITON FILTER TO BE INSTALLED AT CB–501, CB–601, CB–1201, AND CB–1202.

N.T.S.

TRITON SERIES CURB INLET FILTER

Date	Description	No.

Revisions

11-29-2022
SIGNATURE RICHARD BURROW DATE SIGNED
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

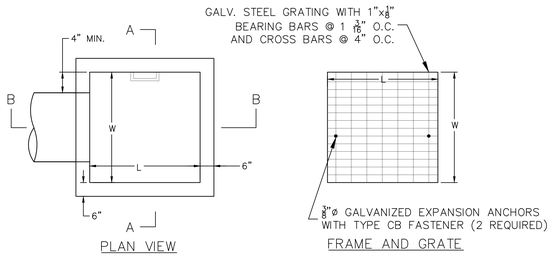
Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY **NEW JERSEY**

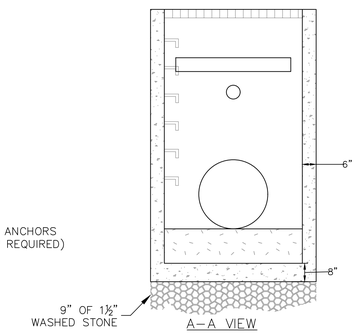
Drawing Title
SITE DETAILS 3

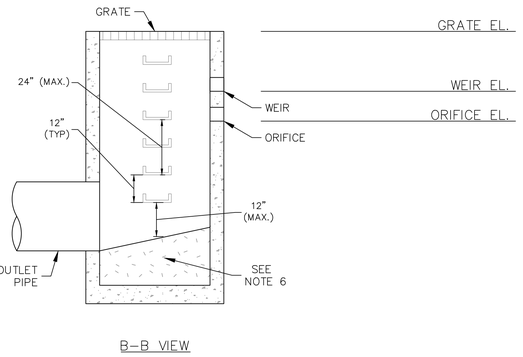
Project No.	Drawing No.
100980201	CS503
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR /RB	

Sheet 61 of 62

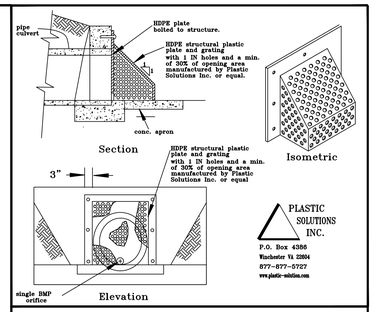
© 2022 Langan



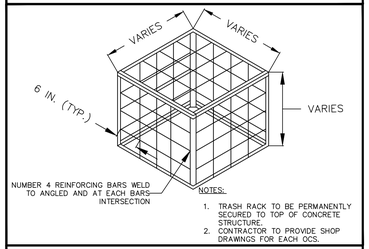




NOTES:
1. REFER TO "OUTLET STRUCTURE DESIGN FOR INFILTRATION BASINS" FOR SIZING AND ELEVATIONS.
2. PRECAST CONCRETE TOP WITH FRAME AND GRATE MAY NOT BE USED.
3. LADDER RUNGS SHALL BE STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS IN CONFORMANCE WITH ASTM C-478, 12" TO BOTTOM.
4. ALL PIPES SHALL BE LAID OR CUT FLUSH WITH THE INSIDE OF THE CATCH BASIN WALL AND SHALL BE FIRMLY PARGED IN PLACE, BOTH INSIDE AND OUTSIDE.
5. TRASH RACKS MUST BE INSTALLED AT THE INTAKE TO THE OUTLET STRUCTURE.
6. THE SPACE BELOW THE INVERT OF THE OUTLET PIPE MUST BE FILLED WITH MATERIAL (CONCRETE, SAND/CEMENT MIXTURE, OR GROUTING MATERIAL). THE MATERIAL MUST BE SLOPED TOWARDS THE OUTLET PIPE TO FACILITATE DRAINAGE.
7. ELEVATIONS ARE IN DATUM NEW JERSEY NAVD88.



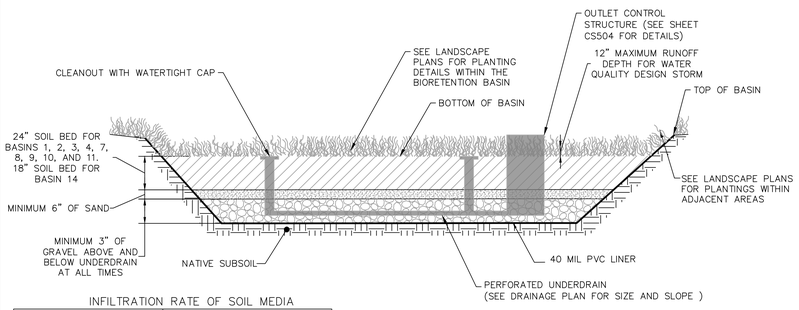
ORIFICE TRASH RACK



TOP TRASH RACK

Structure	Grate Width (W)	Grate Length (L)	Grate El.	Orifice 1 Size	Orifice 1 El.	Orifice 2 Size	Orifice 2 El.	Weir Length	Weir El.	Outlet Pipe Size	Outlet Pipe El.
OCS-1	48	48	787	4Ø	785.00	N/A	N/A	72	786	24Ø	779.75
OCS-2	48	48	780.00	3Ø	778.00	N/A	N/A	48	779	24Ø	766.98
OCS-3	48	48	788.00	3.5Ø	787.00	3.5Ø	787.00	N/A	N/A	24Ø	779.80
OCS-4	48	48	785.00	3Ø	783.00	N/A	N/A	N/A	N/A	24Ø	776.28
OCS-5	48	48	788.50	3Ø	788.00	N/A	N/A	N/A	N/A	24Ø	780.63
OCS-6	48	48	788.00	3Ø	786.00	N/A	N/A	N/A	N/A	24Ø	775.79
OCS-7	48	48	792.00	3Ø	789.00	N/A	N/A	48	791	24Ø	779.23
OCS-8	48	48	785.00	3Ø	784.00	N/A	N/A	N/A	N/A	24Ø	778.80
OCS-9	48	48	786.00	3Ø	784.00	N/A	N/A	N/A	N/A	24Ø	779.13
OCS-10	48	48	792.00	3Ø	789.00	N/A	N/A	N/A	N/A	24Ø	783.97
OCS-11	48	48	794.00	3Ø	789.00	N/A	N/A	N/A	N/A	18Ø	784.03
OCS-12	48	48	791.50	3Ø	791.00	N/A	N/A	N/A	N/A	24Ø	785.65
OCS-13	48	48	776.00	2.5Ø	773.00	N/A	N/A	N/A	N/A	24Ø	765.63
OCS-14	48	48	773.00	4Ø	766.00	N/A	N/A	N/A	N/A	24Ø	763.00

OUTLET CONTROL STRUCTURE DETAIL



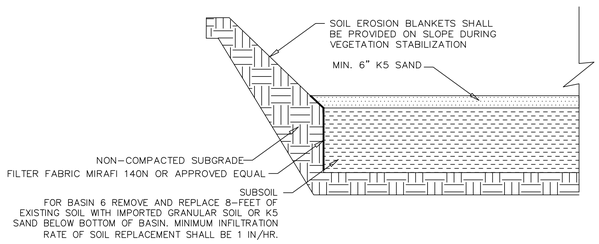
INFILTRATION RATE OF SOIL MEDIA

BASIN	INFILTRATION RATE (IN/HR)
1&2	10 IN/HR
3, 4, 7, 8, 9, 10, 11, & 14	1 IN/HR

NOTES:

1. BIORETENTION BASINS (INCLUDING THE MULCH, SOIL BED, SAND AND GRAVEL LAYER) SHALL BE CONSTRUCTED IN CONFORMANCE WITH NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL SECTION 9.7 FOR SMALL-SCALE BIORETENTION SYSTEMS AND SECTION 10.1 FOR LARGE-SCALE BIORETENTION SYSTEMS.
2. BIORETENTION SOIL BED MATERAIL MUST CONSIST OF THE FOLLOWING MIX, BY VOLUME: 85 TO 95% SAND, WITH NO MORE THAN 25% OF THE SAND AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX MUST THEN BE AMENDED WITH 3 TO 7% ORGANICS, BY WEIGHT. THE SOIL BED MATERIAL SHALL BE FREE OF CONTAMINANTS. THE PH OF THE SOIL BED MATERIAL IS RECOMMENDED TO RANGE FROM 5.5 TO 6.5. THE SOIL BED MATERIAL MUST BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES.
3. PRE-MIXED SOIL MUST BE CERTIFIED TO BE CONSISTENT WITH THE REQUIREMENT ABOVE BY EITHER THE VENDOR OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY. THE CONTENT OF ANY SOIL MIXED ON-SITE MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY; IN ADDITION, THE ENGINEER MUST BE PRESENT WHILE THE SOIL IS MIXED.
4. SAND MUST BE AT LEAST 6 INCHES IN DEPTH AND MUST CONSIST OF CLEAN, MEDIUM-AGGREGATE CONCRETE SAND (AASHTO M-6/ASTM C-33). TO ENSURE PROPER SYSTEM OPERATION, THE PERMEABILITY RATE OF THE SAND LAYER MUST BE AT LEAST TWICE THE DESIGN PERMEABILITY RATE OF THE SOIL BED.
5. THE GRAVEL LAYER MUST HAVE SUFFICIENT DEPTH TO PROVIDE AT LEAST 3 INCHES OF GRAVEL BOTH ABOVE AND BELOW THE PIPE NETWORK AND MUST CONSIST OF 0.5 TO 1.5 INCH CLEAN, BROKEN STONE OR PEA GRAVEL (AASHTO M-43). THE SIDES OF THE UNDERDRAIN PIPES SHOULD SIMILARLY BE PROTECTED BY THE SAME GRAVEL. TO ENSURE PROPER SYSTEM OPERATION, THE PERMEABILITY RATE OF THE GRAVEL LAYER MUST BE AT LEAST TWICE THE DESIGN PERMEABILITY RATE OF THE SAND LAYER.
6. AT LEAST ONE (1) INSPECTION PORT, WITH A REMOVABLE CAP, MUST BE PROVIDED AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE PERFORATED SECTION OF THE NETWORK OF PIPES AND EXTEND ABOVE THE SURFACE OF THE SOIL BED.
7. INSPECTION PORT EXTERIOR OF UNDERDRAINS SHALL BE COVERED IN SUCH A WAY AS TO PREVENT THE MIGRATION OF MATERIAL INTO THE STRUCTURE.
8. THE DEPTH OF RUNOFF GENERATED BY THE MAXIMUM DESIGN STORM SHALL BE MARKED ON ALL INSPECTION PORTS.

BIO-RETENTION BASIN CROSS SECTION



NOTES:

- SAND SHALL ONLY BE INSTALLED AFTER UPSTREAM DRAINAGE AREA HAS BEEN STABILIZED AND ACCUMULATED SEDIMENT HAS BEEN REMOVED.
- BASIN SUBGRADE SHALL BE TILLED OR DISCED TO A DEPTH OF SIX TO TWELVE INCHES TO LOOSEN SOIL IMMEDIATELY PRIOR TO INSTALLATION OF SAND LAYER.
- INFILTRATION BASINS SHALL BE PROTECTED FROM SEDIMENT ACCUMULATION DURING CONSTRUCTION.
- K5 SAND:
  - MUST MEET ALL THE SPECIFICATIONS FOR CLEAN, MEDIUM-AGGREGATE CONCRETE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33, AS CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.
  - THE MINIMUM TESTED PERMEABILITY RATE IS 20 INCHES/HOUR.
  - THE MAXIMUM PERCENTAGE OF FINES IS 15%
- MEASURES MUST BE TAKEN TO ELIMINATE SOIL COMPACTION AT THE LOCATION OF A PROPOSED SMALL-SCALE INFILTRATION BASIN DURING AND AFTER THE PLACEMENT OF THE SOIL BENEATH THE BOTTOM OF THE BASINS. THE LOCATION OF THE PROPOSED SMALL-SCALE INFILTRATION BASIN MUST BE CORDONED OFF DURING CONSTRUCTION TO PREVENT COMPACTION OF THE SUBSOIL BY CONSTRUCTION EQUIPMENT OR STOCKPILES.
- FILTER FABRIC IS REQUIRED ALONG THE SIDES OF THE SMALL-SCALE INFILTRATION BASIN TO PREVENT THE MIGRATION OF FINE PARTICLES FROM THE SURROUNDING SOIL; FILTER FABRIC MAY NOT BE USED ALONG THE BOTTOM OF THE BASIN.

INFILTRATION BASIN CROSS SECTION

Date	Description	No.

Revisions

11-29-2022

SIGNATURE DATE SIGNED

RICHARD BURROW
PROFESSIONAL ENGINEER NJ Lic. No. 24GE04459300

LANGAN
Langan Engineering and Environmental Services, Inc.
300 Kimball Drive
Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project
3000 CONTINENTAL DRIVE WAREHOUSE DEVELOPMENT
BLOCK 200, LOT 1
TOWNSHIP OF MOUNT OLIVE
MORRIS COUNTY NEW JERSEY

Drawing Title
SITE DETAILS 4

Project No.	Drawing No.
100980201	CS504
Date: 11/18/2022	
Drawn By: RY	
Checked By: KMR/RB	Sheet 62 of 62

© 2022 Langan