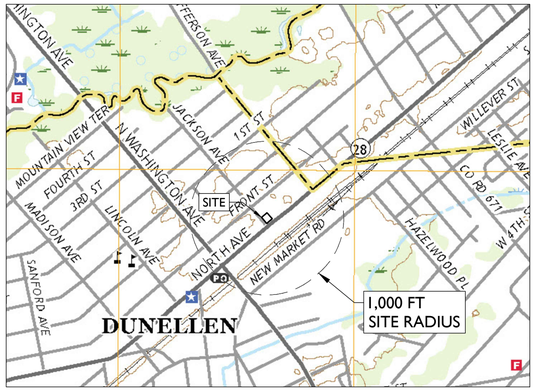
PRELIMINARY & FINAL MAJOR SITE PLAN

FOR

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1 / LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN, MIDDLESEX COUNTY, NEW JERSEY



SOURCE: UNITED STATES GEOLOGICAL SURVEY MAP, PLAINFIELD QUADRANGLE, NEW JERSEY 2019, 7.5 MINUTE SERIES.

KEY MAP

SCALE: 1" = 1,000'±

APPROVAL BLOCK	
APPROVED BY THE BOROUGH OF DUNELLEN PLANNING BOARD	
CHAIRPERSON	DATE
SECRETARY	DATE

APPLICANT / OWNER

COMMUNIPAW ASSOCIATES, LLC
36 VALLEYVIEW ROAD
WATCHUNG, NEW JERSEY 07069

ATTORNEY

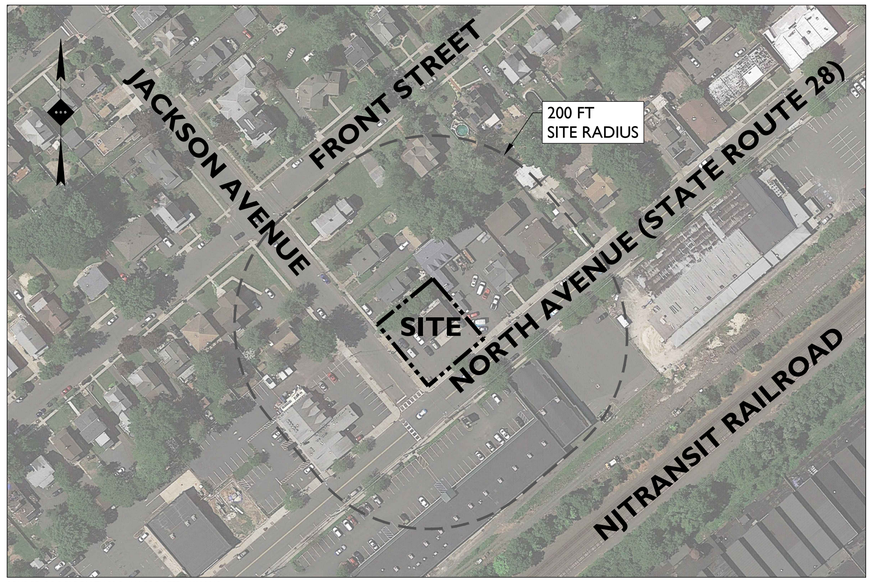
JOSEPH A. PAPARO, ESQ.
100 SOUTHGATE PARKWAY, P.O. BOX 1997
MORRISTOWN, NEW JERSEY, 07962
(973) 889-4042
JAPAPARO@PBNLAW.COM

ZONING RELIEF TABLE

RELIEF TYPE	CODE SECTION	REQUIRED	PROPOSED
DEVIATION	REDEVELOPMENT PLAN §7.4.4. 3.	MAXIMUM DWELLING UNIT DENSITY = 20 UNITS / AC	61 UNITS / AC
VARIANCE	REDEVELOPMENT PLAN §8.3	DECIDUOUS TREES, NATIVE TO NEW JERSEY, SHOULD BE PLANTED APPROXIMATELY 50-FOOT ON-CENTER AND IN RELATION TO BUILDING FACADE. TREES SHALL BE OVER 12 FEET IN HEIGHT, A MINIMUM 3-INCH CALIPER (DBH) AND SHALL BE PLANTED ON THE STREET SIDE OF ANY SIDEWALK.	0 TREES

BOROUGH OF DUNELLEN 200' PROPERTY OWNERS LIST

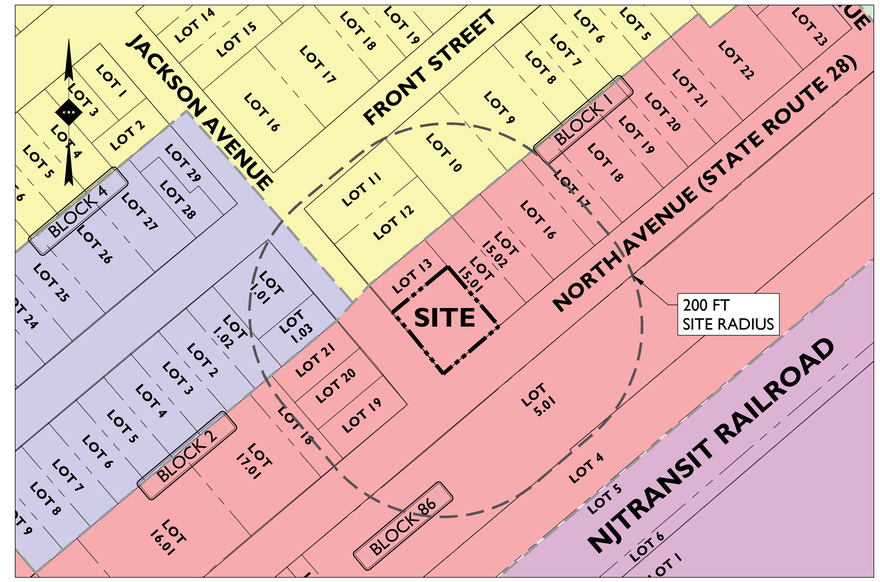
BLOCK	LOT	OWNER	OWNER'S ADDRESS
1	9	REYES, JOSE O	135 FRONT STREET DUNELLEN, NEW JERSEY 08812
1	10	HEISS, JEFFREY	741 SCHOOLHOUSE ROAD BOUND BROOK, NEW JERSEY 08805
1	11	GARCIA, NANCY P	120 JACKSON AVENUE DUNNELEN, NEW JERSEY 08812
1	12	LOPEZ, ANA M.	114 JACKSON AVENUE DUNELLEN, NJ 08812
1	13	CHEN, JIN-GUANG & DESONG	108 JACKSON AVENUE DUNELLEN, NEW JERSEY 08812
1	14	COMMUNIPAW ASSOCIATES LLC	1878 MORRIS AVENUE UNION, NEW JERSEY 07083
1	15.01	DAG PROPERTIES, LLLC.	148 NORTH AVENUE DUNELLEN, NJ 08812
1	15.02	NEAL, EARL W. AND DEBORAH	2020 PLAINFIELD AVENUE SOUTH PLAINFIELD, NEW JERSEY 07080
1	16	GUZMAN, ENRIQUE & ADELA	140 NORTH AVENUE DUNELLEN, NEW JERSEY 08812
1	17	MATHURIN, URBAN & CATHIE	134 NORTH AVENUE DUNELLEN, NEW JERSEY 08812
2	1.01	CHIOFALO, MICHEAL	95 LARK DRIVE SOUTH RIVER, NEW JERSEY 08882
2	1.02	VELASTEGUI, NELSON A & AGUILAR, C	2 HARDY DRIVE BRIDGEWATER, NEW JERSEY 08807
2	1.03	KEYSTONE COMMUNITY LIVING, INC.	154 FRONT STREET SOUTH PLAINFIELD, NEW JERSEY 07080
2	18	ZERVOPOULOS, JR, JOHN & LISA	210 NORTH AVENUE DUNELLEN, NEW JERSEY 08812
2	20	ZERVOPOULOS, JR, JOHN & LISA	210 NORTH AVENUE DUNELLEN, NEW JERSEY 08812
2	21	PERRY JAMES PROPERTIES LLC	210 NORTH AVENUE DUNELLEN, NEW JERSEY 08812
86	5.01	FRIENDWELL PLAZA II LLC	2035 ROUTE 27, ROUTE 2150 EDISON, NEW JERSEY 08817
86	5.02	VALSTIR, LLC	1075 EASTON AVENUE TWR1 STE2 SOMERSET, NEW JERSEY 08873



SOURCE: GOOGLE EARTH PRO: IMAGE DATED MAY 2018.

AERIAL MAP

SCALE: 1" = 100'±



SOURCE: BOROUGH OF DUNELLEN TAX MAP, SHEETS 1, 2, 8, 29, & 30 . BOROUGH OF DUNELLEN ZONING MAP, DATED MARCH 2009.

TAX & ZONING MAP

SCALE: 1" = 100'±

ZONING LEGEND

- REDEVELOPMENT AREA REMAINDER
- REDEVELOPMENT AREA PHASE 1
- RA - SINGLE FAMILY RESIDENTIAL
- RB - SINGLE FAMILY AND TWO FAMILY RESIDENTIAL

PLANS PREPARED BY:

STONEFIELD engineering & design

Rutherford, NJ · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com

Headquarters: 92 Park Avenue, Rutherford, NJ 07070
Phone 201.340.4468 · Fax 201.340.4472

811 Know what's **below** **Call** before you dig.

PLAN REFERENCE MATERIALS:

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
   - SURVEY OF PROPERTY PREPARED BY PARKER ENGINEERING & SURVEYING P.C., DATED 04/17/2019
   - ARCHITECTURAL PLANS PREPARED BY ALAN FELD ARCHITECT, DATED 03/10/2020
   - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO, DATED 05/2018
   - KEY MAP OBTAINED FROM UNITED STATES GEOLOGIC SURVEY MAP, PLAINFIELD QUADRANGLE, NEW JEREY, 7.5 MINUTE SERIES, DATED 2019
   - TAX MAP SHEETS 1, 2, 8, 29 & 30 OBTAINED FROM BOROUGH OF DUNELLEN TAX MAP, DATED 12/2016
   - ZONING MAP OBTAINED FROM BOROUGH OF DUNELLEN ZONING MAP, DATED 03/2009
2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
EXISTING CONDITIONS PLAN	C-2
SITE PLAN	C-3
GRADING, DRAINAGE, & UTILITY PLAN	C-4
LIGHTING PLAN	C-5
SOIL EROSION & SEDIMENT CONTROL PLAN	C-6
LANDSCAPING PLAN	C-7
LANDSCAPING DETAILS	C-8
CONSTRUCTION DETAILS	C-9 TO C-12

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

NOT APPROVED FOR CONSTRUCTION

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PROPOSED MIXED-USE DEVELOPMENT
BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

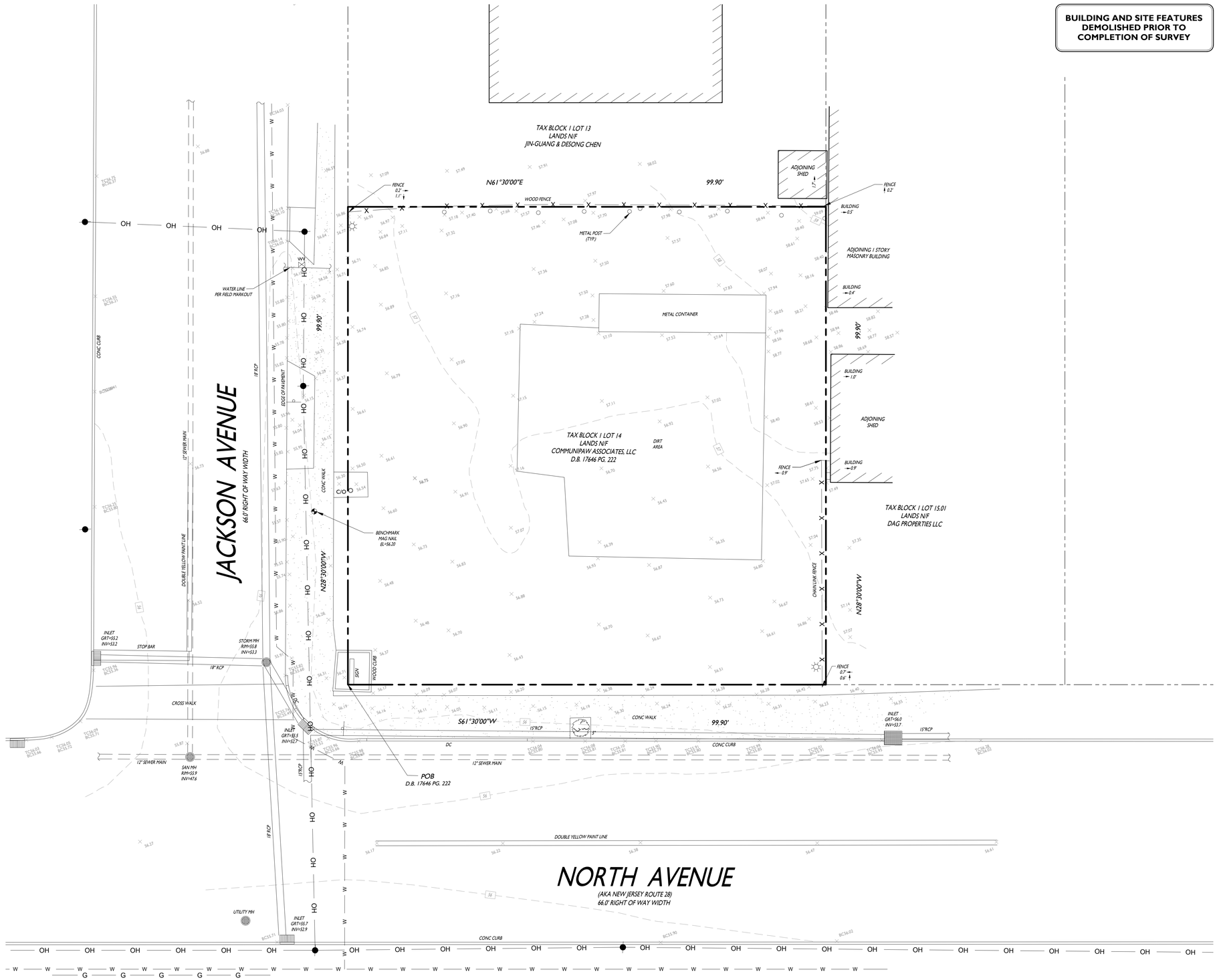
STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: T-19325

TITLE: COVER SHEET

DRAWING: C-1

T:\2019\T-19325 VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\DP-01-COVR.DWG



SYMBOL	DESCRIPTION
	BUILDING
	CONCRETE SIDEWALK / MAT
	ASPHALT / CONCRETE CURB
D.C	DEPRESSED CURB
	PROPERTY LINE
	ADJACENT PROPERTY LINE
C.L.F.	CHAIN LINK FENCE
	BOARD-ON-BOARD FENCE
	GUIDE RAIL
	MAST ARM LIGHT POLE
	POLE
	LIGHT POLE
	SIGNS
WV	WATER VALVE
GV	GAS VALVE
	FIRE HYDRANT
	DRAIN
	INLET
	MAN HOLE
	BOLLARDS
MW	MONITORING WELL
	SIAMESE CONNECTION
	BOX (ELEC, GAS, ETC.)
E.P.	EDGE OF PAVEMENT
OH	OVERHEAD WIRE
G	UNDERGROUND GAS LINE
W	UNDERGROUND WATER LINE
E	UNDERGROUND ELEC LINE
100	MAJOR CONTOUR
101	MINOR CONTOUR
× 100.00	GRADE SPOT SHOT
× TC 100.50	TOP OF CURB SHOT
× BC 100.00	BOTTOM OF CURB SHOT
× TW 102.00	TOP OF WALL SHOT
× BW 100.00	BOTTOM OF WALL SHOT
	HANDICAP PARKING
LS	LANDSCAPING
E	ELEC METER
G	GAS METER
W	WATER METER
C/O	CLEAN OUT
	SURVEY MONUMENT
	IRON PIN
	BENCH MARK

SURVEY NOTES:

1. THE SURVEY LISTED WITHIN THE PLAN REFERENCES ON THE COVER SHEET SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THE SURVEY AND ASSOCIATED DOCUMENTS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF THE SURVEY AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SURVEY NOTES:

1. THE ADDRESS FOR THIS PROPERTY IS 150 NORTH AVENUE PER RECORDS.
2. THIS SURVEY AND THE BOUNDARIES SHOWN HEREON ARE THE RESULT OF AN ACTUAL FIELD SURVEY PERFORMED DURING MARCH OF 2020 BASED ON AVAILABLE MAPS AND DEEDS OF RECORD, AND PHYSICAL EVIDENCE.
3. THIS SURVEY IS VALID ONLY WHEN AN EMBOSSED SEAL IS AFFIXED HERETO.
4. THE CERTIFICATION SHOWN HEREON IS NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
5. LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED ON OBVIOUS ABOVE GROUND PHYSICAL UTILITY APPURTENANCES AND ACCESSIBLE MANHOLES. THE EXACT LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED BY DIGGING TEST HOLES PRIOR TO ANY DESIGN OR CONSTRUCTION. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
6. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), ESTABLISHED VIA RTK GPS OBSERVATIONS.
7. THE PROPERTY HAS DIRECT ACCESS TO NORTH AVENUE & JACKSON AVENUE.
8. A WRITTEN WAIVER AND DIRECTION NOT TO SET CORNER MARKERS HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO P.L. 2003, C.14 (C45:8-36.3) AND N.J.A.C. 13:40-5.1(D)

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
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1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

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LICENSED PROFESSIONAL ENGINEER

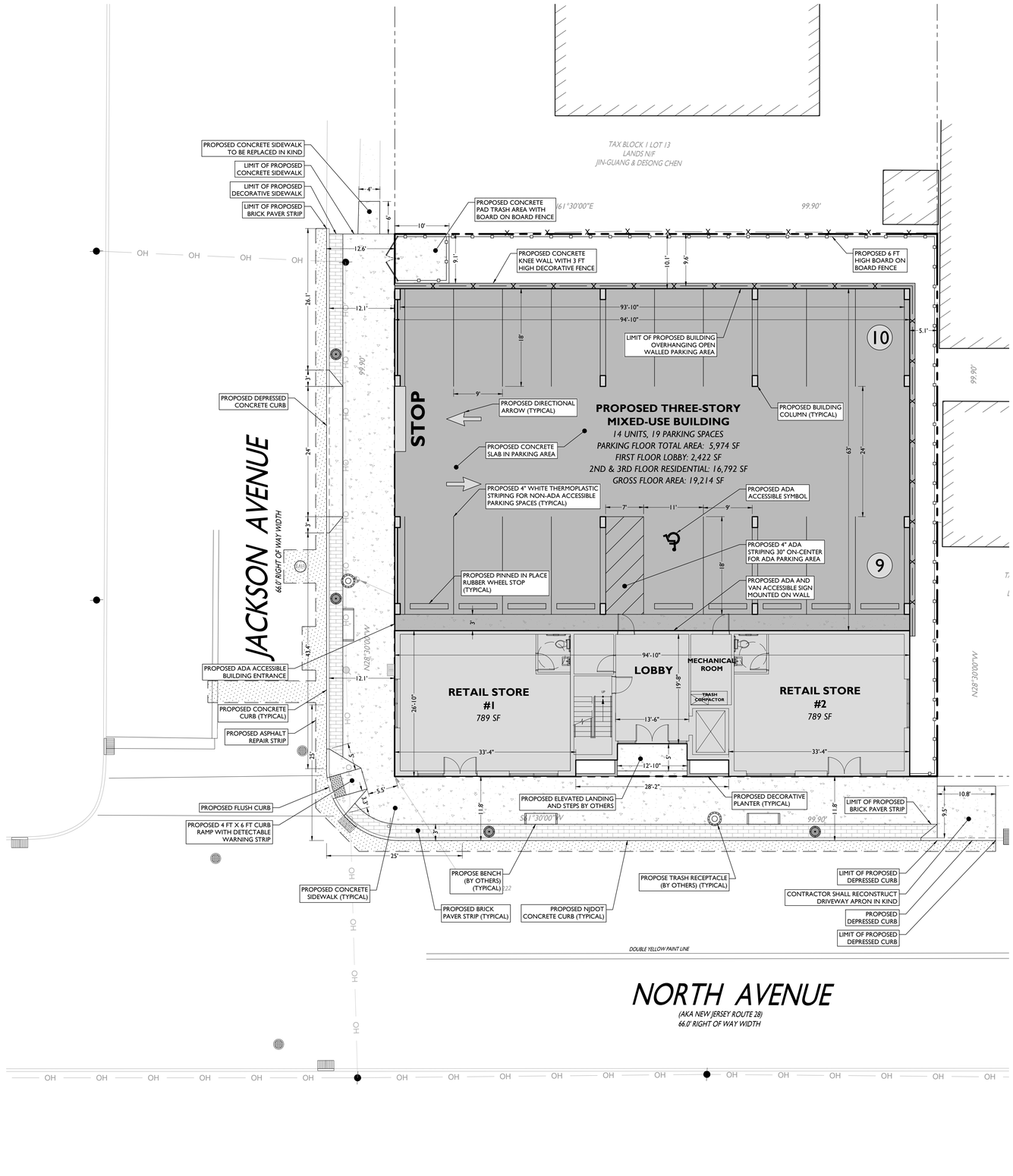
STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: T-19325

TITLE: EXISTING CONDITIONS PLAN

DRAWING: C-2

T:\2019T-19325 | NILAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\LDP-C2-EXISTING



LAND USE AND ZONING

BLOCK 1, LOT 14

REMAINDER PARCELS - REDEVELOPMENT AREA
NORTH AVENUE BETWEEN JACKSON AVENUE AND JEFFERSON AVENUE

PROPOSED USE			
MULTI-FAMILY RESIDENTIAL	PERMITTED USE		
RETAIL	PERMITTED USE		
ZONING REQUIREMENT	**REQUIRED**	**EXISTING**	**PROPOSED**
LOT AREA	N/A	9,980 SF (0.23 AC)	9,980 SF (0.23 AC)
BUILDING HEIGHT	3 STORIES	1 STORY	3 STORIES
MAXIMUM DWELLING UNIT DENSITY	20 UNITS/AC	N/A	61 UNITS/AC (D)
FRONT YARD SETBACK	0.0 FT (*)	46.4 FT	0.0 FT
SIDE YARD SETBACK	0.0 FT	12.7 FT	5.1 FT
REAR YARD SETBACK	0.0 FT	26.1 FT	10.1 FT
MINIMUM LANDSCAPE AREA	10%	0.0%	12.5% (1,246 SF)

(D) DEVIATION
(*) ALL NEW STRUCTURES OR BUILDINGS SHALL BE LOCATED AT THE FRONT PROPERTY LINE TO PROVIDE A CONTINUOUS STREET WALL

OFF-STREET PARKING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
REDEVELOPMENT PLAN §8.13 (1)	**OFF-STREET PARKING REQUIREMENT:** RESIDENTIAL REQUIREMENT: 1.8 SPACES PER 1-BEDROOM UNIT (4 UNITS) (1.8 SPACES / UNIT) = 7.2 SPACES 2.0 SPACES PER 2-BEDROOM UNIT (10 UNITS) (2 SPACES / UNIT) = 20.0 SPACES RETAIL REQUIREMENT: 1 SPACE PER 200 SF OF GFA, PLUS 1 ADDITIONAL SPACE FOR EACH 300 SF OF ADDITIONAL GFA 1578 SF = 6 SPACES **TOTAL: 33 SPACES**	19 SPACES (*)
REDEVELOPMENT PLAN §8.13 (2)	MINIMUM PARKING SPACE SIZE: PARKING SPACE = 9 FT X 18 FT	9 FT X 18 FT
REDEVELOPMENT PLAN §8.13 (2)	MINIMUM DRIVE-AISLE WIDTH: 90-DEGREE PARKING = 24 FT	24 FT

(*) PER SECTION 8.13(1) IN THE DUNELLEN DOWNTOWN REDEVELOPMENT PLAN THE DEVELOPMENT IS EXEMPT FROM OFF-STREET PARKING REQUIREMENTS

DESIGN REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§115-39(B)	FENCE HEIGHT REQUIREMENTS: MAXIMUM FENCE HEIGHT (SOLID) = 6 FT	6 FT
§115-40(C)	BUFFER HEIGHT REQUIREMENTS: MINIMUM BUFFER HEIGHT = 4FT	6 FT (FENCE)
§115-40(D)	PARKING AREA - RESIDENTIAL LOT BUFFER HEIGHT REQUIREMENTS: MINUMUM BUFFER HEIGHT = 6FT	6 FT (FENCE)

DUNELLEN REDEVELOPMENT PLAN REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§7.4.4 (7)	DECORATIVE WALKWAY REQUIREMENTS: ALL WALKWAYS SHALL USE DECORATIVE PAVERS	COMPLIES
§7.4.4 (8)	STREETSCAPE FURNITURE REQUIREMENTS: BOTH TRASH RECEPTACLES AND BENCHES ARE REQUIRED AND SHALL BE OF MATERIALS COMPLEMENTING THE BUILDING SAND THE RAILROAD TOWN THEME	COMPLIES
§8.2	STREETSCAPE FURNITURE REQUIREMENTS CONTINUED: BENCHES-RECYCLED PLASTICS WITH WROUGHT IRON FRAME, METAL OR IRON TRASH RECEPTACLES MATCHING BENCHES, SHRUBS, TREES, AND GROUND COVER, WALKWAYS MADE OF BRICK AND OR DECORATIVE MASON MATERIALS, PLANTERS, AVNNINGS, DECORATIVE AND/OR AMERICAN FLAGS, PORCHES/STEPS, FLOWER POTS, BICYCLE RACKS	COMPLIES

SIGNAGE REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
ORDINANCE 2013-01 § IX. A. 3.	ILLUMINATION REQUIREMENTS: IF SIGNS ARE ILLUMINATED, THEY MUST BE EXTERNALLY ILLUMINATED	COMPLIES
ORDINANCE 2013-01 § IX. A. 4	ILLUMINATION REQUIREMENTS CONTINUED: FREESTANDING ILLUMINATED SIGNS AND ILLUMINATED WALL MOUNTED SIGNS SHALL HAVE THEIR LIGHT SOURCE LOCATED EITHER ON THE GROUND SHINING UP OR MOUNTED ON THE TOP OF THE SIGN SHINING DOWN	COMPLIES
ORDINANCE 2013-01 § IX. B. 1.	LOCATION REQUIREMENTS: ON BUILDINGS DESIGNED FOR COMMERCE, SIGNS SHOULD FIT IN THE EXISTING FEATURES OF THE FACADE, SUCH AS WHEN FACADE BANDS OF DECORATIVE MOLDINGS CREATE NATURAL FRAMES FOR SIGNS. SIGNS SHOULD BE ALIGNED WITH SIGNS ON ADJACENT STOREFRONTS	COMPLIES
ORDINANCE 2013-01 § IX. B. 7.	LETTERING REQUIREMENTS: LETTERING FOR ANY SIGN SHALL NOT EXCEED 12" IN HEIGHT, UNLESS OTHERWISE RESTRICTED IN THIS ORDINANCE	12"
ORDINANCE 2013-01 § XIV. A.	WALL SIGN LOCATION REQUIREMENTS: WALL SIGNS ARE PERMITTED ONLY ON THE FACADES OF BUILDINGS FRONTING ON A STREET, PARKING LOT, OR PUBLIC RIGHT OF WAY	COMPLIES
ORDINANCE 2013-01 § XIV. A. 1. (a)	WALL SIGNS: MAXIMUM QUANTITY = 1 SIGN PER FACADE MAXIMUM SIZE = 2/3 OR 66% OF THE LENGTH OF FACADE AND 3/4 OR 75% OF THE HEIGHT OF THE BUILDING;S SIGN BAND. WHERE NO SIGN BAND IS PRESENT, THE WALL SIGN SHALL NOT EXCEED 24 SF	3 SIGNS COMPLIES 24 SF
ORDINANCE 2013-01 § XIV. A. 1. (b)	WALL SIGN QUANTITY REQUIREMENTS: NO MORE THAN ONE (1) EXTERNALLY ILLUMINATED WALL SIGN PER SEPARATE FRONT FACADE SHALL BE PERMITTED	COMPLIES
ORDINANCE 2013-01 § XIV. A. 1. (d)	PROJECTING SIGN ILLUMINATION REQUIREMENTS: EXTERNALLY ILLUMINATED PROJECTING WALL SIGNS ARE PERMITTED WITH THE REQUIREMENT THAT THE ILLUMINATION SPREAD CANNOT BE BEYOND THE BOUNDARY OF THE SIGN AREA	COMPLIES
ORDINANCE 2013-01 § XIV. A. 2.	WALL SIGN LOCATION REQUIREMENTS CONTINUED: A WALL SIGN SHALL NOT EXTEND BEYOND THE ENDS OF THE WALL SURFACE ON WHICH IT IS PLACED AND SHALL BE BELOW THE TOP OF THE FIRST STORY, OR BELOW THE TOP OF THE PARAPET OF THE PREMISES, OR NOT OVER 17 FT ABOVE GRADE, WHICHEVER SHALL BE LOWER. NO PART OF THE SIGN SHALL BE MORE THAN 6" BEYOND THE BUILDING FACADE.	COMPLIES

SYMBOL	DESCRIPTION
	PROPERTY LINE
	SETBACK LINE
	SAWCUT LINE
	PROPOSED CURB
	PROPOSED DEPRESSED CURB
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED CHAINLINK FENCE
	PROPOSED BOARD-ON-BOARD FENCE
	PROPOSED BUILDING DOORS

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

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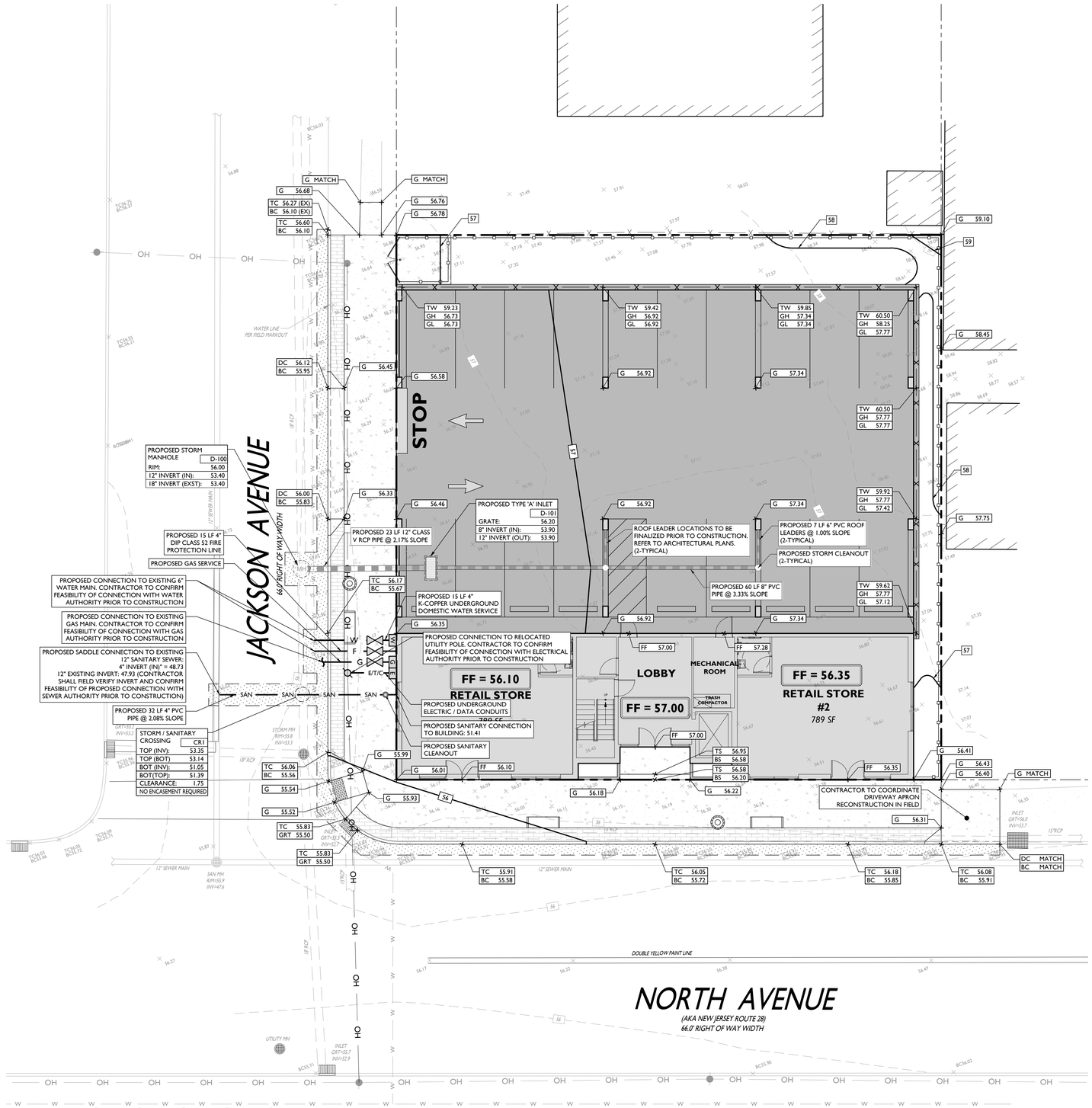
SCALE: 1" = 10' | PROJECT ID: T-19325

TITLE: SITE PLAN

DRAWING: C-3

T:\2019\T-19325\VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\DP-04-SITE.DWG



SYMBOL / DESCRIPTION

SYMBOL	DESCRIPTION
	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
RIDGELINE	PROPOSED GRADING RIDGELINE
	PROPOSED DIRECTION OF DRAINAGE FLOW
G 100.00	PROPOSED GRADE SPOT SHOT
TC 100.50 / BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
DC 100.12 / BC 100.00	PROPOSED DEPRESSED CURB / BOTTOM OF CURB SPOT SHOT
TW 102.00 / BW 100.00	PROPOSED TOP OF WALL / BOTTOM OF WALL SPOT SHOT
	PROPOSED STORMWATER STRUCTURES
	PROPOSED STORMWATER PIPING
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E/T/C	PROPOSED ELECTRICAL/DATA CONDUITS
OH	PROPOSED OVERHEAD WIRES
G	PROPOSED GAS LINE
	PROPOSED VALVE
	PROPOSED SANITARY CLEANOUT
	PROPOSED UTILITY POLE

DRAINAGE AND UTILITY NOTES

1. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
2. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
4. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
6. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
8. CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADIENT.
9. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
10. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

GRADING NOTES

1. ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
2. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
4. THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
5. MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
   - CURB GUTTER: 0.50%
   - CONCRETE SURFACES: 1.00%
   - ASPHALT SURFACES: 1.00%
5. A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET.
6. FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

1. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION. THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
2. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC. AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

ADA NOTES

1. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
2. THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
3. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
4. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP, AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
6. ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
7. A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
8. THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¼ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¼ INCHES AND ½ INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP ¼ INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
9. THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ½ INCH.

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
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PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: T-19325

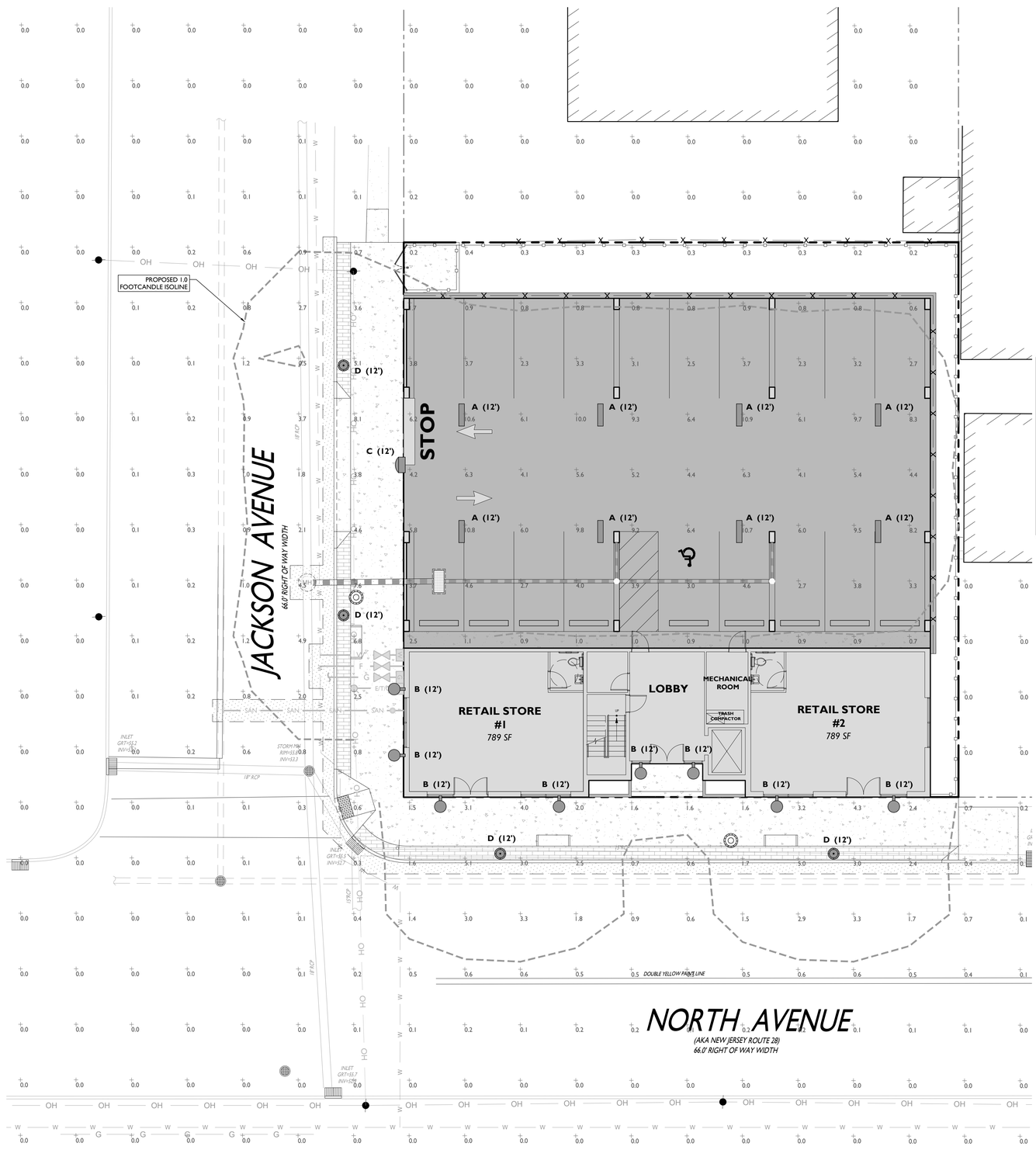
TITLE:

GRADING, DRAINAGE, & UTILITY PLAN

DRAWING:

C-4

T:\2019\T-19325 VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\DP-05-GRAD.DWG



DESIGN REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§115A-15.1 B. (12) (a)	A MINIMUM OF 0.25 FOOTCANLDE SHALL BE PROVIDED FOR ALL NONRESIDENTIAL OFF-STREET PARKING FACILITIES	0.6 FOOTCANDLE
§115A-15.1 B. (12) (b)	A MINIMUM OF 1.0 FOOTCANDLE SHALL BE PROVIDED AT DRIVEWAYS AND DRIVEWAY INTERNAL INTERSECTIONS	3.8 FOOTCANDLE
§115A-15.1 B. (12) (c)	THE LIGHTING OF PARKING FACILITIES THAT ABUT RESIDENTIAL LAND SHALL BE ARRANGED AND INSTALLED SO AS NOT TO REFLECT OR CAUSE GLARE ON THE ABUTTING RESIDENTIAL LAND, IN ACCORDANCE WITH PROVISIONS OF PERFORMANCE STANDARDS	COMPLIES
§115A-15.1 B. (12) (e)	FREESTANDING LIGHTS SHALL NOT EXCEED 25 FT IN HEIGHT	12 FT
§115A-20 Q.	THE EXTERIOR OF A SITE WITH GREATER THAN 100 FT OF STREET FRONTAGE SHALL PROVIDE DECORATIVE LAMPPOSTS APPROXIMATELY 10 FT TO 12 FT HIGH, SPACED AT INTERVALS OF APPROXIMATELY 40 FT TO 60 FT ALONG OR NEAR ALL STREET LINES AND DRIVEWAYS	COMPLIES

DUNELLEN REDEVELOPMENT PLAN REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§8.5 (7)	ADEQUATE AND APPROPRIATE LIGHTING SHALL BE PROVIDED TO PROMOTE A SENSE OF SECURITY IN THE PUBLIC OPEN SPACE	COMPLIES
§8.5 (11)	PUBLIC SIDEWALK AREAS SHALL BE LANDSCAPED AND DURABLY PAVED AND SHALL BE PROPERLY ILLUMINATED WITH SAFE AND ADEQUATE LIGHTING	COMPLIES

SYMBOL	DESCRIPTION
	PROPOSED CALCULATION AREA
	PROPOSED ISOMETRIC LINE
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
X.X	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT

PROPOSED LUMINAIRE SCHEDULE

SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	8	EG3 SERIES - 4 FT - CANOPY LIGHT - 4000K - 31.79 WATT *	V	0.90	LSI LIGHTING	EG3-4-LED-04L-CL-S-40-80.IES
	B	8	PHANTOM SERIES - 21" - WALL SCONCE LIGHT - 4000K - 27.5 WATT *	--	0.90	MODERN FORMS	WS-W1621-SS.IES
	C	1	PATRIOT SERIES - WALL PACK - 4000K - 33.5 WATT *	WT	0.90	LSI LIGHTING	XPWS3-WT-LED-28-350-NW-UE.IES
	D	4	CAPITOL NARROW SERIES - HIGH PRESSURE SODIUM - 100 WATT *	V-HORIZONTAL	0.72	HADCO LIGHTING	20_v4800-15s5vb5.IES

(*) SIMILAR FIXTURES ARE PERMITTED. CONTRACTOR SHALL PROVIDE CUT SHEETS AND SPECIFICATIONS PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL

CANOPY LIGHTING FIXTURE
(TYPE 'A')

AREA LIGHTING FIXTURE
(TYPE 'D')

WALL MOUNTED LIGHTING FIXTURE
(TYPE 'B')

WALL MOUNTED LIGHTING FIXTURE
(TYPE 'C')

GENERAL LIGHTING NOTES

1. THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH ARE WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
2. WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
3. UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
   - LIGHT EMITTING DIODES (LED): 0.90
   - HIGH PRESSURE SODIUM: 0.72
   - METAL HALIDE: 0.72
4. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
5. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
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PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: T-19325

TITLE:

LIGHTING PLAN

DRAWING:

C-5

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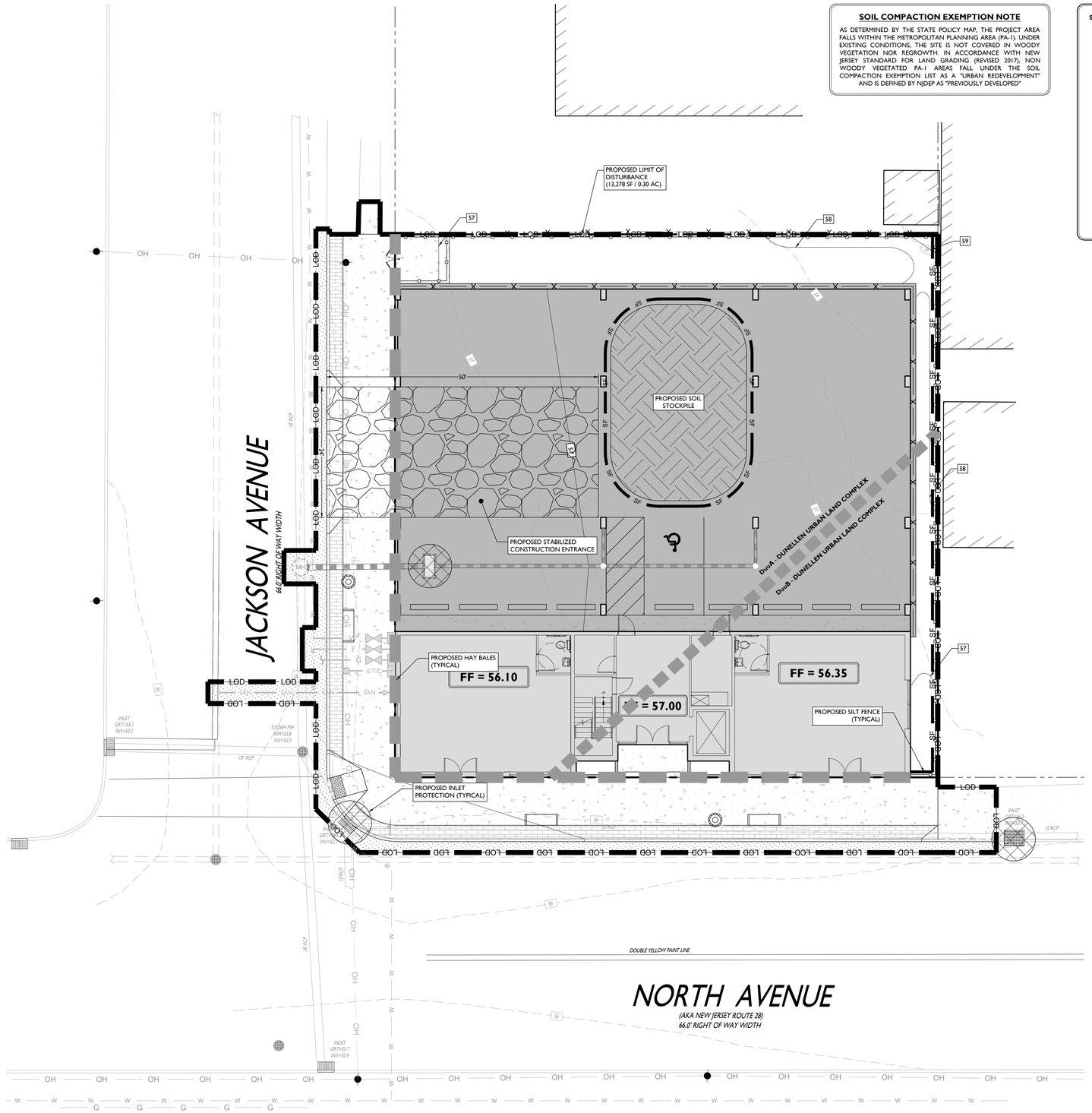


SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA-1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA-1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED"

STABILIZATION SPECIFICATIONS:

1.A. TEMPORARY SEEDING AND MULCHING:
GROUND LIMESTONE - APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.
FERTILIZER - APPLY 11LBS./1,000 SF OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4".
SEED - PERENNIAL RYEGRASS 100 LBS./ACRE (2.3 LBS./1,000 SF) OR OTHER APPROVED SEEDS; PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.
MULCH - UNROTTED STRAW OR HAY AT A RATE OF 70 TO 90 LBS./1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

1.B. B. PERMANENT SEEDING AND MULCHING:
TOPSOIL - UNIFORM APPLICATION TO A DEPTH OF 5" (UNSETTLED).
GROUND LIMESTONE - APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.
FERTILIZER - APPLY 11 LBS./1,000 SF OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4".
SEED - TURF TYPE TALL FESCUE (BLEND OF 3 CULTIVARS) 350 LBS./ACRE (8 LBS./1,000 SF) OR OTHER APPROVED SEEDS; PLANT BETWEEN MARCH 1 AND OCTOBER 1 (SUMMER SEEDINGS REQUIRE IRRIGATION)
MULCH - UNROTTED STRAW OR HAY AT A RATE OF 70 TO 90 LBS./1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

DUST CONTROL NOTES

1. MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 5-1
2. VEGETATIVE COVER - SEE STANDARD FOR: TEMPORARY VEGETATIVE COVER, PG. 7-1, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1 AND PERMANENT STABILIZATION WITH SOD, PG. 6-1
3. SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS), KEEP TRAFFIC OFF THESE AREAS.
4. 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.
5. SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.
6. 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.
7. 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.
8. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

SOIL CHARACTERISTICS CHART

TYPE OF SOIL	BOONTON LOAM (BOGB)
PERCENT OF SITE COVERAGE	19.4%
HYDROLOGIC SOIL GROUP	C
DEPTH TO RESTRICTIVE LAYER	20 TO 36 INCHES
SOIL PERMEABILITY	0.06 TO 0.20 IN / HR
DEPTH TO WATER TABLE	> 80 INCHES

SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE. (3 DAYS)
2. DEMOLISH EXISTING BUILDINGS. ALL EXPOSED SOIL AREAS FOR DEMOLITION SHALL BE STABILIZED TEMPORARILY UNTIL THE NEXT PHASE OF CONSTRUCTION BEGINS. (4 WEEKS)
3. ROUGH GRADING AND EXCAVATION. (4 WEEKS)
4. BUILDING CONSTRUCTION AND SITE IMPROVEMENTS. (6 MONTHS)
5. STREETSCAPE IMPROVEMENTS. (4 WEEK)
6. REMOVE SILT FENCE AND SOIL EROSION MEASURES (1 DAY)

TOTAL ESTIMATED TIME = 9 MONTHS

NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUILE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO TOWNSHIP AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.

811

Know what's **below**
Call before you dig.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

SYMBOL / DESCRIPTION

SYMBOL	DESCRIPTION
	PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
LOD	PROPOSED LIMIT OF DISTURBANCE
SF	PROPOSED SILT FENCE
TPF	PROPOSED TREE PROTECTION FENCE
	PROPOSED STOCKPILE & EQUIPMENT STORAGE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED INLET PROTECTION FILTER

FREEHOLD SOIL CONSERVATION DISTRICT NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A. 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) 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 THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
Headquarters: 92 Park Avenue, Rutherford, NJ 07070
Phone 201.340.4468 · Fax 201.340.4472

PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

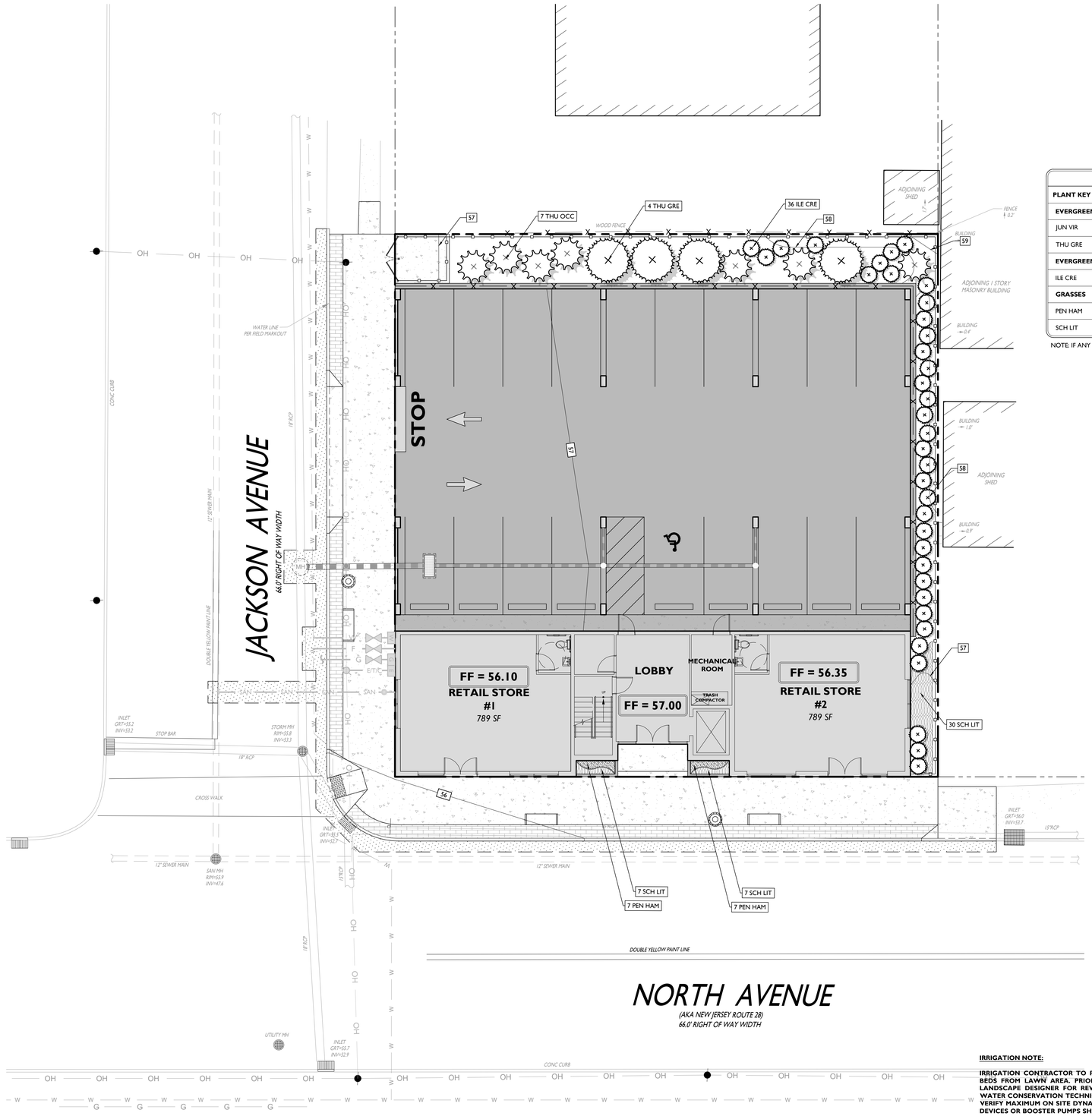
STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: T-19325

TITLE: SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING: C-6

T:\2019\T-19325 VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\DP-08-SESC.DWG



PLANT SCHEDULE

PLANT KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
EVERGREEN TREES					
JUN VIR	7	'THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	6' HT	B&B
THU GRE	4	THUJA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	6' HT	B&B
EVERGREEN SHRUBS					
ILE CRE	36	ILEX CRENATA 'SKY PENCIL'	SKY PENCIL HOLLY	18"-24"	B&B
GRASSES					
PEN HAM	14	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN FOUNTAIN GRASS	1 GAL	30" o.c.
SCH LIT	44	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS	1 GAL	30" o.c.

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

LANDSCAPING AND BUFFER REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§8.3	ALONG NORTH AVENUE AND BOUND BROOK ROAD: DECIDUOUS TREES, NATIVE TO NEW JERSEY, SHOULD BE PLANTED APPROXIMATELY 50-FOOT ON-CENTER AND IN RELATION TO BUILDING FACADE. TREES SHALL BE OVER 12 FEET IN HEIGHT; A MINIMUM 3-INCH CALIPER (DBH) AND SHALL BE PLANTED ON THE STREET SIDE OF ANY SIDEWALK.	0 TREES (V)
§8.5 (4)	ALL AREAS NOT COVERED BY BUILDING, PAVEMENT OR IMPERVIOUS SURFACE SHALL BE LANDSCAPED BY A MIX OF EVERGREEN AND DECIDUOUS TREES, SHRUBBERY AND HERBACEOUS PLANTS, INCLUDING GRASS-NATIVE SPECIES PROVEN TO RESIST THE URBAN ENVIRONMENT IN THIS AREA. EVERGREEN SCREEN PLANING SHALL BE A MINIMUM OF FOUR (4) FEET IN HEIGHT. DECIDUOUS SHRUBS SHALL BE A MINIMUM OF TWELVE TO EIGHTEEN (12 TO 18) INCHES IN HEIGHT. MATERIAL SHALL BE PLANTED, BALLED, AND BURLAPPED AND BE OF SPECIMEN QUALITY AS ESTABLISHED BY THE AMERICAN ASSOCIATE OF NURSERYMEN. AT INITIAL PLANTING SAID MATERIAL SHALL PROVIDE A SCREEN FROM THE TOP OF THE PLANTING TO WITHIN SIX (6) INCHES OF GRADE. OTHER PLANT MATERIALS SHALL BE DENSE AND SPECIMEN QUALITY AS DETERMINED ABOVE. ALL DECIDUOUS TREES SHALL BE A MINIMUM OF THREE (3) INCHES IN CALIPER OR TWELVE (12) FEET IN HEIGHT.	COMPLIES

(V) VARIANCE

BEFORE YOU BREAK GROUND FOR A PROJECT AROUND YOUR YARD, SUCH AS A FENCE, IN-GROUND POOL, OR HOME ADDITION, YOU MUST CALL NEW JERSEY ONE CALL AT (800) 272-1000 TO REQUEST A MARK OUT OF THE UTILITY SERVICES THAT ARE UNDERGROUND. IT IS RECOMMENDED THAT YOU CALL 3 DAYS BEFORE YOU DIG. THE STATE NEW JERSEY REQUIRES THAT YOU CALL "BEFORE" YOU DIG SO THAT YOU CAN IDENTIFY WHERE THE UNDERGROUND UTILITIES ARE LOCATED (SUCH AS WATER, GAS, ELECTRIC, PHONE, CABLE, ETC.) ONCE THE SERVICES ARE "MARKED OUT", YOU CAN DIG WITHOUT THE RISK OF INTERRUPTING SERVICE FROM ONE OF THESE UTILITIES. DAMAGING PROPERTY OR

ONE CALL

NEW JERSEY

SUFFERING PERSONAL INJURY. IF YOU ARE HAVING A PROFESSIONAL DO THE WORK FOR YOU, THEY ARE RESPONSIBLE TO CONTACT ONE CALL. UTILITY SERVICES ARE MARKED OUT WITH PAINT OR A FLAG. THE FOLLOWING LIST WILL HELP YOU IDENTIFY WHAT UTILITY HAS PERFORMED A MARK OUT:

ELECTRIC=RED, GAS/OIL=YELLOW, COMMUNICATION TV=ORANGE, WATER=BLUE, SEWER=GREEN, TEMPORARY SURVEY MARKINGS=MAGENTA, PROPOSED EXCAVATION=WHITE

LANDSCAPING NOTES

1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
3. THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH .
4. THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
6. THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.

IRRIGATION NOTE:

IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

10' 0' 10' 20'

GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
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NOT APPROVED FOR CONSTRUCTION

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PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: T-19325

TITLE:

LANDSCAPING PLAN

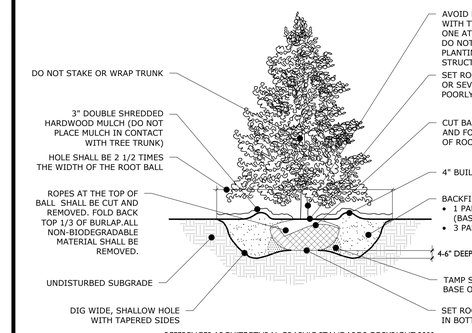
DRAWING:

C-7

T:\2019\T-19325\ VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\LDP-09-LANDSCAPE

NOTES:

1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
3. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILDS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX



REFERENCES ARCHITECTURAL GRAPHIC STANDARDS COPYRIGHT 2000

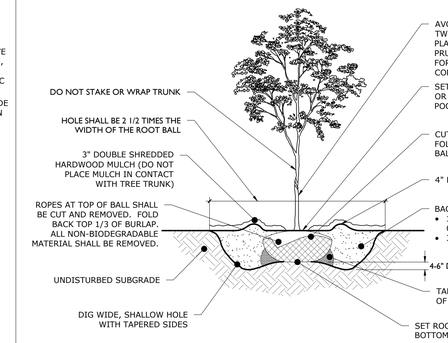
EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

1

NOTES:

1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
3. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILDS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX



REFERENCES ARCHITECTURAL GRAPHIC STANDARDS COPYRIGHT 2000

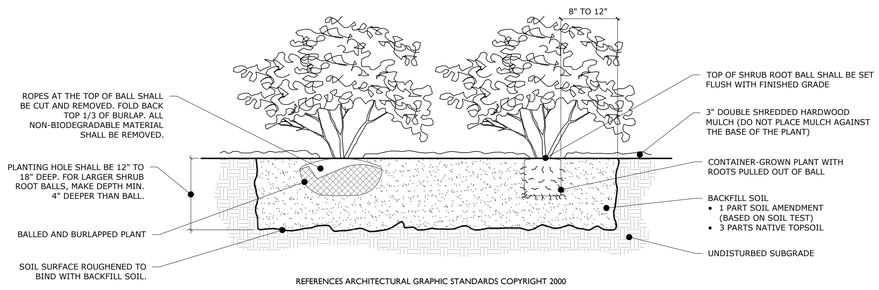
DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

2

NOTES:

1. FOR THE CONTAINER-GROWN SHRUBS, USE FINGERS OR SMALL HAND TOOL TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE SHRUB ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL



REFERENCES ARCHITECTURAL GRAPHIC STANDARDS COPYRIGHT 2000

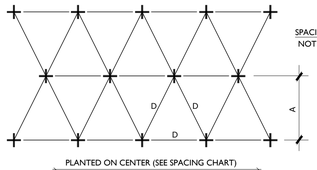
DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

3

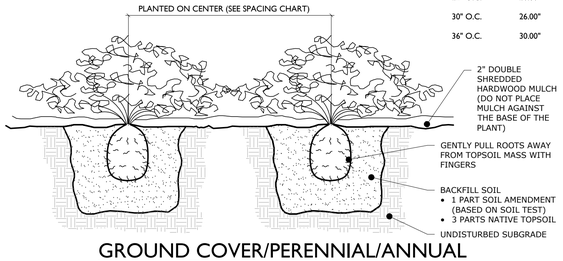
NOTES:

1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
2. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILDS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILDS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX
3. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT PER MANUFACTURER'S SPECIFICATIONS



SPACING CHART
NOT TO SCALE

SPACING "D"	ROW "A"
6" O.C.	5.20"
8" O.C.	6.93"
10" O.C.	8.66"
12" O.C.	10.40"
15" O.C	13.00"
18" O.C.	15.60"
24" O.C.	20.80"
30" O.C.	26.00"
36" O.C.	30.00"



GROUND COVER/PERENNIAL/ANNUAL PLANTING DETAIL

NOT TO SCALE

4

T:\2019\T-19325 WILLIAM BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\DP-PR-LAND.DWG

GENERAL LANDSCAPING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY.
2. WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL.
3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL, IF SO REQUESTED.
4. IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY.
5. UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS.) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF ANY PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER, OR GOVERNING MUNICIPAL OFFICIAL.
6. THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.

PROTECTION OF EXISTING VEGETATION NOTES:

1. BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING. FENCING SHALL BE LOCATED AT THE DRIP-LINE OR LIMIT OF DISTURBANCE AS DEPICTED WITHIN THE APPROVED OR FINAL PLAN SET, ESTABLISHING THE TREE PROTECTION ZONE. FENCE INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE PROTECTION FENCE DETAIL." NO WORK MAY BEGIN UNTIL THIS REQUIREMENT IS FULFILLED. THE FENCING SHALL BE INSPECTED REGULARLY BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
2. IN ORDER TO AVOID DAMAGE TO ROOTS, BARK OR LOWER BRANCHES, NO VEHICLE, EQUIPMENT, DEBRIS, OR OTHER MATERIALS SHALL BE DRIVEN, PARKED OR PLACED WITHIN THE TREE PROTECTION ZONE. ALL ON-SITE CONTRACTORS SHALL USE ANY AND ALL PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, WALKS, PAVEMENTS, UTILITIES, AND ANY OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED UNDER THIS CONTRACT.
3. IN RARE INSTANCES WHERE EXCAVATING, FILL, OR GRADING IS REQUIRED WITHIN THE DRIP-LINE OF TREES TO REMAIN, THE WORK SHALL BE PERFORMED AS FOLLOWS:
   - TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN, THE TREE ROOTS SHALL NOT BE CUT, BUT THE TRENCH SHALL BE TUNNELED UNDER OR AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO THE ROOTS. NO ROOTS, LIMBS, OR WOODS ARE TO HAVE ANY PAINT OR MATERIAL APPLIED TO ANY SURFACE.
   - RAISING GRADES: WHEN THE GRADE AT AN EXISTING TREE IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 6 INCHES (6") IS REQUIRED, CLEAN, WASHED GRAVEL FROM ONE TO TWO INCHES (1" - 2") IN SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES (18") AND FINISH APPROXIMATELY TWO INCHES (2") ABOVE THE FINISH GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNK OF ANY TREE REQUIRING FILL. WHERE FILL EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID TREE WELL SHALL BE CONSTRUCTED. IF APPLICABLE, TREE WELL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE WELL DETAIL."
   - LOWERING GRADES: EXISTING TREES LOCATED IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED, SHALL HAVE RE-GRADING WORK DONE BY HAND TO THE INDICATED ELEVATION, NO GREATER THAN SIX INCHES (6"). ROOTS SHALL BE CUT CLEANLY THREE INCHES (3") BELOW FINISHED GRADE UNDER THE DIRECTION OF A LICENSED ARBORIST. WHERE CUT EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID RETAINING WALL SHALL BE CONSTRUCTED. IF APPLICABLE, THE RETAINING WALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE RETAINING WALL DETAIL."

SOIL PREPARATION AND MULCH NOTES:

1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS.
2. BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIME AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL AMENDMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM.
   - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
3. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL OBTAINED FROM A WELL-DRAINED ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1").
4. TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN MORE THAN 6% ORGANIC MATTER BY WEIGHT.
5. OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE.
6. CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS.
7. UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBED AREA OF THE SITE.
8. LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS THE REQUIRED TOPSOIL), IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN.
9. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER.
11. DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR. GROUND COVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2") TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
12. WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
13. SOIL SHALL BE LOOSENED WITH A BACKHOE OR OTHER LARGE COARSE-TILING EQUIPMENT UNLESS THE SOIL IS FROZEN OR EXCESSIVELY WET. TILING THAT PRODUCES LARGE, COARSE CHUNKS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER THE AREA IS LOOSENED IT SHALL NOT BE DRIVEN OVER BY ANY VEHICLE.
14. APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
15. ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:

MYCRO® TREE SAVER - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS.

- DIRECTIONS FOR USE: USE 3-OZ PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-OZ PER INCH CALIPER. MIX INTO THE BACKFILL WHEN TRANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8 INCHES, AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8 INCHES INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION.
- MYCOR® TREE SAVER® IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ERICOID MYCORRHIZAE.
- SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9.
- FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON THE INOCULATION PROGRAM. SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION.
- OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.

HEALTHY START MACRO TABS 12-8-8

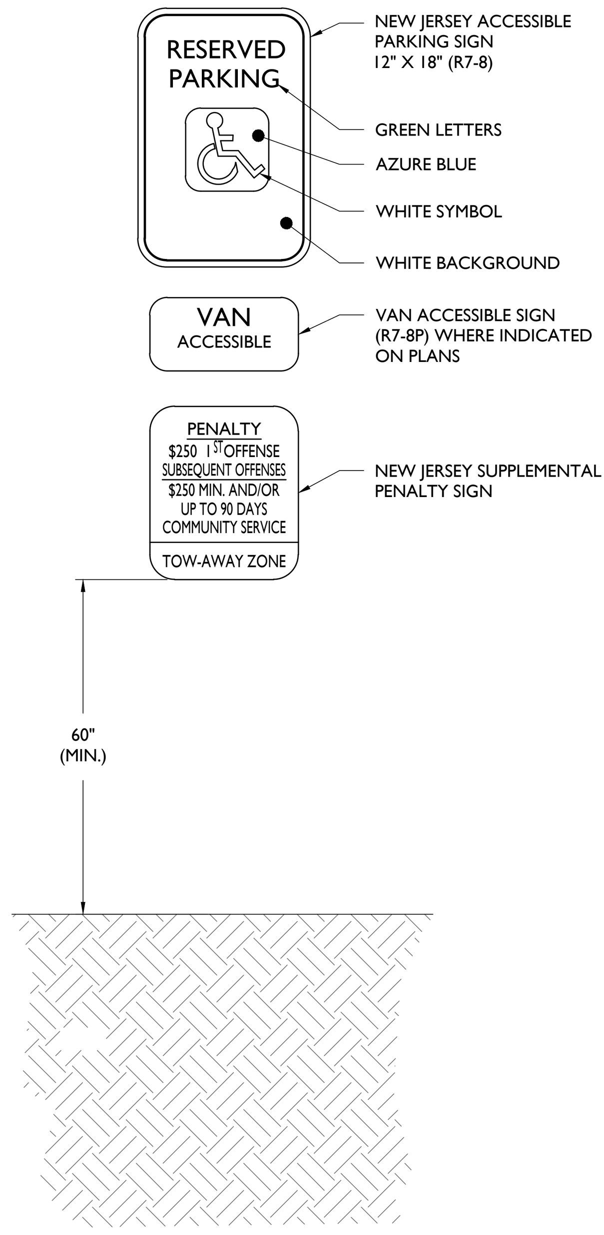
- FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS.
- TABLETS ARE FORMULATED FOR LONG-TERM RELEASE BY SLOW BIODEGRADATION, AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA, AND A COMPLEMENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE: FOR PLANTING BALLED & BURLAPPED (B&B) TREES AND SHRUBS, MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT 1 TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL. EVENLY DISTRIBUTED AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES.

PLANT QUALITY AND HANDLING NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLANT LIST SHALL TAKE PRECEDENCE OVER COMMON NAMES.
3. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEAVY, TIGHTLY KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND, HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE.
4. PLANTS SHALL MUST BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REJECTED.
5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE.
6. THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF.
7. ALL PLANTS DESIGNATED BALL AND BURLAP (B&B) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK AND ALL BURLAP IS TO BE REMOVED.
8. PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INJURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT, OR IMPROPER HANDLING OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOIST, FRESH, AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
9. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING DETAILS.
10. LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN POSSIBLE. THE ROOT BALL SHALL BE KEPT MOIST AT ALL TIME AND COVERED WITH MOISTENED MULCH OR ALGED WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED SO AS TO NOT ALLOW THE ROOT BALL TO DRY OUT. PLANTINGS SHALL BE UNTIED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.
11. NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL.
12. PLANTS WITH INJURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY DISEASED OR INJURED PLANTS SHALL BE REMOVED.
13. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO RELOCATE OR ENLARGE PLANTING PITS OR DELETE PLANT MATERIAL FROM THE CONTRACT.
14. IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF EIGHT FEET (8') ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2') ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY.
15. INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:
    PLANTS (MARCH 15 - DECEMBER 15)
    LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER 1 - DECEMBER 1)
16. THE FOLLOWING TREES ARE SUSCEPTIBLE TO TRANSPLANT SHOCK AND SHALL NOT BE PLANTED DURING THE FALL SEASON (STARTING SEPTEMBER 15):

ABIES CONCOLOR	CORNUS VARIETIES	OSTRYA VIRGINIANA
ACER BUERGERIANUM	CRATAEGUS VARIETIES	PINUS NIGRA
ACER FREEMANII	CUPRESSOCYPARIS LEYLANDII	PLATANUS VARIETIES
ACER RUBRUM	FAGUS VARIETIES	POPULUS VARIETIES
ACER SACCHARINUM	HALESIA VARIETIES	PRUNUS VARIETIES
BETULA VARIETIES	ILEX X FOSTERII	PYRUS VARIETIES
CARPINUS VARIETIES	ILEX NELLIE STEVENS	QUERCUS VARIETIES (NOT Q. PALUSTRIS)
CEDRUS DEODARA	ILEX OPACA	SALIX WEEPING VARIETIES
CELTIS VARIETIES	JUNIPERUS VIRGINIANA	SORBUS VARIETIES
CERCIDIPHYLLUM VARIETIES	KOELREUTERIA PANICULATA	TAXODIUM VARIETIES
CERCIS CANADENSIS	LIQUIDAMBAR VARIETIES	TAXUX B REPANDENS
CORNUS VARIETIES	LIRIODENDRON VARIETIES	TILIA TOMENTOSA VARIETIES
CRATAEGUS VARIETIES	MALUS IN LEAF	ULMUS PARVIFOLIA VARIETIES
	NYSSA SYLVATICA	ZELKOVA VARIETIES

17. IF A PROPOSED PLANT IS UNATTAINABLE OR ON THE FALL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL PRIOR TO ORDERING AND INSTALLATION.
18. DURING THE COURSE OF CONSTRUCTION/PLANT INSTALLATION, EXCESS AND WASTE MATERIALS SHALL BE CONTINUOUSLY AND PROMPTLY REMOVED AT THE END OF EACH WORK DAY. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF AND ALL PAVED AREAS SHALL BE CLEANED.
19. THE LANDSCAPE CONTRACTOR SHALL DISPOSE OF ALL RUBBISH AND EXCESS SOIL AT HIS EXPENSE TO AN OFF-SITE LOCATION AS APPROVED BY THE LOCAL MUNICIPALITY.
20. A 90-DAY MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER ALL PLANTS HAVE BEEN SATISFACTORILY INSTALLED.
21. MAINTENANCE 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 IF ORIGINALLY REQUIRED, WATERING WHEN NEEDED OR DIRECTED, WEEDING,

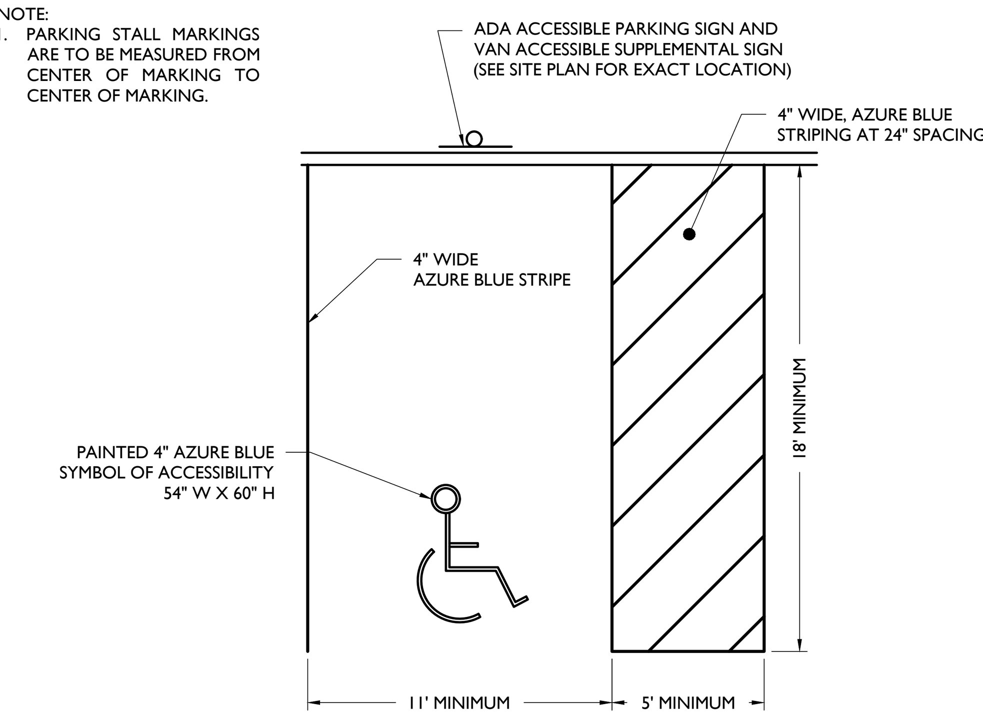


ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE

1

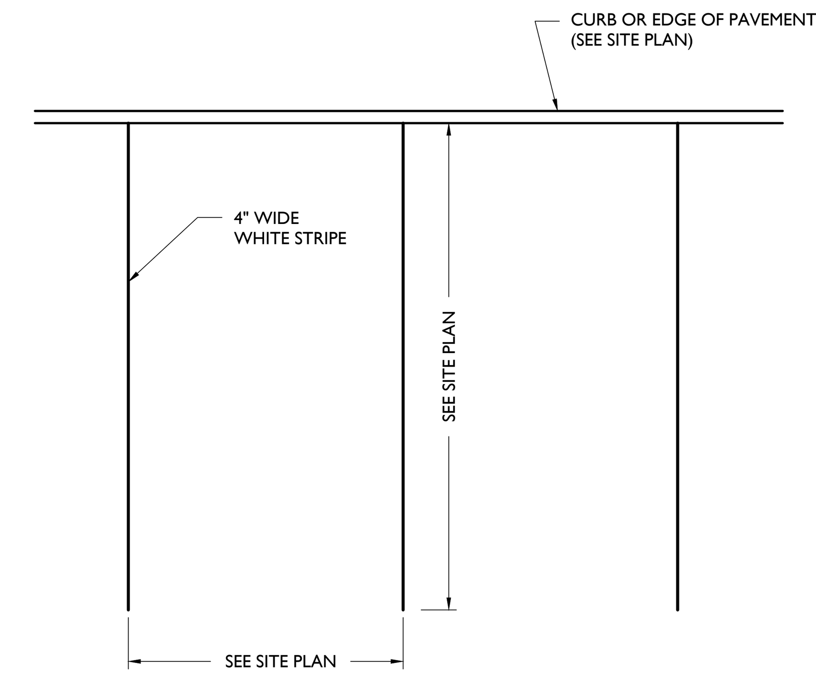
NOTE:
1. PARKING STALL MARKINGS ARE TO BE MEASURED FROM CENTER OF MARKING TO CENTER OF MARKING.



ACCESSIBLE PARKING STALL MARKINGS

NOT TO SCALE

2



PARKING STALL MARKINGS

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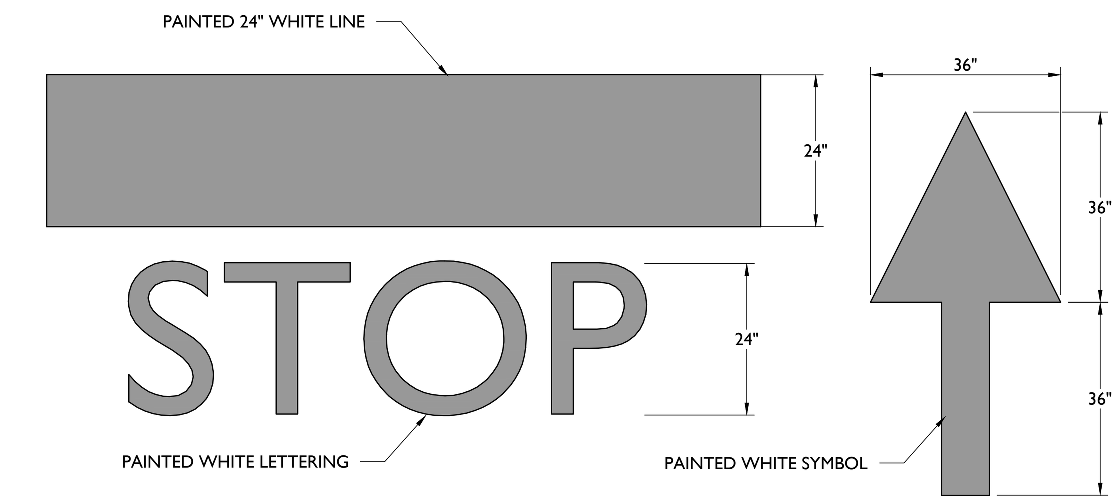
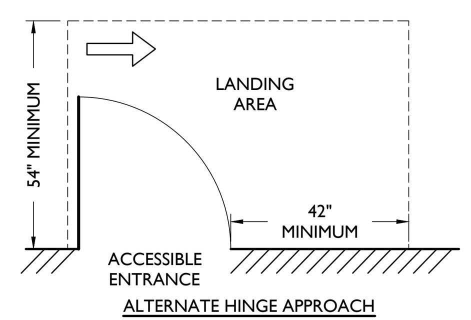


STOP BAR & ARROW DETAILS

NOT TO SCALE

4

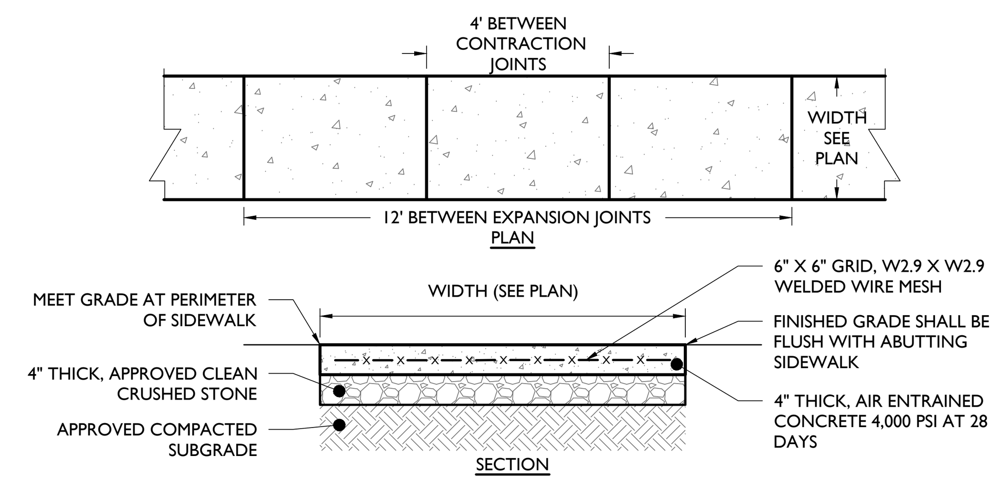


ACCESSIBLE ENTRANCE LANDING DETAIL

NOT TO SCALE

NOTES:
1. MAXIMUM SLOPE ON LANDING SHALL BE 1:50 IN ALL DIRECTIONS
2. DIMENSIONS SHOWN HERE ARE THE MINIMUM DIMENSIONS REQUIRED FOR AN ADA COMPLIANT LANDING AT THE ACCESSIBLE ENTRANCE. REFER TO SITE PLAN FOR SITE SPECIFIC DIMENSIONS THAT MAY SPECIFY A LARGER LANDING AREA.
3. CONTRACTOR SHALL CONTACT THE ENGINEER BEFORE CONSTRUCTION IF THE ACCESSIBLE ENTRANCE ON SITE DOES NOT MATCH THE SCENARIO SHOWN ABOVE.

5

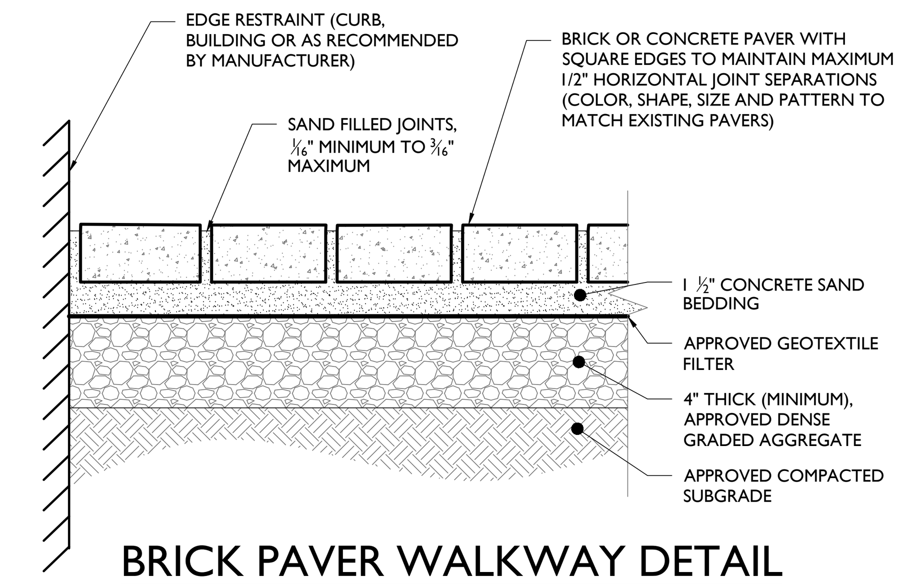


REINFORCED CONCRETE WALKWAY DETAIL

NOT TO SCALE

NOTES:
1. MAXIMUM CROSS SLOPE SHALL BE ¼" PER FOOT.
2. ¼" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ¼" FROM THE SURFACE.
3. 1" DEEP BY ¼" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
4. EXPANSION JOIN SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.

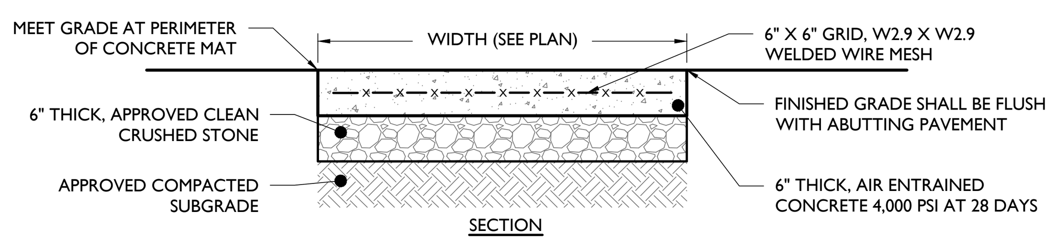
6



BRICK PAVER WALKWAY DETAIL

NOT TO SCALE

7

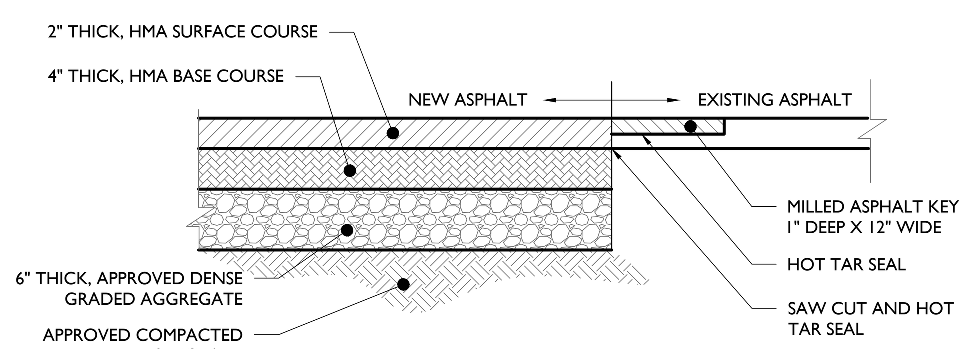


REINFORCED 6" CONCRETE MAT

NOT TO SCALE

NOTES:
1. ½" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ¼" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
2. 1" DEEP BY ¼" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
3. CONCRETE SHALL RECEIVE BROOM FINISH.
4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.

8

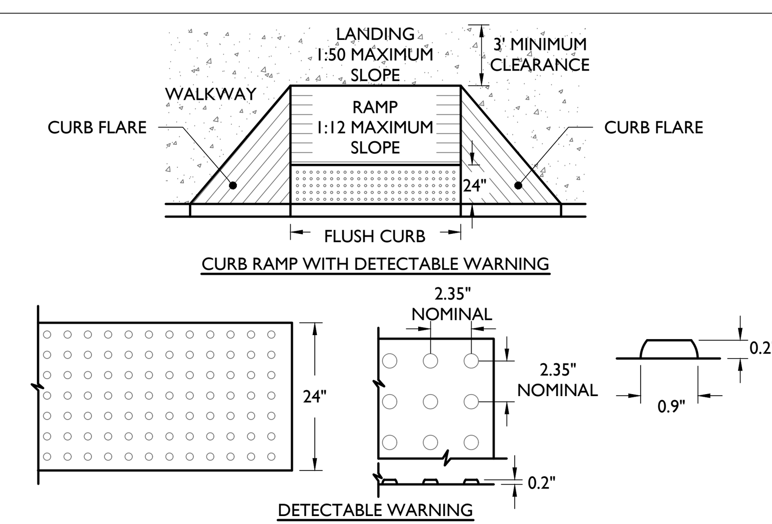


FULL DEPTH ASPHALT PAVEMENT DETAIL

NOT TO SCALE

NOTE:
HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

9



CURB RAMP WITH FLARES DETAIL

NOT TO SCALE

NOTES:
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 1:50 SLOPE.
2. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
3. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE.
4. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE.
5. WHERE A 60" X 60" LANDING EXISTS AT THE TOP OF RAMP, RAMP FLARE SHALL NOT EXCEED 1:10 SLOPE. WHERE LANDING IS NOT PROVIDED RAMP FLARE SHALL NOT EXCEED 1:12 SLOPE.
6. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
7. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.

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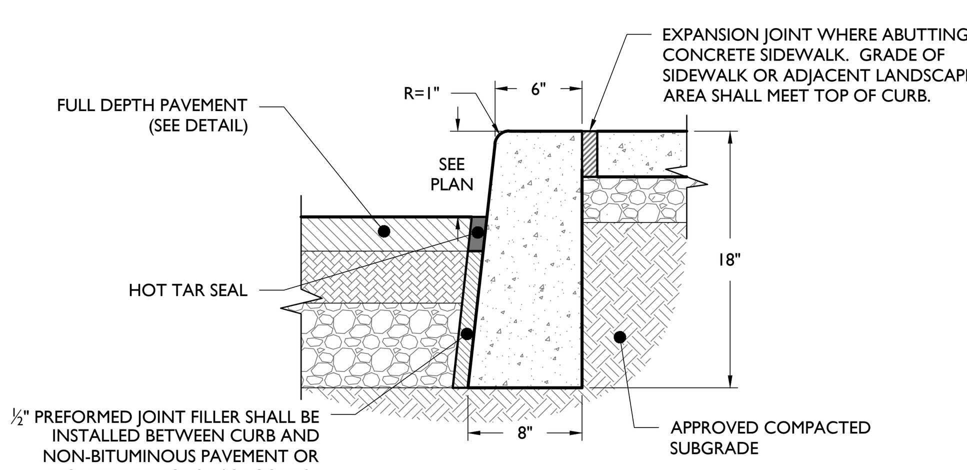


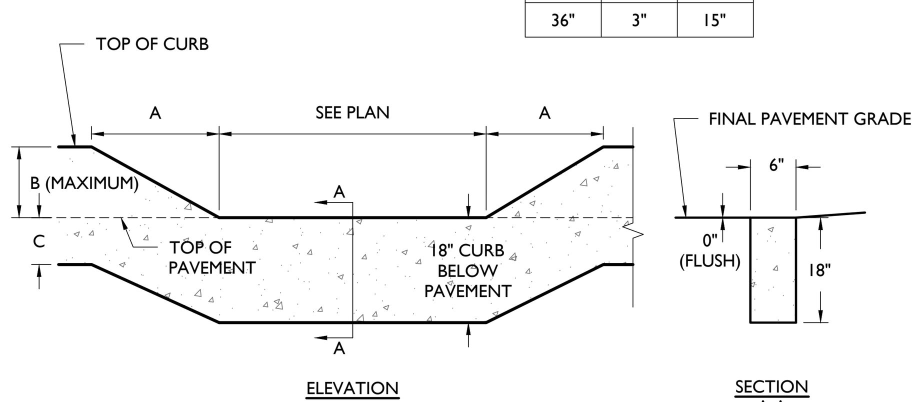
CONCRETE CURB DETAIL

NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ¼" FROM SURFACE.
3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.

11

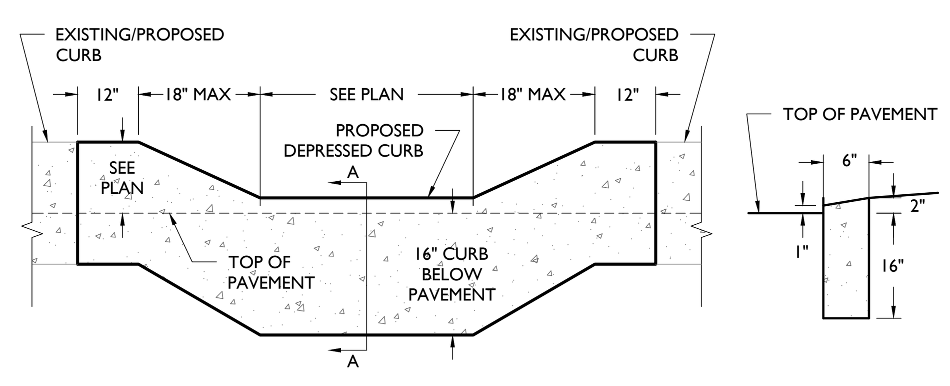
FLUSH CURB DIMENSIONS		
A	B	C
72"	6"	12"
60"	5"	13"
48"	4"	14"
36"	3"	15"



FLUSH CURB DETAIL

NOT TO SCALE

12



DEPRESSED CURB DETAIL

NOT TO SCALE

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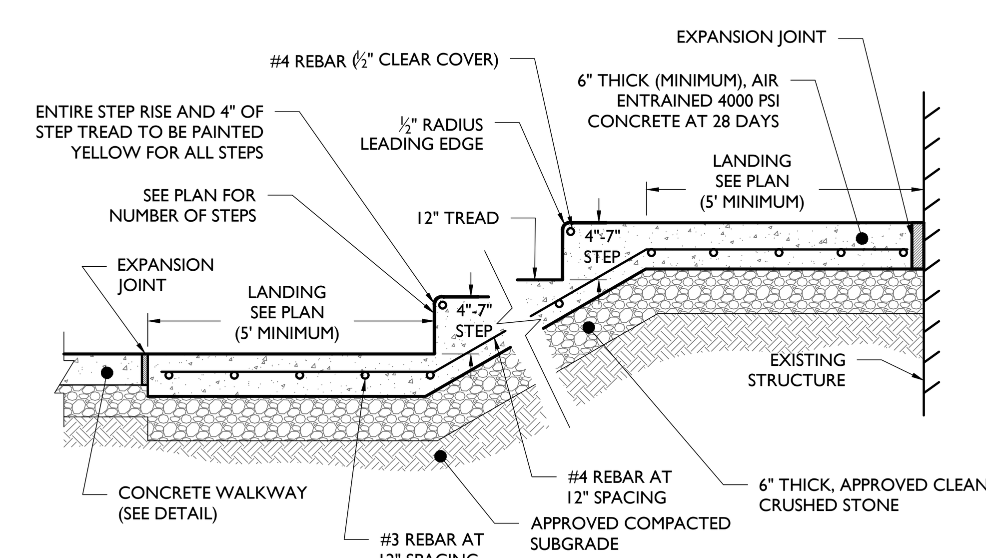
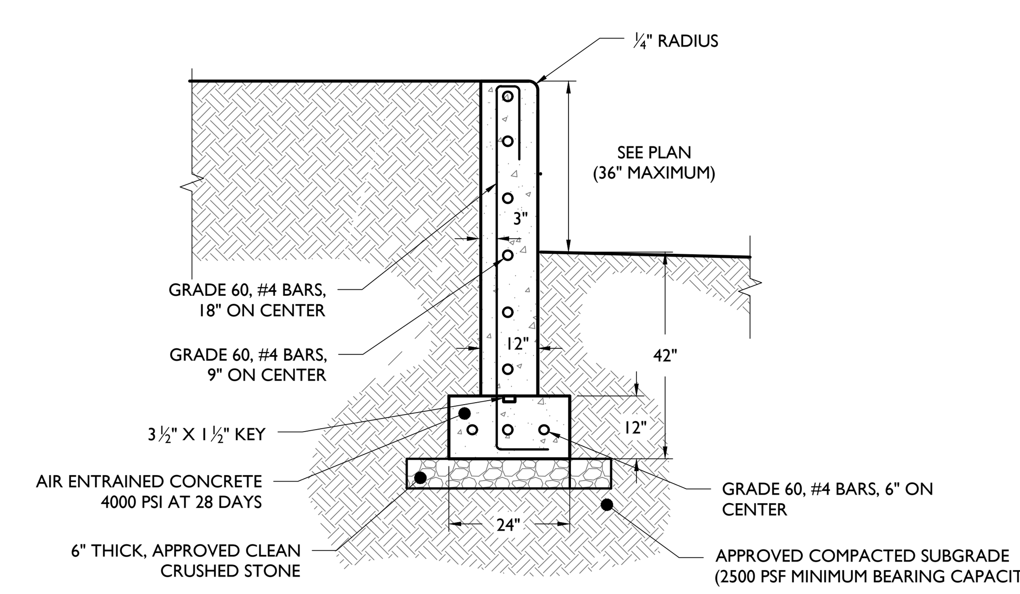


CONCRETE STEPS & ELEVATED LANDING DETAIL

NOT TO SCALE

NOTES:
1. CONTRACTOR SHALL ENSURE 3" MINIMUM EMBEDMENT FOR REBAR EXPOSED TO EARTH AND 2" MINIMUM EMBEDMENT FOR REBAR EXPOSED TO WEATHER (SURFACE). NOSING REBAR TO BE EMBEDDED 1 ½".
2. CONTRACTOR SHALL MAINTAIN A MAXIMUM 1:50 SLOPE IN ALL DIRECTIONS WITHIN PROPOSED CONCRETE LANDINGS.
3. STEPS IN SERIES SHALL HAVE UNIFORM RISER HEIGHT.

14



CONCRETE WALL DETAIL

NOT TO SCALE

NOTES:
1. CONTRACTOR SHALL ENSURE 3" MINIMUM EMBEDMENT FOR REBAR EXPOSED TO EARTH AND 2" MINIMUM EMBEDMENT FOR REBAR EXPOSED TO WEATHER (SURFACE). NOSING REBAR TO BE EMBEDDED 1 ½".
2. BACKFILL TO BE SUITABLE MATERIAL COMPACTED TO 95% OF MAXIMUM DENSITY IN 6" TO 8" LIFTS

15

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
Headquarters: 92 Park Avenue, Rutherford, NJ 07070
Phone 201.340.4468 · Fax 201.340.4472

PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

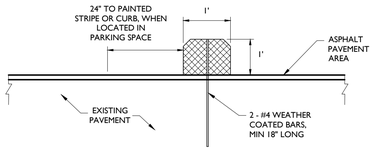
STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: T-19325

TITLE: **CONSTRUCTION DETAILS**

DRAWING: **C-9**

T:\2019\T-19325 VILLANI BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\LDP-10-DETL.DWG

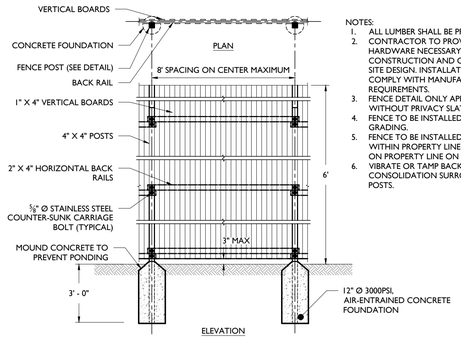


RUBBER WHEEL STOP DETAIL

NOT TO SCALE

NOTES:
1. ON CONCRETE PAVEMENT, SECURE WHEEL STOP WITH EPOXY BONDING AGENT.
2. WHEEL STOP SHALL BE 6' LONG.
3. WHEEL STOP SHALL BE PREFABRICATED RUBBER OR EQUIVALENT

1

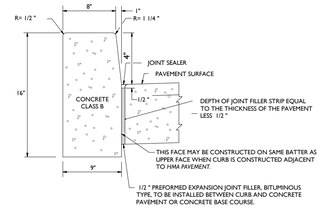


NOTES:
1. ALL LUMBER SHALL BE PRESSURE TREATED.
2. CONTRACTOR TO PROVIDE ALL HARDWARE NECESSARY FOR FENCE CONSTRUCTION AND OPERATION, PER SITE DESIGN. INSTALLATION SHALL COMPLY WITH MANUFACTURER'S REQUIREMENTS.
3. FENCE DETAIL ONLY APPLIES TO FENCE WITHOUT PRIVACY SLATS.
4. FENCE TO BE INSTALLED FOLLOWING SITE GRADING.
5. FENCE TO BE INSTALLED ONE FOOT WITHIN PROPERTY LINE WHERE SHOWN ON PROPERTY LINE ON SITE PLAN.
6. VIBRATE OR TAMP BACKFILL FOR CONSOLIDATION SURROUNDING FENCE POSTS.

BOARD ON BOARD FENCE DETAIL

NOT TO SCALE

2



NJDOT 9"X16" CONCRETE / WHITE CONCRETE VERTICAL CURB

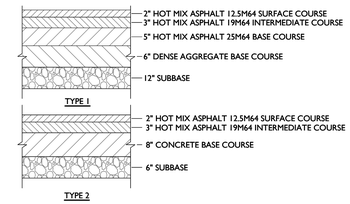
(FOR USE WITHIN NJDOT ROW)

NOT TO SCALE

NOTES:
TRANSVERSE JOINTS 1/2 " WIDE SHALL BE INSTALLED IN THE CURB 20 FEET APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER RECESSED 1/4 " IN FROM FRONT FACE AND TOP OF CURB.

EXPANSION JOINTS THRU AND ADJACENT TO THE CURB SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CURB.

3



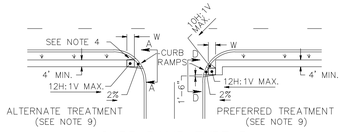
NJDOT PAVEMENT SECTION AND REPAIR STRIP DETAIL

(FOR USE WITHIN NJDOT ROW)

NOT TO SCALE

NOTES:
1. FOR AREAS 5.0 FEET OR MORE IN WIDTH, USE TYPE 1.
2. FOR AREAS LESS THAN 5.0 FEET IN WIDTH WHEN PROPER ASPHALT COMPACTION IS NOT POSSIBLE, USE TYPE 2.
3. IF PAVEMENT CONSTRUCTION ENCROACHES ON EXISTING TRAVEL LANES, THE ENTIRE LANE SHALL BE MILLED AND RESURFACED.
4. FOR MILLING AND RESURFACING, USE HOT MIX ASPHALT 12.5 ME SURFACE COURSE, 2" THICK.
5. SAW CUT PAVEMENT PRIOR TO EXCAVATION.
6. UNDERCUT SOFT SUBGRADE AREAS AND REPLACE WITH ADDITIONAL DENSE GRADED AGGREGATE BASE COARSE.
7. UNIFORMLY SPRAY TACK COAT WHEN PLACING HOT MIX ASPHALT ON PAVED SURFACE.
8. USE POLYMERIZED JOINT ADHESIVE FOR LONGITUDINAL JOINT OF THE NEW SURFACE COARSE WITH EXISTING HOT MIX ASPHALT, CURB, OR ANY VERTICAL SURFACE ALONG THE NEW SURFACE.
9. EXISTING CONCRETE PAVEMENT SHOULD BE REPAIRED IN KIND FOR FULL WIDTH OF LANE IN ACCORDANCE WITH THE STANDARD DETAIL CD-4S3.
10. DENSE GRADED AGGREGATE BASE COARSE AND SUBBASE SHOULD EXTEND A MINIMUM OF 3" BEYOND THE OUTER EDGE OF THE PROPOSED CURB.
11. REPAIR ANY ASPHALT PAVEMENTS, WHICH EXHIBIT HIGH SEVERITY CRACKING, POTHOLES, OR OTHER DAMAGE IN ACCORDANCE WITH 401.03.01.D OF 2007 NJDOT SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION (ITEM NO. 401021M).
12. IF ANY PAVEMENT CONSTRUCTION (WIDENING, NEW/RESETTING CURB ETC.) ENCROACH AN EXISTING TRAVEL LANE, THEN MILL 2" OF EXISTING PAVEMENT AND RESURFACE WITH 2" THICK HOT MIX ASPHALT 12.5ME SURFACE COURSE THE FULL WIDTH OF THAT TRAVEL LANE ALONG NEW CONSTRUCTION WITHOUT ANY JOINTS.
13. UNDERCUT SOFT SUBGRADE AREAS AND REPLACE WITH ADDITIONAL SUBBASE WHERE THE WATER TABLE IS NOT ENCOUNTERED WITHIN THE DEPTH OF EXCAVATION.
14. SHOULD THE EXISTING CORE THICKNESS SHOW ASPHALT DEPTH LESS THAN 8", THIS PAVEMENT SECTION SHALL BE USED.
15. CONTRACTOR TO EXCAVATE AND REPLACE ANY UNSTABLE MATERIAL WITH SUBBASE.

4

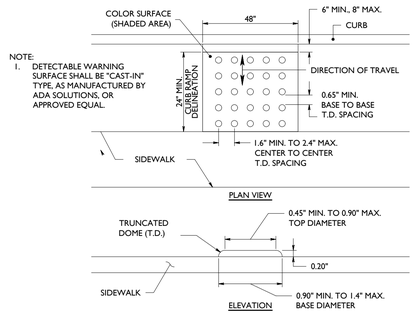


NJDOT CURB RAMP TYPE 5

(FOR USE WITHIN NJDOT ROW)

NOT TO SCALE

5



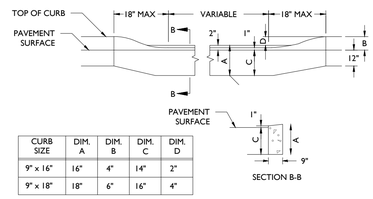
NOTE:
1. DETECTABLE WARNING SURFACE SHALL BE "CAST-IN" TYPE, AS MANUFACTURED BY ADA SOLUTIONS, OR APPROVED EQUAL.

NJDOT DETECTABLE WARNING SURFACE

(FOR USE WITHIN NJDOT ROW)

NOT TO SCALE

6



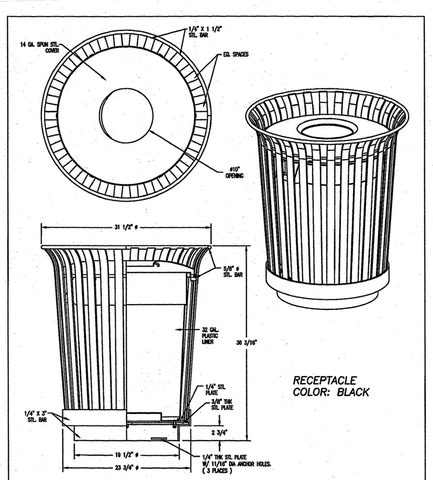
CURB SIZE	DIM. A	DIM. B	DIM. C	DIM. D
9" x 16"	16"	4"	14"	2"
9" x 18"	18"	6"	16"	4"

NJDOT METHOD OF DEPRESSING CURB AT DRIVEWAYS

(FOR USE WITHIN NJDOT ROW)

NOT TO SCALE

7



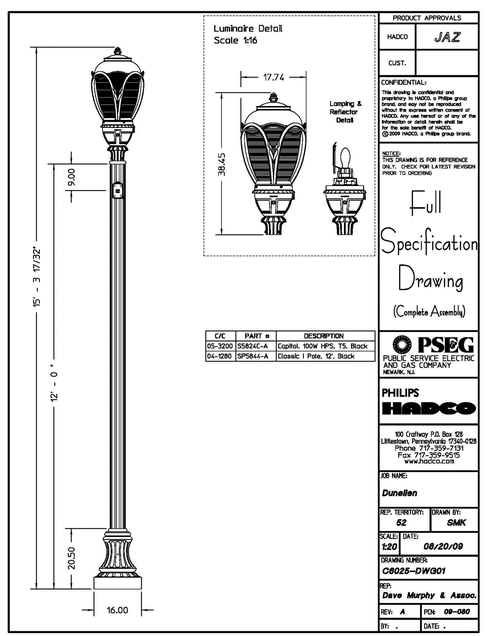
RECEPTACLE DETAIL

N.T.S.

BOROUGH OF DUNELLEN TRASH RECEPTACLE DETAIL

NOT TO SCALE

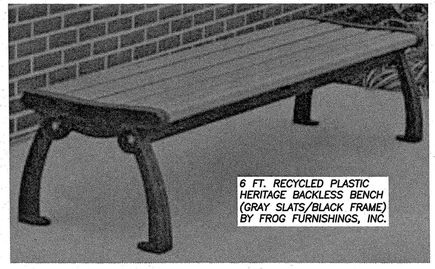
8



BOROUGH OF DUNELLEN STREET LIGHT DETAIL

NOT TO SCALE

9



BENCH DETAIL

N.T.S.

BOROUGH OF DUNELLEN BENCH DETAIL

NOT TO SCALE

10

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
Headquarters: 92 Park Avenue, Rutherford, NJ 07070
Phone 201.340.4468 · Fax 201.340.4472

PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

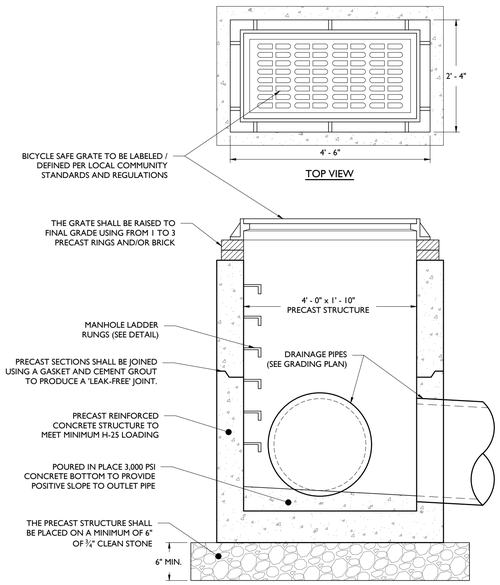
SCALE: AS SHOWN | PROJECT ID: T-19325

TITLE: CONSTRUCTION DETAILS

DRAWING: C-10

T:\2019\T-19325 VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\LDP-10.DETL.DWG

NOTES:
1. STRUCTURE TO BE CONSTRUCTED OF REINFORCED PRECAST CONCRETE.
2. FRAME AND GRATE TO BE CAST-IRON AND SUPPORT MINIMUM H-25 LOADING.
3. ALL JOINTS TO BE WATER-TIGHT.
4. SUBGRADE BENEATH STRUCTURE SHALL BE LEVELED AND COMPACTED AS NECESSARY PRIOR TO INSTALLING STRUCTURE.

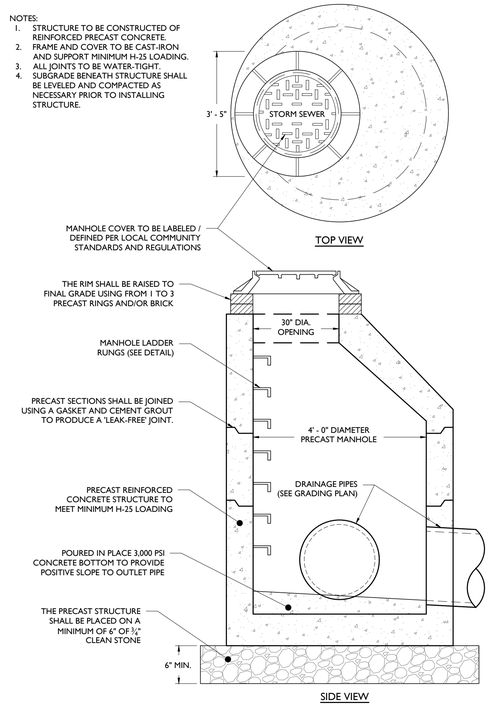


TYPE 'A' STORM INLET DETAIL

NOT TO SCALE

1

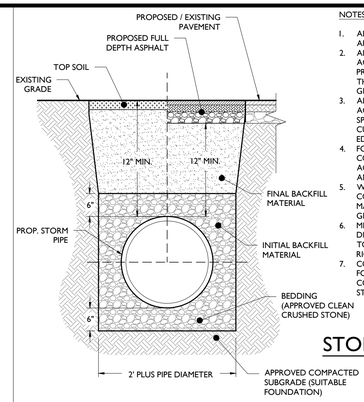
NOTES:
1. STRUCTURE TO BE CONSTRUCTED OF REINFORCED PRECAST CONCRETE.
2. FRAME AND COVER TO BE CAST-IRON AND SUPPORT MINIMUM H-25 LOADING.
3. ALL JOINTS TO BE WATER-TIGHT.
4. SUBGRADE BENEATH STRUCTURE SHALL BE LEVELED AND COMPACTED AS NECESSARY PRIOR TO INSTALLING STRUCTURE.



STORM MANHOLE DETAIL

NOT TO SCALE

2

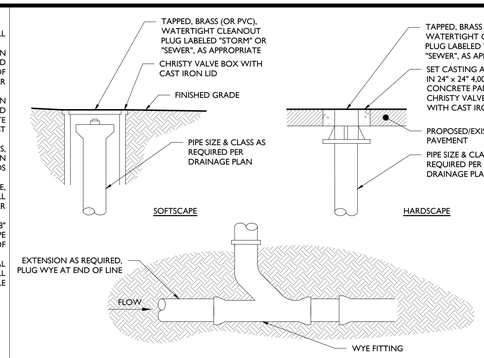


NOTES:
1. ALL PIPE SYSTEM INSTALLATIONS SHALL MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
2. ALL HDPE PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" (LATEST EDITION).
3. ALL RCP PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C76-15, "STANDARD SPECIFICATION FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE" (LATEST EDITION).
4. FOR NON HDPE OR RCP PIPE INSTALLATIONS, CONTRACTOR SHALL INSTALL PIPE IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
5. WHERE THE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL PROVIDE SUITABLE BACKFILL MATERIAL AS REQUIRED BY ENGINEER OR PER GEOTECH RECOMMENDATIONS.
6. MINIMUM COVER IN TRAFFIC AREAS IS 12" UP TO 48" DIAMETER PIPE AND 24" FOR 54" - 60" DIAMETER PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.
7. CONTRACTOR SHALL INSTALL SUITABLE MATERIAL FOR INITIAL AND FINAL BACKFILL. BACKFILL COMPACTION SHOULD MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.

STORM TRENCH DETAIL

NOT TO SCALE

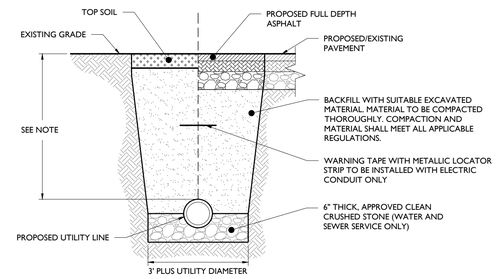
3



CLEAN-OUT DETAIL

NOT TO SCALE

4



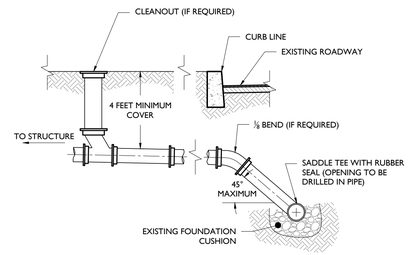
UTILITY TRENCH DETAIL

NOT TO SCALE

NOTE:

MINIMUM PIPE COVER SHALL BE AS FOLLOW:
- ELECTRIC SERVICE - PER APPLICABLE UTILITY AUTHORITY
- GAS SERVICE - PER APPLICABLE UTILITY AUTHORITY
- SEWER SERVICE - 36" MINIMUM
- WATER SERVICE - 48" MINIMUM

5



SEWER CONNECTION DETAIL

NOT TO SCALE

6

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

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PRELIMINARY & FINAL MAJOR SITE PLAN

COMMUNIPAW ASSOCIATES, LLC

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: T-19325

TITLE: CONSTRUCTION DETAILS

DRAWING: C-11

T:\2019\T-19325 VILLAN BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOTLDP-10.SETS.DWG

EG3 4
4FT Wet Location LED

Features & Specifications (Cont.)

Warranty
- LSI LED Fixtures carry a 5-year warranty.

Listings
- Listed to UL 1598 and UL 8750.
- RoHS Compliant.
- American Recovery and Reinvestment Act Funding Compliant.
- UL Listed For Wet Locations.
- DesignLights Consortium Premium qualified luminaire, eligible for rebates from DLC member utilities.

IP Rating
6 / Dust-Tight
No ingress of Dust
5 / Protects against water jets
Water projected from a nozzle against the enclosure from any direction shall have no harmful effect
6 / Protects against powerful
Water projected in powerful jets against the enclosure from any direction shall have no harmful effect
7 / Protected against the effects of immersion
Ingress of water in a harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time.

Mounting Accessories

Part #	Description
310967	10-foot Cable Hanging Set with Loop (pair)
357201	20-foot Cable Hanging Set with Loop (pair)
348901	Stainless Steel 45° mounting bracket for 4-foot fixture
348894	Stainless Steel 45° mounting bracket for 8-foot fixture

Performance

	4000K			5000K		
Lumens	Delivered Lumens	Efficacy	Wattage	Delivered Lumens	Efficacy	Wattage
4L	4511	143.42	31.45	4508	142.72	31.59
6L	6695	138.15	48.46	6695	138.15	48.46

DLC Listings

EG3 4 LED

	4000K	5000K
Lumens	DLC Prod. ID	DLC Prod. ID
4L	PLFFS8XWELTO	PLLVRJZ8M2NY
6L	PLL8F8HX8X0G	PLN2GWYHKAME

Luminaire Ordering Guide

TYPICAL ORDER EXAMPLE: **EG3 4 LED 6L DA S UNV DIM 40 80**

Family Prefix	Fixture Length	Lighting Source	Lumen Package	Lens Type	Distribution	Voltage	Dimming
EG3	4 = 4ft	LED	4L = 4400 Lumens 6L = 6600 Lumens	DA = Diffuse Acrylic CA = Clear Acrylic	S = Symmetric	UNV = Universal (120-277V) HV = High Voltage (347/480V)	DIM = 0-10vdc

Color Temperature	Color Rendering	Controls	Options	Mounting/Wiring	Latches
40 = 4000k 50 = 5000k	80 = 80CRI	OCSWL = Wet Location Occupancy Sensor	EM = 1400 Lumen Emergency	Blank = Standard (Mounting clip and bails included) E6C = 6' foot black cord, no plug (Mounting clip and bails included)	Blank = Standard Nylon SL = Stainless Steel Latches

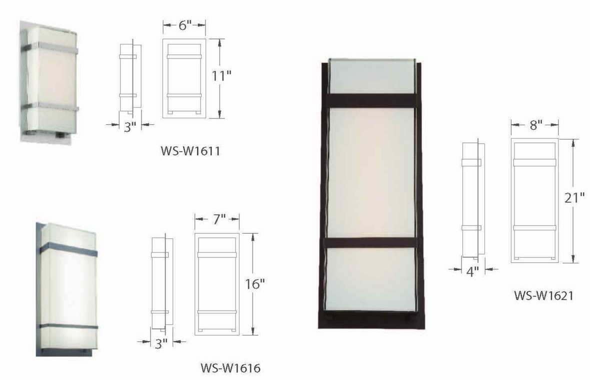
LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsi-industries.com • (513) 372-3200 • ©LSI Industries Inc. All Rights Reserved. 08/14/19

LIGHT FIXTURE 'A'
NOT TO SCALE

1

PHANTOM – model: WS-W16
LED Exterior Sconce

MODERN FORMS



Fixture Type:
Catalog Number:
Project:
Location:

PRODUCT DESCRIPTION
A highly polished, stylish appearance with sharp curb appeal, this stunning family of distinctive mitered glass columns exhibits a shallow depth and clean, architectural look. Constructed in bronze powder coated aluminum or marine grade stainless steel and completely sealed for waterside locations in luxury residential and commercial environments.

FEATURES
- ADA compliant, low profile design
- ETL & cETL wet location listed, IP44 rated
- BZ - Aluminum construction
  SS - 316 marine grade, stainless steel construction
- Mitered white silk screened glass
- Integral transformer in canopy
- Full range dimming when used with compatible dimmers*
- 277V option available (special order)
- Replaceable LED module
- 60,000 hour rated life
- Color Temp: 3000K
- CRI: 90

SPECIFICATIONS
Construction: 316 marine grade, Stainless Steel/ Aluminum with mitered white silk screened glass
Light Source: High output LED.
Finish: Bronze (BZ), Graphite (GH), Stainless Steel (SS)
Standards: ETL & cETL wet location listed IP 44. ADA compliant.

Replacement Glass

Model	Fixture	Description
RPL-GLA-1621-02	WS-W1621	Outside Glass
RPL-GLA-1616-02	WS-W1616	
RPL-GLA-1611-02	WS-W1611	
RPL-GLA-1621-01	WS-W1621	Inside Glass
RPL-GLA-1616-01	WS-W1616	
RPL-GLA-1611-01	WS-W1609	

ORDER NUMBER

Model	Height	Watt	Voltage	LED Lumens	Delivered Lumens	Finish
WS-W1611	11"	12W		628	200	BZ Bronze
WS-W1616	16"	19W	120V	1250	600	GH Graphite
WS-W1621	21"	21W		1566	755	SS Stainless Steel Construction

Example: **WS-W1611-SS**
For 277V special order, add an "F" before the finish: **WS-W1611F-SS**

modernforms.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
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Ontario, CA 91760

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. AUG 2018

LIGHT FIXTURE 'B'
NOT TO SCALE

2

LED PATRIOT® WALL SCONCE (XPWS3)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XPWS3 FT LED 48 450 CW UE WHT BB**

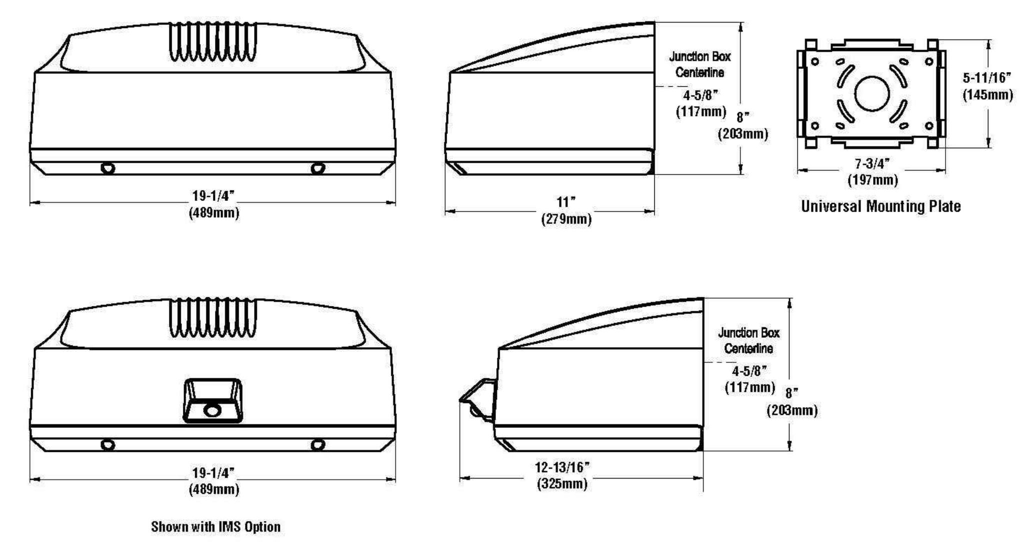
Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Optional Controls	Optional Sensor/Options
XPWS3 - LED Patriot Wall Sconce	WT - Wide Throw FT - Forward Throw WW - Wall Wash	LED	28 48	350 - 350mA 450 - 450mA	CW - Cool White (5000K) NW - Neutral White (4000K)	UE - Universal Voltage (120-277) 347-480	BLK - Black BRZ - Bronze GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White	Wireless Control System[1,2] (blank) - None PCM - Platinum Control System PCMH - Host/Satellite Platinum Control System GCM - Gold Control System GCMH - Host/Satellite Gold Control System DIM - 0-10 volt dimming (required for satellite fixtures) Stand-Alone Control (blank) - None DIM - 0-10 volt dimming[3] (from external signal)	Sensor IMS - Integral Motion Sensor[4] PCI120 - 120V Button-Type Photocell[5] PCI208 - 208V Button-Type Photocell[5] PCI240 - 240V Button-Type Photocell[5] PCI277 - 277V Button-Type Photocell[5] PCI347 - 347V Button-Type Photocell[5] Options BB - Battery Back-up[6] CWBB - Cold Weather Battery Back-up[6] EMR2 - Two Emergency 12V Circuit Provisions with (2) 35 Watt Halogen Lamps[7] HL - Class 1, Division 2 Hazardous Location Rating, ETL Listed to UL844[8] XPMA - Pole Mounting Adaptor w/ Fixture Back Plate for Use with Square Poles[9] XPMAR4 - Pole Mounting Adaptor w/ Fixture Back Plate for Use with 4" O.D. Round Poles[9] XPMAR5 - Pole Mounting Adaptor w/ Fixture Back Plate for Use with 5" O.D. Round Poles[9]

ACCESSORY ORDERING INFORMATION[1] (Accessories are field installed)

Description	Order Number	Description	Order Number
XPWS3 Polycarbonate Shield	244657	DFK208, 240 - Double Fusing	DFK208,240[10]
XPWS3 SW BLK - Surface Wiring Box (Available in black only)	356915BLK	DFK480 - Double Fusing	DFK480[10]
FK120 - Single Fusing	FK120[10]	FK347 - Single Fusing	FK347[10]
FK277 - Single Fusing	FK277[10]		

FOOTNOTES:
1- For wireless controls information and accessories, see Controls section.
2- Requires a SiteManager and override switch. Not compatible with battery back-up, IMS, EMR2 or HL Option.
3- Not compatible with IMS option.
4- Not compatible with wireless controls system or DIM.
5- Not compatible with EMR2 or HL option.
6- Available with UE voltage only. Not compatible with wireless controls system, EMR2 or HL option.
7- Utilizes GZ4 sockets. 12 volt separate circuits required. Not available with wireless controls system, battery back-up, photocell, HL, XPMA or XPMAR option.
8- Not available with wireless controls system, battery back-up, photocell or EMR2 option.
9- Not available with EMR2 option. Designed for 3" reduced drilling pattern. For S or D180 mounting configuration only.
10- Fusing to be installed in a compatible junction box supplied by contractor.

DIMENSIONS



Project Name ______ Fixture Type ______
Catalog # ______

03/24/20
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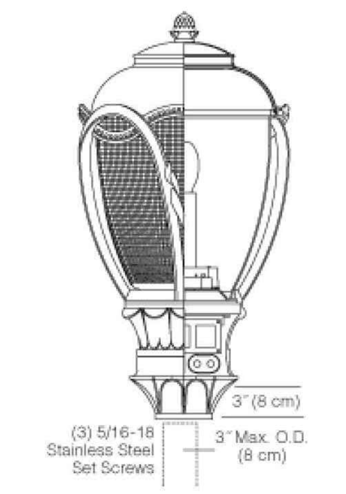
LSI INDUSTRIES INC.

LIGHT FIXTURE 'C'
NOT TO SCALE

3

HADCO by Signify
Landscape
Capitol Narrow
V4800 MH/HPS Post top

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:



Ordering Guide
Example: V4800 A B4 N D 70S E

Product Code	V4800	Capitol Narrow	
Finish	A B G H J	Black White Verde Bronze Green	
Optics	B4 B5 T3 TV T0	Type IV Refractive globe Type V Refractive globe Type III Cutoff Type V Cutoff Symmetric	 *1
Photo Control	N B	None Button Eye Photo Control	
Socket	D G	Medium Mogul	
Wattage	70S 100S 150S 250S 70H 100H 150H 250H	70W HPS 100W HPS 150W HPS 250W HPS 70W MH 100W MH 150W MH 250W MH	 *2 *3 *3 *2
Voltage	E F G H	120V 208V 240V 277V	

*1 Type V Cutoff optics (TV) available with Medium base (D) socket only.
*2 Available with Mogul base (G) socket only.
*3 Available with Medium base (D) socket only

Specifications

HOUSING:
356 HM high-strength, low-copper, proprietary cast aluminum alloy. Tool-less lamp access. Hinged roof with stainless steel thumb screw. Twistlock ballast assembly with quick disconnects for easy maintenance. A weatherproof ballast assembly isolates the ballast from water and heat for longer life. The optional photo control eye is located in the ballast enclosure for easy access via a hinged door. All non-ferrous fasteners prevent corrosion and ensure longer life. Slip Fitter Dimensions: 3" I.D. x 3" deep.

FINISH:
Thermoset polyester powdercoat is electrostatically applied after a five-stage conversion cleaning process and bonded by heat fusion thermosetting. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B117 specifications. For larger projects where a custom color is required, contact the factory for more information.

OPTICAL ASSEMBLY:
Type IV Refractive Globe (Includes internal House Side Shield). Type V Refractive Globe. Optically designed, U.V. stabilized, injection molded, acrylic refractive globe. Type III Cutoff. Type V Cutoff. Precision formed, segmented specular aluminum internal cutoff reflector with horizontal lamp mounting. U.V. stabilized, injection molded, clear acrylic globe. Symmetric. Vertical lamp mounting, with specular aluminum internal reflector.

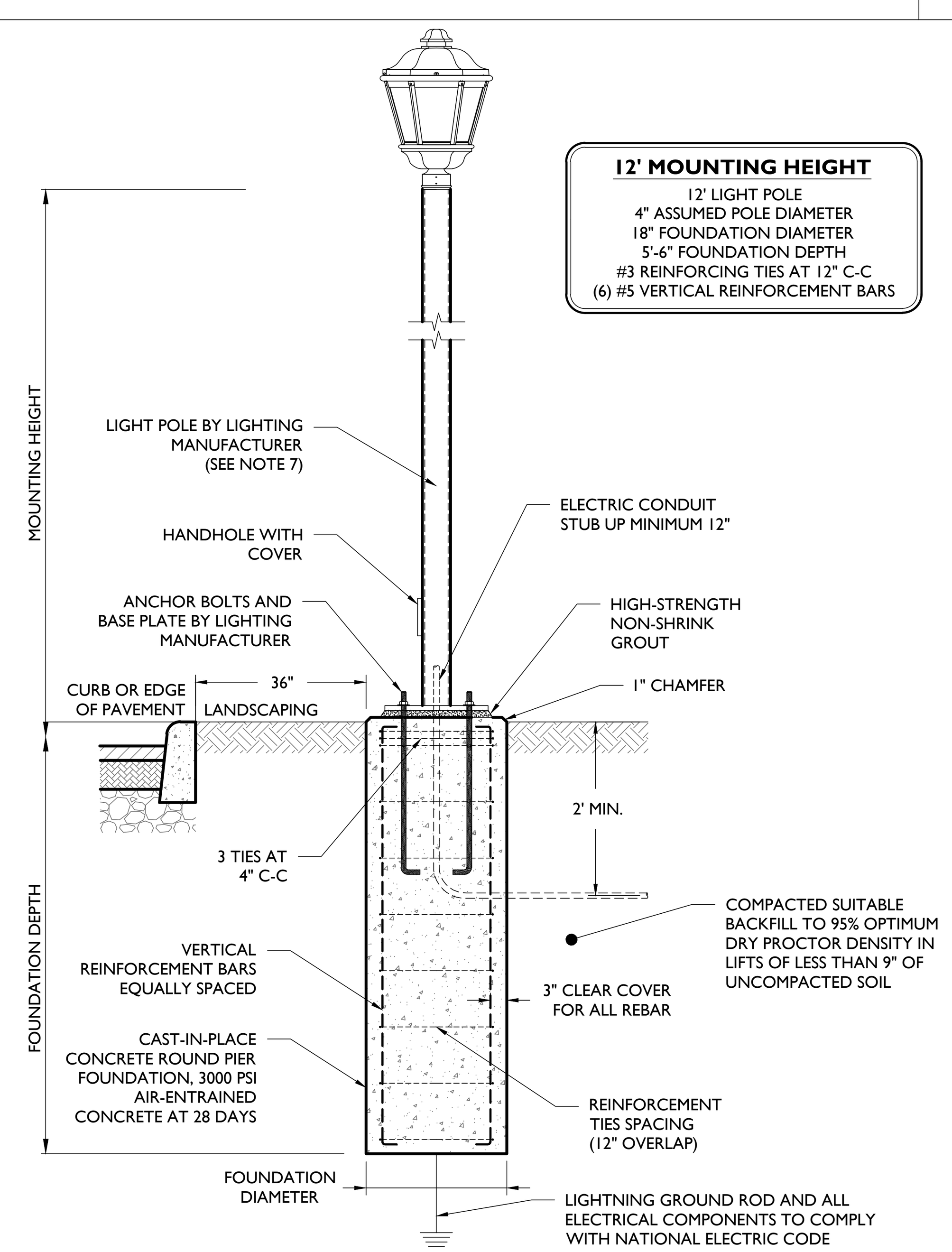
LAMPING:
MH and HPS Medium base: E17. MH and 250W HPS Mogul base: ED28. 70W-150W HPS Mogul base: ED23.5.

ELECTRICAL ASSEMBLY:
Twistlock Ballast Assembly with Quick Disconnects for easy maintenance. Ballasts are HPF core and coil. 4kv rated porcelain mini-can base. Nickel-plated screw shell with center contact. 4kv rated mogul base porcelain socket. Nickel-plated screw shell with center contact.

Landscape_Spec Sheet_V4800 Capitol Narrow Spec Sheet.pdf 12/18 page 1 of 2

LIGHT FIXTURE 'D'
NOT TO SCALE

4



LIGHT POLE INSTALLATION DETAIL
NOT TO SCALE

NOTES:
1. MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
2. CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
3. ALL REBAR TO BE NEW GRADE 60 STEEL.
4. PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
5. CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE.
6. CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
7. POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 33FT ABOVE GROUND FOR THE AREA BASED ON ANSI/ASCE 7-93.
8. POUR TO BE TERMINATED AT A FORM.
9. WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS.
10. CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.

5

T:\2019\T-19325 VILLANI BUILDERS - 150 NORTH AVENUE, DUNELLEN, NJ\CADD\PLOT\LDP-10-DETL.DWG

ISSUE	DATE	BY	DESCRIPTION
2	07/13/2020	BJD	BOROUGH, COUNTY, & SCD SUBMISSION
1	04/27/2020	RO	REDEVELOPMENT COMMITTEE

NOT APPROVED FOR CONSTRUCTION

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PRELIMINARY & FINAL MAJOR SITE PLAN
COMMUNIPAW ASSOCIATES, LLC
PROPOSED MIXED-USE DEVELOPMENT
BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE No. 48731
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: T-19325

TITLE: CONSTRUCTION DETAILS

DRAWING: C-12